

Service Bulletin

A Publication of ConMet

Service Alert: Potential for Water Contamination in Hub Due to Flooding

An unfortunate consequence of mass flooding is the potential for tractors and trailers sitting in standing water. This can lead to water in the wheel ends which results in unsafe vehicles on the road. Vehicles that were in flooded regions should be inspected before use.

Listed in this bulletin is a quick process for inspecting your wheel ends for water contamination.

INSPECTION FOR WATER CONTAMINATION

1. A visual inspection of the hub lubricant.

Front/Trailer

Oil lubricated hubs can be inspected through at the sight window in the hubcap. Oil, such as a 50 weight synthetic, with a small amount of water added will turn to a milky white color (Figure 1).

With semi-fluid grease, the hubcap will need to be removed to look for signs of water ingestion such as water droplets or condensation.

Rear

The complete axle should be inspected, including the differential, for water contamination and serviced per the OEM recommendation. The rear hub can be inspected by draining the oil from the fill plug. If discoloration as shown in figure 1 above is observed, the wheel end has experienced water contamination.

If still unsure if water is present, you can also put the lubrication in a pan on a burner and if the oil “crackles” and spatters, there is presence of water.



Figure 1: 50 weight synthetic oil contaminated with a small amount of water turns milky white.

2. What to do if water is present.

A complete tear down of the wheel end should be performed and all components thoroughly cleaned.

Inspect bearing cups and cones for water corrosion, rusting, and unusual signs of wear. If unsure if bearings set can be resused, the safest option is to replace. Even a small amount of corrosion can lead to spalling and failure of the bearing.

If it is a PreSet hub, be sure to replace with ConMet OEM genuine products to ensure the correct operation of the wheel end.

Remember to replace the wheel seal any time the hub is removed from the spindle.

Reinstall the hub and fill with new lubricant.