

HYDRA 30 & 45 MOBILE PARTS WASH SINKS

The Hydra 30 & Hydra 45 washers are considered standard portable self service washers.

INSTRUCTION MANUAL FOR EQUIPMENT AND CHEMICAL MAINTANANCE



SPECIFICATIONS:

- Tank: Hydra 30 Molded HDPE Plastic Tank Capacity of 25 gallons.
- Tank: Hydra 45 Molded HDPE Plastic Tank Capacity of 45 gallons.
- Washers 30 & 45 electrical requirements 120 Volts AC, 15 Amps. Operates on a standard industrial 20 amp. 120 volt circuit.
- The heater is 1000 watts and constructed of 304 stainless steel. **The heater can be replaced without the need for tools.**
- The tank includes a sink that has a bag filter in its drain, a 400 micron 4" 100% of the fluid is filtered to increase the life of the chemistry. Other filter sizes are available. **The bag filter can be cleaned or replaced without the need for tools.**

- The 300 gph pump includes a filter screen. The pump can be replaced without the need for tools.
- Safety features: Ground fault plug, a manual temperature control, and a stainless steel heater with built in over temperature fuse.
- If the liquid level goes to low, foam will begin to flow out of the brush and spigot. In that case add 5 gallons of water.
- The washer has 4 multi directional casters for ease of movement.
- Complete sytem weight 75 Lbs dry weight.
- GFCI plug.
- Sink dimensions: ID 36" L to R, 21" F to B, 32" Floor to bottom of Sink, 8" Sink Depth.
- Machine dimensions: OD 38.25" L to R, 27.5" F to B, 40" Floor to top of Sink
- Options: Pneumatic Air Diaphragm Pump, Air Blow Off.

Caution:

- Read and understand the manual before using the quipment.
- This unit is designed to be used with water based parts wash. Do NOT use any other cleaning chemicals such as but not limited to mineral spirits, chlorinated solvents or any other petrolium based parts wash. Doing so will void the warranty, cause damage to the equipment and cause a potentially hazardous situation.
- Unplug and lock out the unit before performing any service.
- Do NOT throw hot parts in the sink.
- Do NOT use if damaged. Have the unit serviced before continuing operation.
- If an extension cord is needed to operate the equipment, care must be taken to assure the proper rating. Do NOT use an extension cord that is underrated.
- In case of emergency, unplug the unit and contact a service person.
- Proper solution level should be maintained for heater and pump operation. Low solution level may cause heater or pump failure.
- Do NOT operate the unit without filtration in place. Doing so will may cause premature build up on the heater causing a hot spot that will destroy it. No filtration may clog the pump and casue a pump failure.
- This unit is designed for indoor use only.
- Proper safety ware must be worn such as but not limited to safety glasses, gloves and chemical resistant apron.

New Chemistry Makeup & Washer Start Up:

The equipment should be filled and serviced in the following way.

Fill the Hydra 30 Washer with water. The tank has 25-gallon capacity. Fill with 18.75 gallons of water and 6.25 gallons of the AQC parts wash.

Fill the Hydra 45 Washer with water. The tank has 45-gallon capacity. Fill with 33.75 gallons of water and 11.25 gallons of the AQC parts wash.

Filling with water & chemical and starting the washer:

After filling the washer with water the AQC chemistry can then be added.

Plug in the ground fault circuit interrupter and push the reset button on the plug.

The washer temperature control is preset to 115°F.

The washer will take about 6-8 hours to heat up when it is filled with cold tap water.

Note: If the pH is maintained at 9.5 to 10.5 by adding small amounts of chemistry as described in section 9 of this document you can expect normal operation and life cycle for the chemistry.

Check the temperature: To check the temperature, be sure the washer has been on for at least 6 to 8 hours and the tank is full of solution. Start the pump, place a cup in the basin and overflow the cup. It may take up to 5 minutes for the temperature to stabilize. Place the thermometer in the cup and record the temperature. The ideal temperature is 115°F, however 110° to 117° is acceptable.

Check pH: After checking the temperature, check the pH by placing the pH probe or paper in the cup and record the reading for comparison for future maintenance testing or trouble shooting. The ideal pH is 9.5 to 10.5 machine with the chemical concentration of 25%.

Check the refraction: After the temperature is at or near the set point of 115°F check for the refraction reading using a refract instrument with a range of 0-32° Brix. The ideal refraction is between 4 and 5 for a machine with the chemical concentration of 25%.

It should be noted that the Hydra 30 & 45 washers and the AQC family of chemicals are designed as a system.

Regular and Full Service Procedure For Complete On-Site Maintenance and Used Filter Management.

Regular Equipment & Service Procedure for Hydra 30 & 45 Washers. The following procedure is for a machine that has already been in service.

1. Unplug the unit from the electrical connection (110 volt) outlet. The heater should be allowed to cool down (approximately 5 minutes) before the solution is drained from the machine.

2. Remove the nylon filter bag from the drain hole then dump it out, they can be reused after cleaning if they are not damaged. A floating polypropylene oil sorbent pad can be floated on top of the solution to remove separated oil. The pad should be disposed of according to your facility plan. Do not leave the oil sorbent pad in the unit during normal operation. If there is excess oil in the machine it may be necessary to use an additional oil pad.

In most cases the sorbent pad is classified as sorbent waste that has a high BTU value and can be burned for energy recovery or disposed of with other filters you may have in your facility.

3. Perform the chemical service for the type of chemistry you have in your machine. It should be noted that the AQC family of chemicals are oil splitters. This means that they will clean the oil and grease from your parts and then release the oil either to the top of the solution for oils or to the bottom for heavy greases, dirt and inks.

Check pH: After checking the temperature, check the pH by placing the pH probe or paper in the cup and record the reading for comparison for future maintenance testing or trouble shooting. The ideal pH is 9.5 to 10.5 machine with the chemical concentration of 25%.

Check the refraction: After the temperature is at or near the set point of 115°F check for the refraction reading using a refract instrument with a range of 0-32 ° Brix. The ideal refraction is between 4 and 5 for a machine with the chemical concentration of 25%.

Proper disposal requirements for Used Oil and Sorbents may vary, check your local and state regulations.

Note: Steps 1 through 3 above constitute a regular service.

For a Full Service machine cleaning for a machine that has been in service.

To remove grease, oil and sediment when the chemistry is still functioning, follow these steps.

Note: it is important to understand your correct disposal procedures before you proceed.

Note: Unplug the unit from the electrical connection (110 volt) outlet. The heater should be allowed to cool down (approximately 5 minutes) before the solution is drained from the machine.

4. Before pumping out the washer for small amounts of floating oil a sorbent pad may be used to remove oil. Next pump existing solution into a container until heavy oil and grease sludge level is exposed.

NOTE: Any discoloration of the solution during this initial stage of the maintenance service should be disregarded, discoloration will naturally occur during the cleaning process and will not necessarily affect the cleaning performance in auto, truck and maintenance repair.

5. Your washer can be cleaned in one of the following ways.

6. or Utilizing a wet vacuum grease and sediment. The grease can be combined with your waste grease or you can solidify with oil sorbent.

6.1) A loose or pourable sorbent can be mixed with the grease and dirt to make it easier to remove and then it can be scooped out and added to your sorbent waste were it is appropriate. For small amounts of grease and oil at the bottom of the tank wiping it up with absorbent pads may be the best approach. (Proper disposal requirements for Used Oil and Sorbents may vary, check local and state regulations.)

7. Pump the recycled/filtered solution into the Parts Washer using a wet vac with a pumping feature or a sump pump.

8. After adding water to bring it back to the normal operating level check the chemical concentration and pH. Water level should be checked weekly. Average evaporation of water is approximately 1½ to 3 gallons per week.

Note: Evaporation rate is based on the frequency of operation, heavy usage or leaving the pump running continuously will exceed projected volume.

9. For a machine that has been in service for at least one service period and the refraction or pH is low add approximately (+/-) one quart of the AQC Parts Wash concentrate for every 15 gallons of machine capacity

Example: Hydra-30 will hold approximately 25 gallons of chemistry $25/15 = 1.66$ quarts.

Example: Hydra-45 will hold approximately 45 gallons of chemistry $40/15 = 3$ quarts.

Let the washer pump run for several minutes to mix the new chemical into the old, then recheck the refraction and follow the above procedure if it is still low.

10. Clean or replace the polypropylene filter bag.

11. Reconnect system into electrical outlet, switch system to on position. Test system for flow and overall equipment operation. Wipe the unit clean.