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Extended Life Antifreeze / Coolant

Light duty and heavy duty maintenance technology and methodology is constantly changing. One of these technological changes involves the antifreeze/coolant available for use in cooling systems. A new type of antifreeze, referred to as extended life or long life, is now available. The chemistry used in this product is unique and very different from that used in traditional antifreezes. These differences require a significant change in the maintenance procedures used to maintain cooling systems when extended life antifreeze is utilized.

The total maintenance package offered by the use of extended life antifreeze is directed at extending total cooling system drain intervals to 300,000 miles, 6000 hours or four years, whichever comes first. Since this doubles all existing engine manufacturers current recommendations, some specific maintenance practices must be adhered to in order to realize the benefits of extended life antifreeze.

Extended life antifreezes are available in both ethylene and propylene glycol bases. These can be either undiluted or pre-mixed 50/50 with water. Of specific interest in the corrosion inhibitor additive package used in the extended life antifreezes. Its major ingredient is an organic acid. Because of the organic acid additive package and some other chemical characteristics of extended life antifreeze, the depletion of the corrosion inhibitors is very different than coolants utilizing traditional supplemental coolant additives (SCA's).

While coolants using current SCA's require the SCA level to be replenished on a routine basis, coolants using extended life antifreeze require inhibitor package replenishment only once during its service life. The inhibitor additive for extended life antifreeze is not an SCA style package. Only a special formulation additive package is to be used with extended life antifreezes. Neither the current formulation SCA package nor the special extended life packages are to be substituted for each other at anytime.

Although extended life antifreeze is chemically compatible with traditional formulation antifreezes, it is the recommendation of all extended life antifreeze manufacturers and suppliers that the two types not be mixed. Mixing the two types of antifreezes completely negates any extended life characteristics. For this reason, extended life antifreezes have been colored red and orange depending on the supplier. Other colors may appear in the future. Top-off and refill of these systems is to be done only with the appropriate products. Further, if a coolant recycling program is being used, the extended life antifreezes should be

segregated from the traditional antifreezes and the recycling process reviewed. Also, the original antifreeze manufacturer's recommendations for recycling should be reviewed.

For additional information, contact:

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