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› Liquid Bearings 100%-Synthetic Oil for O Scale Trains and Model Railroads Instruction Manual

Liquid Bearings 608819304625

Liquid Bearings 100%-Synthetic Oil for O Scale Trains and Model Railroads Instruction Manual

Model: 608819304625

1. PRODUCT OVERVIEW

Liquid Bearings 100%-Synthetic Oil is a high-performance lubricant specifically formulated for O Scale Trains and Model Railroads. This advanced synthetic lubricant consistently outperforms conventional petroleum-based oils by offering superior lubrication across a wide range of temperatures and preventing rust. Unlike traditional oils that can leave sticky deposits and break down over time, Liquid Bearings synthetic oil is designed with uniform molecules, ensuring optimal performance and longevity for your model equipment. It is fully compatible with vintage and current oils and will gradually flush away residues from evaporated petroleum oils.



Image: Liquid Bearings 100%-Synthetic Oil bottle, featuring a precision applicator needle for accurate, drop-by-drop application.

2. KEY FEATURES

- **100%-Synthetic Lubricant:** Perfect for all model railroad applications.
- **Displaces Old Oils:** Immediately begins to displace old petroleum-based oils or sprays.
- **Corrosion Prevention:** Provides excellent corrosion prevention for all metal surfaces.
- **Odor-Free:** Essentially odor-free for a pleasant user experience.
- **Precision Application:** Includes both 1/2" and 1-1/2" needles, each with a tip scabbard, allowing for precise, drop-by-drop application.

3. SPECIFICATIONS

Material	Synthetic
Package Information	Bottle
Liquid Volume	1 Fluid Ounces
Recommended Uses	O Scale Trains and Model Railroads, Superior Lubrication, Rust Prevention
Viscosity	10w-40
Upper Temperature Rating	250 Degrees Fahrenheit
Item Form	Liquid
Manufacturer	Liquid Bearings
Unit Count	1.0 Fluid Ounces
Model Number	608819304625
Recommended Age	10 years and up

4. APPLICATION AND MAINTENANCE GUIDE

Proper lubrication and cleaning are essential for the smooth and long-lasting operation of your model trains. This guide provides general instructions; always refer to your model's manufacturer's instructions for specific disassembly and reassembly procedures.

General Lubrication Principles

Modern model trains, much like automobiles, require different types of lubricants for various components due to differing viscosities and additives. Liquid Bearings offers a range of products tailored for specific needs. The key principle is: **If it moves, lube it!**

Disassembly

Before applying lubricant, you will need to access the internal mechanisms of your model train. This typically involves removing the body shell. Consult your model's manufacturer's website or manual for an exploded view and instructions on how to safely remove the body shell without damaging plastic tabs or screw mounts.

Lubricating Train Components

- Motors (N-scale, HO-scale, O-scale):** Apply a single drop of Liquid Bearings 102 (a very thin liquid grease) to each end of the motor shaft. The motor's spinning action will distribute the lubricant into the motor bearings and sleeves.
- Gear Trains (N-scale, HO-scale, O-scale):** For worm gears and other gear train components, use a heavier grease like Liquid Bearings 106. Apply a pinpoint amount, about the size of a grain of rice. As the gear train operates, the grease will spread throughout the gears. You should notice an immediate improvement, with further enhancement as the lubricant fully migrates.
- Exposed Gearboxes:** For older locomotives with exposed gearboxes, it is recommended to use Liquid Bearings 102 oil instead of grease. Grease is tacky and can attract debris (pet hair, lint, scenic material), which can clog the mechanism. The lighter oil will attract less debris, though regular cleaning is still necessary.
- Steam Locomotive Valve Gear:** The valve gear on steam locomotives experiences significant friction.

Apply a few drops of Liquid Bearings 108 oil to each moving part of the valve gear. Wipe off any excess with a clean cloth or Q-tip, leaving a thin film. The lubricant will slowly work its way through the mechanism, improving operation and reducing noise.

5. **Wheel Sets and Side Frames:** For the ends of the wheels that fit into side frames, where rubbing occurs, apply a small dab of Liquid Bearings 107 oil to each end of the axles. This ensures smooth running and reduces friction. This applies to both diesel and steam models.
6. **Switch Points and Couplers:** Moving parts like switch points and operating couplers also require lubrication. For switch points, use Liquid Bearings 112 (for smaller scales) or 113 (for larger scales) to ensure free movement and prevent derailments caused by debris. For operating couplers, apply a dab of oil in the knuckle area where parts work together to prevent fouling.

Track Cleaning

Clean track is crucial for optimal model railroad performance, especially with DCC systems, which rely on consistent electrical contact through the rails. Dirty rails can lead to broken connections and erratic decoder behavior.

1. **Initial Cleaning:** Use a track cleaner like Liquid Bearings 105, which is both a cleaner and a lubricant. Apply a few drops onto the rails.
2. **Running Trains:** Run your trains over the lubricated track. Use a clean pad or cloth to wipe up the dirt that the trains pick up from the rails. Repeat this process several times; you will notice the track becoming progressively cleaner.
3. **Re-coating:** After cleaning, re-coat the track with a thin film of Liquid Bearings 105. This lubricant conducts electricity, making it safe and effective for maintaining good connectivity between your train's wheels and the decoder.

Motor Cleaning (Using LaBelle 901 Motor Cleaning System)

For thorough motor cleaning, especially for older or used models, the LaBelle 901 Motor Cleaning System is recommended. This kit includes a professional-grade degreaser and an atomizer spray.

1. **Demount Motors:** Carefully demount the motors from the model train.
2. **Spray Degreaser:** Spray the degreaser onto the motors from about 2-3 inches away.
3. **Manual Rotation:** Twist the motor by hand to help dislodge debris. The degreaser will cause a lot of debris to deposit underneath.
4. **Dry and Repeat:** Let the motors dry for a few minutes, then repeat the process once or twice until clean.
5. **Re-lubricate:** After cleaning, re-lubricate the motor with the appropriate Liquid Bearings lubricant (e.g., 102 liquid grease). Remember, the degreaser is not a lubricant.
6. **Ventilation:** The degreaser can be strong-smelling. It is advisable to perform this cleaning process outdoors or in a well-ventilated area. Use disposable plastic or cardboard underneath to catch debris and prevent odors from lingering on your workbench.

Video: How to Lubricate and Maintain Your Model Train. This video demonstrates the application of various Liquid Bearings lubricants and cleaning products to different model train components and scales, including motors, gear trains, and tracks.

5. TROUBLESHOOTING

- **Rough Running or Noise:** If your train runs roughly or makes excessive noise, it likely needs lubrication. Identify the moving parts (motors, gears, axles, valve gear) and apply the appropriate Liquid Bearings product as described in Section 4.
- **Deraillments:** Ensure switch points and couplers are clean and lubricated. Debris can cause these

components to malfunction, leading to derailments.

- **Intermittent Power/DCC Issues:** Clean your tracks thoroughly using Liquid Bearings 105 Track Cleaner. Dirty rails impede electrical conductivity, which is critical for DCC operation.
- **Over-Greasing:** Applying too much grease, especially to exposed parts, can attract dirt and cause more problems. Use only a small, pinpoint amount where grease is recommended.

6. WARRANTY AND SUPPORT

Information regarding product warranty and customer support is not available in the provided data. Please refer to the manufacturer's official website or product packaging for details on warranty coverage and how to contact customer support for further assistance.