



NEW FLYER®

SERVICE MANUAL BULLETIN

This Service Manual Bulletin is prepared by the Publications Department of New Flyer Industries Canada ULC. Refer to details below.

SMB-141B

ISSUE DATE: Jan 26 2016

APPLICABILITY	
VEHICLE LENGTH	<input type="checkbox"/> 30ft. <input type="checkbox"/> 35ft. <input type="checkbox"/> 40ft. <input type="checkbox"/> 60ft. <input checked="" type="checkbox"/> ALL
VEHICLE TYPE	<input checked="" type="checkbox"/> Xcelsior® <input type="checkbox"/> MiDi® <input checked="" type="checkbox"/> Invero® <input checked="" type="checkbox"/> Low Floor <input type="checkbox"/> High Floor <input type="checkbox"/> ALL
FUEL TYPE	<input type="checkbox"/> Diesel <input type="checkbox"/> Diesel/Electric <input type="checkbox"/> CNG <input type="checkbox"/> LNG <input type="checkbox"/> Fuel Cell <input type="checkbox"/> Trolley/Electric <input type="checkbox"/> Battery/Electric <input checked="" type="checkbox"/> ALL
SUBJECT	Steering Knuckle Lubrication Model VOK-07-F
SECTION TITLE	PM - PREVENTIVE MAINTENANCE
INITIAL DETAILS	This bulletin provides revised OEM information for lubricating the front steering knuckle bearings on MAN VOK-07-F front axles. Revision B provides clarification and more detail on the lubrication procedure. This information supersedes all prior information on this subject already provided in your New Flyer Service Manuals. Make this Service Bulletin available to service personnel to inform them of changed information.
REV B DETAILS	SMB141 dated Mar 04 2015 has been revised to: <input type="checkbox"/> Provide additional detail on the greasing procedure <input type="checkbox"/> Provide troubleshooting procedures

1. Steering Knuckle Lubrication

Lubricate the upper and lower steering knuckle bearing every six months if operating under harsh winter conditions where the vehicle is exposed to salt spray or extremes of temperature. It is recommended that the bearings be greased before the start of the winter season, and then again immediately following the winter season. Do not grease more frequently than recommended.

NOTE:

The lubrication interval may be extended to once every year or 36,000 miles (58,000 km), whichever occurs first, if operating under less harsh conditions.

1. Remove upper and lower dust caps, if installed, and discard. See "Fig. 1: Steering Knuckle Lubrication" on page 2.

NOTE:

Newer axles with N2G calipers do not have dust caps and are fitted with a 45° grease fitting and a protective red plastic cap on the upper and lower bearings.

2. Replace upper and lower bearing straight grease fittings with a 45° angle fitting if not already done so.
3. Ensure the wheels are supporting the weight of the vehicle. Do not lift on the axle or chassis with the wheels hanging unsupported, as this will prevent proper lubrication of the upper bearing.
4. Remove the protective plastic cap from the grease fitting and clean the fitting and surrounding area.

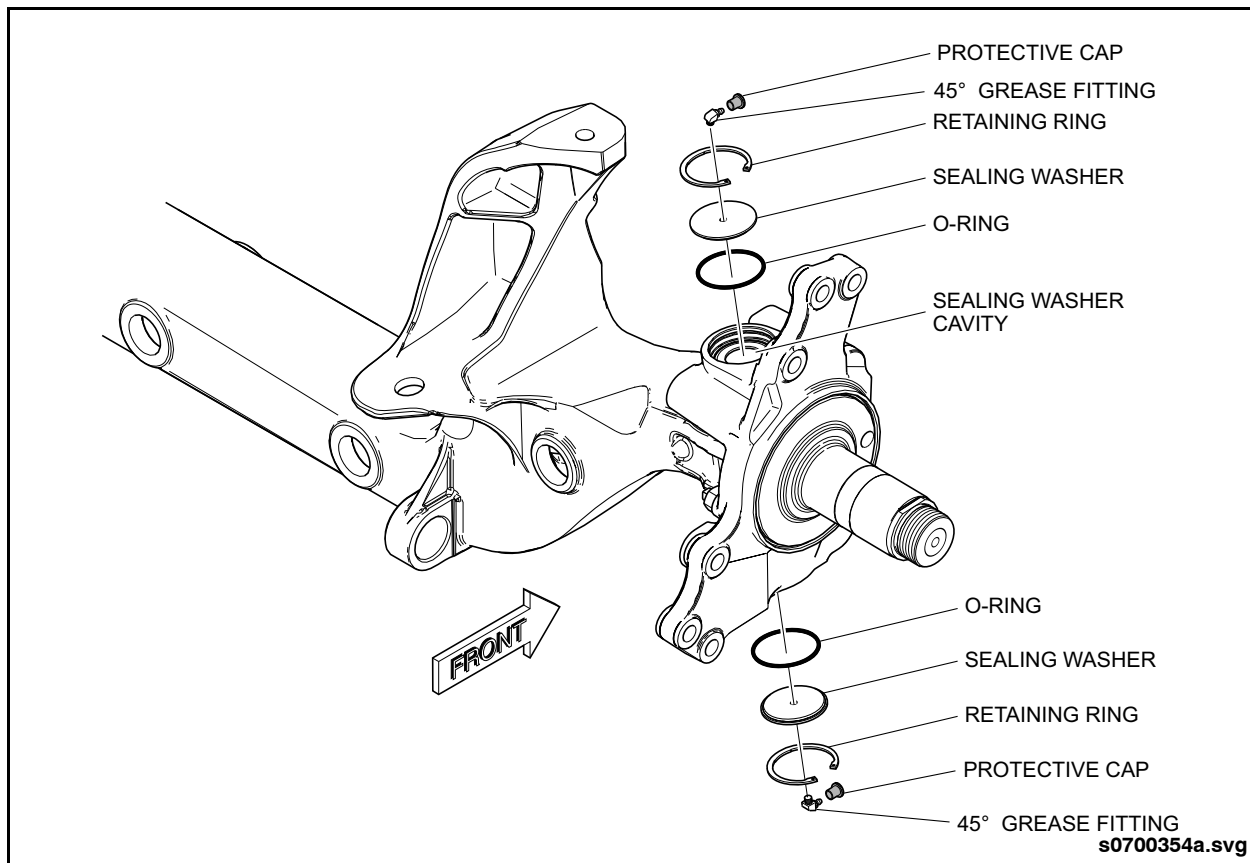


Fig. 1: Steering Knuckle Lubrication

5. Ensure that the adapter on the grease gun properly fits the grease fitting.



DO NOT over-pressurize the bearing cavity when greasing the bearing, as this could cause the sealing washer, located below the circlip, to bulge outward. Replace sealing washer if distorted.

6. Lubricate the upper bearing first. Use only RenoLit LX-OTP-2 lubricant and continue to apply grease until the old grease begins to escape from between the steering knuckle and axle I-beam. It is not necessary to completely purge all of the old grease.

NOTE:

If the lower bearing is lubricated first, it will tend to minimize the cavity above the upper kingpin bearing and restrict grease flow to the upper bearing.

7. Lubricate the lower bearing, same as the upper bearing.
8. If difficulty is experienced lubricating either the upper or lower bearing, [Refer to 1.1. "Lubrication Troubleshooting" on page 3](#) for troubleshooting procedures.
9. Clean any excess grease from the steering knuckle joint as well as the area above the sealing washer.
10. Install protective plastic cap on grease fitting.
11. Once the upper and lower bearings have been greased, pack the sealing washer cavity with a preservation wax to prevent corrosion of the sealing washer.

NOTE:

Newer axles with N2G calipers will have painted sealing washers to prevent corrosion of the washer and will not require the wax.

1.1. Lubrication Troubleshooting

Use the following checks and procedures if difficulty is experienced lubricating the bearings:

1. If neither bearing is taking grease, proceed as follows:
 - a. Confirm that the weight of the vehicle is on the wheels when applying grease.
 - b. Confirm that the proper grease gun adapter is being used.
 - c. If excessive greasing pressures are being used, a hydraulic lock may form and prevent the flow of grease. Relieve the excessive pressure by turning the wheels fully left and right several times. If grease pressure will not relieve, proceed to the following step.

NOTE:

Replace the sealing washer if any evidence of distortion or bulging is noted.

- d. Use a thin punch or similar tool to depress the check ball in the grease fitting and allow grease to escape. If grease pressure still won't relieve, proceed to the following step.
 - e. Remove the circlip and sealing washer, wipe off the grease, and turn the wheels fully left and right several times.
 - f. Install new grease fitting and ensure it does not protrude into the kingpin cavity. Reinstall sealing washer and circlip.
2. If only the upper bearing is not taking grease, proceed as follows:
 - a. Confirm that the weight of the vehicle is on the wheels when applying grease.
 - b. Remove the snap ring and sealing washer and examine the grease fitting to ensure that it is flush with the sealing washer and does not protrude into the kingpin cavity.

NOTE:

The use of a non-specified grease fitting with longer threads could result in the grease fitting contacting the upper kingpin surface and effectively blocking the flow of grease. Refer to your New Flyer Parts Manual for correct grease fitting application.