

PREVENTING WARRANTY VOID

Modern cooling systems are complex and require thorough maintenance. Contaminated coolant and electrolysis will automatically void radiator and heater warranties if ignored.

Contaminated Coolant

Cooling systems use a 1:1 mix of distilled water and antifreeze to absorb engine heat and protect against corrosion.

Rinse the System Every Time

- Completely rinse the cooling system with the adequate equipment and flushing agents to remove contaminants and rust
- Remove all debris and any trace of the former coolant from the system to prevent the premature erosion and contamination of the new liquid
- Avoid diluting the anti-corrosion agents which stick to the surface of the radiator to protect it

Use Distilled Water

- Tap water contains chemical agents and very harmful metals for the cooling system and corrosion inhibitors
- Use distilled water while mixing the antifreeze to prolong the radiator's life
- Pre-mixed anti-freeze using distilled water is also available

Follow OE Instructions

- Use the right product for the right model
- Long-life coolant is made for aluminum alloys only and will not improve regular coolant if added

Cross-contamination

From inadequate cooling system rinsing or use of tap water



WARRANTY VOID

Electrolysis

Electrolysis problems appear when an electric current circulates in a cooling system and are the first cause of failure for aluminum radiators.

The Effect of Electrolysis on the Cooling System

- A bad engine or body ground creates an electrical current in the cooling system, which leads to a deterioration of major components
- Stray voltage rips off metal particles from the radiator and heater proportionally to the amount of current that circulates
- The electrical current also alters the acidity of the coolant
- Floating metal particles and coolant acidity can lead to leaks just a few months after installation

Testing for Electrolysis

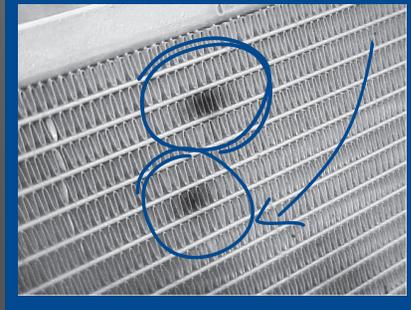
- Use a digital multimeter (DVOM) at the DC volt position
- Plug the negative wire to battery's negative terminal
- Submerge the positive wire of the multimeter in the coolant without touching the radiator
- Start the engine and note the readings when the engine at the start and on idle
- A voltage reading higher than 3/10 of a Volt shows the presence of electrolysis

Inspect grounds and other added circuit under the hood
If the problem cannot be easily found, check one fuse at a time until the voltage decreases to find the defective circuit.

Getting Rid of Electrolysis

- Repair the faulty circuit
- Completely flush and rinse the cooling system
- Refill with new coolant

DARK SPOTS



MULTIPLE LEAKS

