

SERVICE BULLETIN

CLEARANCE ADJUSTMENT – GORMAN-RUPP CLASSIC T-SERIES PUMPS

This Service Bulletin shows how to properly adjust the impeller to wearplate clearance on a Gorman-Rupp Classic T-Series pump. Adjusting the clearance is an important preventative maintenance task to maintain pump flow and efficiency.



Tools Required

12-inch adjustable wrench ¾-inch wrench or ratchet with ¾-inch socket Hammer Medium pry bar Small putty knife or blade Flat Tip / Straight Screw Driver



Before attempting to adjust pump clearances, disconnect or lockout the power source to ensure that the pump will remain inoperative. Follow proper lockout/tag-out procedures. If the application involves volatile, corrosive or hazardous liquids, wear protective safety equipment, such as goggles, gloves and apron when servicing the pump.



Clearance Adjustment Instructions

- 1. Isolate pump from the power source and close all valves on suction & discharge piping.
- 2. Once power is turned off, test pump using the HOA (Hand/Off/Auto) switch to ensure the pump is isolated from the power source
- 3. Loosen the four ³/₄-inch hex bolts and lock washers on the shaft side of the pump where the rotating assembly is connected to the pump volute (do not remove bolts).



4. Use a pry bar and hammer to move the assembly away from the pump volute. This will allow the adjustment shims to be removed.





5. Remove adjustment shim sets, one bolt at a time and replace bolt back in bolt-hole hand tight. Never have more than two bolts out at a time.







6. Tighten the ¾-inch hex bolts evenly (in a star pattern) until the pump shaft cannot be turned by hand. This is zero tolerance.



7. Using shims, measure the gap between the rotating assembly and the volute. Make four even stacks of shims equal to the gap measured. Add 15 thousandths (0.015"), of shims to each stack.







8. Loosen the four bolts on the rotating assembly and pry it away from the volute just enough to install shim sets between the rotating assembly and the volute one at a time





- 9. Tighten all four hex bolts/lock washers.
- 10. Ensure pump shaft spins freely by hand. If it does not, add a 5 thousandths (0.005"), shim to each bolt and test again.
- 11. Once everything is put back together and tightened, perform a shutoff head test to confirm proper adjustment has been completed.

IF ZERO TOLERANCE CAN NOT BE ACHIEVED AFTER PERFORMING THE ABOVE PROCEDURES, THE PUMP IMPELLER AND WEARPLATE SHOULD BE REPLACED.

*** For more information, please contact Envirep's Service Department @ 717-761-7884 or email a request to service@envirep.com. ***

Envirep maintains a large inventory of genuine factory parts for **Gorman-Rupp** pumps and equipment for the water and wastewater industry. Please call our dedicated parts sales team for assistance in selecting and ordering parts for your equipment.