SER-RS

### ROMA STEAM BATH, LTD. 16802 BARKER SPRINGS DRIVE HOUSTON, TEXAS 77084 (281) 578-9945 1-800-657-0656

### SERVICE INSTRUCTIONS

### MODELS: RS-30, RS-40 RS-400C, RS-500C, RS-700C

In order to service the ROMA unit properly, the manner in which it operates should be understood. The unit consists of three basic assemblies. They are as follows:

- 1. **WATER INLET ASSEMBLY** The purpose of this assembly is to provide a regulated flow of water to the generator tank. A blockage or partial obstruction in these components will stop or reduce the volume of the steam output. A malfunction or improper adjustment of the regulating valve can cut off the flow of water or allow an excessive flow that will cause an amp draw above the proper operating level. If it fails to close, a small stream of water will continue to flow, even though the control switch has returned to the off position.
- 2. BACKFLUSH ASSEMBLY The purpose of this assembly is to remove the remaining water and sediments from the steam housing each time the unit completes a cycle. The backflush action eliminates problems connected with water storage and is designed to minimize the sediment build-up in the steam housing. A malfunction in the backflush operation will greatly reduce the efficiency and longevity of the equipment. The backflush solenoid valve must close when the equipment is activated and open at the end of the cycle. If it fails to close, no water will reach the heating elements. If it fails to open and flush (drain), residue build-up inside the tank will eventually short out the operation. The drain line must always run downgrade, without Traps. The relief valve in this assembly serves to relieve and protect against excessive pressure build-up inside the generator tank. Excessive pressure build-up will result only from an obstruction in the steam supply line or the steam orifice. This means that the obstruction will be located in the elbow fitting attached to the nipple at the top of the tank. An obstruction in the steam orifice can cause a "heavy" fluctuation in the amp draw and steam flow. If the flow of steam appears to vary widely (up and down), the steam orifice should be checked for cleaning or a possible enlargement from a previous improper cleaning. The size of the steam orifice is critical to the operation and should not be noticeably obstructed or enlarged.

## WATER INLET ASSEMBLY

- A. Water Strainer This strainer is the first component of the assembly. The strainer will unscrew and separate in the middle to clean. Remove the small strainer disk and clean with vinegar or water.
- B. Cleanable Water Orifice Turn off water and electrical supply to the unit. Remove the plug in the front of the orifice block. With the cleaning wire provided, clean the .033 hole, straight in. Be sure that all particles and sediment build-up are removed. Caution should be exercised while cleaning so as not to damage or enlarge the opening.
- C. Pressure Regulating Valve and Gauge This valve should be cleaned when continued service is required to the orifice. Sediment may build up in the valve and, in turn, be passed on to the orifice. To clean, remove the gauge and unscrew the knob assembly from regulator housing. For best results, simple rubbing with a damp cloth is suggested. Often times this valve cannot be cleaned and if results are not obtainable, replace the valve.
- D. Water Solenoid Valve This valve has a slide action as it opens and closes. Sediment can build up and cause it to stick in either position. To disassemble, loosen the threaded part at the bottom of the

stainless steel shaft and remove. <u>THIS WILL REQUIRE A SPECIAL WRENCH. DO NOT</u> <u>ATTEMPT TO LOOSEN WITHOUT THE PROPER WRENCH OR PERMANENT DAMAGE</u> <u>WILL BE CAUSED TO THE VALVE.</u> When the shaft is removed, it will expose the operating parts of the valve. For best results clean with a 50-50% muriatic acid and water solution and flush with clean water. <u>Make sure that all parts are properly re-assembled</u>. Re-connect the valve to the green coil that is still hanging by its' wires in the box. Engage the 10 amp breaker (10 amp breaker only) and activate the timer. The valve should now be in the "open" position. Blow through the valve in the direction of the arrow to be sure there is clear passage. While blowing, turn off the 10 amp breaker and the valve should close allowing no more air to pass through. Do this " off and on " exercise several times to make sure the valve is operating properly.

# BACKFLUSH ASSEMBLY

- A. Backflush Solenoid Valve This valve has a slide action as it opens and closes, and sediment may cause it to stick in either position. To disassemble, remove the two visible screws and it will separate. Follow by loosening the hex nut at the bottom of the stainless steel shaft and remove. Be careful not to drop any parts, and take special note as to how they fit in place. For best results, clean with a 50-50% muriatic acid and water solution and flush with clean water. Make sure that all parts are properly reassembled. Re-connect the valve to the green coil that is still hanging by its' wires in the box. Engage the 10 amp breaker (10 amp only) and activate the timer. The valve should now be in the "closed" position. Disengage the 10 amp breaker and the valve should "open". Do this " off and on " exercise several times to make sure the valve is operating properly.
- B. Pressure Relief Valve This valve seldom causes any problems. If it malfunctions in any way it should be replaced. Attempting to repair it is not advised.