Info Sheet EB Series, 1 of 1

**Operation:** Flush water is pumped into and out of the model EB toilet by actuating the operating arm at the right side of the toilet. This may be done manually by pumping the handle back and forth, or electrically by depressing the momentary switch. The flow of water into the bowl is controlled by stepping on or off the footpedal on the left side of the toilet.

**Winterization:** Freezing water will damage the toilet. Winterize the unit by draining all water from the toilet base by removing the two drain plugs on the front of the base. Loosen the connecting plumbing to drain water from hose or pipe connections to and from the toilet.

### **Maintenance Checks:**

- When released, footpedal HT-3570-A should "spring" up off the floor. This action automatically closes the inlet gasket. Replace S-72587 if necessary.
- Looking into the bowl, flap HT-26-A should sit tight against the underside of the base casting. Replace HT-84-A and HT-26-A if necessary.
- There should be no noticeable play in arm HT-3560-B. If there is play it is probably due to wear in the keyways of the pump shaft. We recommend replacement of HT-6566 every five (5) years, or when excessive play is detected.
- When the footpedal is released and it springs up, the flow of water from the rim of the bowl should cease (except for the small amount of water still inside the rim).

If water continues to flow into the bowl, replace HT-3557 and HT-3557-A gaskets. When replacing HT-3557 the gasket hinge is to be at the top and the bronze weight facing the toilet. Verify that cam HT-3559 strikes the bronze weight when the footpedal is up, but allows the gasket to swing open when the footpedal is depressed.

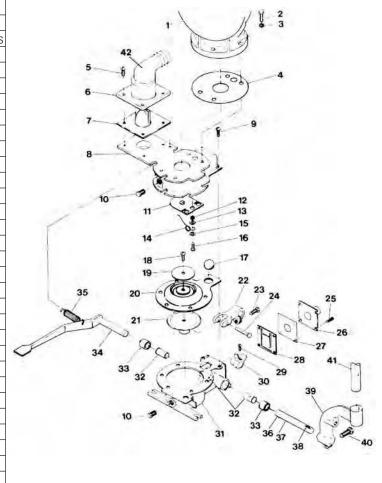
#### **Notes:**

4978 bowl is NLA, replacement must be 4985.

When bowl is replaced, 500-D Seat & Cover must be ordered.

- TT-50 Seat & Cover is NLA.
- If the bowl is replaced on EB toilets equipped with an electric drive, arm HT-3560-E must be ordered to replace HT-3560-B.

Note	EB Regular Kit				NLA
	500-D-2	Seat & Cover, gray			
	500-D-1	Seat & Cover, bone			
NS	500-D-0	Seat & Cover, white	1		
42	HA-1	Elbow	1		Requires HT-11
41	HT-3560-C	Handle	1		
39-40	HT-3560-E	Arm	1		
36, 38		Key Set	1		
	HT-6566	Shaft	1		
35	S-72587	Spring	1		
34	HT-3570-A	Footpedal	1		
33	HT-3564	Seal	2	*	
32	HT-3563-A	Bearing	3	*	
31	HT-3552-A	Casting	1		NLA
29-30	HT-3559	Cam	1		
28	HT-3557	Gasket	1	*	
27	HT-3557-A	Gasket	1	*	
26	HT-3556	Inlet	1		
25	1024X12HB	Screw	4		
	HT-3558-A	Yoke Assy	1		
	HT-3554-A	Diaphargm Assy	1	*	
17	HT-56	Ball	1	*	
	HT-84-A	Spring Assy	1	*	
	HT-26-A	Gasket Assy	1	*	
10	1827HB	Drain Plug	2		
9	1420X12RB	Screw	7		
8	HT-3551	Casting	1		NLA
7	H-27	Joker Valve	1	*	
6	HT-11	Bracket	1	*	
5	1420X34RB	Screw	4		replcd with 1420X34HS
4	HT-52-A	Gasket	1		
3	20L SET	Washer Set	4	*	
2	51618X134HB	Bolt	4	*	replcd with 51618X134I
	4985-2	Bowl, gray			
	4985-1	Bowl, bone			
1	4985-0	Bowl, white	1		
Item	Part Number	Part Name	Qty	Master Kit	Comment



# **GROCO®**

#### Service Bulletin for EA and EB Model Toilets

100628

# To Replace the Pump Diaphragm:

- \* Always close the inlet seacock and the discharge seacock when working below the waterline.
- \* Remove the bowl and bowl gasket.
- \* Remove seven (7) screws holding top and bottom pump castings together, and remove the top casting.
- \* Remove the check ball (Item-17) and the screw (Item-18) that secures the diaphragm washer.

While the pump mechanism is exposed, check the tightness of the pump shaft key-ways by holding the bronze diaphragm yoke assembly (Item-21) down securely by hand and attempt to actuate the pump handle. Any movement of the handle indicates key-way wear; replacement of HT-6566 shaft (Item-36 through 38) is recommended at this time.

- \* Place the new diaphragm on the base casting, and place the check ball on the hole in the diaphragm; secure the diaphragm.
- \* Place the top casting on the diaphragm and start the seven screws. Tighten equally. Do not over-tighten as this will deform the diaphragm and may prevent proper operation.
- \* Replace bowl gasket and bowl. Take care not to over-tighten the bowl bolts.

# To Replace Shaft Seals and Bearings:

- \* Always close the inlet seacock and the discharge seacock when working below the waterline.
- \* Remove the bowl and bowl gasket.
- \* Remove seven screws holding top and bottom pump castings together and remove the top casting.
- \* Remove the check ball and the screw that secures the diaphragm washer.
- \* Remove the inlet casting (Item-26) and gaskets (Items 27 and 28).
- \* Loosen cam set screw (Item-29) and withdraw foot-pedal (Item 34).
- \* Remove seal (Item-33) and bearing (Item-32) from the foot-pedal socket.
- \* Loosen the bolt (Item-23) that secures the diaphragm yoke assembly to the pump shaft; withdraw the pump-shaft (Items 36 through 38). Note that the 1/8" x 1/8" square key must remain in the key-way in Item-22 for re-assembly.
- \* Remove seal (Item-33) and plastic bearing (Item-32) from the outside, and plastic bearing (Item-32) from the inside of the operating socket.
- \* Insert one new plastic bearing from the inside and one from the outside into the operating arm socket.
- \* Insert one new rubber seal from the outside of the operating arm socket (the small hole of the rubber seal faces in).
- \* Grease the tip of the pump shaft and insert with a twisting motion. Take care to keep the 1/8" x 1/8" square key in place while the shaft is inserted into the diaphragm yoke. It may help to hold the key in place with the tip of a screwdriver. Tighten bolt #23.
- \* Insert one new plastic bearing and one new rubber seal from the outside of the foot-pedal socket (the small hole of the rubber seal faces in).
- \* Grease the tip of the foot-pedal shaft and insert with a twisting motion. Shaft (Item-34) passes through cam (Item-30). Note that the shaft has an indent for cam set screw (Item-29).
- \* Replace inlet gaskets and casting. The weighted rubber gasket goes against the base casting (hinge at the top and weight facing in), and the clear plastic gasket goes against the rubber gasket (hinge at the top). Tighten the four screws only enough to seal the gaskets. Over-tightening will prevent proper operation.

## To Replace Spring and Flap Gasket:

- \* Always close the inlet seacock and the discharge seacock when working below the waterline.
- \* Remove the bowl and bowl gasket.
- \* Remove seven (7) screws holding top and bottom pump castings together, and remove the top casting.
- \* On the under side of the top pump casting is the spring assembly (Items-13 through 16) and flap gasket (Item-11 through 12). Remove the old parts.
- \* Remove the zinc packing nut on the spring assembly. Insert the screw through the copper washer in the gasket and into the threaded hole in the top casting. Assure that the spring "finger" passes through the "eye" of the plastic weight of the flap gasket. Tighten (do not over-tighten) the screw taking care to keep the flap centered over the large hole in the top casting.
- \* Place the top casting on the diaphragm and start the seven screws. Tighten equally. Do not over-tighten as this will deform the diaphragm and may prevent proper operation.
- \* Replace bowl gasket and bowl. Take care not to over-tighten the bowl bolts.