

Evaporative Emission System Leak Test

Activation

Phase 1 - Leak Verification

1. Run the EVAP Test with the scan tool.
2. **NOTE:** *Some small leaks may not be detected using the EVAP Test. If the system has passed the test but a leak is still suspected, then proceed to Phase 2.*

If the EVAP system failed the EVAP Test, then proceed to Phase 2.

Phase 2 - System Leak Check

3. Disconnect the fuel vapor tube-to-EVAP canister purge valve quick connect coupling.
Refer to: [Quick Release Coupling](#) (310-00D Fuel System - General Information - 5.0L 32V Ti-VCT, General Procedures).
4. Connect the VACUTEC Smoke Machine Fuel EVAP Emissions System Tester to the fuel vapor tube quick connect coupling. Refer to the manufacturer's instructions.
5. **NOTE:** *The battery ground cable was previously disconnected in the fuel vapor tube quick connect coupling procedure.*

Connect the battery ground cable.

Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).

6. Close the canister vent solenoid with the scan tool.
7. **NOTE:** *The supplemental refueling adapter is located in the jack storage compartment.*

Install the supplemental refueling adapter into the Easy Fuel™ (capless) fuel tank filler pipe assembly.

8. **NOTE:** *If smoke does not exit the fuel tank filler pipe neck area after the system is pressurized, open the canister vent solenoid with the scan tool to allow the air to purge. Once smoke is seen at the canister vent solenoid, close the canister vent solenoid with the scan tool.*

Introduce smoke from the VACUTEC Smoke Machine Fuel EVAP Emissions System Tester into the EVAP system and verify that smoke is exiting the fuel tank filler pipe neck area. For additional information, refer to the manufacturer's instructions.

9. Remove the supplemental refueling adapter once smoke is observed exiting the fuel tank filler pipe neck area.
10. Continue to enter smoke into the system for 60 seconds to obtain pressure.
11. Press and release the remote start button in intervals of 15 seconds ON and 15 seconds OFF while checking for exiting smoke.
12. Use the halogen light provided with the VACUTEC Smoke Machine Fuel EVAP Emissions System Tester to follow the EVAP system path and look for smoke exiting at the source of the leak(s).
13. Repair any leaks as necessary.
14. Repeat the leak test until the system passes.