



COMMON CAUSES OF PREMATURE SEAL FAILURE

PROBLEM	PROBABLE CAUSE	REMEDY
EXCESSIVE SHAFT WEAR	Soft Material Abrasives	Use shaft material of 20 Rockwell C or better. Be sure shaft and sealing unit are clean and free from dirt and grit. Also lubricate.
EXCESSIVE LEAKAGE	Light Lip Contact Over-Stretched Lip Nicks, Cuts or Tears in Sealing Lip Cocked Seal Damaged Springs Excessive Use of Installation Lubricant Damaged Case Paint on Shaft Runout or Shaft Whip Scratches on Shaft	Check shaft diameter. See Table of Recommended Shaft Tolerances. Use correct mounting tools. See "Mounting the Seal" section. Do not apply over shaft shoulder more than 1/32" larger than shaft diameter. Usually caused by rough finish on shaft. Remove all burrs and finish to lower RMS . . . Also caused by improper installation. Be careful when installing over keyways, splines, sharp metal surfaces. Use a mounting tool. Be sure to install the seal at right angles to the shaft. Use proper installation tools as indicated in installation instructions. If possible, use a counterbore housing in product design. This insures a positive seal. Caused by improper installation. Avoid spreading the lip excessively. Rough handling and storage can also cause this trouble. Use only slight amount of lubricant to insure proper surface slippage when seal is first starting. Caused by use of improper driving tools. See instructions in installation section. Use a mask so that paint will not run under the seal and solidify, forcing the sealing lip away from the shaft. Install seal close to bearing. Make sure all parts are accurately machined. Avoid looseness in splines. Polish shaft with crocus cloth; grind. If possible, reverse machining operations to eliminate spiral grooves.
SHORT SEAL LIFE	Excessive Wear Caused by Rough Shaft Finish Too Tight a Fit on Shaft Pressure Poor Lubrication Overheated Seal	Finish shaft surface to lower RMS. Check seal size. Make sure proper size is used. Eliminate pressure by venting around bearings or away from helical gears. Use Trostel Leather Seals. Use Trostel Leather Seals or use a larger size synthetic seal. Check ambient temperature and make sure of proper lubrication.