

HydroMassage® Cleaning and Maintenance

In order that we may best serve you, before calling technical support please note the product serial number and be prepared to answer questions regarding operational problems. **Technical Support 1+727-536-5566.**

The serial number label is located at the foot end of the tank on the tub.

- 1) **Always frequently inspect** under the pump, pressure valve, plumbing, and cooling unit for any signs of water leakage.
- 2) The use of distilled water is necessary to keep the warranty effective. Our most frequent problems are due to chlorine, calcium and minerals. Even though tap water and spring water may appear clean they contain chlorine, calcium and minerals, which will make the machine cavitate. (Pressure goes up and down from foaming or dirty water; this reduces the life of several components.)
- 3) 2. It is highly recommended that you add 2 teaspoons of Defoamicide™ with 2 gallons of water every 3 months (add three gallons if using 30+ massage per day). The Defoamicide will maintain proper water quality. **Poor water quality will cause sudden pressure changes during a massage.** See pg 43 Photo 3a in manual for filler location – Defoamicide is attached to frame.
- 4) Cleaning and service of the machine is recommended every 12 months. Barriers should be replaced at this time as well.

HydroMassage Annual Cleaning

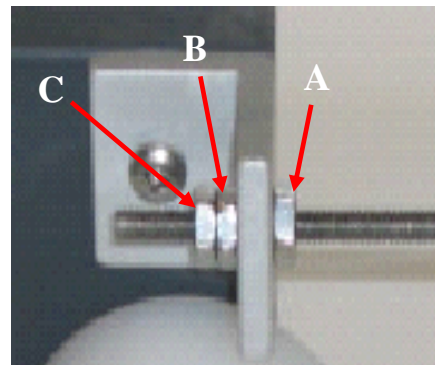
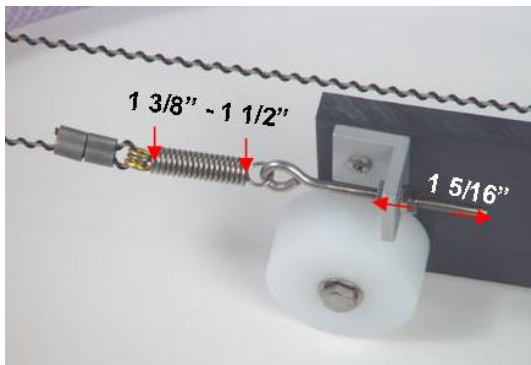
Necessary tools

- Small flat tip screwdriver
- Small and medium Phillips screwdriver
- 3/8 wrench box or open end wrench
- 7/16 or 11 mm box or open end wrench
- 1/8 Allen wrench
- Pliers
- Garden hose or shop VAC
- **Towels and Scotch Brite sponge, cleanser (non-abrasive i.e. soft scrub) and 25 gallons of distilled water.

Cleaning Instructions

- 1) **DISCONNECT POWER prior to beginning cleaning / maintenance**
- 2) Remove cover sheet and comfort pad and the 4 outside panels
 - a) Remove cover sheet and comfort pad
 - b) Remove the 8 head end and foot end thumb screws.
 - c) Remove the long side panels held in place with Velcro
 - d) Remove end panels at foot and head of bed.
- 3) Clean fins on cooling unit by vacuuming or brushing off dust and lint.

- 4) Remove the 20 black knobs on the underside top edge of bed by rotating counter clockwise. Remove the 4 flat bar retainers.
- 5) Remove the barrier retaining ring. The ring is one piece, starting at the center foot end; simply pull the ring out of its groove.
- 6) Remove the barrier. Inspect the barrier, tackiness or stickiness indicates barrier needs to be replaced. **Do not use any commercial cleaners or disinfectants as they may damage the barrier.** For sanitation, periodically clean with mild soapy warm water only. Barriers must be replaced every 24 months.
- 7) Inspect net for wear. Tears indicate net is getting weak and needs to be replaced. Remove only 4 or so sections of the net around the bed to give you access for cleaning.
- 8) Drain the machine (25 gallon or 96 liters) using a shop vacuum (recommended) or a garden hose. Place the hose in the lowest part of the tank (sump). If using a garden hose, attach it to the spigot located underneath the center of the tank. The hose must continuously be routed downhill for proper draining.
- 9) Locate the Shaft Seal Cover (pg 44 Photo #5A). Remove the 2 cover screws with a #1 Phillips screwdriver then slide the cover away. Check for debris inside the box and if found remove it, replace the cover and screws (no sealant is necessary).
- 10) Clean the tank using non-abrasive cleanser (Soft Scrub brand cleanser only) and a scrub pad. Do not scrape with tools that may scratch or gouge the plastic tank. **Rinse thoroughly while scrubbing. Failure to thoroughly rinse may leave soap residue which results in pressure fluctuation (pump cavitations.)** Keep the drain spigot open or the shop vacuum running while rinsing. Tap water may be used for cleaning only. DISTILLED WATER must be used for operation.
- 11) Make sure Navitrac™ traveling jet system wheels are clean and spin freely. Tighten if necessary with 1/8" Allen wrench and 3/8" open or box wrench.
- 12) Clean the brass heater tube, located in the sump area, with soap less Brillo pads or scraper. Support the tube with your hand while cleaning. **DO NO APPLY EXTRA FORCE.**
- 13) Clean the surface around the small 3/16" hole (Water Level pg45 photo D) near the heater tube. Do not put anything into the 3/16" hole, a scrub pad can be used to clean the hole.
- 14) **THOROUGHLY RINSE ALL AREAS INSIDE THE TANK AGAIN.**
- 15) Drain the pump by loosen large locking nut, place a bucket or pan under pump for draining
- 16) Check the manifold hose for wear. (Pg 44, Photo #6).
- 17) Check all hose clamps inside the tank (Pg 44, Photo #6) and outside underneath the tank to be sure they are tight.
- 18) Check the condition of the drive cable. It is a two piece cable consisting of a black cable that spirals around and is bonded to a core cable. The black cable should spiral consistently the full cable length. It should not be bunched up or separated from the core cable.
 - a) To adjust spring tension: Measure the spring as shown in photo below on left. At room temperature (75 degrees), the spring should measure 1-3/8" end to end not including end loops. If the bed has been running (95 degrees), the spring should measure 1-1/2".




- 19) Check all fasteners by hand, tighten if loose.
- 20) Remove the electrical box cover and check for loose wire connections and/or discolored wires then put the cover back on and tighten the four screws.
- 21) Add Defoamacide per instructions on bottle. **USE ONLY JTL Defoamacide**, DO NOT USE store bought chemicals, they may cause the properties of the plastic components to change.
- 22) Pour 5 gallons of Distilled water into the tank. Do not pour the water directly into the sump. Check for leaks. If no leaks, reconnect the power to the bed.

DO NOT PUSH THE START BUTTON UNTIL THE BARRIER, BARRIER RING, AND PADDED RAIL ARE IN PLACE

- 23) The display on the Hand Held Control should display "WARNING: ADD WATER". If it does, add more water until the sump area is filled. The unit should begin to initialize and numbers should scroll on the display. **If the bed does not begin Initializing at this time, unplug the unit and call Technical Support.** Add the balance of distilled water required, 25 gallons (96 liters).
- 24) Install the support net per the instructions on pg 51 (Replace every 3-5 years or as needed).
- 25) Install barrier and ring. (Replace barrier after 2 year use). Center barrier over the bed and place ring on the barrier in a circular pattern with ends at the foot end. Push one end of the ring (and barrier) into the ring groove and continue working around the bed. Do not pull or cut off any of the excess barrier. If ring doesn't fit perfectly, pull back 18 inches and compact or stretch the ring as needed while inserting it.
- 26) Install the barrier retaining bars. Set the retaining bars in place with the threaded bolts through the holes. If the barrier covers any of the holes, simply fold it inward. **Do not trim the barrier near the holes.**
- 27) Install the side panels in reverse order as they were taken off in step 2.
- 28) **To ensure optimum performance, add 2 teaspoons Defoamacide with two gallons of distilled water EVERY three months after cleaning (three gallons if using 30+ massages per day).**

HydroMassage® Technical Reference and Diagnostics

BED DIAGNOSTICS Touchscreen Models			
Problem	Solution 1	Solution 2	Solution 3
<p>Bed will not start, Communications Status window open on Screen</p> 	<p>First check the USB connection on back of Touchscreen. If that does not resolve the problem, then with the bed 220 volt power unplugged, locate and press and release the power button on the front of the PC. The PC will shut down. Once the PC has shut down, press and release the power button once more to power it back up. After the Touch Screen Software has fully loaded, and the Communication Status window appears again, reconnect the 220 Volt power to the bed back in. The communications status window should close and the initialization process box will appear.</p>	<p>If the Communication Status window does not close, check 30amp breaker in main electrical panel of the facility. If this does not resolve the issue, check the breaker reset buttons on side of control box. Button will be popped out if breaker is tripped. (See Pg 47 N).</p>	<p>If the main breaker in the panel and the 30amp reset buttons are both ok, remove the cover panel on the control box. With a volt meter, verify that you have 208-240 volts across the reset breaker terminals. If the power is between 208-240 volts, verify that the red power LED on the mail circuit board on.</p>
<p>Error Dialog box on screen “Warning: Water Temp Cold” After adding 25 gallons of distilled water during initial installation or annual maintenance, room temperature water will give this error</p>	<p>Run bed for 15 minute cycle, setting massage area at 5 to 15</p>	<p>If bed has been unplugged for extended period of time and water is at room temperature, perform solution 1</p>	<p>If error appears every morning, check for 220 power on terminals 2 and 3 on mainboard wire block inside control box. If there is no power check fuses. If there is power, order replacement heater.</p>
<p>Error Dialog box on screen “Warning: Water Temp High”</p>	<p>Check to see if chiller/radiator fans are coming on. Verify that the 2 water lines to chiller are not kinked, Verify air conditioning duct is installed if you have a radiator (See External Cooler Vent)</p>	<p>Check chiller/radiator fuses (See Pg 47, Item D) Check for 220 power across 10 & 12</p>	<p>Fins dirty. Use vacuum and brush to remove lint, carpet, etc. from chiller or radiator fins. Make sure there is 2 feet clearance at each end of the chiller</p>
<p>Traveling Jet System not moving or does not travel full length of bed</p>	<p>Reinitialize; check to see if shaft connection is turning (pg 44 Photo #4 C)</p>	<p>If shaft is not turning, verify that the set screws in the coupling are securely tightened on the flat side of the</p>	<p>If shaft is turning, open bed and check that drive cable (Pg 44 Photo #5 B, C, and D) for slack or fraying and that it is on</p>

		motor shaft (Pg 44 Photo #4 B & C Also refer to Pg 50	the drive pulley properly. Adjust as necessary.
Error dialog box on screen “Error No Head” or “Error No Foot”	Reinitialize; check to see if shaft connection is turning (pg 44 Photo #4 C)	If shaft is not turning, verify that the set screws in the coupling are securely tightened on the flat side of the motor shaft (Pg 44 Photo #4 B & C	If shaft is turning, open bed and check the drive cable (Pg 44 Photo #5 B, C, D) for slack or fraying and that it is on the drive pulley properly. Adjust as necessary.
Pump Motor Not Operating	Check and contactor coil voltage (see Pg 47, Items O). Does contactor pull in when the start button is pressed?	If contactor does not pull in, push contactor in manually to test pump motor	With the start button pushed, verify that there is 220 power to the contactor coil from the #'s 4 and 6 on the circuit board wire block
Pressure Fluctuating up then down while going from foot to head of bed	Foam build-up or low water. Add HydroMassage Defoamicide to one quart of distilled water and pour into filler tube (pg. 48, Photo #3A)	If bed has not been serviced in 12 months or more, perform the cleaning and maintenance in section 12	
Error dialog box on screen “Error Halting P_Drive Current”	Drive motor pulling to much current, Reinitialize; Check to make sure water temp is not cold	If error persists, call HydroMassage Tech Support Dept	Drive motor is failing, order replacement

Important Note: Run the unit through at least one complete 15-minute session each day to ensure that bed runs to its maximum efficiency

HydroMassage® Illustrations & Components


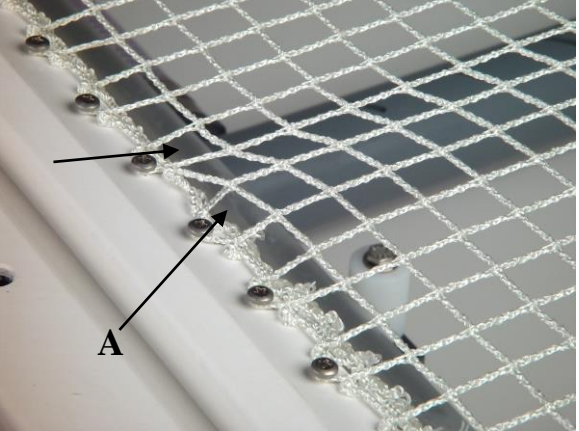
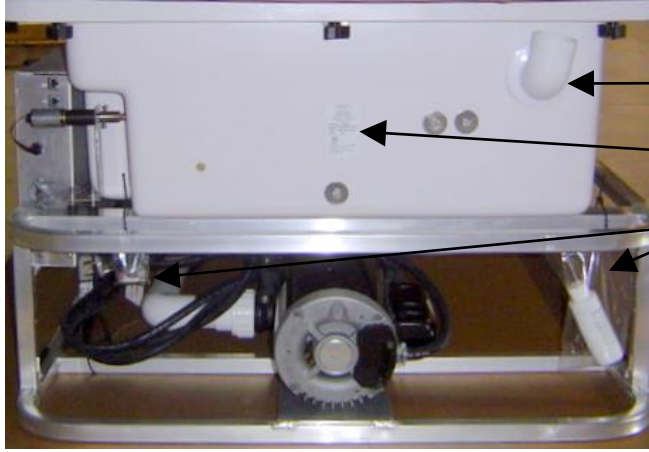
PHOTO	COMPONENTS	MODEL/ Series
	<p>PHOTO #1</p> <ul style="list-style-type: none"> A. Black Knobs B. Electrical Control Box C. Drive Motor 	<p>100, 300, 320,340, 350, 500 &700</p>
	<p><u>PHOTO #2 SUPPORT NET</u></p> <ul style="list-style-type: none"> A. Head & Foot 31 Squares across 	<p>ALL</p>
	<p><u>PHOTO #3</u></p> <ul style="list-style-type: none"> A. Breather Elbow/Filler Tube B. Serial Number Label C. Complimentary Defoamers/ Spare Fuses 	<p>ALL</p>

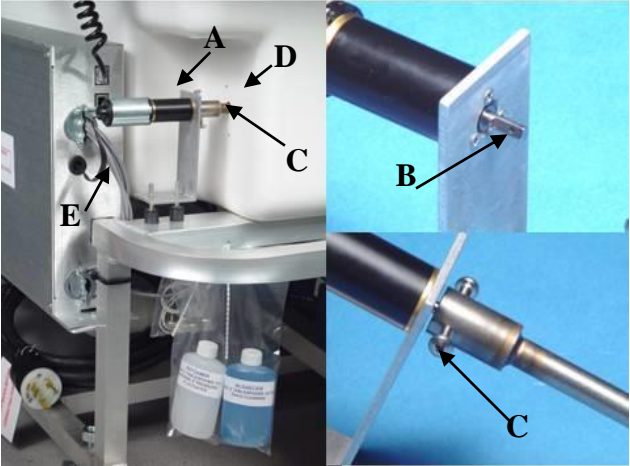
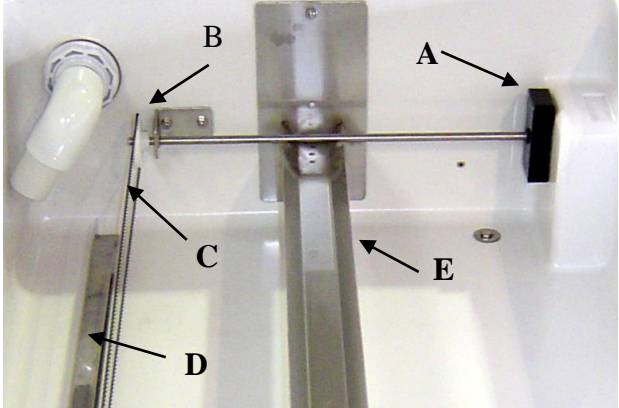
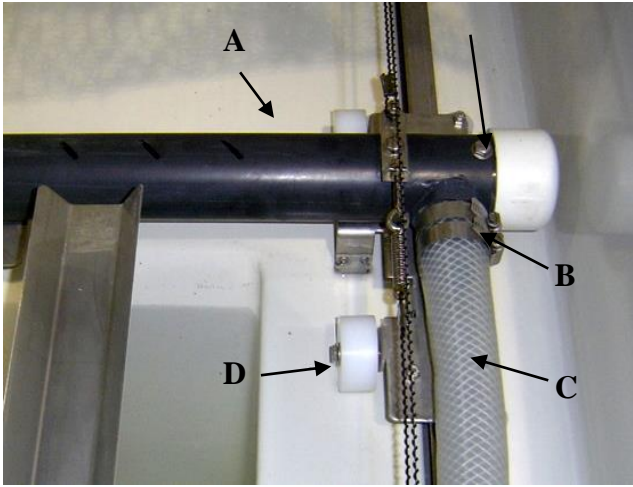
PHOTO	COMPONENTS	MODEL / SERIES
	<p>PHOTO #4</p> <ul style="list-style-type: none"> A. Drive Motor B. Motor Shaft w/ Flat Spot C. Lock Screw D. Drive Shaft E. Wire Connection 	<p>ALL</p>
	<p>PHOTO #5</p> <ul style="list-style-type: none"> A. Seal Shaft Cover B. Drive Cable Gear C. Drive Cable D. Manifold Track E. Diverter 	<p>ALL (Series 100 does not have a diverter)</p>
	<p>PHOTO #6</p> <ul style="list-style-type: none"> A. Manifold Assembly B. Hose Clamps C. Manifold Hose D, Roller 	<p>ALL</p>

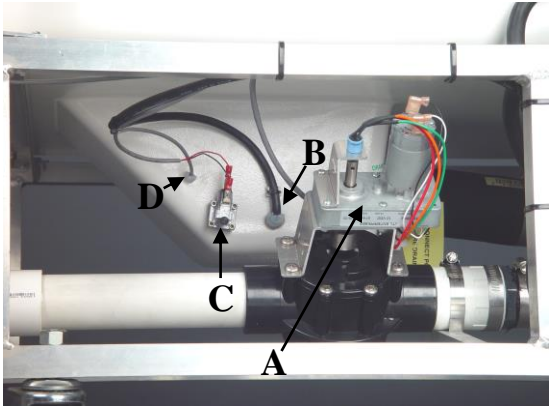
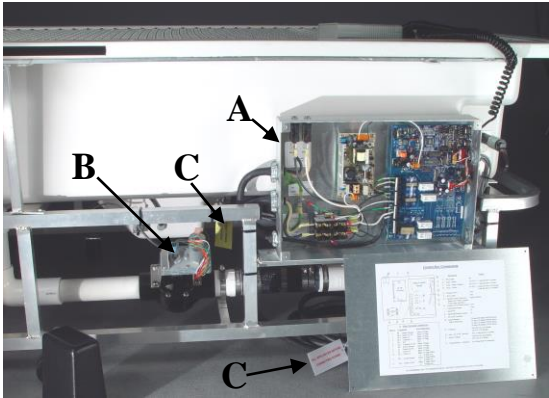
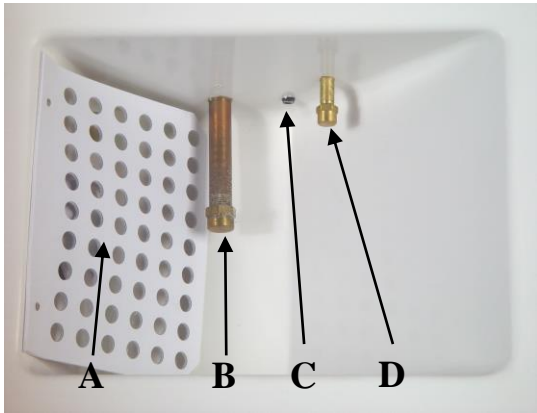


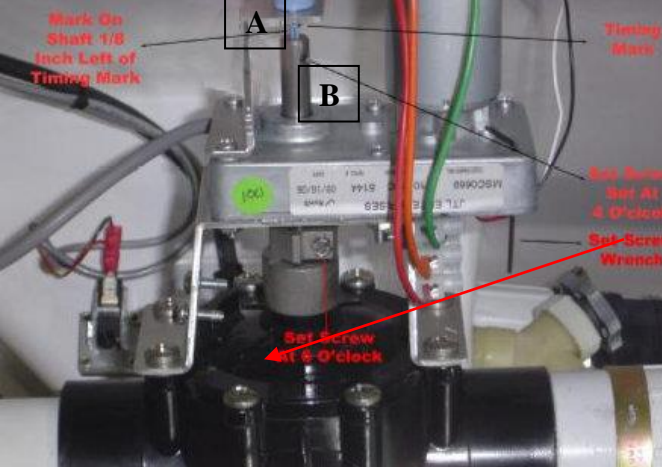
PHOTO	COMPONENTS	MODEL / SERIES
	<p><u>PHOTO #7</u></p> <ul style="list-style-type: none"> A. Pressure Actuator Assembly B. Heater Cable C. Water Level Switch D. Temperature Sensor Cable 	<p>ALL</p>
	<p><u>PHOTO #8</u></p> <ul style="list-style-type: none"> A. Electrical Control Box B. Pressure Actuator Assembly C. Safety Tags 	<p>ALL</p>
	<p><u>PHOTO #9</u></p> <ul style="list-style-type: none"> A. Anti-Cavitation Plate B. Heater Tube C. 3/16" Hole—Water Level D. Temperature Sensor 	<p>ALL</p>

PHOTO	COMPONENTS	MODEL Series
	<p><u>PHOTO #11</u></p> <p>A. Reed Switch (Foot End)</p>	<p>ALL</p>
	<p><u>PHOTO #12</u></p> <p>A. Radiator Fans</p>	<p>100 300 340</p>
	<p><u>PHOTO #13</u></p> <p>Pressure Actuator Assembly</p> <p>A. Potentiometer</p> <p>B. Set Screw & Wrench</p>	<p>ALL</p>