

Coolant Hose Fails From The Inside

The primary cause of coolant hose failure is an electrochemical attack on the rubber tube compound in the hose.

The phenomenon is known as electrochemical degradation, or ECD. It occurs because the hose, liquid coolant and the engine/radiator fittings form a galvanic cell or "battery". This chemical reaction causes micro-cracks in the hose tube, allowing the coolant to attack and weaken the hose reinforcement. Failure results from a pinhole leak or a burst hose.

The best way to check a coolant hose for the effects of ECD is to squeeze the hose near the clamps or connectors. Check for any difference in the feel between the middle and ends of the hose. If the ends are soft and feel mushy, chances are the hose is under attack by ECD. To avoid breakdowns, the hose should be replaced immediately with an ECD-resistant hose. Also, if it's been four years since the last time the coolant hoses were changed, they should be replaced.



An example of coolant hose failure caused by ECD.



Don't risk it, fit the best, fit Gates.

To address the damage caused by ECD, Gates developed an electrochemically-resistant coolant hose using a patented EPDM (ethylene propylene rubber) formulation and special wrapped reinforcement. These hoses are long-lasting with no ECD effect. In addition to providing electrochemical resistance, the new EPDM hose offers improved performance characteristics over both standard rubber hose and much more expensive silicone hose.

In addition to providing ECR properties Gates EPDM hose offers improved performance characteristics over both standard rubber hose, and much more expensive silicone hose.



For more information on Gates hose and other Gates products please call Gates Customer Service Team on 03 9797 9688 or visit www.gatesaustralia.com.au