

INDUSTRIAL - AQUEOUS PARTS CLEANER

OPERATION & INSTRUCTION MANUAL

EM235

DRUM MOUNTED HEATED PARTS WASHER

I. Introduction

A. Manufacturer's Statement

This manual will provide you with important information about the Aqueous Parts Cleaners and will instruct you on how to use this equipment in a safe manner.

The information contained in this manual is necessary for the safe, proper setup and operation of your Aqueous Parts Cleaner.

Keep this manual, along with the Material Safety Data Sheets (MSDS) for the solution in use, within easy reach of the operator of this parts cleaner.

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 the manufacturer.

B. General Information



READ AND UNDERSTAND ALL LABELS, MSDS, AND THIS INSTRUCTION MANUAL BEFORE USE.

The Industrial Aqueous Parts Cleaner is an economical, safe, and innovative system designed to clean parts, using an aqueous based solution. Aqueous solutions, when used to clean grease and oil, must be disposed of properly. Consult your local environmental management agency for additional guidance and other potentially hazardous materials compliance requirements.

Install your parts cleaner on a flat, level surface in an area provided with adequate ventilation. Avoid repeated or prolonged breathing of vapors. Do **NOT** use compressed air to dry parts as this may cause a high concentration of vapors in the immediate area. 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.

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

Do **NOT** allow the parts cleaner to operate unattended.

II. Safety Instructions and Information

Complete safety in use is dependent upon proper use and handling of the parts cleaner in your workplace.

It is important that you follow the instructions provided in this manual. If you fail to read, understand, and follow all of the procedures in this manual, you may cause or suffer personal injury.

DO NOT OPERATE ELECTRICAL EQUIPMENT INSIDE OF PARTS CLEANER.

 **CAUTION**
USE ONLY WATER-BASED CLEANING SOLUTIONS
DO NOT USE MINERAL SPIRITS

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, kerosene, fuel oil, gasoline, or chlorinated solutions. The use of any other solutions could potentially cause a hazardous condition.

 **CAUTION**
DO NOT ALLOW HEATER TO OPERATE UNATTENDED FOR
LONG PERIODS, SUCH AS EVENINGS OR WEEKENDS.

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.

This unit is **NOT** intended for outdoor operation.

Do **NOT** leave solution-soaked rags in parts cleaner or in uncovered containers.

Do **NOT** obstruct the cover. It is designed to close automatically in the event of a fire. The safety link and cover closing mechanism must be intact. Do **NOT** substitute with any other type of cover positioning device. Do **NOT** leave large objects in the parts cleaner or hang anything on the cover that could prevent the cover from closing in the event of a fire.

Do **NOT** place heavy objects on edges or front of sink. Although this parts cleaner is designed to be stable, uneven weight distribution could cause a hazardous condition.

Do **NOT** contaminate cleaning solutions with gasoline, alcohol or flammable liquids.

When cleaning carburetors or other fuel supplying components: remove all gasoline into a proper disposal container before placing the component into the parts cleaner.

Do **NOT** spray aerosols into or around this machine. Install the equipment in an area away from heat, sparks, and open flame. Never put hot parts into the solution.

Do **NOT** use compressed air to dry parts. Be sure parts, especially brake parts, are completely dry prior to reassembly.

Turn unit "OFF" and close lid when equipment is not in use. This will reduce evaporation.

A. Important Safety Instructions

1. Read all instructions.
2. Care must be taken as burns can occur from touching hot parts.
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 service person.
4. 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.
5. Always unplug equipment from electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
6. To reduce the risk of fire, do **NOT** operate equipment in the vicinity of open containers of flammable liquids (gasoline).
7. To reduce the risk of electric shock, do **NOT** use on wet surfaces or expose to rain.
8. Use only as described in this manual. Use only manufacturer's recommended attachments.
9. **ALWAYS WEAR SAFETY GLASSES.** Everyday eyeglasses only have impact resistant lenses, they are not safety glasses.
10. Do **NOT** operate any electrical equipment inside sink or vat.
11. Do **NOT** use light bulbs rated over 40 watts.
12. Do **NOT** smoke, eat or drink in the work area.
13. Do **NOT** modify these machines.
14. Do **NOT** operate this unit in any manner that will cause splashing or cause mist to form.
15. Use only aqueous solution.
16. Adjust flexible nozzle or flow-thru brush so solution is directed to inside the sink only.
17. On the Control box, set the breaker switches to **OFF** before plugging in unit.
18. In any emergency, turn off the unit.
19. These parts washers employ a safety feature called a fusible link that holds the cover open during use. Do **NOT** modify, alter, or obstruct the operation of the fusible link.
20. Keep cover closed whenever unit is not in use.
21. Do **NOT** remove fluid from this equipment or it may cause malfunction or unsafe conditions.

SAVE THESE INSTRUCTIONS

B. Service

Call your representative should your parts cleaner need service and always unplug unit when servicing.

Inspect and keep in good working order the power cord and all electrical components. If components show signs of damage or wear replace immediately. All work should be done by a trained technician.

Do **NOT** replace pump before unplugging unit and letting it completely cool down.

Do **NOT** replace fusible link with any other device to hold lid up. If fusible link should fail, for any reason, call your representative immediately.

C. Fire

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, kerosene, fuel oil, gasoline, or chlorinated solutions. The use of any other solutions could potentially cause a hazardous condition.

Maintain the liquid level within the indicated operating range.

For your protection, a fusible link automatically closes the cover of the parts cleaner in the event that a fire occurs in the sink work area. The closed cover contains and smothers the fire inside the sink. Do **NOT** leave large objects in the parts cleaner or hang anything on the cover that could prevent it from closing in the event of a fire. Do **NOT** replace fusible link with any other device to hold cover up.

IN CASE OF FIRE: Use a Type ABC or Type BC fire extinguisher. Do **NOT** use water. Contact your local fire department.

IN AN EMERGENCY, UNPLUG THE ELECTRICAL SUPPLY TO THE UNIT.

D. First Aid (Medical instructions)

Please note that these First Aid Precautions are for uncontaminated cleaning solutions only. Once the solution has been contaminated (i.e. with oil, grease, antifreeze, etc.), safety precautions should be adjusted according to the type of contaminant.

1. **EYES:** Contact may cause slight to moderate irritation. **For direct contact, flush eyes with water for 10-15 minutes or until the material has been removed; be sure to remove contact lenses, if present, and to lift the upper and lower lids during rinsing. If irritation from vapors or mists develops, move victim into fresh air. Get medical attention if irritation persists.**
2. **SKIN:** Prolonged or repeated contact tends to remove skin oils, possibly leading to dermatitis. **Wash skin with soap and water. Remove contaminated clothing, rinse shoes and launder clothing before reuse. If irritation or pain develops or persists, seek medical attention.**

3. **INHALATION (Breathing):** Prolonged exposure to concentrate-mist or vapor may cause mild irritation of nasal passages or throat. **Remove to fresh air immediately. Do not leave victim unattended. Get medical attention if irritation persists.**
4. **INGESTION (Swallowing):** (Uncontaminated cleaning solution) **Drink 4 to 8 ounces of water and seek medical attention. DO NOT** induce vomiting.

E. Environmental

1. **Avoid spilling solution.** Spilled solution can create slippery conditions, clean it up immediately. Close off area to traffic. Wear appropriate personal protective equipment to prevent eye and skin contact. Consult the Material Safety Data Sheet for instructions on clean up and disposal.
2. **Contain leaks promptly.** Notify local environmental authorities if necessary.
3. **Aqueous solutions, when used to clean grease and oil, must be disposed of properly. Consult your local environmental management agency for additional guidance and other potentially hazardous materials compliance requirements.**
4. **For further information consult the Material Safety Data Sheet provided by the solution supplier.**

III. Installation

1. Position the drum upright on a flat, level surface in a well-ventilated area.
2. Attach the drum bracket to the heater assembly, do not tighten the bolts. Note if you are using a steel drum use the bracket with the larger offset lip, if you are using a plastic drum use the bracket with the smaller offset lip.
3. Place the pump/heater assembly onto the drum.
4. Place the sink on the drum so the pump/heater assembly fits in the relief in the back of the tank.
5. Screw the pump/heater assembly to the sink.
6. Slide bracket as far forward as possible to completely catch on the drum lip and tighten the screws to secure.
7. Connect the quick coupler from the pump to the quick nipple on the back of the sink.
8. Place the filter strainer and grate in the hole on the bottom of the sink.
9. Put the work tray into the sink.
10. Plug the cord from the pump/heater assembly into the receptacle on the control box.
11. Fill the reservoir to the correct level with aqueous based solution. This equipment is designed for use only, with Aqueous Based Solutions. Do **NOT** use Flammable or Combustible solutions. Do **NOT** add any other chemicals to the cleaning agent including, but not limited to, kerosene, fuel oil, gasoline, or chlorinated solutions. The use of any other solutions could potentially cause a hazardous condition.

Capacity Model EM235= 20 Gal. (75.7 L.)

12. Plug the power cord into a properly grounded power source. Check serial plate for power requirements.

Power requirements: 120 Volt, 15 Amp, 60 Hz

13. Weight capacity for this parts cleaner is **150 Lbs. Do not exceed rated load.**

IV. Operation

A. Turn on the heater control switch, at the beginning of each workday or shift. Allowing the solution temperature to rise will aid in the cleaning efficiency.

B. Avoid prolonged contact with hands. Use gloves or barrier cream.

C. Wear protective safety glasses suitable to prevent solution splashing into eyes.

D. Wear a protective apron or garment to avoid absorption of solution into clothing.

E. Open the cover and adjust the spray nozzle into the work area.

F. Load parts to be cleaned. Maximum load capacity 150#. **CAUTION:** Load parts into the center of the tank to reduce the chances of tipping.

G. Turn on the pump control switch.

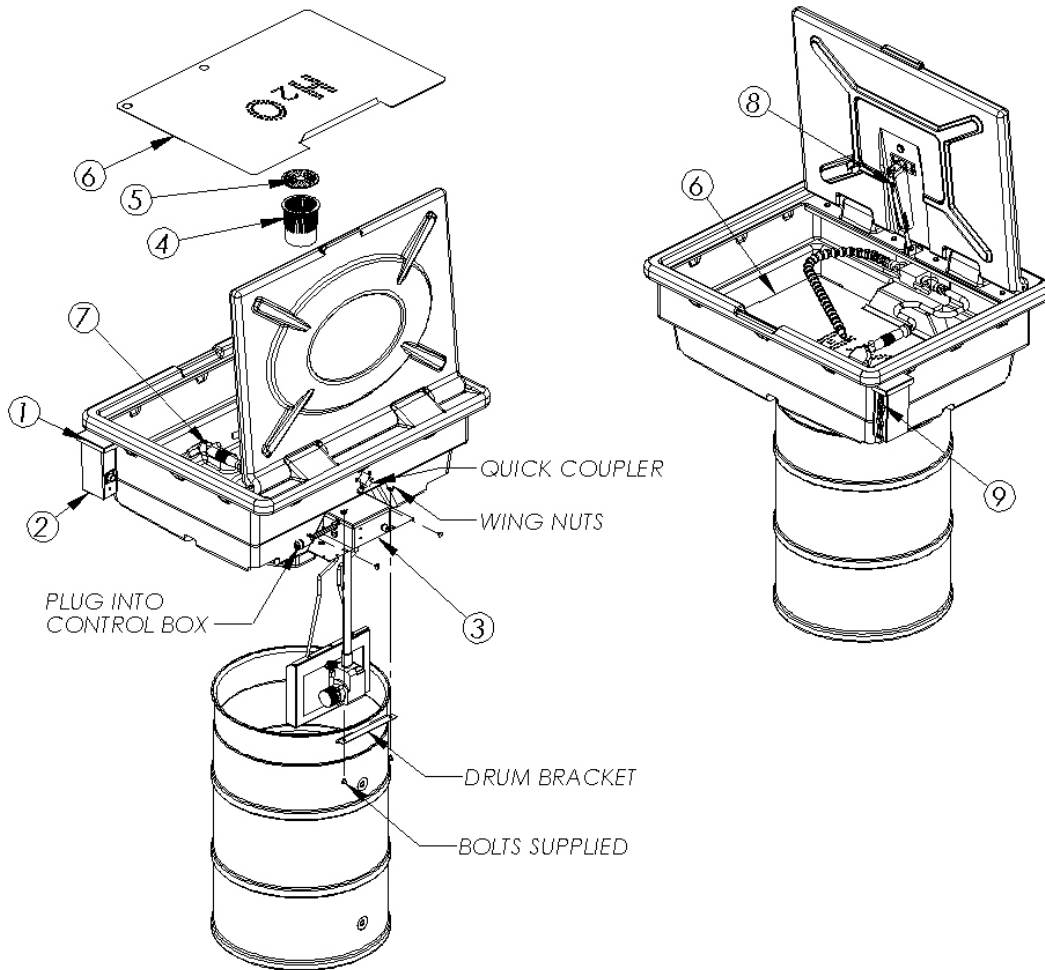
H. Clean parts using solution nozzle and flo-thru brush. Use of a stiff bristled brush to scrub parts will maximize cleaning efficiency on difficult to remove deposits.

I. Turn off pump control switch when operation is complete.

J. Allow parts to drain in parts cleaner prior to removal. Be sure parts, especially brake parts, are completely dry before reassembly.

K. Turn off heater control switch at end of daily use. Do not allow the heater to operate unattended for long periods, such as evenings or weekends.

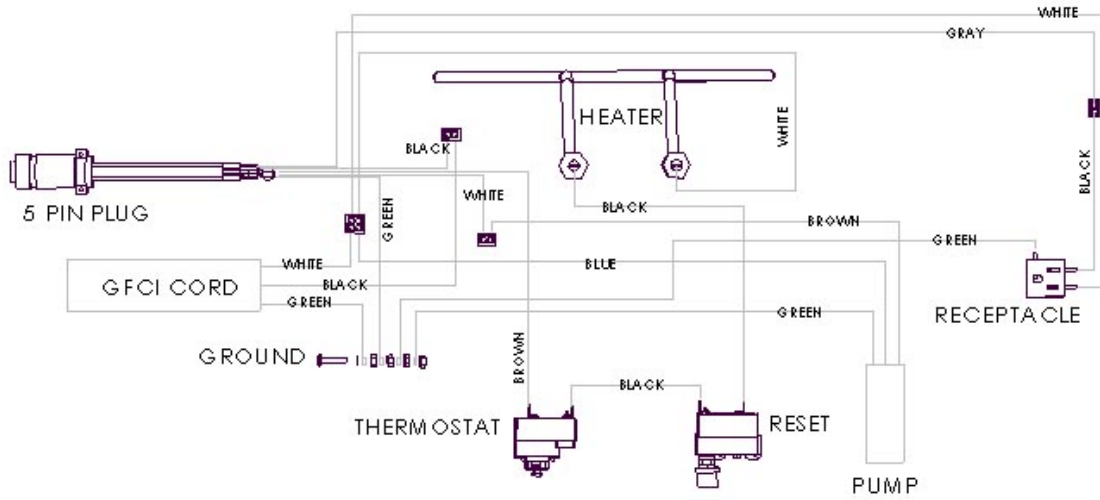
V. Parts Breakdown



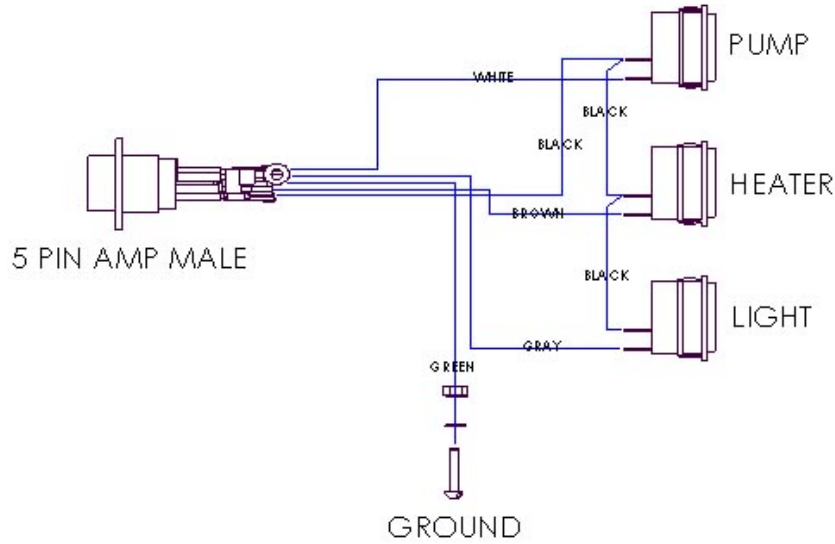
ITEM	PART #	QTY	DESCRIPTION
1	57729	1	CONTROL BOX BRACKET
2	57783	1	CONTROL BOX ASSEMBLY
3	57777	1	HEATER/PUMP ASSEMBLY
4	6430	1	STRAINER, PLASTIC
5	6431	1	FILTER GRATE, PLASTIC
6	57656	1	TRAY, H2O
7	01205	1	BRUSH, FLAT ANGLE
8	55449	1	DOOR CLOSURE
9	01122	3	SWITCH, ROCKER
10	57772	1	CORD, GFCI
11	01626	1	HEATER, 1000W
12	9039	1	THERMOSTAT
13	01041	1	RESET
14	02206	1	CORD, 5 PIN CONNECTOR
15	02225	1	RECEPTACLE, 5 PIN
16	04727	1	PUMP, 115V
17	56375	1	RECEPTACLE

VI. Wiring Diagram

WIRING DIAGRAM HEATER/PUMP ASSY



WIRING DIAGRAM CTRL BOX



VII. TROUBLESHOOTING

A. Machine does not operate:

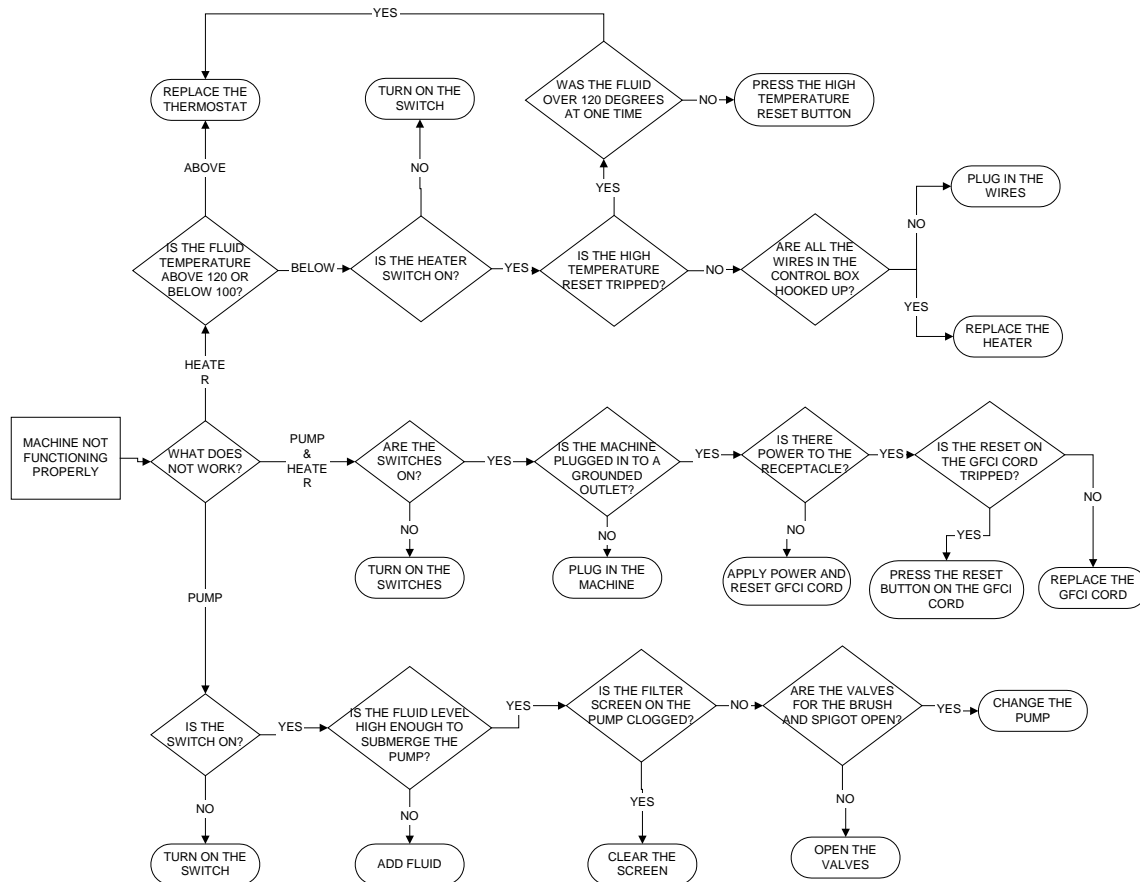
1. Make sure the parts cleaner is connected to electric power or air supply.
2. Check for incoming power. Check serial plate for power requirements.
3. On electric units: check reset button on GFCI cord to make sure it is not tripped. On air units: an increase in air supply may be required.

B. Cleaning fluid not to temperature:

1. Check to make sure heater switch is turned "ON".
2. Check fluid level in tank.
3. Check to see if high temperature reset is tripped.

C. Little or no fluid flow thru the flow-thru brush:

1. Turn pump switch "ON" or increase air pressure.
2. Check the fluid level in the tank.
3. Check pump intake for obstructions.



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(5) Each limitation on liability or remedy set forth in these Terms and Conditions is independent of any other limitation or if they are otherwise held to be unenforceable, that shall not affect the validity of any other such limitation or remedy.

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This limited warranty does not cover or include consumable/wearable associated with such equipment.

Fountain assumes no liability for any unauthorized modifications carried out to the equipment not strictly recommended by the factory procedures.

This limited warranty is not transferable, and does not cover general equipment maintenance, demonstration, installation, routine servicing, calibration or customization of the equipment.

No person is authorized to alter or extend this limited warranty unless made in writing and signed by an authorized officer of Fountain.



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