

Wheel Bearings

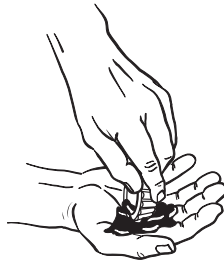
Periodic inspection and regular replacement of lubricant is important to obtain maximum bearing life. Always inspect bearings for damage prior to installation. When installing wheel bearings, it is important to ensure both the inside of the wheel hub cavity, bearings and grease cap are clean. It is also recommended that seals be replaced when wheel hubs have been removed for service. **EXTREME CARE SHOULD BE TAKEN WHEN REINSTALLING WHEEL HUBS TO PREVENT DAMAGE TO THE SEALS. DO NOT CONTACT RUBBER SEALING LIP WITH THE SPINDLE THREADS.**

rotating the hub to ensure proper seating of the bearings, cups and seal in the wheel hub.

Grease Lubrication

Grease should be replaced every 12,000 miles or 12 months. Prior to repacking bearings, all old grease should be removed from the wheel hub cavity and bearings. Bearings should be packed by machine. If machine is unavailable, packing by hand method is acceptable. The method to pack bearing cones is as follows:

1. Place a quantity of grease onto the palm of your hand.
2. Press a section of the widest end of bearing into the outer edge of the grease pile closest to the thumb, forcing grease into the interior of the bearing between two adjacent rollers.
3. Repeat this while rotating the bearing from roller to roller.
4. Continue this process until you have the entire bearing completely filled with grease.
5. Before reinstalling, apply a light coat of grease onto the bearing cup mating surface.



Oil Lubrication

Oil should be changed at least once a year, or 100,000 miles, or whenever the seals or brakes are replaced. Oil level should be inspected every 1,000 miles. Always allow a few minutes, after adding oil or after vehicle operation, for the oil to settle when establishing the required oil level.

Adjustment

1. After properly installing the bearings and seals according to the manufacturer's recommendations, tighten the inner spindle nut to **100 Ft. Lbs.** while

CAUTION

You must follow the maintenance procedures to prevent damage to important structural components. Damage to certain structural components such as wheel bearings can cause the wheel end to come off of the axle. Loss of a wheel end while the trailer is moving can cause you to lose control and lead to an accident, which can result in serious injury or death.

2. Loosen the inner spindle nut to remove preload torque.
3. Hand tighten the inner adjustment nut, then back off $\frac{1}{4}$ turn, $\frac{3}{8}$ turn maximum.
4. Install lock ring (lock ring must engage pin on inner spindle nut. Nut to engage nearest pin hole).
5. Install tab washer and outer locknut. Torque outer spindle nut to **250-300 Ft. Lbs.** Bend 3 tabs over outer nut flats to secure.
6. This procedure should assure an end-play of .001" to .010" which must be present in the adjusted wheel bearing assembly.

Recommended Wheel Bearing Lubrication Specifications

Grease:

Thickener Type	Lithium Complex
Dropping Point	215°C (419°F) Minimum
Consistency	NLGI No. 2
Additives	EP, Corrosion & Oxidation Inhibitors
Viscosity Index	80 Minimum

Approved Grease Sources:

76 Lubricants Company	76 Multiplex EP 76 Multiplex RED
Citgo Petroleum Corp.	Lithoplex MP #2 Lithoplex CM #2
Exxon Company, USA	Ronex, MP
Kendall Motor Oil (Div. of Witco Corp.)	Kendall Super Blu L427 Grease

Wheel Bearings

Mobil Oil Company	Mobil Grease HP Mobilith AW 2 Mobil 1 Synthetic Grease
Mystik Oil Company Inc.	Mystik JT-6 Hi-Temp Grease Red Lithium Complex EP No. 2 Mystik SX-6 Synthetic Blend Extreme Range, Low Temp Blue Lithium Complex
Oil Center Research of Oklahoma	Liquid-O-Ring No, 167L
Pennzoil-Quaker State Company	Synthetic Red Grease
Shell	Gadus S3 V220C Gadus S5 V220 Rotella Heavy Duty Lithium Complex #2
Royal Mfg. Company	Royal 98 Multi-Lube EP #2 Lithium Complex
Chevron Texaco	Chevron Ulti-Plex Grease EP NLGI 2 Texaco Starplex Moly MPGM 2
Chem Arrow Corp.	Arrow 78981-1
Valvoline (Div. of Ashland Inc.)	Valvoline Multi-Purpose GM
Great Plains Lubricants	Lithium Complex EP Grease NLGI 2

MFA Oil Company	Multi-Purpose Gear Oil 80W-90
Mobil Oil Corporation	Mobilube SHC Mobil 1 Synthetic Gear Lube
Phillips 66 Petroleum	Superior Multi-Purpose Gear Oil Philguard Gear Oil Philsyn Gear Oil
Pennzoil Products Co.	Gear Plus 80W-90 GL-5 Gear Plus Super 75W-90 Gear Plus Super EW 80W-90 Multi-Purpose 4092 Gear Lube
Oil Center Research	Liquid-O-Ring 750 GX
Sun Refining and Marketing Company	Sonoco Ultra Sonoco Dura Gear
Shell Oil Company	Spirax A Spirax G Spirax HD Spirax S
Texaco Oil Company	Multigear EP Multigear SS
Troco Division / Royal Manufacturing	Multigear Select Gear Oil
Union Oil Company	Unocal MP Gear Lube 76 Triton Syn Lube EP

Oil:

SAE 90, SAE 80W-90, SAE 75W-90

Approved Oil Sources:

Ashland Oil	Valvoline Dura Blend Valvoline Power Lube
CITGO Petroleum Co.	CITGO Premium Gear Oil MP Mystik JT-7 Mystik Power Lube
Conoco	Universal Gear Lubricant 80W-90
Exxon Company USA	Gear Oil GX 80W-90
Industrial Oils Unlimited	Super MP Gear Oil 80W-90
Kendall Refining Co.	Kendall NS-MP Hypoid Gear Lube
Lubriplate Division / Fiske Brothers Refining	Lubriplate APG 90