

Marine Head Basic Troubleshooting Guide

HC, HE, HF Head

Visual ID- The H Series pumps are a piston style, Rod operated pump, mounted to the right side of the bowl as you face it.

Issue #1

Head will flush in the Dry Bowl position, but will not draw water in on the Wet Bowl Position.

The problem is likely the Inlet Gasket or Wet/Dry Lever. Close the inlet seacock and remove the inlet manifold and examine the HF-1 Check Gasket and the HF-20 Cam/lever assembly. The cam should release the Inlet Check Gasket lower flap when rotated to the rear position, allowing the lower flap to open and to pass water to the bowl during pumping action of the handle. The Cam should engage the lower flap when rotated to the front position, closing the flap and preventing water from entering the bowl, allowing a 'Dry Flush' operation. (This is to limit and control the volume of water going to the holding tank.)

Issue #2

It will not pump out in the dry or wet bowl option, only re-circulate the waste in the bowl from the center opening of the bowl.

The problem is either in the Cylinder/Base gasket or the H-27-A joker valve. During proper pumping action, the handle upstroke will cause the gasket to open and draw waste from the bowl. During the down stroke, pressure will close the gasket and direct waste to discharge the pump thru the H-27-A joker valve and discharge elbow. If the HA-8 has failed, then waste can be returned to the bowl in a Geysier effect. Replace as needed.

Issue #3

It will not pump out, only re-circulate waste from the rim of the bowl.

Likely problem is HF-10-R Piston Ring or the H-27-A, Joker Valve. The simplest check is to look at the ring. If it's gone bad then waste will bypass seal and be pushed back into the toilet. During proper operation, the 'duckbill' opening of the joker valve will open on the down stroke of the handle, pushing the waste from the cylinder, thru the Joker Valve. The duckbill opening will open and pass the waste. When the handle is moved up, the flow thru the Joker valve stops and the opening will relax back to its closed state, stopping the waste from returning to the bowl. If the opening does not relax to this state, flow will go back and forth as pumping continues. The opening can be affected by many factors, including :

- * Solids in the waste have become trapped in the opening.
- * Tissue paper caught in the opening.
- * Foreign matter in the waste (cig. Butts, tampons, condoms, excessive tissue/paper towels.)

- * The extended use of household toilet cleaners can affect the rubber compounds and cause distortion.

E Series Head

The E series toilet is a manual, bronze, diaphragm pump mounted below the bowl. The pump operates by pushing/pulling the handle front to back while stepping on the water inlet pedal. With the foot pedal depressed and as the handle is moved forward, the diaphragm is moved down, water enters the pump lower chamber, and waste is discharged from the upper chamber. As the handle is moved to the rear, water is moved to the rim of the bowl and waste is drawn from the bowl.

Issue #1

Water will not enter when I step on the foot pedal.

Water is allowed to enter the pump at the rear thru the Inlet hose and fitting. There is a small, weighted Flapper Gasket (HT-3557) that is allowed to open as a result of the cam assembly on the pedal shaft releasing pressure from the flap allowing water to enter. Spring tension on the pedal draws the pedal back to the closed position, pressing the flap to the closed position, stopping the flow of water.

Check the condition of the HT-3557 gasket. Check that the cam assembly is rotating and contacting the gasket when the foot pedal is depressed. Check that the inlet seacock is open and there is flow of water from the seacock.

See Repair Sheets for more information.

K Series Head

See Repair Sheets for more information.