

RBC SERVICES UPDATE

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RBC BEARINGS: BASIC MAINTENANCE

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Each of the bearings listed in this UPDATE, when properly lubricated, should operate without problems for a minimum of 10 years. Lubrication schedules vary, but should be performed on a regular basis as recommended by their respective manufacturer.

RBC Bearings operate in a very moist atmosphere. Therefore, it is critical that contaminants be removed to protect the integrity of the bearings at your plant, regardless of the manufacturer.

All of the bearings discussed use a Lithium type grease; Grade #1 or #2. Examples are noted for each type bearing. If the brands indicated are not available through your supplier, the lubricant you get must meet the specifications of those listed. This will help protect any warranties which may be in effect. Today's synthetic lubricants also do an excellent job if you decide to go with that.

Lubrication of the bearings should be done while the RBC is rotating. The excess grease can be applied to unprotected surfaces of the bearing, the housing or the shaft end.

A "walk through" inspection of the RBCs should be done on a daily basis. This will provide the opportunity to listen for any unusual sounds from the bearings or drive system in general. Early detection of any problem is always easier and less expensive to correct. Preventive maintenance is the key to longer equipment life.

Periodically, take a sample of the old grease and inspect it carefully. This may give you an indication of how the bearing is performing and warn you of any potential problems.

MS TYPE, 5" JOURNAL

The MS is a double tapered roller bearing with a single eccentric lock collar which first locks the inner race to the shaft, and has (2) set screws, which is applied on the outboard side of the cartridge. The Expansion housing is pre-machined to accept a Load Cell Kit.

This bearing has radial lip seals to provide a lubrication purge schedule of up to once every 3 months. Grease should be pumped in slowly until the new grease is observed escaping from between the seal and lock collar all the way around the bearing.

This bearing and/or assembly is manufactured by RBC Services and has been provided as a direct replacement for the PB-950 and TDL on either Autotrol and/or Envirex RBCs using the existing housing, and for spherical bearing assemblies.

Examples of recommended grease are:

- * ARCO Litholine HEP #1
- * Shell Alvania EP #1
- * Texaco Multifak EP #1

PB-950 TYPE, 5" JOURNAL

This double tapered roller bearing has a single eccentric lock collar with (1) set screw which is applied on the outboard side of the cartridge.

The dust trap seals on this bearing makes it necessary to completely purge the bearing twice weekly. Grease should be pumped in slowly until the new grease is observed escaping from between the seal and lock collar all the way around.

This bearing was assembled by Browning and was included on most RBCs supplied by Autotrol Corporation from 1974 to 1982.

Examples of recommended grease are:

- ARCO Litholine HEP #1
- Shell Alvania EP #1
- Texaco Multifak EP #1

SPHERICAL TYPE, 5" JOURNAL

This spherical bearing is completely enclosed in a housing which included seals to provide a lubrication schedule of up to once every 3 months.

The housing has a grease relief port on the top face. There have been cases when the grease escaped from the rear seal, indicating a clogged grease relief port or congealed grease in the front reservoir. The reservoir should be checked and cleared periodically.

This bearing was assembled by Browning and was included on some RBCs supplied by Autotrol Corporation from 1980 to 1982.

Example of recommended grease are:

- ARCO Litholine HEP #1
- Shell Alvania EP #1
- Texaco Multifak EP #1

TDL TYPE, 5" JOURNAL

This double tapered roller bearing has a lock collar both inboard and outboard of the cartridge applied onto the extended inner bearing race. The Expansion bearing housing is pre-machined to accept a Load Cell Kit.

This bearing has radial lip seals to provide a lubrication purge schedule of up to once every 3 months. Grease should be pumped in slowly until the new grease is observed escaping from between the seal and lock collar all the way around.

This bearing was manufactured by Autotrol and was included on some of their RBCs supplied from 1981 to 1984. Envirex began supplying them on most of their RBCs since 1983 and continue supplying them today.

Examples of recommended grease are:

- ARCO Litholine HEP #1
- Shell Alvania EP #1
- Texaco Multifak EP #1

DODGE TYPE, 4-15/16" - 7"

This bearing is manufactured by Dodge/Rockwell Automation. The 4-15/16" bearings were provided on many RBCs as manufactured by CLOW and LYCO. The 7" bearings were provided on the BioSpiral type RBC manufactured by Walker.

Suggested lubrication period for these bearings used for RBC applications is up to once every 10 weeks. The bearing should contain as much grease as speed will permit, since a full bearing with consequent slight leakage is the best protection against foreign material.

When new, these bearings are lubricated at the factory and are ready to run. If however, the bearing is stored prior to use, lubrication is suggested at time of start-up. Certain conditions may require a change of lubrication periods as dictated by experience.

Example of recommended grease is:

- #2 Consistency Lithium Base

REX TYPE, 4-15/16"

This bearing is manufactured by Rexnord, and is supplied on more recent RBCs as manufactured by Walker Process, as well as more recent LYCO and older CLOW RBCs.

Recommended lubrication for the REX bearing is set at a quantity of 2.5 oz. up to once every 4 months (based on a 40 hour work week), which equates to 12 oz. per schedule. A slight leakage should be observed to prevent the infiltration of foreign particles.

When new, these bearings are lubricated at the factory and are ready to run. If however, the bearing is stored prior to use, lubrication is suggested at time of start-up. Certain conditions may require a change of lubrication periods as dictated by experience.

Bearings should be re-lubricated at regular intervals. The frequency and amount are based upon the average application conditions.

Example of recommended grease are:

- Shell Alvania #2
- Mobilux #2
- Amolith #2

If you experience any problems with your bearings while the warranty is still in force, contact the RBC manufacturer's representative for assistance.

Otherwise, you can contact RBC Services for information and assistance in acquiring replacement bearings. And as always, if you ever have any questions regarding your RBC operations, please do not hesitate to give me a call.