MAINTENANCE MATTERS — Keeping your coolant

Coolant absorbs heat from the engine, engine oil, transmission fluid, the air compressor, and on the newer EGR engines, heat from re-circulated exhaust gases. It is also a lubricant, rust inhibitor and freeze protectant. Yet for all it does, it is often neglected — or, conversely, over-serviced.

You should always heed your engine manufacturer’s antifreeze recommendations or requirements. That being said, MCI’s technical experts can offer a few guidelines for getting the most out of your coolant maintenance schedule.

The most common coolant service procedure is to either add water or undiluted coolant to top off the coolant level. Proper testing is rarely done for coolant additives and freeze-level protection. Not maintaining those at proper levels can cause substantial damage to the components the coolant comes in contact with. That damage can come in the form of freeze damage, rust, gelling of inhibitors and high additive concentrations that can affect critical areas like the heat exchanger in the EGR system. Properly maintained coolant will extend the life of the antifreeze and the components it protects.

Engine heating and cooling over time causes coolant additives to degrade and quantity levels to fluctuate, degrading coolant performance and potentially degrading and/or damaging the cooling system. These additives can be restored by replacing the SCA filter. By performing periodic coolant sampling and testing, the additive levels can be monitored and modified accordingly.

Using a standard antifreeze tester or a coolant test kit approved by the engine manufacturer, always test the antifreeze solution both before and after adding water or antifreeze. With the coolant slightly warm, fill and empty the tester several times to pre-heat it before making the actual test. Be sure to keep testers clean inside and out. Also note that some testers are accurate only at a specific coolant temperature. Others have a conversion for the actual coolant temperature.

Coolant test kits are available from MCI Service Parts. Kit number CTK5029 includes complete instructions and 50 test strips. Each strip measures freeze point, nitrite and nitrilotriacetic acid. Because the test strip is self-contained, there’s no need to mix or measure solutions. A color-coded chart profiles the condition of SCAs and works with any conventional coolant formulation. A smaller kit, with only four test strips, CTK5029-4, is also available.

For more information on maintaining your coolant system, please consult your coach manual or ask for assistance at your nearest MCI service center.

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