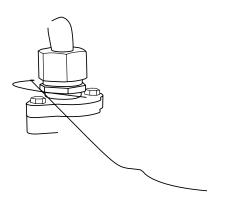
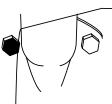


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NOTE! To the installer: Please make sure you provide this manual to the owner of the equipment or to the responsible party who maintains the system.

General Information

This manual contains important information for the safe use of this product. Read this manual completely before using this product and refer to it often for continued safe product use. DO NOT THROW AWAY OR LOSE THIS MANUAL. Keep it in a safe place so that you may refer to it often. Reasonable care and safe methods should be practiced. Check local codes and requirements before installation.

Pump Cautions and Warnings

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seal chamber are completely sealed with O-rings located at mating part faces.

The power cord entry system is designed to give double sealing. The chamfered pilot of the motor housing mates with the molded cord end to form the first seal. The cord grip forms the second seal around the molded cord end and provides strain relief. The cable on the HPG model includes the leads for both heat sensors (motor protection) and the seal sensor lead for seal leakage detection.

The cutters are designed to be self adjusting and will not need to be shimmed or reset.

These pumps are designed for either residential or industrial sewage discharge applications with a pH ranging from 5 to 9, specific gravities from 0.9 to 1.1, viscosities ranging from 28 to 35 S.S.U., and temperatures up to 140°F.

All local wiring codes must be observed. Consult the local inspector before installation to avoid costly delays that can occur due to rejection after job is finished.

Pump Installation

Remove pump from carton. When unpacking unit, check for

2. Remove the volute and cutters per the instrutions listed under the

section in this manual.

- 3. To remove the impeller, secure the shaft by threading the radial cutter onto the shaft and holding it with a pair of pliers. Hold a wood block against the impeller vane and tap it with a hammer until it spins off.
- 4. Using a pair of snap ring pliers, remove the snap ring that secures the lower seal. Remove the lower seal rotating elements by sliding the spring off the shaft. Then using two screwdrivers, slide the carbon assembly off by prying on the retaining ring.
- 5. Loosen and remove the cap screws that hold on the seal housing, then remove the seal

- using the same method as used for the lower seal, remove the carbon seal assembly.
- 7. With a pair of screwdrivers, pry up on the seal/bearing plate. Remove the seal/bearing plate until you have access to the seal sensor wire, then carefully pull the seal sensor wire off the seal probe which will allow the complete removal of the seal bearing plate.
- 8. Take a socket and tap out the stationary portion of the seal from the seal/bearing plate in the same manner as used for the lower stationary seal.
- After checking both of the O-rings, replace the seal bearing plate in the motor housing, making sure that the seal sensor wire has been reattached to the seal probe. Use O-ring lube to prevent cutting in assembly.
- 10. Take the stationary portion of the new seal, and lube the rubber material with a good quality dielectric oil. Press the stationary portion of the new seal into the seal/bearing plate.
- 11. Using a good quality dielectric oil, lube the rubber material on the carbon seal assembly and press it on the shaft. Place the spring and the seal retainer on the shaft as removed. Replace the snap ring.
- 12. Carefully place the seal housing onto the seal bearing

- plate, replace the cap screws, and evenly tighten.
- 13. Using a pressure gauge with a fill stem, pressurize the motor housing to no more than 7 psig with dried air and check for leaks. If after several minutes the gauge reads the same, the seal is good and you can continue with assembly.

- 14. Following the same procedure outlined in steps 10 through 13, install the lower seal assembly. Replace the impeller using a removable locking adhesive.
- 15. Reassemble the cutters and volute as outlined in the
 - section of this manual.
- 16. Refill all chambers with a good quality dielectric oil. Fill the motor housing so that the tops of the motor windings have been covered (2500 ml), but leave an air gap to allow for expansion of the oil. Fill the seal chamber with 700 ml of oil so that an air gap also exists.
- 1. If the replacement of the stator is necessary, first follow the disassembly steps outlined in the previous sections of the manual.

- 2. Remove the shaft rotor assembly from the motor housing, making note that a wave washer is used on the top of the upper bearing.
- 3. Place motor housing vertically on the bench and remove the cord grip. Carefully remove the power cord from the pump, making sure that the wires are not damaged. Clip the power cable leads, taking note of the wire connections, and then remove the power cable.
- 4. Turn the motor housing over and remove the stator bolts from the stator, then remove the stator from the motor housing.
- 5. Place new stator into the motor housing while pulling the new leads through the power cord opening in the motor housing. Replace the stator bolts and tighten. Replace the seal sensor wire along the side of the stator.
- 6. Attach the power cord to the stator leads and the sensor leads using insulated butt connector. Once attached, carefully tuckrom the mo -1.575 8.83 0 Tm(Tj11.4 0 0 12 43

- 8. Examine the bearings on the shaft/rotor assembly. If when rotated they feel rough, replace. When reinstalling new bearings, press only on the inner ring of the bearing or damage may occur.
- 9. Replace the wave washer into the upper bearing pocket in the motor housing, then reinstall the rotor and shaft assembly.
- 10. Follow the previously outlined steps to reassemble the pump from this point.
- 11. Always run pump for a few seconds after assembly work to be sure all parts run smoothly before replacing it in the sump. Check again for correct rotation. Pump should rotate counterclockwise when viewed from the suction end.

HPG200 Parts List

ORDERING REPLACEMENT PARTS: Product improvements are made from time to time. The latest part design will be furnished as long as it is interchangeable with the old part. When ordering replacement parts, always furnish the following information: (1) pump serial number, (2) pump model and size, (3) part description, (4) part number, (5) impeller diameter (if ordering impeller), (6) quantity required and (7) shipping instructions.



Notes: S – Parts in Seal Kit

- Fill oil to above motor windings