Position Pro™ Therapy Mattress

Model 2920

stryker®

Operations/Maintenance Manual

For Parts or Technical Assistance:
USA: 1-800-327-0770 (option 2)
Canada: 1-888-233-6888

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INTENDED USE OF MANUAL

This manual is designed to assist with the operation of the **Position Pro™** mattress system, model 2920. Carefully read this manual thoroughly before using or beginning maintenance on the **Position Pro™**. To ensure safe operation of this equipment, it is recommended that methods and procedures be established for educating and training staff on the safe operation of the **Position Pro™** mattress system.

INTENDED USE OF PRODUCT

The **Position Pro™** mattress is intended to assist medical personnel in the transfer and turning of patients in their care. It is also designed to assist in the prevention and treatment of pressure ulcers and other complications associated with patient immobility. It is intended for use on Stryker's frames and on other frames supporting a 35" X 84" mattress.

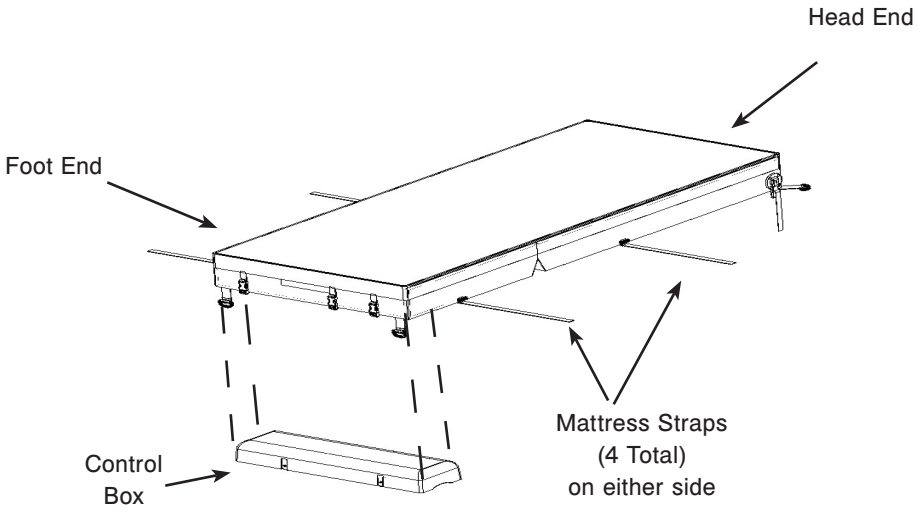
PRODUCT DESCRIPTION

The mattress can be used in a Critical Care environment as well as a regular hospital unit. It provides a pressure-redistribution surface by utilizing air inflated bladders. The unit is powered by a 120V power cord that can use the auxiliary outlet of the bed. A Can-Bus Network communication system is used to provide communication of computer diagnostics and software loading. The Can-Bus Network, which is only available on certain Stryker beds, allows for touch screen control functions which eliminates the use of any pendant. The unit consists of a sleep surface, a control box located under the mattress at the foot end and a color touch screen that can be mounted onto siderails or the foot board.

The **Position Pro™** mattress offers the following:

- Full Body Pressure Redistribution
- Low Air Loss
- Adjustable Firmness
- Max Inflate
- Turn Assist up to 40 degrees for 300 pound patient

PRODUCT ILLUSTRATION



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SPECIFICATIONS

Model		DH2920-000-005 With Dartex Cover DH2920-000-010 With Dartex/Merlin	
Dimensions	Mattress	Mattress: 35” x 83” x 8.5”	88.9 cm x 210.8 cm x 21.6 cm
Weight	Complete system	63 lbs	28.6 kg
	Mattress	29 lbs	131.1 kg
	Pendant	1 lb	.45 kg
	Pump Box	33 lbs	15 kg
Safety working load		500 lbs	226.8 kg
Power Cord		15 feet, 16 AWG cord with hospital grade plug for use with wall outlet. 3 foot, 16 AWG cord with hospital grade plug for use with accessory outlet	
Over Current Production		2 fuses 5 x 20 mm, 5 AMP Slo-blo, 250 VAC	
Voltage		120 VAC; 60Hz; ±10%; 1 AMP	
Operating Ambient Temperature Range		50˚F - 104˚F	10˚C - 40˚C
Storage Temperature		-40˚F - 158˚F	- 40˚C - 70˚C
Output Flow Rate		12.5 LPM (0.4 SCFM) minimum @ 30mmHg	
Current Leakage		300 uA Maximum	
Classification		Class 1, grounded equipment Class 2, FDA and Health Canada	
		Type BF equipment 	
		Continuous operation - Not suitable for use in the presence of flammable anesthetic mixture with air or with oxygen or nitrous oxide. Suitable for continuous duty.	
		IPX4, Splash Proof	
		Medical equipment: Classified with respect to electric shock, mechanical hazards only, in accordance with UL60601-1 CAN/CSA C22.2 No. 601.1.-M90. For fire hazards: CALTB603, 16 CFR 1632, 16 CFR 1633.	
		Electromagnetic compatibility, meets EN 60601-1-2, 2001 (CISPR II classified as Class A, Group 1 ISM equipment)	

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WARNING /CAUTION / NOTE DEFINITION

These words carry special meanings and should be carefully reviewed.

WARNING

Alerts the reader about the situation which if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.

CAUTION

Alerts the reader of a potentially hazardous situation, which if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to a device that may occur as a result of use or misuse.

NOTE

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

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Symbols

Warning, Refer to Service/Maintenance Manual

~ Alternating Current

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

Class 1 Equipment: equipment in which protection against electric shock does not rely on **Basic Insulation** only, but which includes an additional safety precaution in that means are provided for the connection of the **Equipment** to the protective earth conductor in the fixed wiring of the installation in such a way that **Accessible Metal Parts** cannot become live in the event of a failure of the **Basic Insulation.**

IPX4 Protection from Liquid Splash

Dangerous Voltage Symbol

Protective Earth Terminal

Potential Equalization Symbol

Medical Equipment Classified by Canadians Safety Association with Respect to Electric Shock, Fire, Mechanical and Other Specified Hazards Only in Accordance with UL 60601-1, First Edition (2003) and CAN/CSA C22.2 No. 601.1-M90 with updates 1 and 2.

Safe Working Load Symbol

In accordance with European Directive 2002/96/EC on Waste Electrical and Electronic Equipment **(WEEE)**, this symbol indicates that the product must not be disposed of as unsorted municipal waste, but should be collected separately. Refer to your local distributor for return and/or collection systems available in your country.

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Summary of Safety Precautions

- Before operating or servicing the **Position Pro™** mattress system, it is important to read and understand all information in this manual. Carefully read and strictly follow these guidelines. The **Warnings** and **Cautions** are repeated throughout the manual, where applicable.
- To ensure safe operation, methods and procedures must be established for educating and training the staff.
- U.S. Federal law restricts this device be sold by or on the order of a physician.

⚠ WARNING

- The Turn Assist function should only be used or operated by a skilled medical professional.
- Explosion risk. Do not use in the presence of flammable mixture with air or with oxygen or nitrous oxide.
- Electrical shock risk. Refer all servicing to qualified personnel.
- The mattress is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded three-prong receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used.
- Medical electrical equipment requires special precautions regarding EMC and needs to be installed and put into service according to the EMS information provided within this manual in order to prevent equipment malfunction.
- Portable and mobile RF communication equipment can affect Medical Electrical Equipment.
- Do not turn patient with unstable fractures, unstable spinal cord injuries or those in skeletal traction. Death or serious injury could result.
- Risk of injury. Use of dynamic mattress systems for stroke victims should be only under physician's order.
- It is the responsibility of the caregiver to monitor the patient's condition at regular intervals to ensure patient safety.
- Consult physician if redness or skin breakdown occurs.
- Failure to position the patient along the mattress center line before starting the Turn Assist could result in injury. Check patient frequently to ensure proper positioning and mattress inflation.
- Rotation angles will differ according to patient size, patient weight, shoulder width and patient position. Monitor the patient closely to ensure that the unit achieves the desired angle.
- Ensure that all tubing and wiring connected to the patient is long enough, stabilized and secure to assure safe and unrestricted lateral rotation/elevation of the patient. Be sure to monitor the patient frequently.
- To avoid injury when using the Turn Assist function, take special care not to extubate intubated patients.
- Always secure the mattress straps to the bed frame to prevent the mattress from sliding and causing patient injury.
- To help ensure patient safety, always raise the bed siderails before beginning Turn Assist.
- Do not leave patient unattended during Turn Assist. Serious injury could result.
- Ensure CPR straps are always accessible.
- Disinfect the mattress between patients. Failure to do so could result in cross-contamination and infection.
- If a big spill occurs that cannot be cleaned or dried adequately, changing the cover will be required. Also, open the mattress to verify if there is fluid inside.
- Unplug the mattress power cord from the wall outlet before cleaning the mattress. Failure to unplug the unit could damage the equipment or result in personal injury.
- Do not immerse the mattress or the foot box in cleaning or disinfectant solutions. Do not allow liquid to pool on the mattress or the control box. Immersion or liquid pooling could cause malfunction resulting in equipment damage or patient injury.
- Allow the control box to completely dry before placing the mattress over it. Excess moisture could cause equipment malfunction resulting in equipment damage or patient injury.
- To reduce risk of patient or user injury and equipment damage, do not exceed the safe working load of the hospital bed frame when supporting both the patient and the **Position Pro™** mattress.
- If changing the angle of the bed during Turn Assist, monitor the patient for at least one complete cycle to ensure that the patient achieves the desired angle.
- If the Alarm **"Call Maintenance"** occurs, immediately remove the patient from the bed and call your service personnel.

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WARNINGS (CONTINUED)

- Do not perform a “Burn In” (electronic or electrical tests) with the patient on the mattress to ensure patient safety.
- Do not use the pendant to move the bed.
- To avoid patient injury, do not use the side straps to transport the patient.

To avoid possible injury and assure proper operation when using the **Position Pro™** mattress on a bed equipped with:

SCALES

- Follow the manufacturer’s instructions for use of the scale system.
- Do not zero bed scales or weigh patient with Turn Assist active. Patient motion and position resulting from the **Position Pro™** mattress may adversely affect the scale system performance.
- Confirm proper scale system operation following mattress installation. For best results, secure the **Position Pro™** mattress power cord to prevent damage to the cord and interference with the bed frame and the scale system.

BED EXIT SYSTEM

- It is recommended to use the **Position Pro™** mattress with the Bed Exit System.
- Follow the manufacturer’s instructions for use of the Bed Exit System.
- Be sure there is no bed or mattress movement when initializing the Bed Exit System. The patient motion and position resulting from the Turn Assist may adversely affect bed exit system and performance.
- Confirm proper Bed Exit System operation when used in conjunction with Turn Assist.

CAUTION

- Do not drop the foot section of the mattress back onto the bed frame. Abruptly dropping the mattress foot section could seriously damage the controls and cause malfunction.
- The **Position Pro™** mattress should not be used adjacent to or stacked with other equipment to avoid malfunction (excluding on a bed).
- The mattress cover must be completely dry before storage or adding linens. Failure to remove excess disinfectant could cause degradation of the cover material.
- Follow all applicable safety rules and protocols concerning patient and care giving safety.
- To prevent pulling, removal or breakage, stabilize and secure all patient lines and tubing before starting Turn Assist all together.
- Monitor the patient’s skin condition regularly to ensure skin integrity.
- Avoid contact of sharp objects with mattress. Punctures, cuts and tears in the cover could result in contamination of the cushions, prevent proper air pressure control and compromise therapy and safety.
- If fluids spill on any part of the pendant, immediately unplug the power cord from the power source. Remove the patient from the mattress and clean up the fluid. Fluids can cause corrosion of components and may cause the mattress to operate erratically or may make some functions completely inoperable. **Do Not** put the mattress back in service until it is completely dry and has been thoroughly tested for safe operation.
- The bed’s caster brakes should always be locked except during transport to prevent unintentional movements.
- The bed should always be in the lowest position when the patient is unattended to minimize fall consequences.
- Siderails are not intended to be a patient restraint device. It is the responsibility of attending medical personnel to determine the appropriate manner of restraint and the siderail positioning necessary to ensure a patient will remain safely in bed.

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CONTRAINDICATIONS

Stryker promotes the clinical assessment of each patient and appropriate usage by the caregiver. Air support therapy is not recommended for patients with, but not limited to:

- Unstable fractures
- Spinal cord injuries
- Patients in skeletal traction
- Agitated patients
- Patients with severe hemoptysis
- Patients for whom a head-down position is contraindicated (e.g. head injuries)
- Patients with bleeding disorders
- Patients with rib fractures, or predisposition to pathological fractures
- Patients for whom the techniques cause increased dyspnea or wheezing
- Patients who are hemodynamically unstable

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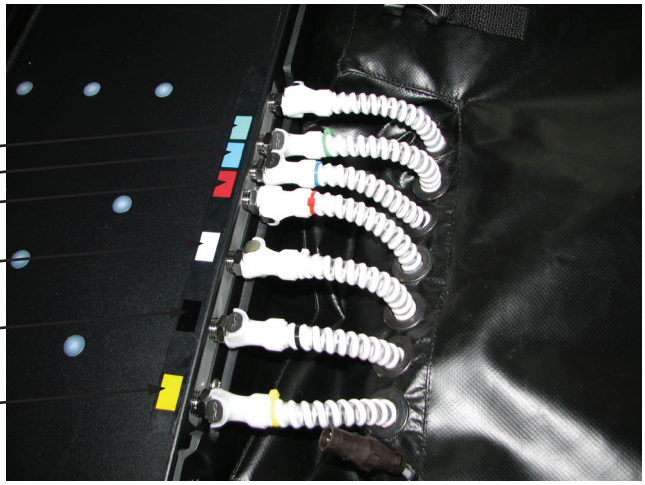
INSTALLING THE MATTRESS AND CONTROL BOX

1. Place the mattress onto the bed.
2. Flip the foot section towards the head end.

3. Place the control box (upside down) into the opening in the foot section.

4. Connect outer transparent tubes to manifold, matching the color coding.



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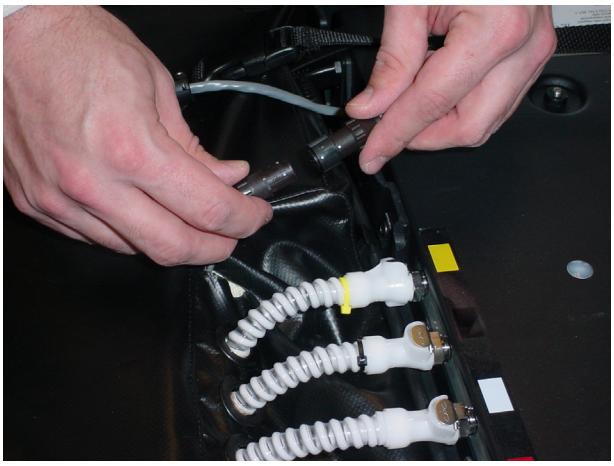
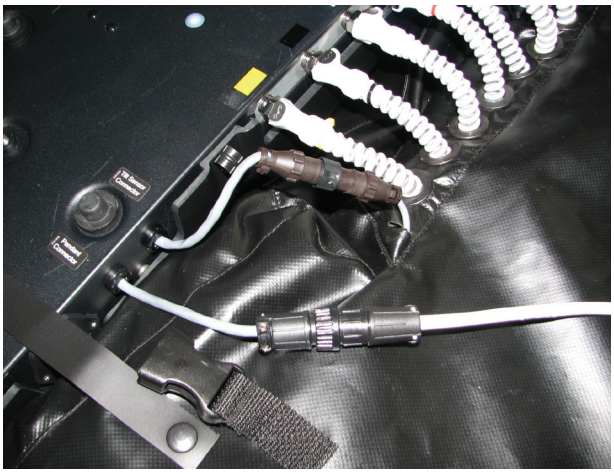
INSTALLING THE MATTRESS AND CONTROL BOX (CONTINUED)

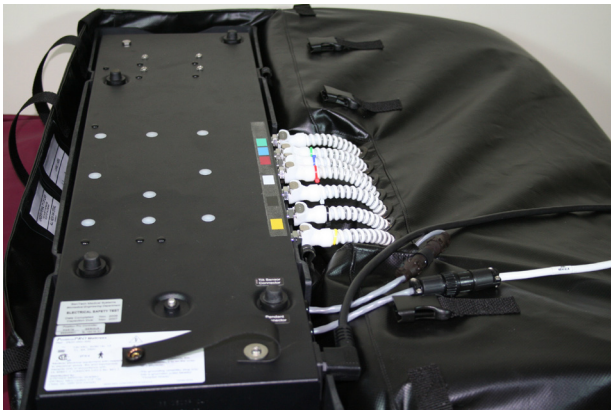
5. Connect tilt sensor cables.
   a) Align the white dots.
   b) Twist clockwise to fasten.



6. Connect pendant cable.



7. Connect power cord (4’ or 15’) and turn the switch to on.



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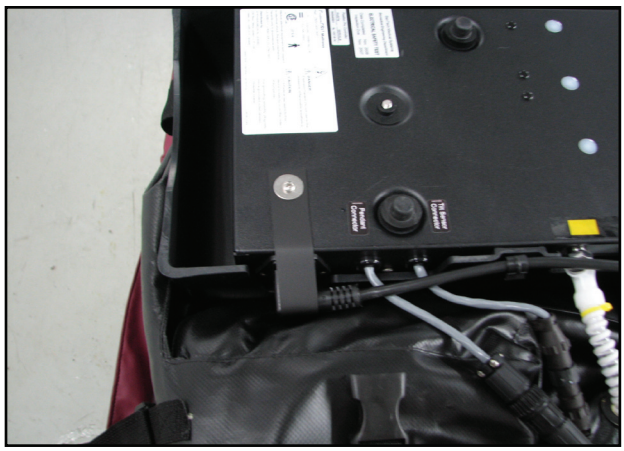
INSTALLING THE MATTRESS AND CONTROL BOX (CONTINUED)

8. Fasten straps over the power cord.



9. Install the power cord in the two retaining clips.

10. Fasten the three retaining straps.
11. Carefully rotate the foot end control box and mattress into the flat position.

CAUTION

Gently lower the foot end section to not damage the control box.

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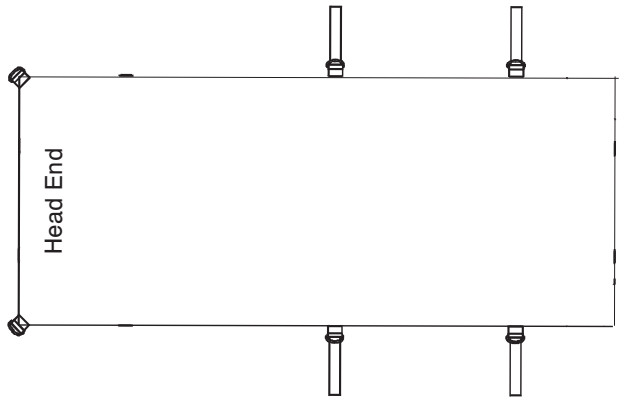
INSTALLING THE MATTRESS AND CONTROL BOX (CONTINUED)

12. Fasten the retaining straps to secure the mattress to the bed frame (4 straps total). (Refer to mattress diagram and picture below.)



13. Install the clip for the pendant control

Note

Pendant control can be installed in 2 locations:

a) Foot Siderails

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13. Install the clip for the pendant control (Continued)

    b) Foot Board

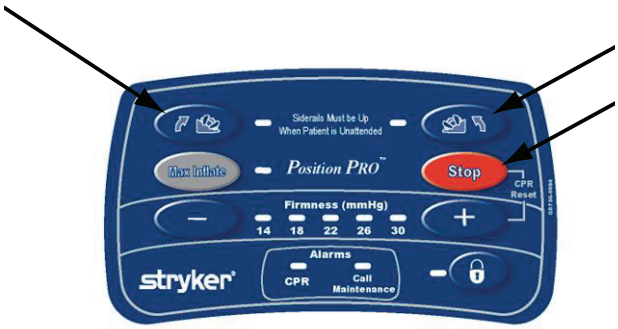
14. Connect the power cord to the power source.

Note:
Mattress is automatically programmed at normal state, (firmness level 22 mmHg). The mattress is equipped with a hospital grade plug for the protection against shock hazard. It must be plugged into a properly grounded three-prong receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used. The yellow LED on the pendant will light whenever the power cord is plugged in.

15. Calibration of tilt sensor.

Note

Calibrate only when the control box is replaced immediately after plugging in the mattress (in the first ten seconds), simultaneously press on “Turn Assist Right”, “Turn Assist Left” and “Stop”. Ensure that the bed is in flat position.

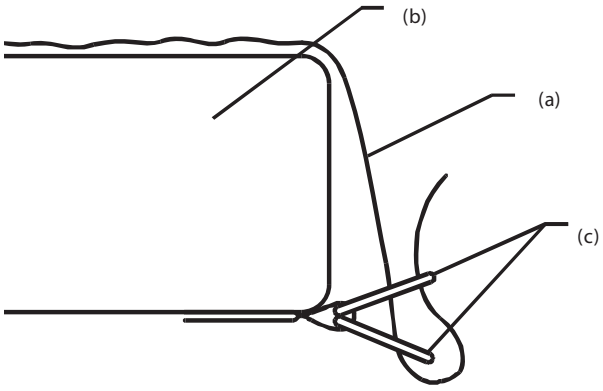


CAUTION

Ensure that the head of the mattress is flat before calibration.

APPLYING THE LINENS

1. Apply the linens using the “D” rings for the flat sheet.
2. As shown in the diagram to the right, to secure linens (a) to mattress (b), thread four corners through “D” rings (c) attached to mattress.
3. To effectively use the “Turn Assist”, do not pull linens taut. Linens should remain loose and wrinkly on surface of the mattress.



WARNING

Ensure that you have always access to the CPR straps.

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PREPARING FOR TURN ASSIST

PATIENT POSITIONING

Position the patient along the center line of the mattress.

WARNING

Failure to position the patient along the mattress center line before starting Turn Assist could result in patient injury.

Note:

- Rotation angles will differ according to patient size, patient weight, shoulder width and patient position.
- Position Pro can turn a 300 pound patient up to 40 degrees.

BED POSITIONING

1. Raise the bed siderails.
2. Lower the bed height to the lowest position.
3. Lower the head section to its lowest position.

ADJUSTING MATTRESS FIRMNESS

Mattress firmness settings may be adjusted for patient comfort requirements. The default of 22 mmHg will provide optimal pressure relief for patients up to 200 pounds. For larger patients, higher settings are recommended.

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USER PENDANT CONTROL BUTTON FUNCTIONS

TURN ASSIST RIGHT: Located over the “Stop” Button. Allows to turn patient to the right (from patient’s perspective).

TURN ASSIST LEFT: Located over the “Max Inflate” Button. Allows to turn patient to the left (from patient’s perspective).

MAX INFLATE: Allows nurses to inflate mattress to the maximum pressure of 60 mmHg to facilitate patient manipulation.

MINUS SIGN: Allows to decrease the firmness level of the mattress pressure for patient’s comfort. It is not possible to modify the firmness of the mattress when the system is in Max Inflate or in Turn Assist Mode.

PLUS SIGN: Allows to increase the firmness level of the mattress pressure for patient’s comfort. It is not possible to modify the firmness of the mattress when the system is in Max Inflate or in Turn Assist Mode.

STOP: Allows nurse to cancel any of the following therapies: “Turn Assist Left”, “Turn Assist Right” or “Max Inflate”. Pressing once will Stop Turn Assist Left and Right at current angle but won’t cancel function completely. Press Stop a second time to completely cancel function or press the “Turn Assist” again to continue.

LOCK OUT: Allows nurse to block the activation of all the functions and controls on the pendant control.

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LED FUNCTIONS

- **Turn Assist LEFT LED**: An illuminated LED will indicate that this function is in use, otherwise the LED is turned off. A blinking LED means that a complete turn has not been reached or that the mattress is in the process of turning. The LED will remain illuminated once the function is completed.

- **Turn Assist RIGHT LED**: An illuminated LED will indicate that this function is in use, otherwise the LED is turned off. A blinking LED means that a complete turn has not been reached or that the mattress is in the process of turning. The LED will remain illuminated once the function is completed.

- **MAX INFLATE LED:** An illuminated LED will indicate that this function is in use, otherwise the LED is turned off. A blinking LED means that a full inflation has not been reached and is still in the process of inflating. The LED will remain illuminated once the function is completed.

- **LOCK OUT LED:** An illuminated LED indicates that all button functions on the pendant control have been locked. A non-illuminated LED indicates that all functions may be activated.

- **FIRMNESS CONTROL LEDs**: Five LEDs are assigned to indicate the firmness settings of the Mattress. These LEDs are controlled by the "-" and "+" buttons. There are only five levels of pressure that may be reached.

  1) 14 mmHg (The lowest level of pressure that can be reached)
  2) 18 mmHg
  3) 22 mmHg
  4) 26 mmHg
  5) 30 mmHg

- **WARNING LEDS:** "Siderails Must Be Up When Patient is Unattended" is activated when "Turn Assist Right" or "Turn Assist Left" are on. They follow the same blinking pattern as the Turn Assist Leds.

- **ALARM LEDS:** Two LEDs are assigned as a visual alarm for the mattress. They flash to indicate a hazardous situation has been detected. The two main alarms are the following:

  1) CPR activation
  2) Call Maintenance

  Note:
  Call Maintenance Alarm will occur in the following situations:

  - Excessive Temperature
  - Loss of CAN Network
  - Pressure Leakage
  - Reading Errors with Pressure, Temperature and Angle Sensors
  - Calibration Errors with the Angle Sensor

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ACTION - REACTION MATRIX COMBINATIONS

TIMING: Buttons are considered pressed simultaneously when the time difference between their activation is less than 20 msec. The difference is effective for any number of function combinations. In the case when two buttons are pressed simultaneously, if one button is released for more than 20 msec, the function of the last released button is performed.

FIRST AREA ACTION - REACTION MATRIX

The table below depicts the action performed when two buttons are pressed simultaneously. The order of priority is as follows:

1st priority - LOCK OUT
2nd priority - STOP
3rd priority - MAX INFLATE
4th priority - Turn Assist LEFT & Turn Assist RIGHT

Functions/ Functions	Turn Assist Left	Turn Assist Right	Max Inflate	Lock Out	Stop
Stop	Stop	Stop	Stop	Lock Out	X
Lock Out	Lock Out	Lock Out	Lock Out	X	Lock Out
Max Inflate	Avoid Both Command	Avoid Both Command	X	Lock Out	Stop
Turn Assist Left	X	Avoid Both Command	Avoid Both Command	Lock Out	Stop
Turn Assist Right	Avoid Both Command	X	Avoid Both Command	Lock Out	Stop

SECOND AREA ACTION REACTION MATRIX

The table below depicts the action performed when two functions are combined.

Functions/ Functions	Lock Out	Decrease Firmness	Increase Firmness
Lock Out	X	Lock Out	Lock Out
Decrease Firmness	Lock Out	X	Decrease Firmness
Increase Firmness	Lock Out	Increase Firmness	X

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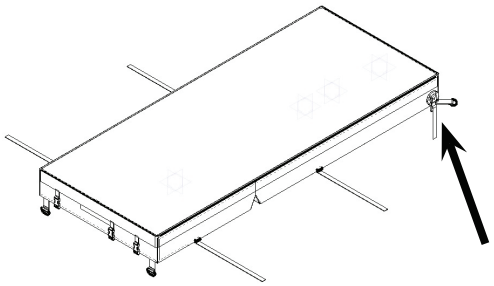
RESETTING CPR ALARM

- To reset CPR alarm, simultaneously press on “Stop” and “+” buttons.

CPR ACTIVATION

- To activate CPR, pull either the left or the right or on both CPR straps located at the head end of the mattress. All running functions will stop.



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TRANSFERRING A PATIENT TO AND FROM THE POSITION PRO™ MATTRESS

1. Position the patient along the center line of the mattress.

WARNING

Do not transfer the patient from one bed to another using the mattress with patient on it. Doing so can result in serious patient injury.

1. Lock the brakes on both surfaces (beds or stretchers)
2. Select 
3. Adjust the height of the bed to the same level as the surface to which (or from which) the patient is to transfer.
4. Once the mattress has reached its maximum inflation, transfer the patient following all applicable safety rules and institution protocols to ensure patient and caregiver safety.
5. Select  to turn off Max Inflate.

TRANSPORTING A PATIENT

1. Do not use Turn Assist while transporting a patient.
2. Unplug the mattress power cord and the bed power cord from the power source and properly stow them to avoid entanglement during transport.
3. Raise and lock siderails.
4. Transport the patient following all applicable safety rules and institution protocols to ensure patient and caregiver safety.
5. Plug the mattress power cord and the bed power cord into a properly grounded, hospital grade wall receptacle when the patient destination has been reached.

NOTE

The mattress will maintain air pressure for up to four (4) hours while unplugged.

INCONTINENCE / DRAINAGE

Disposable diapers or incontinence pads may be used. Ensure to provide appropriate skin care following each episode.

WARNING

It is the caregiver's responsibility to monitor the patient's condition at regular intervals to ensure patient safety. Consult physician if erythema or skin breakdown occurs.

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Preventative Maintenance Checklist

_____ Zipper and cover are free of tears, cuts, holes or other openings.

_____ Pendant controls function properly.

_____ Max Inflate functions properly.

_____ Turn Assist functions properly.

_____ Left and right CPR releases function properly.

_____ All electrical connections function properly.

_____ Power cord and plug are free of damage.

_____ Current leakage not more than 300 micro amps.

_____ Air cells are free of excessive wear (i.e. cracks). It is recommended to check cells every 6 months. Replace if necessary.

_____ If excessive wear is observed on the flame barrier cover, it is strongly recommended to replace this cover.

_____ All connectors are without damage.

Mattress Serial No.

Completed by:_____ Date_____

NOTE:

A preventative maintenance program should be established and performed annually at a bare minimum. Preventative maintenance may need to be performed more frequently based on the usage level of the product.

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WARNING

Unplug the mattress power cord from power source prior to cleaning. Failure to unplug the unit could cause equipment damage or personal injury.

Do not immerse the mattress or control box in cleaning or disinfectant solutions. Do not allow liquid to pool on the mattress or control box. Immersion or liquid pooling could cause malfunction resulting in equipment damage or patient injury.

PENDANT CLEANING

To clean the pendant, use a non-abrasive cleaning solution (i.e. warm, soapy water) and a clean, soft cloth. Apply disinfectant to the entire pendant outer surface.

MATTRESS CLEANING

Wipe down the entire mattress surface with a mild soap and water solution and a clean, soft cloth. Apply a disinfectant to the entire mattress outer surface. Lift up the head section of the mattress to clean the bottom surface.

To clean the bottom of the foot section, carefully lift up the foot section and fold it over the seat section. Clean as described above. Allow the surface to completely dry then gently lower the foot section back into its original position.

CAUTION

The mattress cover must be completely dry before storage or adding linens. Failure to remove excess disinfectant could cause degradation of the cover material.

Note

The mattress cover contains an antimicrobial agent to help prevent bacteria and fungus from destroying the cover. If stains, discoloration, brittleness, stickiness or unpleasant odors become noticeable, the antimicrobial agent may have become ineffective and the mattress cover should be replaced.

CONTROL BOX CLEANING

To clean the control box, use a non-abrasive cleaning solution (i.e. warm, soapy water) and a clean, soft cloth. Apply disinfectant to the entire box outer surface.

WARNING

Allow the control box to completely dry before placing the mattress over top of it. Excess moisture could cause equipment malfunction resulting in equipment damage or patient injury.

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Problem / Failure	Recommended Action
Mattress has no power.	A. Verify the mattress power cord is connected properly, and verify that power switch is turned on. 1) If not, reconnect. If the mattress now has power, return it to service. B. Check the fuses above the control box power cord connection. 1) Replace the fuse(s) and test. If the mattress now has power, return it to service. C. Check the power board. 1) Check the main fuse. Replace, if necessary. 2) Check for 120 VAC on the pump box assembly between the red/white and green/black wires from the power inlet filter. a) If no voltage, check for 120 VAC on the power cord inlet between the blue and brown wires. b) If voltage is present, replace the power inlet filter. D. Check DC voltages on the power board on connectors J1 or J2, pin 4 (ground) / pin 3 (+12) / pin 6 (+24) 1) If no voltage at any one of the points, check for 24 VAC on connector J7. If no voltage, replace the transformer. 2) If no voltage at any one of the points, replace the power board. If the mattress now has power, return it to service.
Pendant has no power but the mattress is running.	A. Lift up the foot section of the mattress, unplug the mattress power cord from the power source and verify the black connector in the control box is connected properly to the pendant. Reconnect if necessary. Plug the mattress power cord back into the power source. If the mattress now has power, return it to service. Check to ensure angle sensor cable is connected to control box. B. If it is connected properly, test with another pendant. If the pendant has power, calibrate Tilt Sensor and return the mattress to service.

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Troubleshooting Guide

Problem / Failure	Recommended Action
Mattress does not inflate.	A. Check the pendant for any alarm messages. B. Listen to the control box and verify the pump is running. 1) If it is not, verify both the left and the right CPR plugs are properly inserted and snapped in the locking mechanism. If the mattress will now inflate, return it to service. 2) If the control box pump is running, verify air valves are well connected to the control box and verify there are no kinks. If the mattress will now inflate, return it to service.
Pendant does not respond.	A. If the mattress has power, check for 12 VDC from the power board between pin 3 and pin 4 and for 24 VDC on J1 and J2 on the pendant connector. 1) If voltage is present, go to step C. 2) If no voltage, replace the transformer. If the controller now responds, return the mattress to service. B. Test with another pendant, if available. 1) If the different pendant works, return mattress to service. 2) If the different pendant still does not respond, open the control box and see if the CAN bus LED's are flashing on the CPU board. C. Open the non-responding pendant and check all the connections. 1) Reset the connectors, if necessary, and test. 2) Inspect for damage. 3) If the pendant now responds, return the mattress to service.
Bladder does not inflate or deflate.	A. Verify bladder integrity. B. Verify connections. C. Verify CPR mechanism is in place, "right" & "left".

Quick Reference Replacement Parts List

Note: The parts and accessories listed below are currently available for purchase. Certain parts identified on the assembly drawings may not all be individually available for purchase. For more information, please contact your local Stryker Service Technicians.

Part Name	Part Number
Clip	QDF2082
Pendant	QDF2081
Pump	QDF56-0541
Medical Toroid	QDF56-0047
Manifold Valve Assembly	QDF56-0503
Air Main Control Board (AMCB)	QDF56-0005
Top Cover, Dartex	QDF56-0528
Power Cord, 4 feet	QDF8087
Power Cord, 15 feet	QDF8088
Fan	QDF56-0509
Sub - Assembly Line Choke	QDF56-0243
Sub - Assembly Angle Sensor	QDF56-0239

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TOP COVER REPLACEMENT

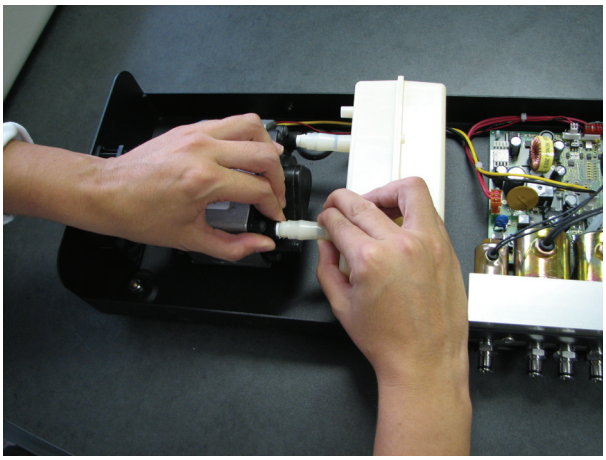
1. Unplug the mattress power cord from the power source.
2. Unzip the mattress cover and remove.
3. Replace with new cover and zip all sides.

CONTROL BOX PUMP REPLACEMENT

Required tools:

- **Phillips Screwdriver**
- **Diagonal Cutters**

1. Unplug the mattress power cord from the power source.
2. Carefully fold the foot end section of the mattress back over the head section.
3. Unplug all connectors, power cord and pendant cable.
4. Remove control box from mattress.
5. Using the Phillips Screwdriver, remove the four (4) screws securing the cover onto the control box (two screws on each side).
6. Remove cover.



7. While holding the pump with one hand, carefully pull on the air hose to remove it from the barbed fitting.

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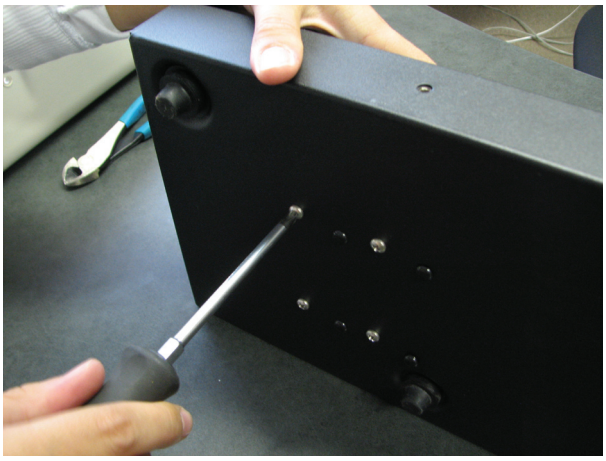
CONTROL BOX PUMP REPLACEMENT (CONTINUED)

8. Disconnect Electrical Connector (Line Chokes).

9. Turn the box on it's side.
10. Remove the 4 screws holding the pump to the control box.
11. Remove the pump from the control box.
12. Install new pump inside control box.
13. Connect the pump power connector to the electronic board.



Note
Leave enough slack to allow free movement of the control box in order to prevent pinching of the cable.

14. Reconnect the air hose to the barbed fitting on the new pump.
15. Replace the four (4) screws which hold pump.
16. Replace control box cover.
17. Plug the mattress power cord into the power source and test the mattress functionality before returning the mattress to service.

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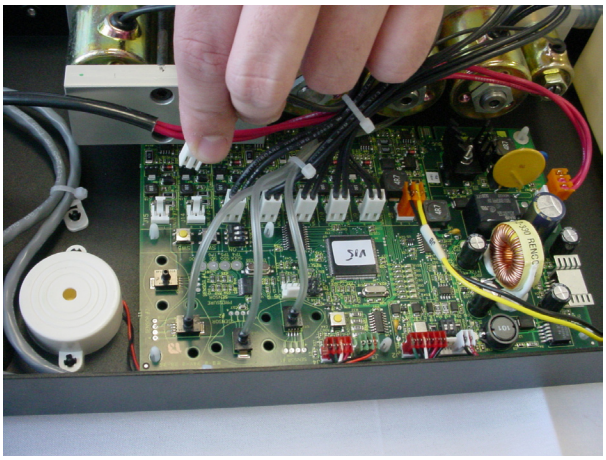
CONTROL BOX PUMP ELECTRONIC BOARD REPLACEMENT

Required tools:

- **Phillips Screwdriver**
- **ESD System (Static Strap)**
- **Needle Nose Pliers**

1. Unplug the mattress power cord from the power source.
2. Carefully fold the foot end section of the mattress back over the head section.
3. Unplug all connectors, power cord and pendant cable.
4. Remove control box from mattress.
5. Using the Phillips Screwdriver, remove the four (4) screws securing the cover onto the control box (two screws on each side).
6. Remove cover.



7. Properly ground yourself.
8. Unplug the cable connections and hoses from the electronic board.

   Note
   Take note of all connector locations to ensure that the board is properly reconnected later. Start connecting at J14; **do not use** J15.

9. Using needle nose pliers, disengage the locking mechanism on the 9 (nine) board mounts holding the electronic board to the control box.
10. Remove the electronic board.
11. Reverse the procedure to reinstall new electronic board.
12. Plug mattress power cord back into the power source and test the mattress functionality before returning the mattress to service.

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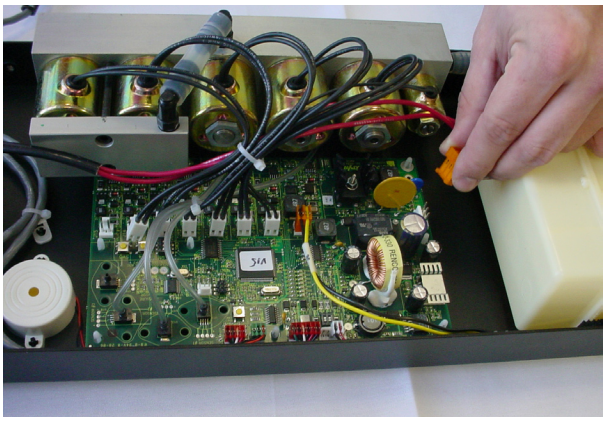
CONTROL BOX TRANSFORMER REPLACEMENT

Required tools:

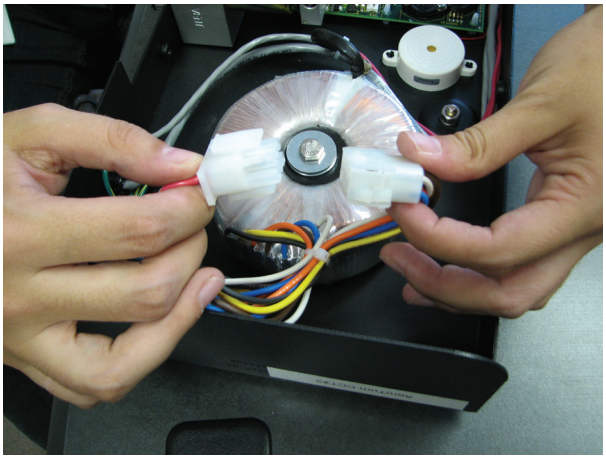
- **Phillips Screwdriver**
- **ESD System (Static Strap)**
- **7/16” Wrench**

1. Unplug the mattress power cord from the power source.
2. Carefully fold the foot end section of the mattress back over the head section.
3. Unplug all connectors, power cord and pendant cable.
4. Remove control box from mattress.
5. Using the Phillips Screwdriver, remove the four (4) screws securing the cover onto the control box (two screws on each side).
6. Remove cover.



7. Properly ground yourself.
8. Unplug the transformer wire that connects to the electronic board.

   Note
   Take note of location so the new transformer will be properly reconnected.



9. Unplug the 120V connector and cut cable ties.

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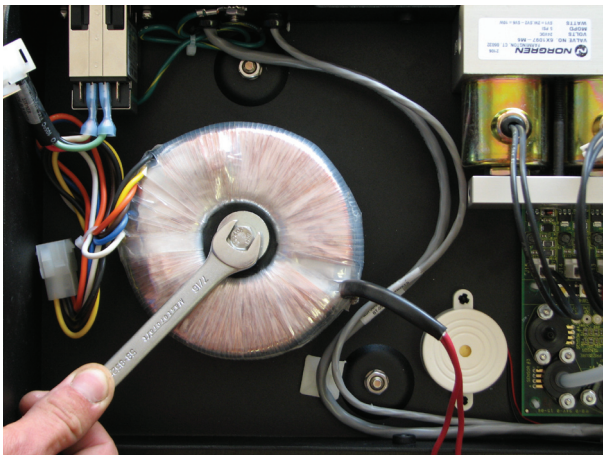
CONTROL BOX TRANSFORMER REPLACEMENT (CONTINUED)



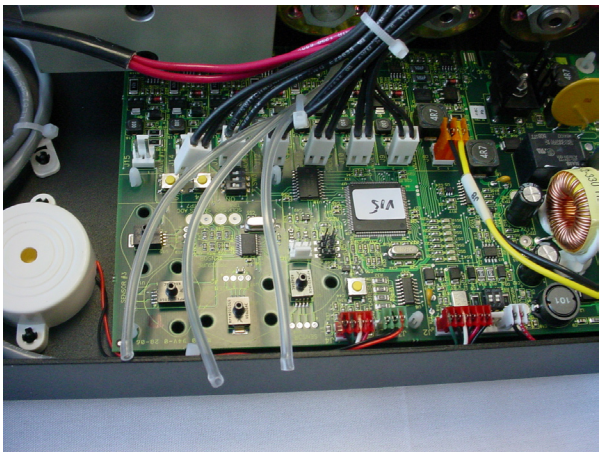
10. Using a 7/16” wrench, remove the bolt on top of the transformer.
11. Remove the transformer and discard.
12. Reverse the procedure to install the new transformer.
13. Plug the mattress power cord into the power source and test the mattress functionality before returning the mattress to service.

CONTROL BOX MANIFOLD REPLACEMENT

Required tools:

- **Phillips Screwdriver**

1. Unplug the mattress power cord from the power source.
2. Carefully fold the foot end section of the mattress back over the head section.
3. Unplug all connectors, power cord and pendant cable.
4. Remove control box from mattress.
5. Using the Phillips Screwdriver, remove the four (4) screws securing the cover onto the control box (two screws on each side).
6. Remove cover.



7. Disconnect hoses and wires from the electronic board.

   Note
   Take note of locations to ensure proper reconnection of valves and wires.

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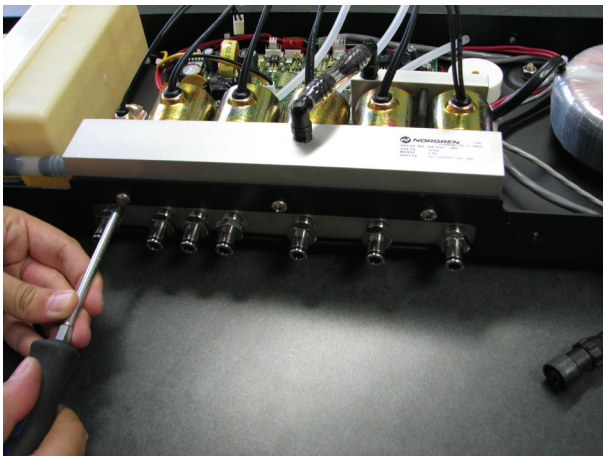
CONTROL BOX MANIFOLD REPLACEMENT (CONTINUED)

8. Remove the three (3) screws holding the valve assembly. Remove the assembly.
9. Reverse the procedure to install the new assembly.
10. Plug the mattress power cord into the power source and test the mattress functionality before returning the mattress to service.



TOP AIR BLADDER REPLACEMENT

1. Unplug the mattress from the outlet.
2. Unplug one of the CPR plugs to deflate the bladder.
3. Unzip the top cover and fold it off to the side.
4. Pull the flame barrier off from head to the foot, working it from the left to the right while pulling it down.
5. Unsnap the four straps which hold the top bladder down to the foam crib, by unsnapping them from the restraints below the foam crib. Also unsnap the eight straps (four on each side) from the secondary bladder straps, two straps (on the bottom corners), and one snap from the head end.
6. Unplug the hose going to the top bladder at the head end and at the foot end left side of the bladder.
7. Remove the top bladder.
8. Install the new bladder by reversing the above steps.
9. Plug the mattress into the outlet and test all functions prior to returning to service.

SECONDARY AIR BLADDER REPLACEMENT

1. Unplug the mattress from the outlet.
2. Unplug one of the CPR plugs to deflate the bladder.
3. Unzip the top cover and fold it off to the side.
4. Pull the flame barrier off from head to the foot, working it from the left to the right while pulling it down.
5. Unsnap the four straps which hold the top bladder down to the foam crib, by unsnapping them from the restraints below the foam crib. Also unsnap the twelve snaps (six on each side) from the top bladder and rotation bladder straps.
6. Unplug the two hoses at the foot right corner of the secondary bladder.

   NOTE: Make sure to mark the hoses so they can be reconnected in the correct location.

7. Remove the secondary bladder.
8. Install the new bladder by reversing the above steps.
9. Plug the mattress into the outlet and test all functions prior to returning to service.

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ROTATION AIR BLADDER REPLACEMENT

1. Unplug the mattress from the outlet.
2. Unplug one of the CPR plugs to deflate the bladder.
3. Unzip the top cover and fold it off to the side.
4. Pull the flame barrier off from head to the foot, working it from the left to the right while pulling it down.
5. Unsnap the four straps which hold the top bladder down to the foam crib, by unsnapping them from the restraints below the foam crib. Also unsnap the four straps from the secondary bladder (two on each side).
6. Unplug the two hoses at the head end and unplug the two hoses at the foot end of the rotation bladders.

   NOTE: Make sure to mark the hoses so they can be reconnected in the correct location.

7. Remove the rotation bladder assembly.
8. Install the new bladder by reversing the above steps.
9. Plug the mattress into the outlet and test all functions prior to returning to service.

CPR AIR BLADDER REPLACEMENT

Required tools:

- **3/8 Combination Wrench**

1. Unplug the mattress from the outlet.
2. Unplug one of the CPR plugs to deflate the bladder.
3. Unzip the top cover and fold it off to the side.
4. Pull the flame barrier off from head to the foot, working it from the left to the right while pulling it down.
5. Unplug the six hoses from the CPR air bladder.

   NOTE: Make sure to mark the hoses so they can be reconnected in the correct location.

6. Using a 3/8 combination wrench, remove the eight nuts and bolts that hold the CPR brackets on (four on each side)
7. Remove the CPR air bladder assembly.
8. Install the new bladder by reversing the above steps.
9. Plug the mattress into the outlet and test all functions prior to returning to service.

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SERVICE ALARMS

Note

Disconnect connector from the PC board during cable continuity tests. Never insert meter leads or anything else into the connector pin receptacle and check continuity at the access slot on the side of the connector.

Service Event	Description	Problem Area
CPR Alarm	Rapid drop in pressure.	1. Ensure that the CPR mechanism is closed “Right” & “Left”. 2. Verify that air bladders are not punctured or losing air. 3. Ensure connectors are properly inserted. **Note:** After 30 minutes of alarm a buzzer will sound. After 90 minutes, the ‘call maintenance LED will flash. 4. Resetting system using pendant will cancel the alarm. **Note:** Pressing “Stop” and “+” buttons simultaneously for 1 second will reset the system.
Call Maintenance	Pressure Sensor Reading Error.	1. Verify that Max Inflate and Turn Assist attain their required pressure. (Pressure can be verified by touching the mattress to assess firmness). 2. Inflation doesn’t stop or stops prematurely. 3. Verify tube connections. 4. Verify pressure sensor connections. 5. Change AMCB board (Air Main Control Board).
	Angle Sensor Reading Error.	1. Verify mattress calibration and “zeroing” of the angle sensor, (Refer to “Angle sensor calibration”). 2. Ensure that the angle sensor is in the right location in the mattress. 3. Change sensor or AMCB board (Air Main Control Board).
	Temperature Reading Error or Exceeded Temperature.	1. Check control box is not overheating. 2. Ensure pump, transformer and valves are not overheating. 3. Verify that connectors are in the correct position and not damaged.

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SERVICE ALARMS (CONTINUED)

Service Event	Description	Problem Area
Call Maintenance (Continued)	Temperature Reading Error or Exceeded Temperature (Continued).	4. Verify input power is 120 VAC. 5. Check if operating conditions are respected for ambient temperature.
	Loss of Pressure.	1. Cannot inflate Mattress. 2. Low loss of air “low leak”. 3. Verify that air bladders are not punctured. 4. Verify tube connection. 5. Verify pressure sensor connection.
	Loss of CAN Network.	1. Verify connections between pendant and control box is intact. 2. Verify that the pendant connection to the board is intact.

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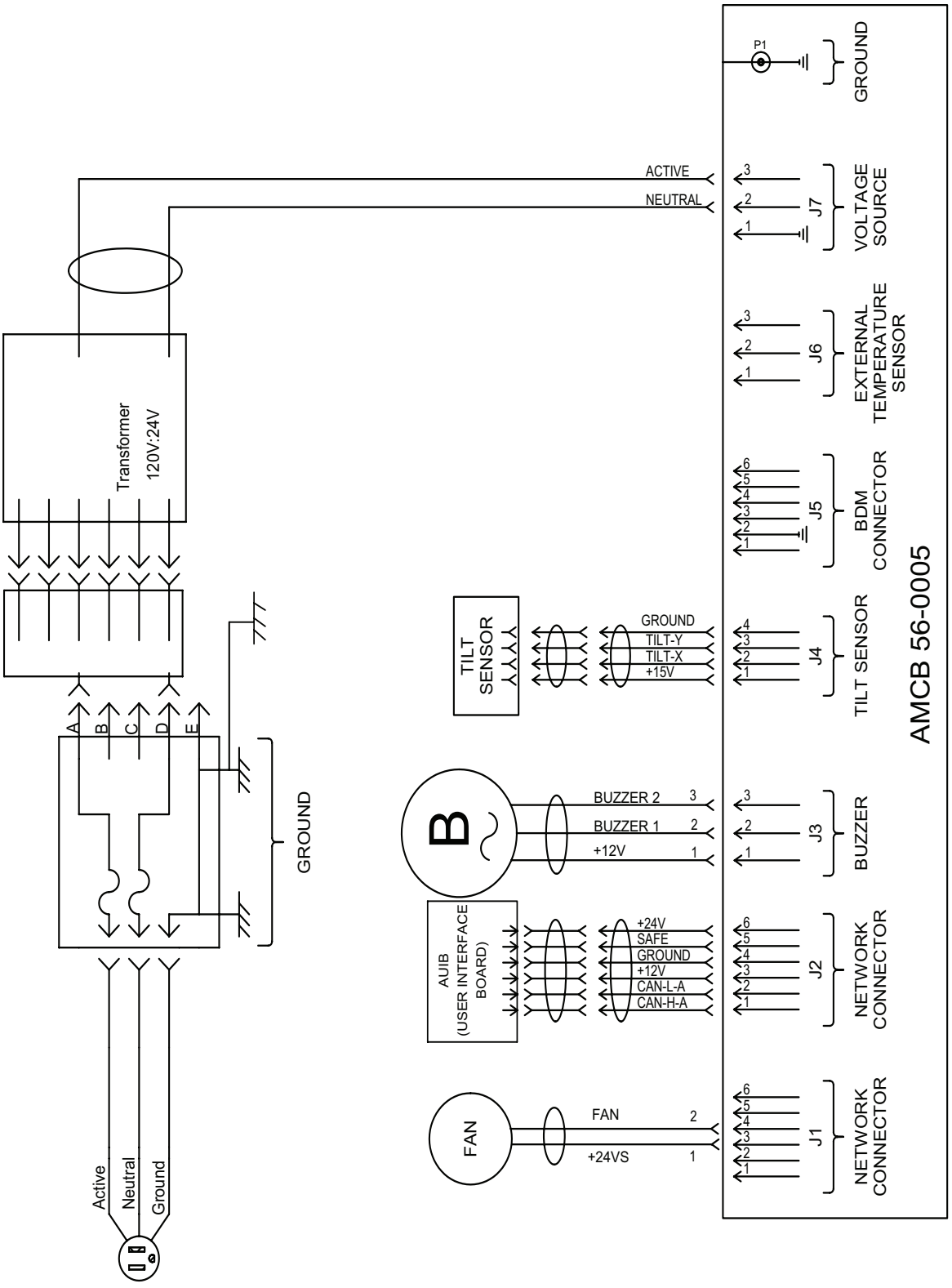
Electrical Diagram



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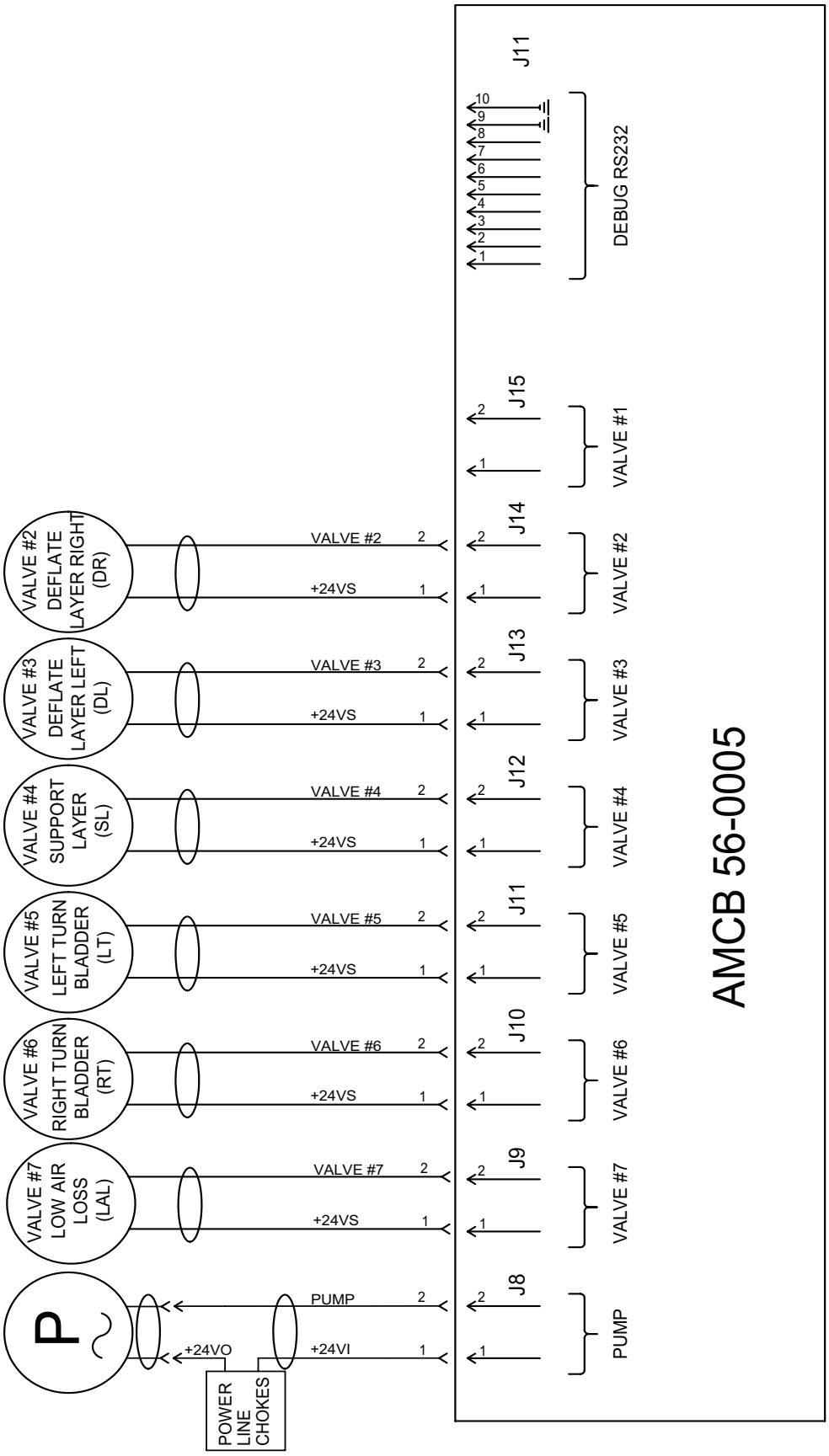
Electrical Diagram



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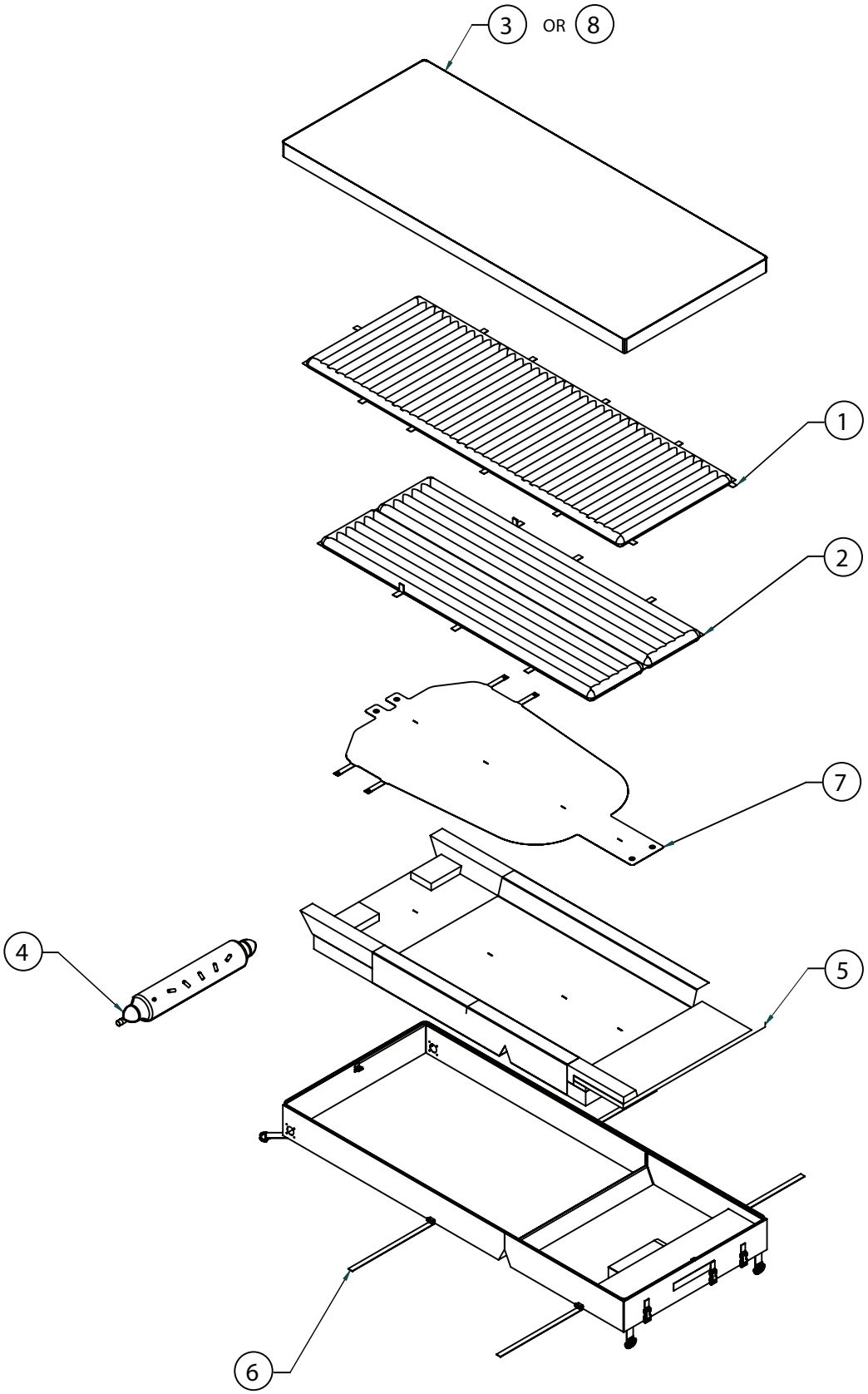
Mattress Layer Assembly



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Mattress Layer Assembly

Item	Part No.	Part Name	Qty.
1	56-0522	S.A. Therapy Layer	1
2	56-0523	S.A. Air Cushion Lower	1
3	56-0528	S.A. Top Cover	1
4	56-0532	S.A. CPR Manifold	1
5	56-0533	S.A. Foam Cushion	1
6	56-0532	S.A. Bottom Cover	1
7	56-0535	S.A. Turning Bladder	1
8	56-0247	S.A. Nylon Top Cover	1

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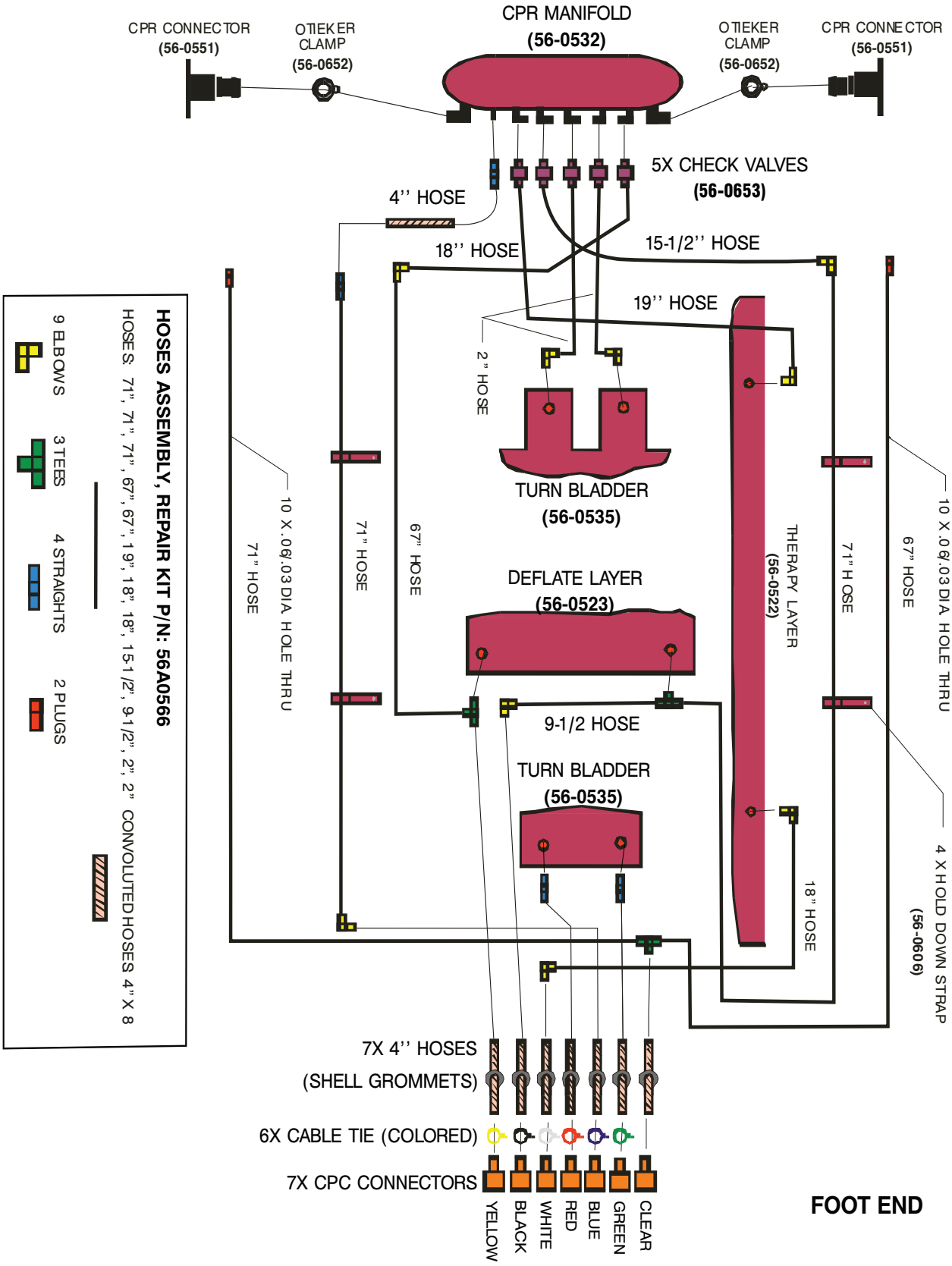
Mattress Hose Assembly

HEAD END



FOOT END

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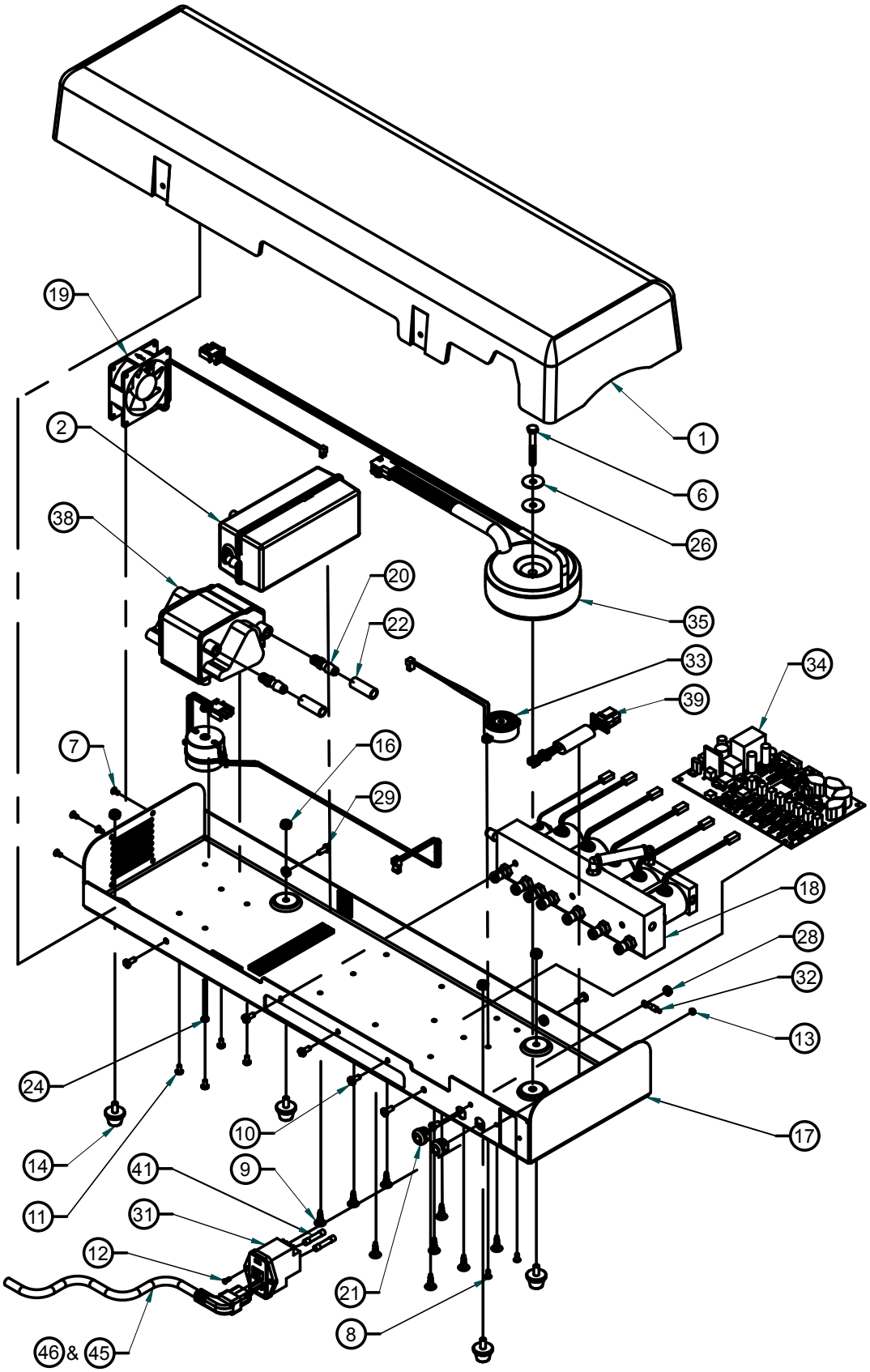
Control Box Assembly



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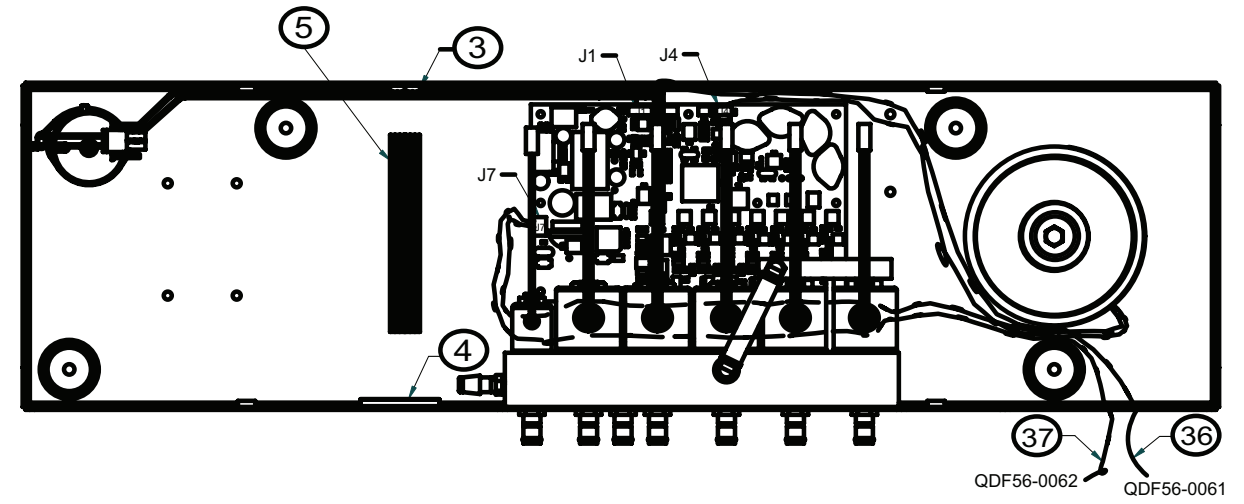
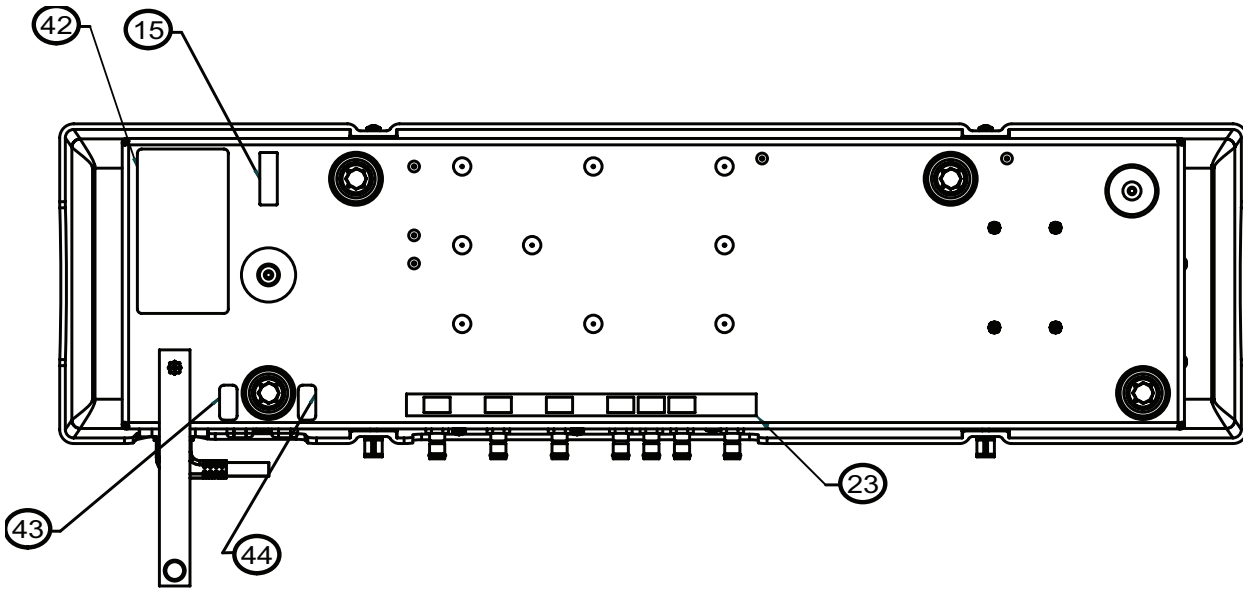
Control Box Assembly





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Control Box Assembly

Item	Part No.	Part Name	Qty.
1	QDF56-0132	Box Cover	1
2	QDF56-0143	Canister Assembly	1
3	56-0237	Rubber Seal 1.25	1
4	56-0238	Rubber Seal 2.00	1
5	56-0239	Rubber Seal 5.00	1
6	56-0241	Screw, Cap .25-20 x 2.25	1
7	56-0242	Rivet, Snap	4
8	QDF56-0243	Line Choke Assembly	2
9	56-0244	Standoff, PCB	9
10	56-0246	Screw, PHP, SEMS 10-32 x. 50	3
11	56-0247	Screw, PHP, SEMS 8-32 x .31	4
12	56-0248	Screw, FHP 4-40 x 3.75	2
13	56-0585	Nut, Locking No.4	2
14	56-0586	Rubber Bumber	4
15	56- 0250	Serial Number Controller Label	1
16	56-0251	Locking Nut 1/4 - 20	4
17	56-0500	Control Box Bottom Cover	1
18	QDF56-0503	Valve Manifold Assembly	1
19	QDF56-0509	Fan, Tube Axial	1
20	56-0571	Threaded/Barbed Fitting	2
21	56-0572	Strain Relief Bushing	2
22	56-0599	Hose, PVC-Clear	2
23	56-0602	Label, Connection - Hoses	1
24	56-0617	Screw, PHP -32 x 2.25	1
25	56-0618	Locking Nut 8-32	1
26	56-0619	Washer, Fender - 1/4	2
27	56-0620	Screw, 10-32 x .38	1
28	56-0621	Nut, 10-32	1
29	N/A	Screw PHP Black	4
30	QDF56-0239	Tilt Sensor Assembly	1
31	QDF2034	Switch, AC	1
32	QDF25-0508	M.A.L.T. Principle Cable	1
33	QDF5095	Alarm Buzzer	1
34	QDF56-0005	AMCB	1
35	QDF56-0047	Medical Toroid	1
36	QDF56-0061	Cable	1
37	QDF56-0062	Tilt Sensor Cable within Box	1
38	QDF56-0541	Pump	1
39	QDF56-0078	120V Connector	1
40	N/A	N/A	1
41	QDF9576	250V Fuse	2
42	QE56-0244	**PositionPro™** Signal Label	1
43	QE56-0245	Pendant Control Label	1
44	QE56-0246	Tilt Sensor Connector Label	1
45	QDF8087	4’ Power Cord	1
46	QDF-8088	15’ Power Cord	1

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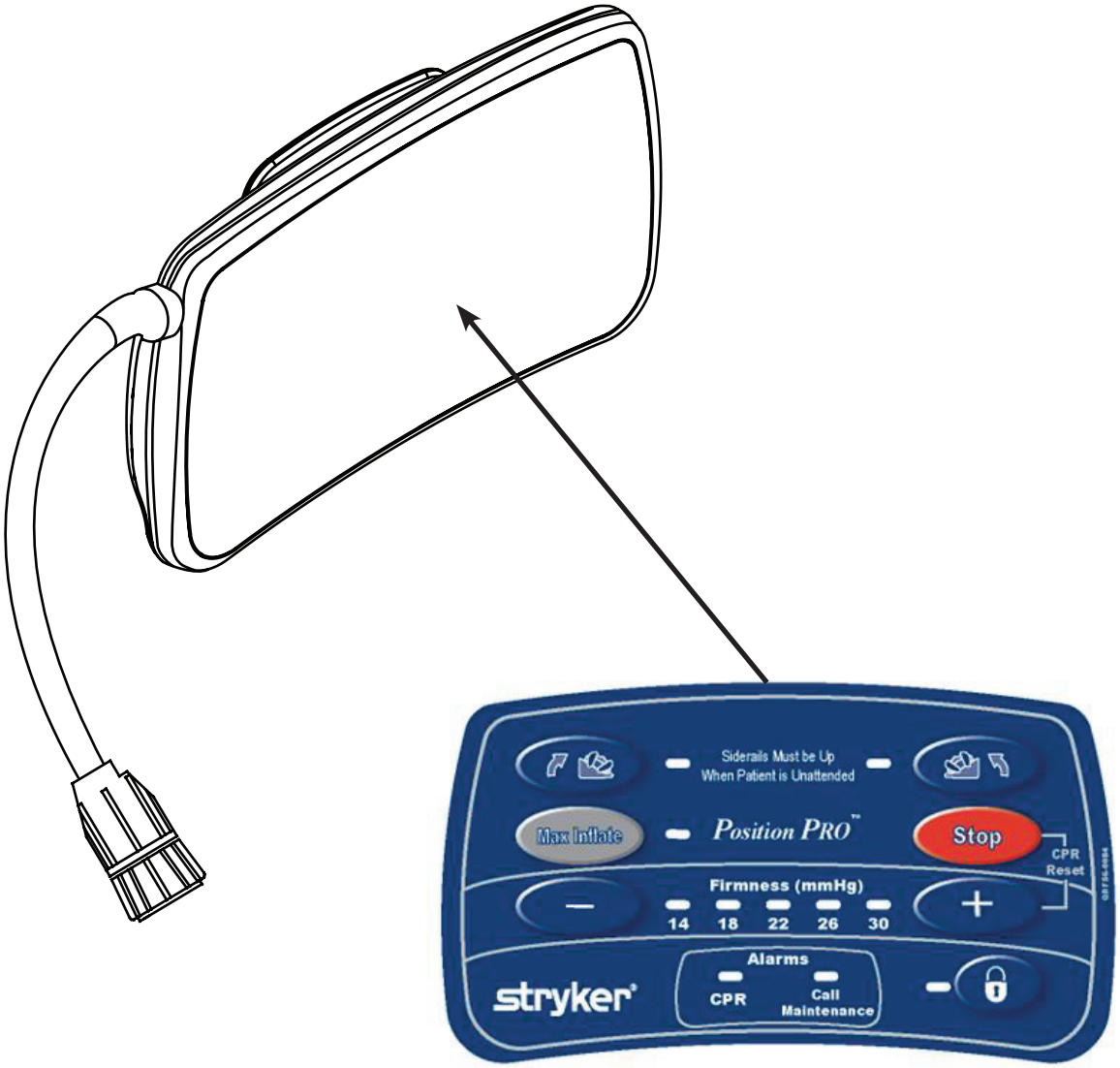
Pendant Control - QDF2081



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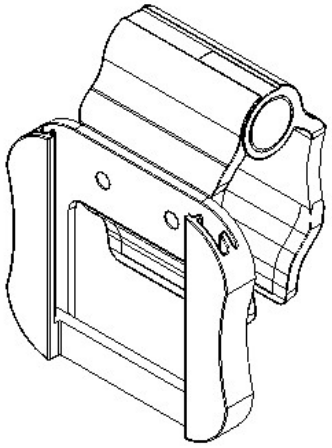
Pendant Control Clip - QDF2082



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LIMITED WARRANTY

Stryker Medical division, a division of Stryker Corporation, warrants to the original purchaser the **Position Pro™ mattress** to be free from defects in material and workmanship for a period of two (2) years after date of delivery. Stryker's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product which is, in the sole discretion of Stryker, found to be defective. If requested by Stryker, products or parts for which a warranty claim is made shall be returned prepaid to the factory. Any improper use or any alteration or repair by others in such manner as in Stryker's judgment affects the product materially and adversely shall void this warranty. Any repair of Stryker products using parts not provided or authorized by Stryker shall void this warranty. No employee or representative of Stryker is authorized to change this warranty in any way.

Stryker Medical mattress products are designed for a five (5) year expected service life under normal use, conditions, and with appropriate periodic maintenance as described in the maintenance manual for each device.

This statement constitutes Stryker's entire warranty with respect to the aforementioned equipment. **Stryker makes no other warranty or representation, either expressed or implied, except as set forth herein. There is no warranty of merchantability and there are no warranties of fitness for any particular purpose. In no event shall Stryker be liable hereunder for incidental or consequential damages arising from or in any manner related to sales or use of any such equipment.**

TO OBTAIN PARTS AND SERVICE

Stryker products are supported by a nationwide network of dedicated Stryker Field Service Representatives. These representatives are factory trained, available locally, and carry a substantial spare parts inventory to minimize repair time. Simply call your local representative, or call Stryker Customer Service USA at 1-800-327-0770, Canada 1-888-233-6888.

SERVICE CONTRACT COVERAGE

Stryker has developed a comprehensive program of service contract options designed to keep your equipment operating at peak performance at the same time it eliminates unexpected costs. We recommend that these programs be activated before the expiration of the new product warranty to eliminate the potential of additional equipment upgrade charges.

A Service Contract helps to:

- Ensure equipment reliability
- Stabilize maintenance budgets
- Diminish downtime
- Establish documentation for JCAHO
- Increase product life
- Enhance trade-in value
- Address risk management and safety

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SERVICE CONTRACT PROGRAMS

Stryker offers the following service contract programs:

Service Agreement Options *	Gold	Silver	Parts	Labor	PM
Annually scheduled preventative maintenance	X				X
All parts	X	X	X		
All labor and travel	X	X		X	
Unlimited emergency service calls	X	X		X	
Priority one contact: two hour phone response	X	X	X	X	
Most repairs completed within 3 days	X	X		X	
JCAHO documentation	X	X		X	X
On-site record of PM & emergency service	X				X
Factory-trained Stryker service technician	X	X		X	X
Stryker authorized parts used	X	X	X	X	X
Service during regular business hours (8-5)	X	X	X	X	X

* Does not include maintenance due to abuse or for any disposable items. Stryker reserves the right to change options without notice.

Stryker Medical also offers personalized service contracts.
Pricing is determined by age, location, model and condition of product.

For more information on our service contracts,
please call your local representative.

RETURN AUTHORIZATION

Merchandise cannot be returned without approval from the Stryker Customer Service Department. An authorization number will be provided which must be printed on the returned merchandise. Stryker reserves the right to charge shipping and restocking fees on returned items. **Special, modified, or discontinued items not subject to return.**

DAMAGED MERCHANDISE

Claims for damaged merchandise must be made with the carrier within fifteen (15) days of receipt of merchandise. **Do not accept damaged shipments unless such damage is noted on the delivery receipt at the time of receipt.** Upon prompt notification, Stryker will file a freight claim with the appropriate carrier for damages incurred. Claim will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker within the fifteen (15) day period following the delivery of the merchandise, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for payment of the original invoice in full. Claims for any short shipment must be made within thirty (30) days of invoice.

INTERNATIONAL WARRANTY CLAUSE

This warranty reflects U.S. and Canada domestic policy. Warranty outside the U.S. and Canada may vary by country. Please contact your local Stryker Medical representative for additional information.

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POSITION PRO™ EMC INFORMATION

Guidance and Manufacturer's Declaration - Electromagnetic Immunity			
The **Position Pro™** is suitable for use in the electromagnetic environment specified below. The customer or the user of the **Position Pro™** should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment Guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast Transient/burst IEC61000-4-4	±2 kV for power supply lines ±1 kV for input/ output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	±1 kV line(s) to line(s) ±2 kV line(s) to earth	Mains power quality is that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% Ut (>95% dip in Ut) for 0,5 cycle 40% Ut (60% dip in Ut) for 5 cycles 70% Ut (30% dip in Ut) for 25 cycles. <5% Ut (>95% dip in Ut) for 5 sec.	<5% Ut (95% dip in Ut) for 0,5 cycle 40% Ut (60% dip in Ut) for 5 cycles 70% Ut (30% dip in Ut) for 25 cycles. <5% Ut (>95% dip in Ut) for 5 sec.	Mains power quality should be that of a typical commercial or hospital environment. If the user of the **Position Pro™** requires continued operation during power mains interruptions, it is recommended that the **Position Pro™** be powered from an uninterrupted power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Note: U_T is the a.c. mains voltage prior to applications of the test level.			

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POSITION PRO™ EMC INFORMATION (CONTINUED)

Recommended separation distances between portable and mobile RF communications equipment and the Position Pro™.

The **Position Pro™** is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the **Position Pro™** can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the **Position Pro™** as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	**Separation distance according to frequency of transmitter m**		
	150 kHz to 80 MHz $d=[3.5/V1]\sqrt{P}$	80 MHz to 800 MHz $d=[3.5/E1]\sqrt{P}$	800 MHz to 2,5 GHz $d=[7/E1]\sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,37	0,37	0,74
1	1,17	1,17	2,33
10	3,69	3,69	7,37
100	11,67	11,67	23,30

For transmitters rated at a maximum output power not listed above, the recommended separation distance *d* in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1
At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2
These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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POSITION PRO™ EMC INFORMATION (CONTINUED)

The **Position Pro™** is suited for use in the electromagnetic environment specified below. The customer or the user of the **Position Pro™** should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
Conducted RF IEC 6100-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2,5 GHz	3 Vrms 3 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the **Position Pro™**, including cables, than the recommended separation distance calculated from the equation appropriate for the frequency of the transmitter. Recommended Separation Distance $d=[3.5/3]\sqrt{P}$ $d=[3.5/3]\sqrt{P}$ 80 MHz to 800 MHz $d=[7/3]\sqrt{P}$ 800 MHz to 2,5 GHz where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and *d* is the recommended separation distances in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [a] should be less than the compliance level in each frequency range. [b] Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1
At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2
These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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POSITION PRO™ EMC INFORMATION (CONTINUED)

The **Position Pro™** is suited for use in the electromagnetic environment specified below. The customer or the user of the **Position Pro™** should assure that it is used in such an environment.
[a]Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the **Position Pro™** is used exceeds the applicable RF compliance level above, the **Position Pro™** should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the **Position Pro™**. [b]Over the frequency range 150 kHz to 80 MHz, field strengths are less than 3 V/m.

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POSITION PRO™ EMC INFORMATION (CONTINUED)

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<tr><th colspan="3">Guidance and Manufacturer’s declaration - Electromagnetic Emissions</th></tr>
<tr><td colspan="3">The Position Pro™ is intended for use in an electromagnetic environment specified below. The customer or the user of the Position Pro™ should assure that it is used in such an environment.</td></tr>
<tr><th>Emissions Test</th><th>Compliance</th><th>Electromagnetic Environment</th></tr>
<tr><td>RF Emissions
CISPR 11</td><td>Group 1</td><td>The Position Pro™ uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.</td></tr>
<tr><td>RF Emissions
CISPR 11</td><td>Class A</td><td rowspan="3">The Position Pro™ is suitable for use in all establishments other than domestic, and may be used in domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes, provided the following warning is heeded:

⚠ WARNING

This equipment/system is intended for use by health care professionals only. This equipment/system may cause radio interference or may disrupt the operation of nearby equipment. It may be necessary to take mitigation measures, such as re-orienting or relocating the Position Pro™ or shielding the location.</td></tr>
<tr><td>Harmonic Emissions
IEC 61000-3-2</td><td>Class A</td></tr>
<tr><td>Voltage Fluctuations
Flicker Emissions
IEC 6100-3-3</td><td>Complies</td></tr>
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