

December 1, 2004

TECH NOTE: LARGE OPEN POCKET BEARING HOUSINGS FOR 64046, 72046, 72058 MACHINES.

1. These machines used two different shafts throughout the years of production. One shaft was welded from 2 pieces and the replacement shaft is forged as 1 piece. The welded shaft used a larger bore rear bearing than the forged shaft.
2. Some welded shafts broke after many years of service life in the field. The shaft broke in front of the front bearing, behind the hub mounted to the basket. This would be obvious to the user when the shaft was turning at the rear of the machine and the basket was not turning. Forged shafts are much stronger and should theoretically never break in decades of operation on these machines.
3. We recommend that you replace any welded shaft with a forged shaft when changing failed bearings. Use kit KDHBA0010R – with BUNA seals, kit KDHBA0020R for dye seals or KDHBA0030R for Viton machines to replace the front bearing housing and kit K25-0007 to replace the rear bearing whenever ordering replacement parts. Please order both a front and rear bearing kit whenever replacing these components. In many cases, we have shipped a front bearing assembly with forged shaft only to discover that a rear bearing was not ordered which rendered the machine unusable until the proper size rear bearing was shipped. If the rear bearing is the proper size for the new shaft then the unused rear housing can be returned for full credit.
4. If you wish, you can determine which shaft you have installed in the machine by inspecting the bore of the rear bearing. You can do this by removing the rear bearing grease seal cover plate and exposing the rear bearing bore. The welded shaft uses a 9 ½ inch rear bearing diameter. The forged shaft uses an 8 ½ inch rear bearing bore dimension.
5. Newer front bearing housings also utilize compressed air (at 10 PSI) to enhance seal life. YOU MUST install compressed air inject kit KDADDAI001 if this is not currently installed on the machine. Otherwise, water will seep out of the air inject port and potentially be misdiagnosed as a leaking seal. The kit is comprised of a regulator, electrically operated solenoid valve and needed tubing. This allows air flow when the machine is powered.

These housings include three levels of protection in the water seal area. The first layer of protection is provided by an excluder seal which rides on a machined face plate within the wet area of the shell. The next two seals are lip seals riding on a cylindrical seal sleeve. Air is injected between the first lip seal and the excluder seal at 10 PSI. You can hear air passing by the excluder seal when the machine is in operation. This is normal.

6. It is possible to rebuild a bearing housing which utilizes a welded shaft. However, the longevity of these housings is undetermined since some returned shafts have seen extreme abuse. This is why we have taken to the policy of not offering welded shaft rebuilding from MILNOR.
 - a. MILNOR does offer spare parts support for rebuilding these housings in the field. However, no warranty is provided with these parts if field reassembly is done. If a welded shaft and non-air inject housing is rebuilt in the field, the longevity of service may be hindered. The air inject provides an additional layer of protection from bath liquor and contaminants (like sand and other abrasives).
7. A rebuilt main bearing assembly for these machines delivered from MILNOR has a 5-year pro-rated parts warranty.
8. Substantial credit is offered for a forged shaft and bearing housing if the parts are in reusable condition. This may substantially reduce the replacement costs of a bearing replacement. No credit is offered for a welded shaft if returned. MILNOR has replacement bearing assemblies available prior to the removal of a failing bearing in the field.

If you have any questions, please contact MILNOR Tech Support at 504-467-9591 or service@milnor.com

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