

# FLEXIBLE IMPELLER PUMPS

OPERATION AND  
SERVICE GUIDE  
O-580B  
JAN. 1998

MODEL	PRICE CODE NUMBER	EPOXY PLASTIC BODY
3/4 JENH	48-0075A	w/NEOPRENE IMPELLER
3/4 HEVH	48-0076A	w/VITON IMPELLER

Refer to Bulletin P-617 and  
Parts List P-2050.

## ⚠ SAFETY PRECAUTIONS BEFORE STARTING PUMP:

1. Read operating instructions and instructions supplied with chemicals to be used.
2. **Refer to a chemical resistance data chart for compatibility of material in pump with solution to be used.**
3. Note temperature and pressure limitations.
4. **Personnel operating pump should always wear suitable protective clothing: face mask or goggles, apron and gloves.**
5. All piping must be supported and aligned independently of the pump.
6. Always close valves slowly to avoid hydraulic shock.
7. Ensure that all fittings and connections are properly tightened.

## ⚠ BEFORE CHANGING APPLICATION OR PERFORMING MAINTENANCE:

1. **Wear protective clothing as described in Item 4 above.**
2. Flush pump thoroughly with a neutralizing solution to prevent possible harm to personnel.
3. Verify compatibility of materials as stated in Item 2 of SAFETY PRECAUTIONS above.

## INSTALLATION

Pump may be mounted in any position. The rotation of the pump shaft determines the location of the pump's intake and discharge ports. Refer to end cover. Before starting, turn the pump shaft in the direction of the operating rotation.

## DRIVE

Close coupled for motor pump unit.

## SPEEDS

1750 RPM is the maximum shown in the performance table. For longer pump life, operate at lowest possible speeds.

## SELF-PRIMING

Primes at low or high speeds. For vertical dry suction lift of 15 feet, a minimum of 1750 RPM is required. Pump will produce suction lifts up to 22 feet when wetted. **BE SURE SUCTION LINES ARE AIRTIGHT OR PUMP WILL NOT SELF-PRIME.** The suction line should be as short as possible.

## RUNNING DRY

Unit depends on liquid pumped for lubrication. **DO NOT RUN DRY FOR MORE THAN 30 SECONDS.** Lack of liquid will burn the impeller and damage the plastic components.

## DISCHARGE LINE

When transferring liquids further than 25 feet, use discharge line one size larger than the discharge opening.

## ⚠ CAUTION

If corrosive fluids are handled, pump life will be prolonged if flushed with water after each use or after each work day.

## PRESSURES

For continuous operation, pressure should not exceed 20 PSI.

## TEMPERATURES

Impellers are suitable for service from 60° - 180° F.

## SPARE PARTS

A spare impeller and seal should be kept on hand to eliminate downtime.

HEAD CAPACITY TABLE

TOTAL HEAD				SPEED 1750 RPM		
PSI	KG/CM <sup>2</sup>	FT. OF WATER	METERS OF WATER	GPM	L/MIN.	HP
4.3	0.3	10	3.0	11.3	42.8	1/2
8.7	0.6	20	6.1	10.2	38.6	1/2
13.0	0.9	30	9.1	9.0	34.1	1/2
21.6	1.5	50	15.2	5.2	19.7	1/2

NOTE: Do not operate Viton impeller above 15 PSI.

## **ASSEMBLY AND DISASSEMBLY INSTRUCTIONS TO REPLACE IMPELLER**

### **DISASSEMBLY:**

1. Remove wing nuts, washers and end cover.
2. Remove pump head from seal housing. Remove "O" rings from body grooves.
3. Push impeller from body bore.

### **ASSEMBLY:**

4. Install new impeller in lubricated body bore by grasping hub and with a rotary motion push it into the body bore. Replace "O" rings in body grooves.
5. Position the body over the through bolts against the seal housing.
6. Install end cover and secure with washers and wing nuts.

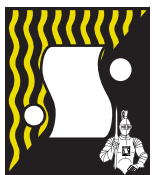
## **TO REPLACE SEAL ASSEMBLY**

### **DISASSEMBLY:**

7. Follow Steps 1, 2, and 3.
8. Remove seal housing. Insert screwdriver through seal seat bore and pry seat and grommet from seal housing.
9. Remove drive sleeve from shaft. Remove seal and seal spring from drive sleeve.

### **ASSEMBLY:**

10. Install seal spring on drive sleeve. Lubricate seal with water and slide on drive sleeve with carbon facing away from spring. Install drive sleeve on shaft.
11. Install ceramic seal seat in grommet with grooved face towards grommet. Lubricate outer grommet surface with water and push seal seat assembly into seal housing with ceramic seal facing out of seal seat bore. Assemble seal housing over through bolts so seal and seat faces contact.
12. Assemble impeller, body and end cover as in Steps 4, 5, and 6.



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