

HC Regular and HC Master Pump rebuild instructions

Tools Needed:

Flat blade Screwdriver

5/16" Nut Driver

7/16" wrenches (2 needed)

¾" Socket, extension and ratchet

Needle Nose Pliers

1. Close the inlet and outlet seacocks.
2. Disconnect the inlet water hose, the pump to bowl hose and the discharge elbow fitting from the pump.
3. Remove the two screws from the pump base and remove the pump.
4. Make a note of the orientation of the HA-8 Flapper gasket.
5. Remove the cover from the rear of the pump assembly. (six screws, 5/15" Hex head nut driver or flat head screwdriver)
6. Remove the HF-1, gasket and spring assy and the HC-5 Check Plate.
7. Inspect the HC-20 Cam assy for wear, cracks and function. Rotate the handle to the 'Dry' position. Remove, inspect and replace as needed.
8. Using the ¾" Socket, Remove the piston and ring assy. Slide the shaft and handle from the cylinder. Do not discard the washers from the shaft. They will be re-used.
9. Using a small flat bladed screwdriver, Pry out the Shaft Seal from the end of the cylinder. Install the new seal, spring side down in the cylinder. Press down with both thumbs or carefully set flush to top of cylinder with a small mallet.
10. Lubricate the shaft with some mild soap, install bumper washers to the shaft, install the shaft into the seal at the top of cylinder. Install lower washer onto the shaft, lubricate the piston/ring assembly and thread onto the shaft, hand tight only.
11. Using Needle Nose Pliers, Remove the HT-49-A Vacuum Breaker from the side of the cylinder. Insert the New rubber plug, and press the small brass tube into the plug, until flush with rubber.
12. Install the HF-28 Bridge into the center of the chamber to support the gasket. NOTE: Some cylinders will have this installed and may be left in place..
13. Install the HC-5 in the upper chamber, flush with cylinder. (This part must remain in place to ensure a good seal of the HF-1 gasket.)
14. Install the new HF-1 gasket, weighted side down and facing the pump. NOTE: The screw pattern only allows one correct alignment. Do not alter the gasket.)
15. Install the spring to the gasket top 'Doggy Door' flap. There is a small button on the hose side of the Flap to accept and align the spring.
16. Polish the sealing surface of the cover with a fine grit emery paper, to ensure a clean sealing surface. Remove any Grit/Debris created by this polishing action.
17. Insert the six hex head screws and attach the cover. Snug all six screws carefully. Do not over tighten, as this will distort or damage the cylinder and cover and prevent the pump from priming.
18. Test the unit by rotating the wet/dry selector handle to full travel several times. This will 'Set' and break-in the gasket .
19. Install a temporary hose to the inlet fitting., place the opposite end into a bucket of water, and test the 'Priming' Action. The Unit should draw water after 2 or 3 strokes. If not, repeat steps 11-18. Remove the hose from pump assy when finished.

20. Install the H-27-A Joker Valve with the slit parallel to the pump cylinder.
21. Install the discharge elbow. Use care to not overtighten. This will crack and destroy the cylinder.
22. Place the HA-8 Gasket onto the base with the weight facing up. Mount the pump to the base, using the two screws from step 3
23. Re-Install the pump to bowl hose, the water inlet hose, and secure all hose clamps.
24. Open the inlet and discharge seacocks, inspect for leaks, test for proper operation.