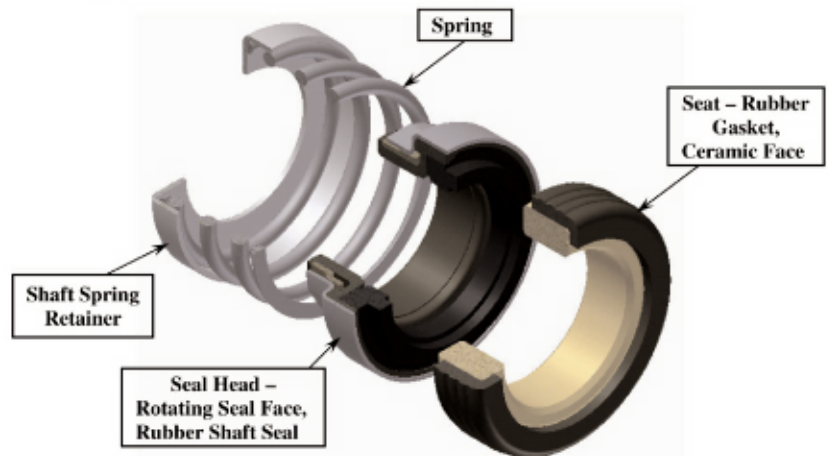


SERVICE BULLETIN

Date: DECEMBER 1, 2007
Log Number: 112
Models Affected: ALL DISHMACHINE MODELS
Subject: PUMP SEALS

PUMP SEAL REPLACEMENT

Type 21 Mechanical Shaft Seal Replacement Instructions



NOTE: Protect precision lapped faces of the seal seat and seal ring from DAMAGE, DIRT and FINGER MARKS.

1. Disassemble pump housing to expose defective seal: NOTE HOW THE OLD SEAL IS ASSEMBLED. TO BE SURE REPLACEMENT SEAL IS INSTALLED IN IDENTICAL MANNER.
2. Carefully remove old seal head and seat, taking care not to scratch shaft or seal counterbore.
3. Clean shaft and counterbore surfaces using fine emery cloth or equivalent. Remove rust, burrs, and wipe clean. Avoid creation of flat spots or reducing shaft diameter.
4. Lubricate the shaft, rubber inner diameter (ID) of the rotating seal head and rubber seat outer diameter (OD) of the stationary seal seat with a water based lubricant (Liquid Household Dishsoap). Seal faces should not be lubricated.

NOTE: NEVER use grease or heavy oil as an installation lubricant. Any oil or grease on the seal face may cause the seal to leak.

5. Press seal firmly into counter bore ensuring it is bottomed out and squared to the shaft. This can be hand pressed or driven into place taking care to protect the sealing face from direct blow with any metal object. Use a piece of plastic between the face and any driving force (or shaft end of drain ball.)
6. Check both seal surfaces to assure they are free of any foreign matter. Slide rotating seal head by hand pressure along shaft to a completely parallel contact with the stationary seat. Avoid extreme installation pressure or hammering of seal. Make sure spring correctly engages shoulder of seal head and impeller shoulder.
7. Re-assemble impeller and pump housing.
8. **DO NOT RUN PUMP DRY. ALWAYS PRIME PUMP BEFORE STARTING. IN CASE OF SELF-PRIMING MODELS THE PUMP CASING MUST BE FILLED.**