Replacement Seal Instructions for B&G Pumps with ½” Seal

SAFETY INSTRUCTION
This safety alert symbol will be used in this manual to draw attention to safety related instructions. When used, the safety alert symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.

INSTALLATION INSTRUCTIONS

WARNING! To prevent electrical shock and/or unintentional operation, disconnect and lockout the power before servicing. Electrical power to the boiler and any related accessory must also be disconnected and locked out. Failure to follow these instructions could result in serious personal injury or death.

CAUTION! Check surfaces for high temperatures. Allow the pump/piping temperature to reach approximately 100°F before proceeding. Failure to follow these instructions could result in property damage and/or moderate personal injury.

CAUTION! To prevent water damage, close the valves on the suction and discharge sides of the pump before proceeding. If no valves have been installed, it will be necessary to drain the system. If it becomes necessary to drain the system, close the pressure reducing valve which supplies water to the boiler, allow the system to cool to approximately 100°F., open the boiler drain valve (take precautions against water damage) and leave the drain valve open until servicing is completed. Failure to follow these instructions could result in property damage and/or moderate personal injury.
1. Loosen the four body capscrews. Shift the bearing assembly position slightly to allow for any pressurized water to escape. Remove the four body capscrews.

2. Remove entire power pack/seal-bearing-impeller assembly from body.

3. Remove impeller nut and impeller. **NOTE:** If impeller has a flat hub surface, continue to use old spring seat with new seal.

4. Pry off old seal assembly, ceramic insert, insert gasket and insert retainer with a screwdriver.

5. Clean shaft sleeve and insert recess thoroughly.

6. Install new insert retainer, insert gasket and ceramic insert. (Do not drop or chip ceramic). Butt shaft inside of bearing assembly with wooden block to push up end play.

7. Moisten inner diameter of seal assembly with soapy water (DO NOT USE OIL OR GREASE) and press down tightly on pump shaft. Carbon seal face MUST be tight against ceramic.

8. Replace impeller and impeller nut, being careful to line up the keyways on the impeller and shaft.

9. Clean the surfaces of the pump body and bracket and remove pieces of the old gasket. Install a new body gasket.

10. Fit the pump on the pump body and tighten capscrews evenly. Do not over-tighten.

11. Open the pump suction and discharge valves. If the system was drained, it will be necessary to close the boiler drain valve and then open the pressure reducing valve to supply water to the boiler.

![CAUTION! Be aware that hot water leaks could occur. Pressurize the pump body slowly. Check for leaks at all gasketed joints. Failure to follow these instructions could result in property damage and/or moderate personal injury.]

12. Eliminate air introduced into the system by venting it from a high point in the system.

13. Reconnect electrical power to the boiler, pump and any related accessories. Return the system to normal operating condition. Check the pump and the surrounding piping for evidence of leaking and correct as required.

14. After a short operational period, additional air should be vented from the system through a vent located at a high point in the system.

**PERIODIC INSPECTION**

Bell & Gossett booster products are designed to provide years of trouble free service. It is recommended that periodic inspections be made to check for potential problems with the unit. If any leakage or evidence of leakage is present, repair or replace the unit.

**NOTE:** To assure continued quality performance, use only genuine Bell & Gossett replacement parts.