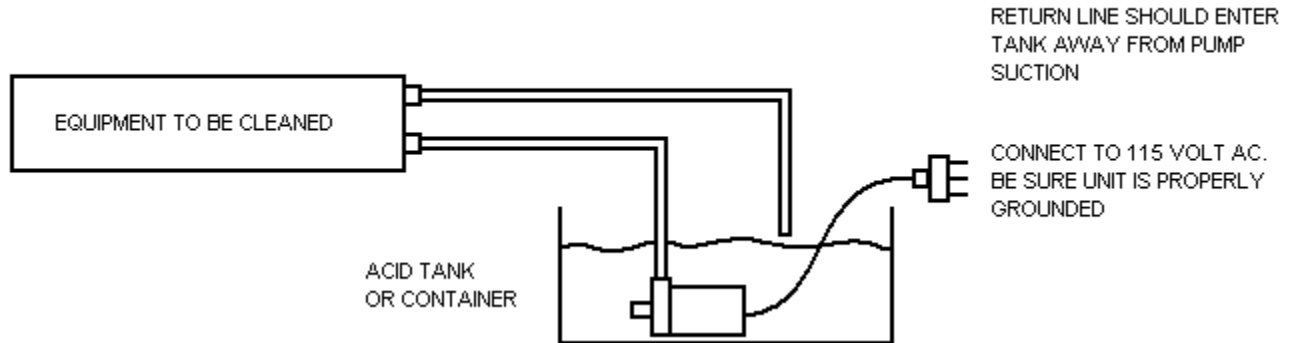




MARCH PUMPS

1819 PICKWICK AVE., GLENVIEW, IL 60026-1306, U.S.A
PHONE: (847) 729-5300 - FAX: (847) 729-7062
WWW.MARCHPUMP.COM

MODEL 2DS DESCALER PUMP DIRECTIONS FOR USE



Pump is specifically designed for circulating hydrochloric acid or sulfamic acid cleaning solutions through scaled water cooled condensers, heat exchanges, water heater coils, water lines, coffee urns and other water handling equipment.

HOW TO CIRCULATE ACID WITH THE NO. 2DS DESCALER PUMP

1. Connect No. 2DS pump to equipment to be cleaned as shown in the diagram above. The pump discharge tubing should be connected to the bottom of the equipment to be cleaned to eliminate any air pockets.
2. Place No. 2DS pump in bottom of circulating tank, preferable a 10 or 20 gallon plastic container. The pump discharge should be pointed straight up. Fill tank about two-thirds full with tap water and connect pump to 115 volt-AC being sure large prong in plug or green wire is connected to a ground.
3. Slowly add the acid to the tank. Follow the directions on the acid container for proper acid concentration.
4. The acid solution should be circulated for $\frac{1}{2}$ to 3 hours depending upon the thickness and type of the scale. The circulating solution should be checked periodically with pH paper to make sure that it remains at the proper acid strength.
5. One can usually tell when the equipment is clean by observing the acid solution returning. When the returning solution does not contain any bubbles or foam and is the same color as the solution in the tank, it is a sign that the equipment is clean.
6. After the equipment is clean, dispose of the used acid solution, then thoroughly flush all of the acid from the system and from the No. 2DS pump with fresh water. If the cleaned equipment is not going to be put in service right away, an acid neutralizer should be used to neutralize all traces of the acid and provide protection against corrosion.

NOTES

1. Any strong acid solution will remove old scale and corrosion products so, where the system is old and badly corroded, leaks may occur.
2. Do not pump highly abrasive solutions.
3. Do not run pump dry. The pump **MUST BE COMPLETELY SUBMERGED** when operating to prevent overheating and motor burn-out.
4. This pump is not suitable for continuous operation and must not be left standing in acid solutions when not in use.
5. The upper temperature limit of the No. 2DS pump is 120 degrees F. Since the acid solution temperature will rise during the cleaning process it is possible that the pump temperature may exceed this limit. To prevent motor burn-out due to overheating a built-in thermal overload switch has been installed to shut off the pump automatically when the temperature limit is reached. Pump operation will not resume until the pump temperature is reduced to below 120 degrees F.
6. Drain pump and flush out with fresh water after each use. Improper cleaning will shorten the life of the pump.

Replacement parts are not available for the pump motor as it is a sealed unit which cannot be repaired. The pumps warranty covers materials of construction and workmanship only. We cannot warranty the application as we cannot control the acid solution, the usage of the pump, or the cleaning of the pump after usage.

MOTOR SPECIFICATIONS:

1/35 HP. at 3000rpm, 115 volt, 60 cycle, 1.2 amps, 67 watts.

PUMP DIMENSIONS:

4-21/32 Lg x 4-1/4 W x 3-13/32 H

CAPACITY:

6 gpm at 1 ft. lift, 5.5 gpm at 3 ft. lift
4.5 gpm at 6 ft. lift, 3.2 gpm at 9 ft. lift
Max. head 12.5 ft