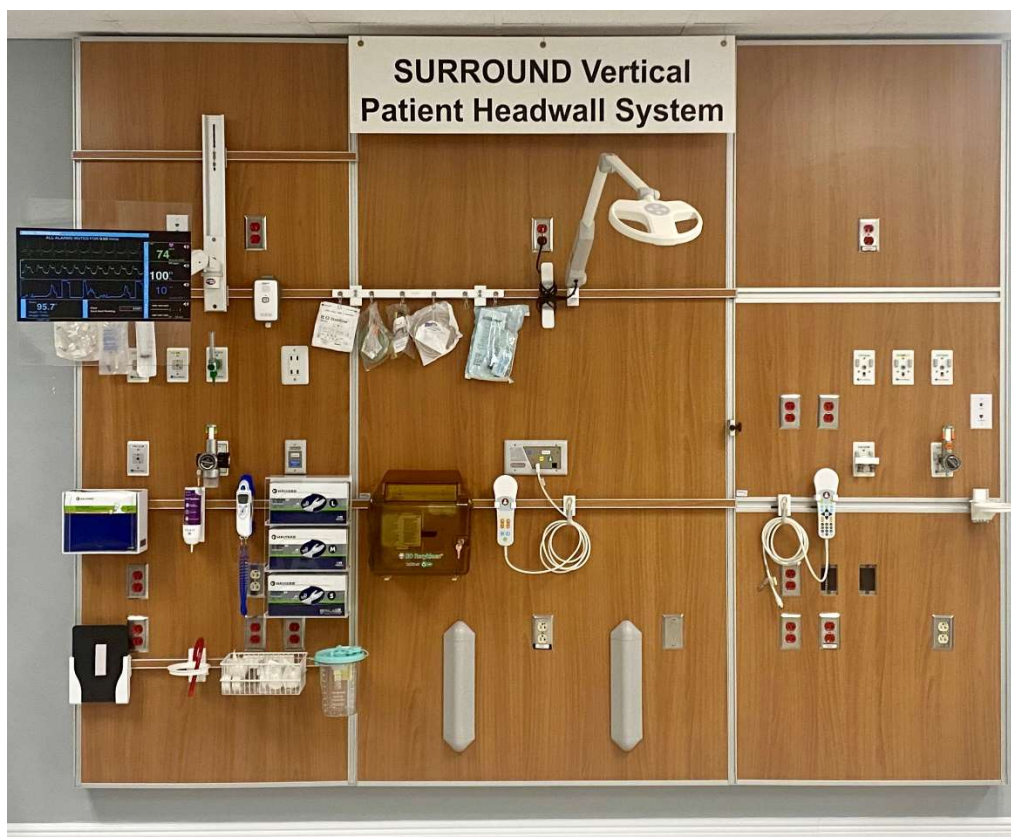


INSTALLATION MANUAL

Surface Surround Series Room Headwall Systems



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**Installation Manual
for Surface Surround Series Room Headwall System**

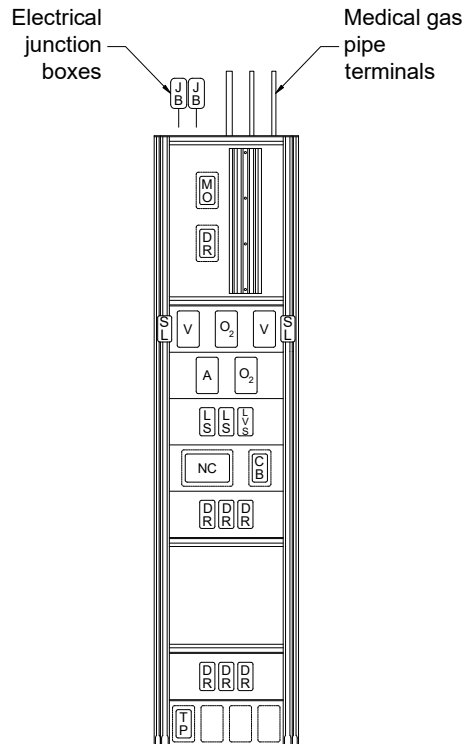
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1. Receiving and Unpacking

- 1.1. **Visual Inspection** - It is recommended to count and compare the received components with the packing slip. Carefully unpack the unit and avoid the use of any sharp tool in order not to damage the unit. Proceed with a final visual inspection to confirm that the unit has been delivered in good condition. Store the unit in a safe, dry and clean area while pending the final site installation.

- 1.2. **Report Damages within 5 Days** - Upon reception, the contractor should verify shipment to ensure quantities and possible damages due to transportation. Receiver must identify any missing part or discrepancy within 5 days after reception and notify the supplier. It is the responsibility of the customer to report damage or deficiencies to the manufacturer immediately upon reception.

Figure 1. – Module should arrive complete with gas pipes and electrical junction boxes (if required)



2. Medical Gas Connections

- 2.1. Medical gas piping connections are to be made in accordance with NFPA 99 before installation of the drywall.
- 2.2. Single-service termination points are provided in each unit for each gas service . Therefore, on a double-sided unit there will be two service termination points for each medical gas service. The service connection may be joined for the common service by the mechanical contractor, as required.
- 2.3. Prior to brazing the pipes together, the component housing should be inspected to ensure that it is set for proper drywall installation. Brazing pipes together with the component housing out of position could create additional stresses on the pipin

3. Electrical connections

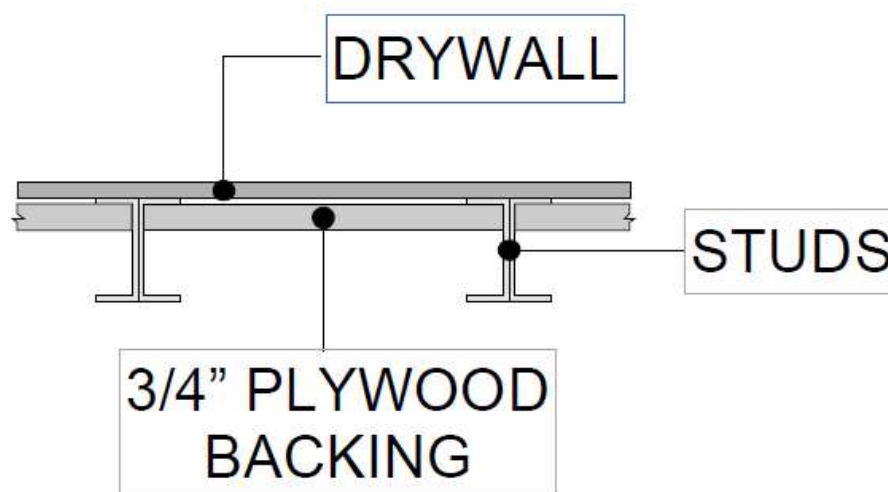
- 3.1. Ensure all electrical power circuits are locked off prior to hook-up.
- 3.2. Review wiring diagram or shop drawing.
- 3.3. All factory-installed electrical devices are pre-wired to the electrical service junction boxes at the top of the unit.
- 3.4. Wiring is factory-installed and routed to the incoming service junction boxes for any preinstalled electrical devices.
- 3.5. **IMPORTANT:** Service connections are to be made in accordance with applicable National Electrical Codes, in addition to state and local codes.
- 3.6. **Electrical Wiring:** Wire for standard and critical branch power circuits are no. 10 or no. 12 (as specified) type THHN stranded copper wire, 600 volts, with heat resistant thermo-plastic insulation for hot (black) and neutral (white). Grounds are no. 10 type R THHN stranded copper wire (green). All ground conductors shall be insulated in conduit.
- 3.7. **Grounding and Bounding:** All ground conductors are installed in conduit. Each power receptacle has a ground conductor connected to a grounding screw. A grounding bus is installed in each raceway at the rough in location and are installed as to ensure grounding for the complete power system.

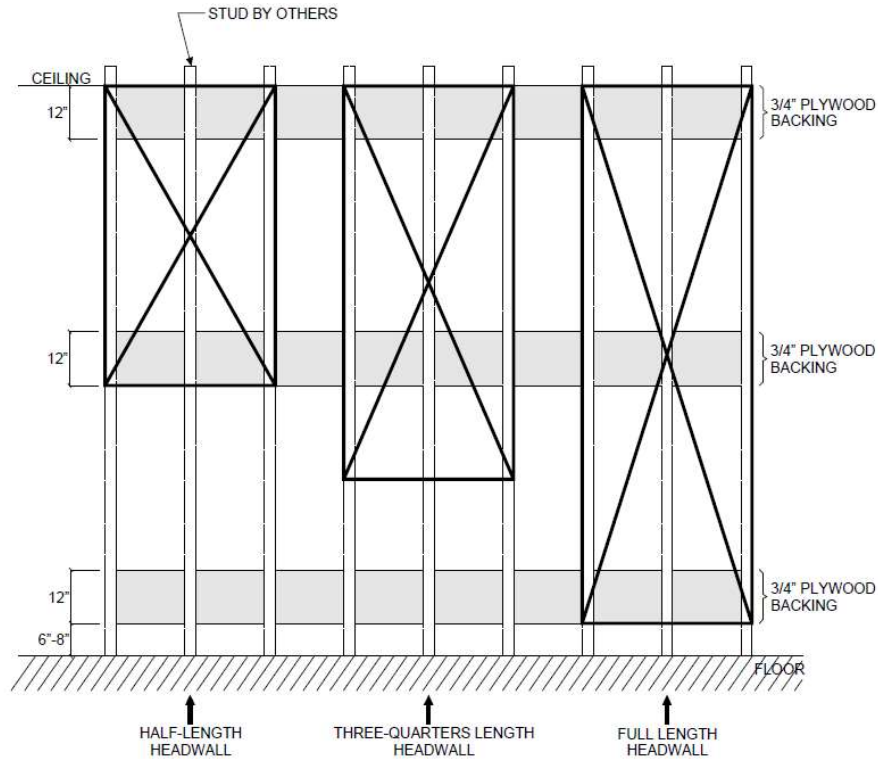
- 3.8. **Electrical Receptacles:** Paladin Healthcare LLC uses HUBBELL hospital grade 15 or 20 amp, 120 or 277 VAC, UL listed and marked hospital grade. Quantity and type as shown on drawings. Paladin Healthcare LLC furnishes and installs receptacles with wiring required, as shown on submittal shop drawings. Electrical contractor must ensure compatibility of plug on accessory equipment to be used with these devices:
- 3.8.1. **Duplex Receptacles:** NEMA style 5-15R or 5-20R, color ivory for use on normal power circuits, and color red for use on critical branch power circuits.
- 3.8.2. **Simplex Receptacles:** NEMA style 5-15R or 5-20R, color ivory for use on normal power circuits, and color red for use on critical branch power circuits.
- 3.8.3. **Safety Receptacles (if required):** Duplex type, NEMA style 5-15R or 5-20R, color ivory for use on normal power circuits, and color red for use on critical branch power circuits. Receptacles limit proper access to energized contacts and accept both 2 wire and 3 wire plugs.
- 3.8.4. **Locking Receptacles (if required):** Simplex type, 20 amp, 120 or 277 volts, color black, and HUBBELL lock 23000 HG style.
- 3.9. **Low Voltage Data Provisions:** Connected to device junction box via conduit. Paladin Healthcare LLC includes pull cord extending from service provision to electrical termination point. Telephone jack, blank faceplates, data port or other low voltage device is furnished, installed and wired by low voltage contractor.

4. Installation

Getting Started

- 4.1. Finished Dry Wall - Prior to installation, the wall partition must be completed with proper wood or steel stud framing as per the drawing. The Surround Series Surface Mounted Headwall must be installed after the sheet rock walls have been properly installed and completed (i.e., painted).
- 4.2. Installed Services - The services (medical gas piping and electrical conduits) to the Surface Mounted Headwall are coming from the top of the modules. In order to minimize potential damages to the headwall units, it is preferable to have the services as close as possible to the headwall units
- 4.3. Wall Reinforcement (Backing) - The modules will be screwed to their respective walls at these locations: top, middle, and bottom. Sheet rock alone is not strong enough to support the headwall weight. Therefore, the installing contractor is responsible to install three strips of reinforcement panels horizontally across the entire wall (see Figure 2). We recommend using a 3/4"-thick plywood as a reinforcement backing.





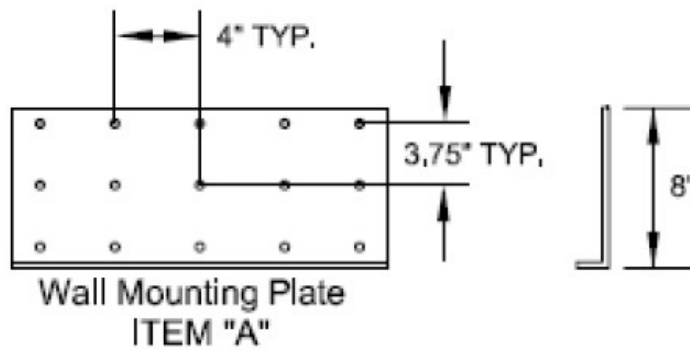
4.4. The Surround Headwall is a modular system. Therefore, several modules are required to have a complete headwall. Please make sure you have all modules you need to make a complete headwall before starting the installation.

4.5. The first module to be installed is A-L-W-A-Y-S the left-hand side module.

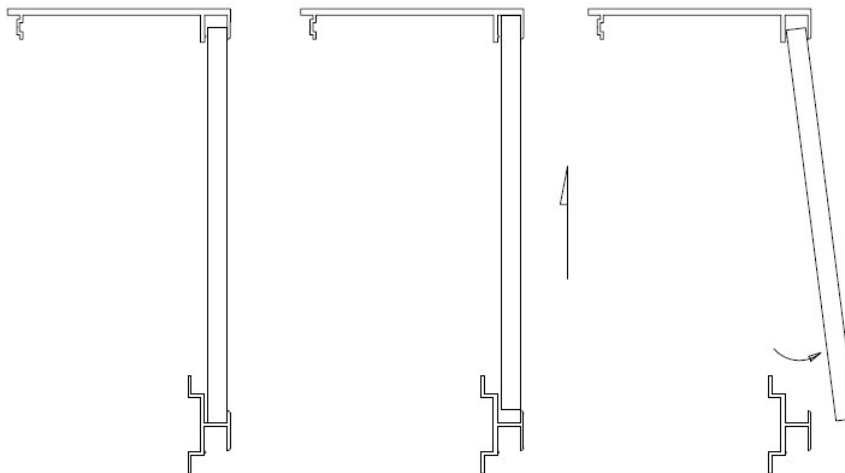
4.6. The procedure below is asking you to remove the laminated panels. In order to avoid laminated panel mix ups with the ones of other modules, damages or losses, we S-T-R-O-N-G-L-Y recommend removing only the laminated panels of the headwall you intend to immediately install.

4.7. Mark a horizontal line 12" below the finished ceiling line. This line will be used to locate the hanging brackets.

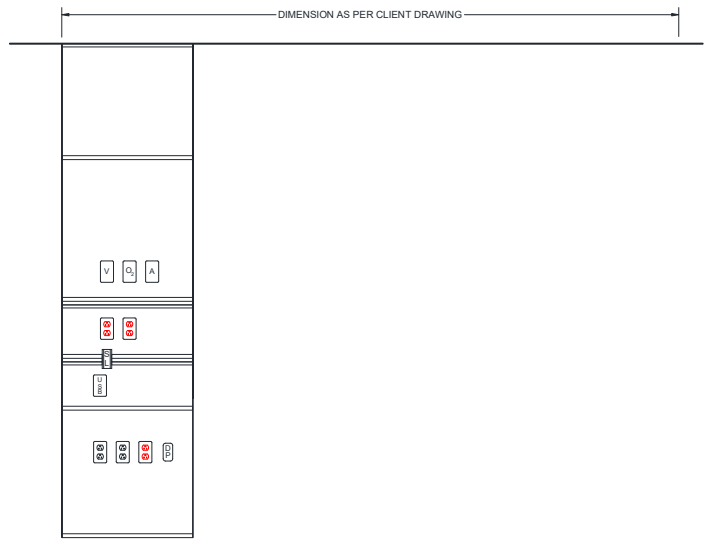
- 4.8. Install the provided wall mounting plate (ITEM "A") to the wall. The bottom of the wall mounting plate must be leveled with the 12" horizontal line mentioned in 4.7. above. The wall mounting plate must screw into the wall reinforcement (plywood backing). The wall mounting bracket must remain straight. Do not screw the wall mounting plate to perfectly mate the sheet rock shape wall as most sheet rock walls are warped.



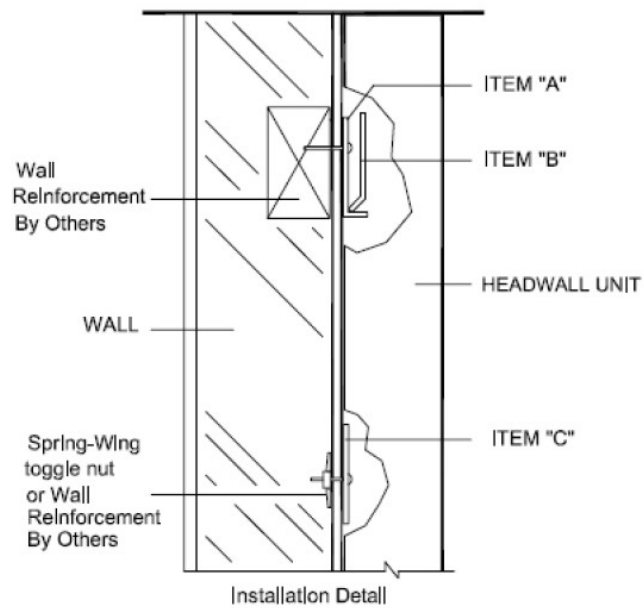
- 4.9. Remove all medical gas outlet covers and electrical wall outlet covers from the laminated panels.
- 4.10. Remove the laminated panels from the headwall to be installed. To do so, lift it up then pull the laminated panel towards you and bring it down.



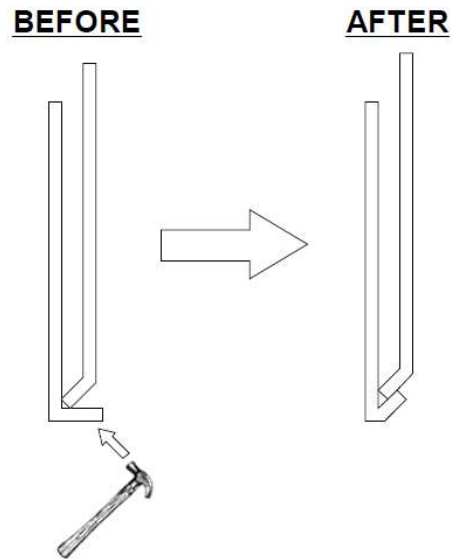
4.11. Install the 1st unit on the left.



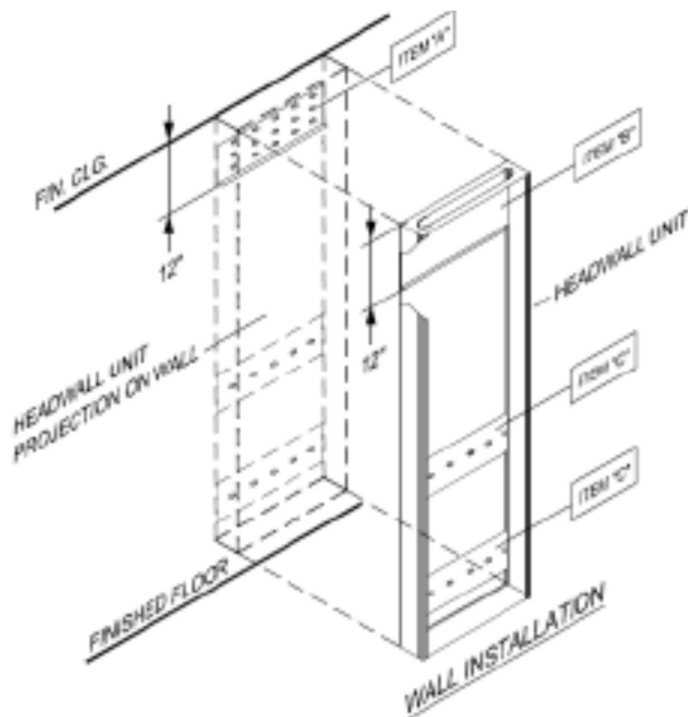
4.12. There is a "J" shaped aluminum strip (ITEM B) across the aluminum frame of the headwall. Hang the headwall by sliding ITEM B onto ITEM A as shown below.



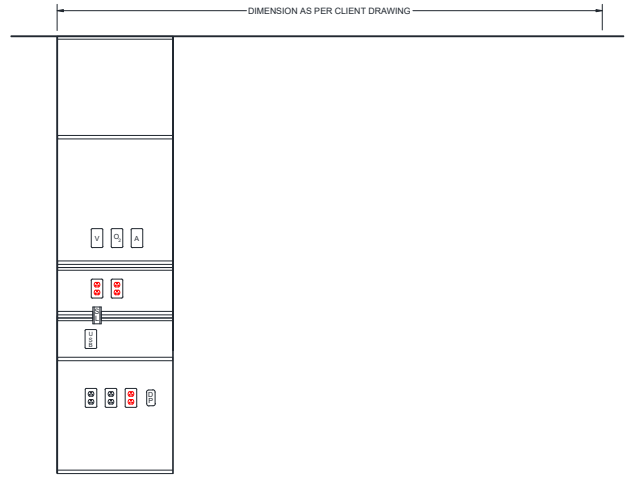
4.13. Using a hammer, fold the lip at each end of ITEM A upward so that the aluminum headwall frame does not fall off the wall mounting plate.



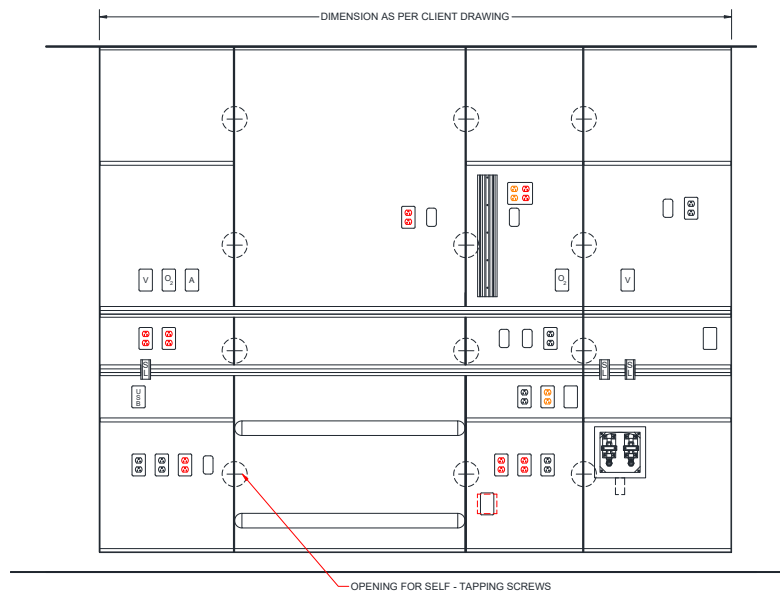
4.14. There are two other flat mounting brackets at the back of the aluminum mounting frame: one in the middle and one toward the bottom (ITEM C). Secure the aluminum mounting frame to the wall by installing proper attachment devices such as screws or spring-loaded wing nuts.



4.15. 1ST unit is ready to receive the rest of the units.



4.16. To install a new module beside an existing module, use the 3/16" pre-drilled holes that are on each left-hand side of each modules. Use #8, 1/2" length, self-tapping screws to install the unit. Use a minimum of 5-6 screws per unit. Use more screws if required. Be sure to keep the unit square.



4.17. Before re-installing the laminated panels of the new module, the new module must be pushed against the module already installed. Then, attach the two modules together by using self-tapping screws. The self-tapping screws must be installed from the new module to the existing module. The left-hand side aluminum extrusion of the new module has holes already drilled every 12 inches. Once the two units are securely fastened, repeat for all other units.

4.18. Install or Re-install the laminated mounting panels.

4.19. Install or Re-install the medical gas outlet covers and the electrical outlet covers if previously removed.

4.20. For modules built to receive accessories such as IT stations and bed locators, you can install the accessories now or wait until all modules are installed. Follow the installation instructions provided by the accessory manufacturers.

Care and Maintenance

- a. Clean with mild detergent and warm water. **Do not use lubricants or oils on the unit.**
- b. Avoid excessive moisture build-up, as it can damage mechanisms in the unit.
- c. Disinfect as required with disinfectant approved by the Environmental Protection Agency.
- d. To remove difficult spots or stains, use standard household cleansers and a soft-bristled brush. **Never use steel wool or abrasive.**
- e. For parts or repairs, contact your sales representative.

Warranty

Paladin Healthcare LLC warrants its medical equipment and products to be free from defects in material and workmanship for a period of twenty-four (24) months from date of shipment. Within this period, **Paladin Healthcare LLC** will repair or replace any part on site, or at the factory, which is proven to be defective, at **Paladin Healthcare LLC's** cost.

Furthermore, Paladin Healthcare LLC will warrant its material to be free from defect for an additional period of three (3) years [five (5) years from date of shipment]. Within this additional period, **Paladin Healthcare LLC** will replace any part, at no charge, which is proven to be defective. Shipping and Installation costs after the first twenty-four (24) months will be borne by the customer.

This warranty is valid only when the product has been properly installed according to **Paladin Healthcare LLC** installation instructions, used in a normal manner and serviced according to factory recommendations. It does not cover failures due to damage which occurs in shipment or failures which resulted from accidents, misuse, abuse, neglect, mishandling, alteration, misapplication, or damage that may be attributable to an act of God.

Paladin Healthcare LLC shall not be liable for incidental or consequential damages resulting from the use of its equipment or products. All claims for warranty must first be approved by **Paladin Healthcare LLC** Service Department at (407) 614-8781. A valid return authorization (RGA) number must be obtained prior to commencement of any service work. Warranty work, which has not been pre-authorized by **Paladin Healthcare LLC**, will not be reimbursed.