

# Model HF Series Marine Toilets

## Installation, Operation, and Maintenance

**Installation:** Fasten the HF toilet base to the floor with 1/4" or larger stainless steel bolts and flat washers.

**Plumbing Connections:** Connect 3/4" ID hose to the inlet fitting on the pump (the fitting that points diagonally downward). The inlet line must not be shared with the water supply or drain for any other accessory.

To the pump discharge connect 1-1/2" ID hose that is intended for use with raw sewage.

Double clamp both hose connections to assure efficient pumping and leak-free operation.

**Vented Loops:** The proper use of vacuum breakers (Vented Loops) is essential for safe efficient operation. Use a 1-1/2" Vented Loop (GROCO HVL-1500) between the HF toilet and the holding tank, treatment system, or overboard discharge seacock. The Vented Loop should be 12" or higher above the outside waterline. The relation between the outside waterline and the

internal toilet plumbing will change with vessel movement, especially with sailboat installations.

**Overboard Discharge:** It is illegal to discharge untreated waste directly overboard. Consult local regulations governing overboard discharge. Restrictions will vary with geographic location.

**Operation:** To flush open the valve (vertical) on the right side of the pump. This allows raw water to be drawn into the toilet pump. Pump the T-Handle up and down until the waste is removed.

Apply additional pump strokes to allow the vented loop and connected plumbing lines to be flushed clear.

Close the valve handle (horizontal) when flushing is complete. You will hear the valve click closed.

Warning: Failure to close the valve could flood the toilet.

### Dry Bowl Feature:

Flushing liquid waste can be accomplished without opening the valve. With the valve closed (horizontal) pump the T-Handle until the liquid is flushed clear



### History:

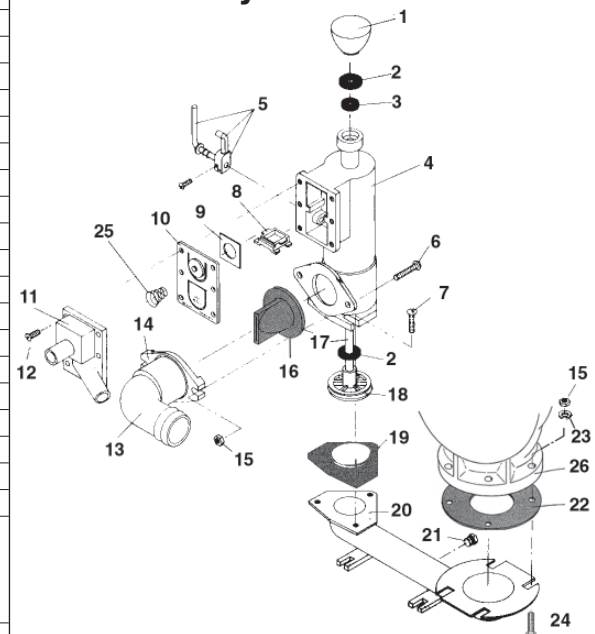
In 1985 HC Model production was discontinued in favor of Model HE. In 1987, HE was replaced by Model HF. The three models share most parts, but some parts for HC and HE are no longer available. HF REGULAR and HF MASTER service all models considering the service notes below. Owners of HC and HE models should consider updating to HF.

### SERVICE NOTE - PISTON ASSEMBLY:

If you are replacing the piston assembly with HF-10 (HC-10 is no longer available), HF-21 shaft is required to prevent the recirculation of waste. Alternately, you may use (3) RG-3037-A washers between the handle and the pump cylinder, or update to HF Pump Assembly.

Item	Part Number	Description	Qty	HF Regular Kit	HF Master Kit	Comment
1	HT-1085	Handle	1			
2	RG-3037-A	Washer	4		X	HC & HE Models require three (3) under handle, or replace HF-21 Shaft
3	037-075-8	Seal	1	X	X	
4	HF-C	Cylinder	1			
5	HF-20	Cam Assembly	1			
6	1420X114HS	Screw	2			
7	1420X34RB	Screw	3			
8	HF-28	Bridge	1	X	X	
9	HC-5	Check Plate	1	X	X	
10	HF-1	Gasket	1	X	X	
11	HC-2-A	Valve Cover	1			
12	1032X58HS	Screw	6			
13	HA-1	Elbow	1			
14	HA-11	Bracket	1			
15	1420HS	Nut	1			
16	H-27-A	Joker Valve	1	X	X	
17	HF-21	Shaft	1			
18	HF-10	Piston Assy	1		X	
19	HE-8	Gasket	1	X	X	
20	HF-22-B	Base	1			
21	1827HB	Drain Plug	1			
22	H-6	Gasket	1		X	
23	16S	Washer	4			
24	1420X2HS	Bolt	4			
25	HF-26	Spring	1	X	X	
26	4967	Bowl	1			
NS	HC-10	Piston Assy	1		NLA	For HE Toilet Use HF-10; Replace HF-21 shaft also or use three (3) RG-3037-A beneath handle
NS	HT-49-A	Vacuum Breaker Assy	1			Sold Separately
NS	TC-50	Seat	1			
NS	H-7	Bowl Elbow	1			

### Parts and Assembly



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**NS = NOT SHOWN**