

## ENGINEERING BULLETIN

November 9, 1999

### Extended Life Antifreeze/Coolant

A new type of antifreeze, referred to as extended service or long life, is now available in the marketplace. These products are available from several manufacturers under various brand names, but in general all carry the long life/extended service life names. General Motors and Caterpillar have both used these antifreezes in their equipment from the factory for a period of time.

Cummins Engine Company announced in a memo dated July 16, 1999, that these materials based on Organic Acid Technology (OAT) are not compatible with their engines. Cummins is reporting that these long life antifreezes cause degradation of silicone seals in their engines after 80,000 to 100,000 miles of service. Cummins, therefore, is not recommending the use of long life coolants in their engines. Hastings Filters is also concerned with the

problems that may arise due to this situation. Cummins is not specifically detailing which seals are degrading, however, deterioration of any engine seal is of concern. For example, leakage of coolant into the lube oil system will very quickly cause the oil filter to become plugged and disallow flow. Consequently, filtration of the oil as is intended in the system is interrupted. Bypass of unfiltered oil will occur. Other effects of coolant mixed with the oil, such as corrosion of bearings, may also occur.

At this time we have not been notified of any seal failures resulting in further engine damages, but we want our Cummins customers to be aware of this potential situation. Similarly, other non-Cummins customers may also want to address this issue with their engine company, requesting a statement of compatibility with their engine systems.

**If you have further questions,  
please contact our  
Service Engineering Team at (800) 887-8836.**