



Maintenance & Lubrication Schedule

Lovejoy®/Sier-Bath® Gear Couplings

Lubrication

Adequate lubrication is essential for satisfactory gear coupling operation. Lovejoy Gear Coupling Grease is specifically designed for gear coupling applications to increase coupling life while drastically reducing maintenance time. Its high viscosity base oil and tackifier combine to keep the grease in place preventing separation and it is in complete compliance with ANSI/AGMA 9001-B97 lubrication recommendations.

Lovejoy Gear Coupling Grease is dark brown in color and manufactured with a lithium soap/polymer thickener, which has superior resistance to oil separation when subjected to the high centrifugal forces normally found in couplings. Bearing or general purpose greases tend to separate and lose effectiveness due to the high centrifugal forces acting on the various ingredients at high rotational speeds. These high centrifugal forces encountered in couplings separate the base oil from the thickeners. Heavy thickeners, which have no lubrication qualities, accumulate in the gear tooth mesh area resulting in premature coupling failure. Lovejoy Gear Coupling Grease is designed to be highly resistant to centrifugal separation of the oil and thickener, which allows the lubricant to be used for a relatively long period of time.

One of the secrets to the success of Lovejoy Gear Coupling Grease is the variable consistency throughout the working cycle of the application. The consistency of our gear coupling grease changes with the operating conditions. Working of the lubricant under actual service conditions causes the grease to become semi-fluid, functionally splash lubricating the wear surfaces of the coupling. As the grease cools, it returns to its original consistency, thereby preventing leakage.

Maintenance

Following the initial break-in period of about 3 million revolutions (80 hrs. @ 600 rpm) it is recommended that the coupling be completely flushed and relubricated. Thereafter, a regular relubrication schedule should be maintained. If the coupling leaks grease, is exposed to extreme temperatures, excessive moisture or repeated reversals, frequent lubrication may be required. For average industrial operating conditions, relubrication every 12 months should be sufficient. Periodic inspections should be made to insure that neither the quality nor the supply, due to leakage, of the lubricant has deteriorated to an unacceptable level and the fasteners are at the proper torque values.

During the relubrication cycle or at least annually, whichever comes first, the coupling should be disassembled and thoroughly cleaned of all lubricant. Remove and inspect all parts: gear teeth for signs of abnormal stress or wear, the seals or gaskets for any cracks or breaks, and fasteners for damage.

Any parts showing signs of wear or damage should be replaced. These parts are available for purchase by referencing the coupling UPC number, size, type and bolting style. Hub and sleeve should be replaced as a half coupling whenever possible.

Check alignment and if maximum operating misalignment values are exceeded, realign the coupling to the recommended value.

It is always important that the equipment be aligned as close as possible, keeping within the economics and sophistication of the system. Misalignment is the leading cause of bearing and seal failure, vibrations, oil leakage from bearing frames, broken shafts and coupling failure.