

INSTALLATION AND OPERATING INSTRUCTIONS

Replacement of Seal Bearing Assembly

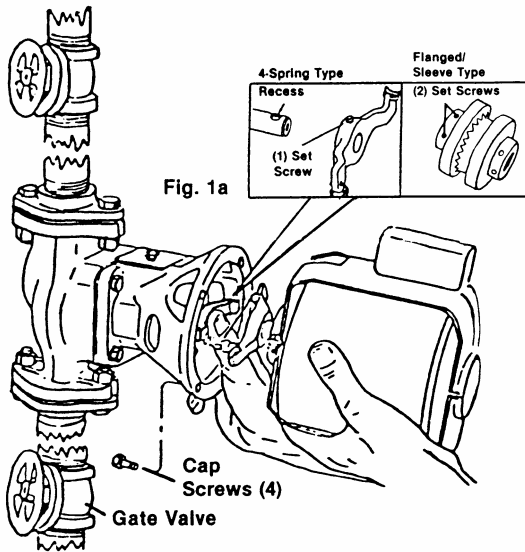


Fig 1. Removing motor Assembly

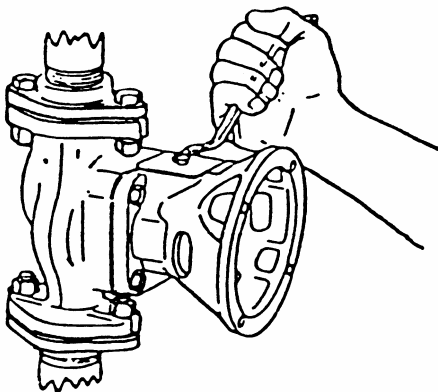


Fig 2. Removing Bearing Assembly

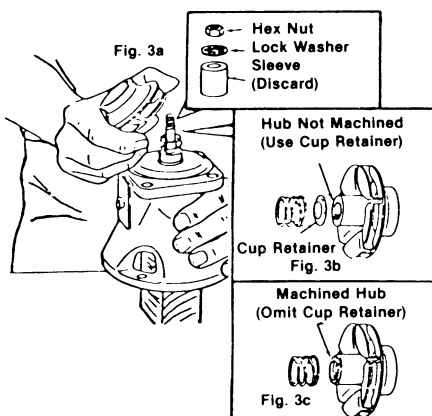


Fig 3. Installing Impeller on New Bearing Assembly

1. Shut off electric power supply to pump. Drain system (or close gate valves if available).
- 2a. Loosen set screw holding 4-spring Coupler to shaft of Bearing Assembly. Loosen enough so that set screw clears recess in shaft (Fig. 1a). If flanged/sleeve type coupler is used, step 2a is not necessary until after step 2b.
- 2b. Remove motor Motor Assembly (and attached Coupler) by removing 4 cap screws. See Fig. 1.
3. Remove Bearing Assembly from Pump Body by removing Body Cap screws. (Fig. 2)
4. Remove and clean Impeller from old Bearing Assembly.
5. Position new Bearing Assembly on a wood block (Fig. 3) to force shaft upward while installing Impeller. Then install Impeller as follows:
 - a. Remove hex nut and lockwasher (Cap Nut and ring washer on Bronze Assemblies) and discard plastic sleeve (Fig. 3a).
 - b. Determine if Cup Retainer is needed. If Hub of Impeller is not machined (Fig. 3b), use Cup Retainer. If Hub of Impeller is machined (Fig. 3c), then discard Cup Retainer.
 - c. Assemble Impeller to shaft, using lockwasher and hex nut (or ring washer and Cap Nut on Bronze Assemblies). Tighten nut securely.

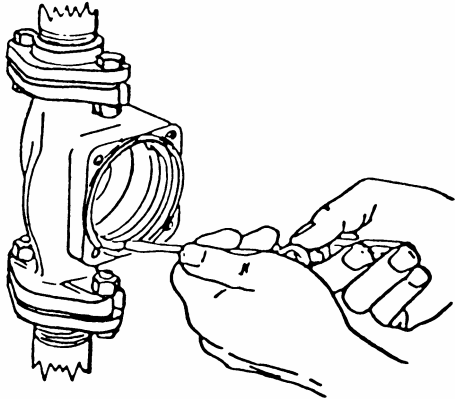
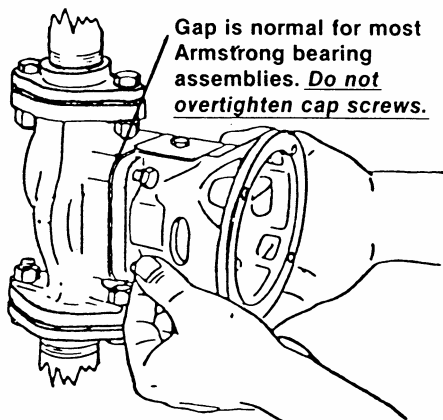


Fig 4. Cleaning off gasket area



Gap is normal for most Armstrong bearing assemblies. Do not overtighten cap screws.

Fig 5. Installing Bearing Assembly to Body

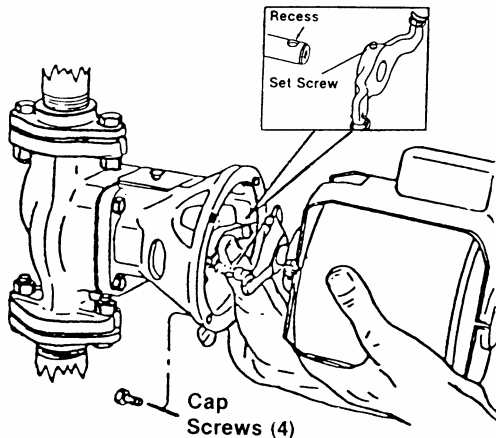


Fig 6. Replacing Motor Assembly.

6. Remove and discard old gasket. Clean off area in Pump Body (Fig. 4).
7. With new gasket in place, fit Bearing Assembly into Pump Body and tighten Body Cap Screws (Fig. 5).

IMPORTANT: Gap between Bearing Assembly and Pump Body is normal when using an Armstrong Bearing Assembly with any circulator; **do not overtighten Body Cap Screws.**

8. Connect Coupler to shaft of Bearing Assembly by placing thumb of one hand behind coupler-half to be attached and sliding it onto shaft, using care to line up Set Screw with recess in shaft. Securely tighten Set Screw in recess and attach Motor Assembly to Bearing Assembly with 4 cap screws. In case of couplers with 2 set screws, tighten one in recess and one snug on shaft (Fig. 5).
9. Add complete contents of Oil Bottle (or Bottles) supplied to the oil cup on Bearing Assembly.

This motor has been lubricated properly at the factory. At the start of each following heating season, however, *on motors with oil cups*, add 15 drops SAE 30 non-detergent oil to each motor cup.

If motor is fitted with grease fittings, follow the motor manufacturer's recommended procedure. Motors without oil cups or grease fittings are custom-greased for several years operation and require little or no attention.

10. Pump must be fully primed before start-up. Fill system piping and pump body and vent complete system, turning pump by hand to dislodge air from body.
11. Restore electric power supply and test for proper operation.

S. A. Armstrong Limited
23 Bertrand Avenue
Toronto, Ontario
Canada, M1L 2P3
T: (416) 755-2291
F (Main): (416) 759-9101

Armstrong Pumps Inc.
93 East Avenue
North Tonawanda, New York
U.S.A. 14120-6594
T: (716) 693-8813
F: (716) 693-8970

Armstrong Holden Brooke Pullen
Wenlock Way
Manchester
United Kingdom, M12 5JL
T: +44 (0) 161 223 2223
F: +44 (0) 161 220 9660

