

NOTES: FOR INSTALLATION AND OPERATION

1. Test flatness and squareness of seal to shaft before you apply the RTV sealant and mount permanently.
2. Only use compressible gasket when seal has gap over 3/16" coat both sides with RTV before permanent installation.
3. Use a torque wrench and torque mounting bolts or nuts equally. Take special care not to compress the UHMW housing. This will cause the seal to run very hot and wear quickly. Usually a mild torque is sufficient depending on the application and seal size. (Please note: AGD Products, Inc. now provides Compression Limiting Sleeves for the DURA-SHIELD SD-Series Shaft Seals over 2.00" in Shaft Dia. as Standard Equipment.) This new feature aids in solving the possible problems with over tightening during installation of the seal.
4. When installing purge medium leave enough slack in the line before the air regulator, so you can move seal about 4"-5" with out disconnecting purge.
5. If you decide to purge seal with grease, fill seal at least once daily with a grease gun or you can use an automatic spring lubricator.
6. When aligning shaft for hose clamp tightening, sometimes it is easier to jog shaft into position by removing the backplate of drive motor and rotating motor cooling fan by hand. This lets you move shaft more accurately and with mechanical advantage. (Check with manufacture of equipment first to see if this can be done.)
7. Check torque of hose clamp on rubber elastomer periodically to insure proper sealing to shaft. (Three finger tight is usually sufficient) As internal plates wear with age this becomes more necessary. (When you tighten the rubber elastomer you create outward pressure against the seals internal wear plates maintaining longer life of the seal.) If torque seems the same but seal is failing, torque clamp more in half turn increments until leak stops. If you tighten two full turns and problem persists order rebuild kit and replace seal components.
8. After seal has been running for awhile lay your finger on the faceplate next to the spinning shaft. If you can't keep it there for more than 5 seconds loosen the clamp or boost the purge. The seal is running to Hot! (Tap the plate lightly first and make sure you don't get burned) Take seal temperature on a regular basis.
9. If periodic maintenance is an issue for your company, please ask about other DURA-SHIELD internal ring designs. We have self adjusting designs that allow for complete maintenance free installations.

IF YOU HAVE ANY QUESTIONS CONTACT US TOLL FREE: AT (877) 243-7325

Please visit us on the web at: www.AGDPRODUCTS.com for the latest innovations and new product releases.

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INSTALLATION INSTRUCTIONS

SD, LD, EA and RX Series Seals

Pre-Installation:

Before you can install your DURA-SHIELD Seal you must examine the sides of the seal, and locate the two openings. The 1/8" NPT is the connection port for the air or grease purge supply. The 1/2" NPT plug is the screw driver access port for the driving and sealing thermoplastic rubber elastomer; once this plug is removed, the clamp which can be viewed internally in the DURA-SHIELD Seal can be adjusted to get the proper grip to the shaft.

Depending on the type of DURA-SHIELD Shaft Seal you have purchased, removal of the trough end bearing may be necessary. Please don't forget to remove existing seal entirely. Now you can inspect your shaft- If the shaft is badly worn or undercut by more than 1/16" replace or repair it.

Installation Procedure: (Non-Split Type) with Standard Elastomer & Ring Configuration.

To ensure the proper installation of your DURA-SHIELD Seal, it can be very helpful to mount the seal on a mandrel equal to the shaft size or if the space permits, directly to the shaft. Tighten the clamp gradually, until the seal firmly grips the shaft equally around the diameter, and will not slide when heavy force is applied.

At this point, relax the clamp three full 360 degree turns. The seal is now ready for final installation.

Apply an approved sealant for your process to the inboard side of the seal housing, (View Fig. 1-A) You can use a compressible gasket between the seal and the trough end. Do not exceed 1/8" in gasket material thickness. Exceeding thickness could result in bending the housing when tightening. Now slide the seal into position on the trough end. The seals are designed to slide smoothly onto the shaft. If necessary: lubricate the contact area with clean water or a very light soap and water solution only. Never use any other lubricant.

Bolt or nut the seal firmly to the trough end and wipe away any sealant that squeezed out from the sides of seal to keep your installation clean. If a four bolt flange bearing is used, the seal should be placed between the trough end and the bearing. Be careful not to bend, compress or distort the seal housing. This will lead to premature wear and increase load on equipment. SD Series DURA-SHIELD Shaft Seals 2.00" in shaft Dia. and over now come standard with our Compression Limiting Sleeves. When seal is seated use a straightedge across the outboard face of the seal housing to ensure that housing is flat. If necessary, shim behind the seal until the housing is flat and no longer distorted. At this point, also check that seal is square with the shaft. Keep run out to less than 1/16".

Once the seal is fully mounted, rotate the shaft by jogging the machine until the head of the hose clamp aligns with the access port on the side of the seal. Use a flat head screw driver and tighten the hose clamp three full 360 degree turns. Replace the access plug.

Attach your purge medium (clean air or an inert gas, like nitrogen) to a low pressure adjustable air regulator / filter (Available Directly through AGD Products, Inc.) and then connect to the 1/8" NPT purge supply. Set final purge pressure 3-5 psi. above the product pressure. You should detect air leakage at the I.D. of the stainless face plates, all the way around the seal. (Note: A Good Starting Pressure is about 10-15psi.)

At this time you can run the seal on your equipment. If time permits run approximately 1 hour before loading machine with product to ensure proper working order. If seal seems to be in good working order after trial operation add materials to equipment and watch closely for first day of operation. Please Note: Periodically you will need to adjust the torque of the hose clamp on the elastomer. Never adjust the hose clamp more than three finger tight. Make a scheduled maintenance operation to do this once monthly. (Please ask about our maintenance free internal ring designs if periodic maintenance is difficult after seal has been installed.)