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TO: Service Locations

FROM: Service Systems Development

SUBJECT: **Detroit™ Coolant Change From Nitrite Organic Acid Technology (NOAT) to Nitrite-Free Organic Acid Technology (OAT)**

ISSUE

In June of 2015, Daimler Trucks North America will be changing from Nitrite Organic Acid Technology (NOAT) Extended Life Coolant (ELC) to nitrite-free Organic Acid Technology (OAT) ELC. Under certain circumstances, the use of NOAT can lead to coolant breakdown.

A revised version of the Detroit™ Coolant Service Information publication (*DDC-SVC-BRO-0002*) will be released in conjunction with the OAT launch.

Approved OAT coolant products can already be found in a revised version of Detroit™ Approved Coolants publication 93K217 available on ddcsn.com. Under Literature, select "Lubricants/Fuels/Coolants". Then select "Approved Coolant List" to view the Detroit™ 93K217 approved coolants list. The link is shown below, but is subject to change without notice.

https://extranet-ddc.freightliner.com/Support/On-Highway/Manuals/Lubricants_Fuels_Coolants/Power_Guard_Oils/index4print_93K217.asp

Other information about OAT coolant:

- Service intervals for OAT are the same as for NOAT.
- For a truck that is factory-filled with NOAT, it **is** possible to top off with OAT. This is preferred instead of topping off with NOAT.
- For a truck that is factory-filled with NOAT, it is **not** necessary to immediately replace the coolant with OAT. The NOAT coolant can be replaced with the normal drain/refill process at the applicable Preventative Maintenance interval.
- For a truck that is factory-filled with OAT, do **not** top off with NOAT.
- All coolant suppliers that provide NOAT also provide OAT.
- Detroit™ *Power Cool Plus* ELC is already an OAT coolant. Part numbers for various quantities are in the Coolant Service Information publication (*DDC-SVC-BRO-0002*) in the appendix for Detroit™ Cooling System Maintenance Products. This is available on ddcsn.com. Under Literature, select "Lubricants/Fuels/Coolants", then select "Coolant Service Information", then select "DDC-SVC-BRO-002". The link is shown below, but is subject to change without notice.

<http://ddcsn-ddc.freightliner.com/cps/rde/xbcr/ddcsn/DDC-SVC-BRO-0002.pdf>

- OAT is also approved for use in Series 60®, Series 50®, MBE 4000®, and MBE 900® engines.
- Daimler Trucks North America factory-filled NOAT and OAT coolants are both red in color. However, not all commercially available ELCs are red in color.
- Coolant extenders are available for OAT.
- The sticker on the radiator surge tank will be changing to show the truck was factory-filled with OAT.
- There is no change to Standard Life Coolant (SLC) even though it does contain nitrites. The silicates in SLC prevent the nitrites from reacting with cooling system components. Some NOAT coolants do not contain silicates so there is nothing preventing the nitrites from reacting with the cooling system.
- **Never mix** SLC and ELC.

OAT coolant can be tested by:

- Lab Testing (Detroit™ preferred coolant testing methodology, such as Power Trac Analysis for ELC using sample bottle Detroit™ P/N: 23539088)
- Freeze Point Check (refractometer)
- OAT ELC Test Strips. These are commercially available from coolant suppliers, such as from Old World Industries P/N: OWI FXATK4. The newly designed test strips will detect the organic acid levels in the coolant and are therefore more effective than traditional NOAT test strips that only detect the nitrite level. OAT ELC test strips can also be used to test NOAT coolant as the actual organic acid concentrations are similar to OAT. Because NOAT nitrite test strips only test for nitrite, they should not be used in OAT systems. The improved ELC testing should lead to improved maintenance practices for customers, and reduced costs.
- pH test strips. These commercially available test strips indicate the pH level in the coolant. For trucks filled with NOAT, a pH level of 10 or greater indicates the need to drain and refill the cooling system with OAT.

CONTACT INFORMATION

Please contact the Detroit™ Customer Support Center at 800-445-1980 or email csc@daimler.com if you have any questions.