

# **Service Bulletin**

## INFORMATION

#### Subject: Information on the Use of Stop Leak Additives in the Coolant System

Models: 2014-2016 Cadillac ELR 2011-2016 Chevrolet Volt 2014-2016 Chevrolet Spark EV

#### Attention: This Bulletin also applies to any of the above models that may be Europe and Australia Export vehicles.

The Volt, ELR, and Spark EV coolant systems uses very small orifices in multiple areas (heater core filter, heater core, thermostat, radiators, heater plates in the HV battery cells, etc.) for the cooling systems (Passenger Compartment Heater, Hybrid/EV Battery Pack Cooling, Hybrid Electronics Cooling). When a stop leak product or other additives are used in the cooling systems these products will clog the small orifices reducing the flow of coolant. The coolant systems can have adverse conditions requiring multiple part replacements including the entire HV battery.

**Note:** The flushing process described in SI is for maintenance and part replacements only. SI does not provide an adequate flushing procedure to remove the stop leak product from the small orifices throughout the two cooling systems.

#### If a Stop Leak Product or Additives Have Been Used in the Passenger Compartment Heater System

If a stop leak product or additives are used in the passenger compartment heater system, the heater core, heater core outlet filter (if equipped), thermostat and coolant must be replaced. The entire passenger compartment heater system must be removed to thoroughly flush/clean the stop leak/additive. If the stop leak/additive cannot be properly flushed/cleaned or you can't determine if the product was completely removed, then the part(s) must be replaced. If any of the stop leak/additive is left behind, the vehicle may experience a repeat issue when the system is filled with coolant.

#### If a Stop Leak Product or Additives Have Been Used in Hybrid/EV Battery Pack Cooling System

If a stop leak product or additives are used in the Hybrid/EV battery pack cooling system, the coolant and Hybrid/EV battery pack may have to be replaced due to codes set for clogged orifices, overheating, and/or isolation faults. Once the HV battery is replaced the entire HV battery coolant system has to be removed to thoroughly flush/clean the stop leak/additive. If the stop leak/additive cannot be properly flushed/cleaned or you can't determine if the stop leak/additive was completely removed, then the part(s) must be replaced. If any of the stop leak/additive is left behind, the vehicle may experience a repeat issue when the system is filled with coolant.

#### If a Stop Leak Product or Additives Have Been Used in the Hybrid Electronics Cooling System

If a stop leak product or additives are used in the Hybrid Electronics Cooling System, the electronic control modules may have to be replaced. The entire Hybrid Electronics Cooling System must be removed to thoroughly flush/clean the stop leak/additive. If the stop leak/additive cannot be properly flushed/cleaned or you can't determine if the product was completely removed, then the part(s) must be replaced. If any of the stop leak/additive is left behind, the vehicle may experience a repeat issue when the system is filled with coolant.

**Note:** The Passenger Compartment Heater, Hybrid/EV Battery Pack Cooling, Hybrid Electronics Cooling systems require a 50/50 mix of GM DEX-COOL® and de-ionized water. This mixture is available in a pre-mix with bitterant, P/N 12378390 (U.S.) (in Canada, use 10953456). The pre-mixed coolant is no longer available without the bitterant chemical. DO NOT use tap water or distilled water.

### Warranty Information

GM does not use any stop leak product or additives in the cooling systems on the Volt, ELR, and Spark EV at the assembly plants. If a dealership or customer installs a stop leak product or any type of additive to the cooling systems the cost to repair the vehicle will be the responsibility of the dealership or customer.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools,

safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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