

### **Aqueous Combination Unit**

### **Operating Manual**

#### INTRODUCTION

Congratulations on receiving your 2740!

Heritage Crystal Clean provides comprehensive maintenance and service support for your leased product. This manual provides helpful content regarding operator maintenance and solution monitoring. HCC provides additional maintenance support, troubleshooting support, and provides scheduled service of the unit and solution based on your needs. HCC strives to be a helpful hand and partner for your part washing needs.

This unit is a compact and powerful jet washer designed to provide maximum cleaning power in a minimum amount of space. This footprint coupled with the machines ease of operation and automated cleaning abilities will eliminate the need for solvent sinks which may be harmful to employees and the environment. It also reduces the amount of time spent manually cleaning parts. The operator simply places the parts on the turntable, closes the lid, and starts the wash cycle. The parts automatically clean while rotating through multiple spray curtains of aqueous based cleaners and hot water.

Read the entire manual before attempting to operate the 2740.

Carefully review the SAFETY INSTRUCTIONS AND INFORMATION section and all CAUTION, WARNING, and DANGER information. This information will instruct you on how to use this equipment in a safe manner. Keep this manual along with the Material Safety Data Sheets (MSDS) for aqueous based cleaners in use. Always have this information in easy reach for the operator and all personnel working on or around the equipment.

Familiarize yourself with the general Maintenance and Troubleshooting of the product. Follow these guidelines to help ensure a long and trouble free experience. If there are any questions or concerns, please call your HCC representative.

The equipment described in this manual is subject to change. The manufacturer reserves the right to change equipment at any time as part of normal product improvement. Some improvements may have been made after this manual was printed. For the latest information on your equipment, contact your HCC representative.

#### GENERAL INSTRUCTIONS

- 1. Read all instructions.
- Always wear PPE. Take precaution and wear thermally protective equipment that is suitable for wet environments. This machine is preset to 130°F. The liquid will be hot. Most surfaces will be hot. All parts removed from the machine will be hot.
- 3. Do not operate equipment with a damaged cord or if the equipment has been dropped or damaged until it has been examined by a qualified technician.
- 4. Do not let cord hang over edges of table, bench or counter or come in contact with hot manifolds or moving fan blades.
- 5. If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
- 6. Always unplug equipment from electrical outlet when not in use or empty. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect power to the unit before maintenance or servicing of the equipment.
- 7. Wait for at least 15 seconds before opening Lid/Sink after washer has timed off.
- 8. To reduce the risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids (gasoline).
- 9. Keep hair, loose clothing, fingers, and all parts of the body away from moving parts.
- 10. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain.
- 11. Use only as described in this manual. Use only manufacturer's recommended attachments.
- 12. The ambient air temperature should not be below 40°F or above 105°F.
- 13. Do NOT modify these machines.

### **"SAVE THESE INSTRUCTIONS"**

#### SAFETY INSTRUCTIONS

- DANGER! This is a HEATED device. This equipment is designed for use only with Aqueous Based Solutions. Do NOT add any other chemicals to the cleaning agent including, but not limited to: mineral spirits, kerosene, fuel oil, gasoline, or chlorinated solutions. The use of any other solutions could potentially cause a hazardous condition including risk of fire or explosion.
- DANGER! NEVER operate electrical equipment inside of parts cleaner.
- DANGER! This machine utilizes HIGH VOLTAGE 220V 1 Phase electricity. ALWAYS disconnect power to the unit before removal of the electrical panel cover. Obtain the services of a qualified electrician for all electrical work.

Make sure the parts cleaner is connected to a properly grounded power source. Check serial plate for power requirements.

- WARNING! Avoid contact with eyes or skin. Wear protective eyewear, gloves, and clothing.
  Operation should be conducted in a manner, which prevents splashing, or spillage.
  Any spills should be promptly and properly cleaned up. Soak up all spills with absorbent material. Remove and dispose of all soaked material in accordance with regulatory requirements.
- CAUTION! Do NOT allow heater to operate unattended for long periods, such as evenings or weekends.
- CAUTION! This machine comes with a built-in lid limit switch to protect the operator from injury. In the event that the lid is lifted mid-cycle, the limit switch will cease all operation of the turntable and pump.
- NEVER Modify or defeat the limit switch. An unsafe condition may occur if any unauthorized changes are made.

#### INSTALLATION

The 2740 is a high capacity, compact footprint, and self-contained parts washer. The only external hookup is a 220VAC, 1PH, 24A minimum dedicated electrical supply line. Floor plan layout should include adequate access for maintenance, service, and repair. Vertical clearance should allow full opening and closing of the lid without obstruction. Install your parts cleaner on a flat, level surface in an area provided with adequate ventilation. Local exhaust ventilation should be used in areas of high vapor concentration. Provisions for determining and maintaining adequate ventilation are the responsibility of the operator.

WARNING! This unit is NOT intended for outdoor operation.

PRODUCT DIMENSIONS All dimensions are in inches WEIGHT (Estimate) Dry Weight: 390 lbs Wet Weight: 720 lbs (at 40 gallons)

#### CONSIDERATIONS

- 1. Make sure the site is level and smooth
- 2. The floor surface needs to be appropriate for supporting the weight and applied pressure of the unit.
- 3. Plan space around the unit to allow access for maintenance, service, and repair. Refer to the clearance dimensions above as recommendations.
- Plan space above the unit to allow the lid to fully open and close without interference.
  Refer to the open lid height in the above dimensions.
- 5. The unit typically creates a significant amount of steam. Make sure this steam will have no adverse effects on the surrounding area.
- 6. The process of removing wet parts from the machine will inevitable result in some water or solution spilling on the floor. Consider traction mats around the machine and avoid placing the machine next to a walkway.

#### ELECTRICAL SPECIFICATIONS

System:

Voltage: 220VAC Phase: 1PH Amperage: 24A Largest Motor: HP: 3/4HP Wattage: 550W FLA: 6.5A

#### ELECTRICAL HOOK-UP

The 2740 comes fully wired with plug in the 6-50P configuration. The voltage, phase, and current draw of the machine are listed above and on the serial number plate. The wiring diagram is listed below in this manual.

#### **OPERATING INSTRUCTIONS**

#### **IMPORTANT DO NOT USE EXTENSION CORDS.**

#### FILLING AND USING CLEANING COMPOUND

1. Do not plug in the Parts Washer until it has been filled with water. Damage to Pump Seal will occur if the Pump Motor is turned on with no water in the reservoir. The water level marker (FULL) is on the inside back wall located under the basket..

#### **CLEANING RESERVOIR**

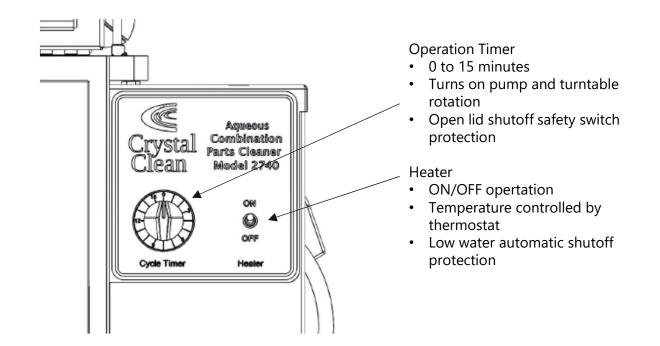
- 1. Do not let Parts Washer get over contaminated. If solids cover the heater it can burn out. The spray manifold can over build with scale and residue that will reduce flow.
- 2. Remove caps on end of spray manifolds, use a pick or drill bit by hand to clean out spray holes, close Parts Washer lid, turn pump on for 2 seconds, replace caps hand tight.
- 3. Make sure the cord is unplugged before draining reservoir.
- 4. Remove the large basket, basket support and pump screen. After cleaning is complete, clean pump screen and place it back in position. Grease top of spindle and place basket support and basket back in position.
- 5. Clean out dirty solution, when the solution is down to the bottom,. Clean and rinse out the bottom of reservoir.
- 6. Take care in cleaning around the heating element and low water float switch.
- 7. Clean the float switch thoroughly wiping it of all grease and metal filings.
- 8. Fill with chemistry, allow heat up time.

#### FOAMING

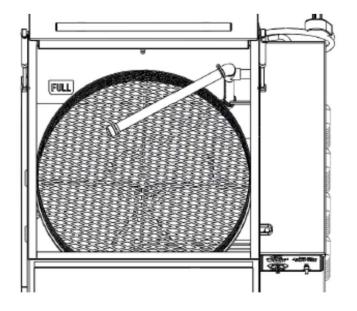
1. Foaming can be caused by many different reasons such as, cold bath temperature, lack of cleaning compound from use, extreme amounts of certain greases or gear oil, too long of a service interval, over contaminated bath, and over time the salts from water that is added to the bath.

#### MACHINE CONTROLS AND ADJUSTMENTS

#### CONTROLS – MAIN CONTROL PANEL



#### SWING AWAY SPRAY BAR

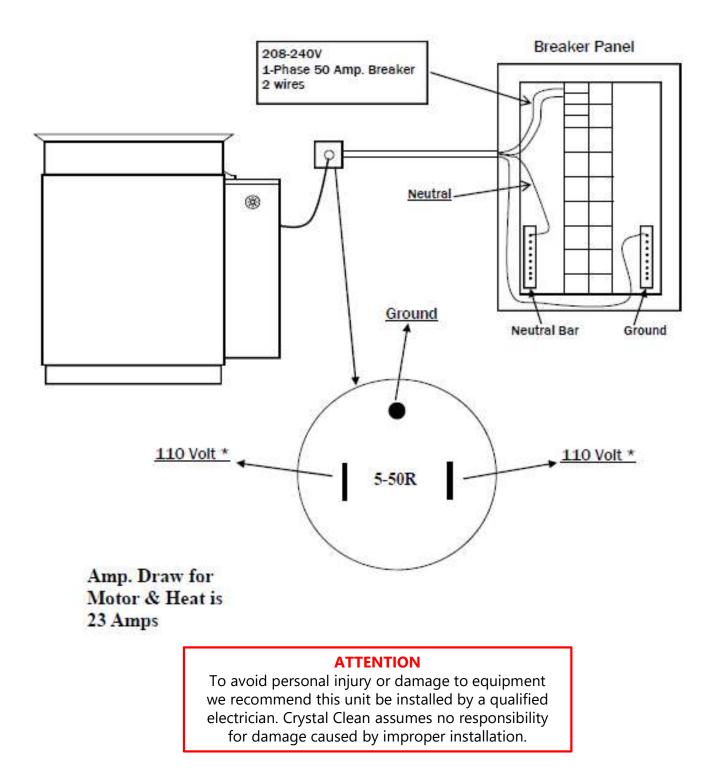


#### Swing Away Spray Bar

- Overhead load friendly
- Large object friendly
- Can move either direction to be completely clear of the turntable area

#### ELECTRICAL INSTRUCTIONS

#### CONTROLS – MAIN CONTROL PANEL

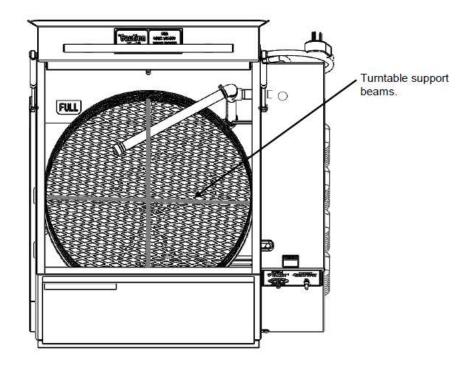


#### LOADING

DANGER! Center all loads. Place any heavy parts centered on turntable. If washing multiple heavy parts, distribute them evenly and over the main support bars. Any uneven loading or placement of heavy objects risks personal harm and may affect the operation of the unit.

IMPORTANT! The working height of this unit is approximately 13". Do not place parts taller than 13" into this unit. Taller parts will hit the upper spray bar.

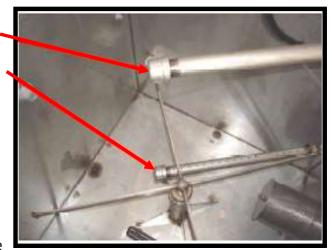
- 1. Verify no obstructions are overhead then open lid.
- 2. Rotate spray bar out of the way to the side or rear of the unit.
- 3. Carefully lower parts into the parts washer.
  - When loading small and numerous parts, always distribute the weight evenly across the turntable.
  - Very small parts may need to be contained within their own basket or mesh container to prevent them from falling through the turntable grate and to keep them from getting blown off the turntable by the washer spray.



#### SPRAY MANIFOLD, PUMP FILTER MAINTENANCE

#### **BEFORE CLEANING OR DRAINING RESERVOIR**

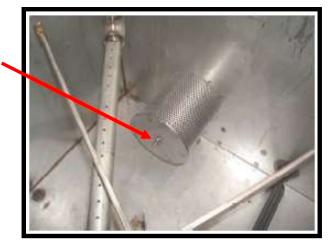
Clean out the spray jets in the manifold. Debris can lodge in the spray jets and restrict the spray. Remove the pipe caps. With a pick or a drill bit (no drill motor) push any debris back into the manifold . Close the Sink/Lid . Turn the cycle timer on for only 2 second or less, this is enough time for the pump to send several gallons of cleaning solution thru the manifold system and flush out all debris . This process may be performed at any time necessary.



DO NOT CLEAN MOPS OR RAGS IN THE MODEL 2740.

#### CLEANING OUT PUMP INTAKE FILTER

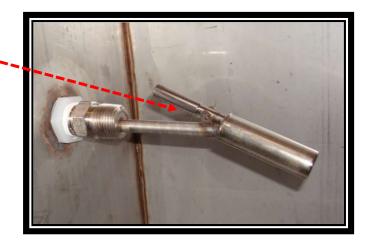
Cleaning the pump intake filter each time the reservoir is drained will keep the Model 2740 performing it's best . After removing the filter tube from it's support bolt, rinse off debris as much as possible. A wire brush may be used to assist in removing fibers and build up around the filter holes. Use an air blow off gun to make sure all filter holes are clean. Give the filter a final rinse, then reinstall the filter tube.



#### WATER LEVEL AND FLOAT MAINTENANCE

#### LOW WATER, HEATER CUT OFF

Be careful when cleaning out the reservoir not to hit the level switch with any metal objects that could damage it. To clean off metal particles that are attracted to the small magnet, rinse with water first and then wipe clean with a rag.

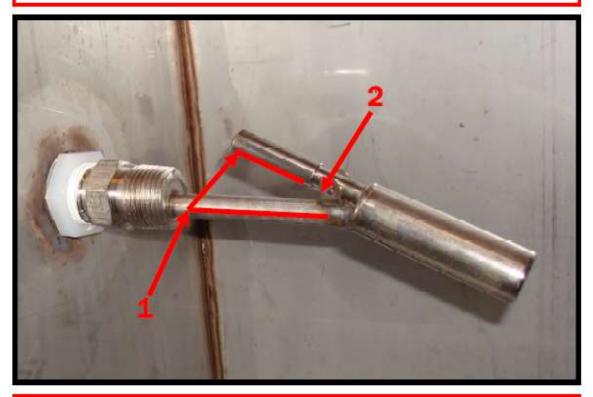


#### WATER LEVEL MARKER

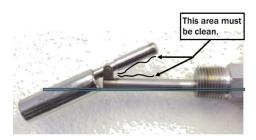
The detergent level marker is positioned on the rear wall and left. The maximum detergent level is at this marker. Maintain level at this marker. Low level is 1 to 1-1/2" below the marker.



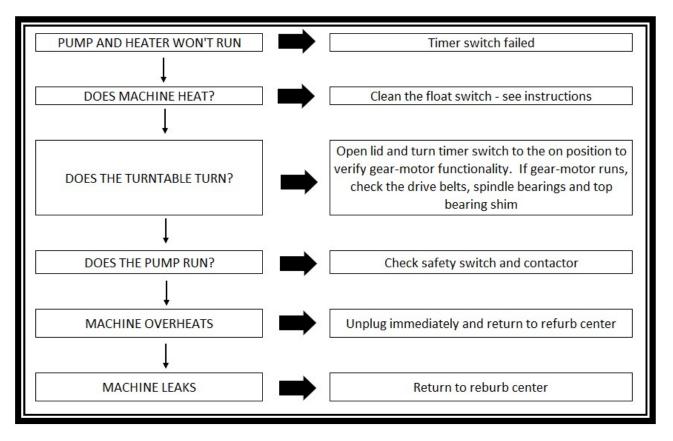
# 2740 Parts Washer <u>SERVICE BULLETIN</u> No heat caused by dirty float switch



<u>Remedy</u>: At every service interval the following service needs to be performed. Clean the entire area between and around the float stem as shown on #1. Pay particular attention to the inside of the hinged area. Rinse, brush, or use compressed air to clean. There is a small magnet in this area that can attract metal fillings and prevent the switch from operating after changing out the cleaning solution. Check float when filling by momentarily lifting up and down on float, a snapping sound can be heard when the heater engages.



### TROUBLESHOOTING CHECKLIST



### MACHINE RETURN FORMS ARE MANDATORY

