1. Description

This procedure describes the removal and replacement of a charcoal canister. Inspection and evaluation requirements are also included.

2. Purpose

The purpose of this procedure is to provide industry-accepted procedures for the testing, repair, and replacement of a charcoal canister. This procedure is intended for use by professionals who are qualified through training and experience.

3. Referenced Documents

The following documents are considered part of this procedure by reference.

3.1 Procedures
HM01 Hazardous Materials
PS01 Personnel Safety

3.2 Other Information
Equipment-specific information
Vehicle-specific repair information
4. Equipment And Material Requirements

4.1 Testing Equipment

The use of this testing equipment is included in this procedure:

- hand vacuum pump/gauge
- digital volt-ohm meter (DVOM)

5. Damage Analysis

5.1 Charcoal Canister

Inspect the charcoal canister for these conditions:

- cracks or other damage
- fuel leaks
- fuel vapor odor

Perform a visual inspection and vacuum check. A damaged or leaking charcoal canister must be replaced.

5.2 Canister Filter

Some charcoal canisters have a replaceable filter. Replace the filter if any of these conditions exist:

- dirty
- plugged
- damaged
6. Personnel Safety

6.1 General Safety
General safety information is in PS01.

6.2 Safety With Fuel Vapors
To prevent injury when working around fuel vapors:

- Keep sparks, open flame, or any heat source away from the area.
- Wear a vapor respirator.
- Keep the working area ventilated.
- Wear protective gloves to avoid skin contact.
- Store fuel-soaked cloths in a fireproof storage container.

7. Environmental Safety

7.1 Hazardous Materials
The filter from a charcoal canister, or the canister itself if the filter cannot be replaced, is considered hazardous waste, and must be disposed of properly.

Hazardous material safety information is in HM01.

8. Vehicle Protection

8.1 Spills
Immediately clean up any spilled fuel.
9. Repair Procedure

9.1 Charcoal Canister Replacement

To replace a charcoal canister:

- 1. Disconnect the electrical and vacuum lines from the canister.
- 2. Loosen the mounting fasteners. Discard any damaged fasteners.
- 3. Remove the charcoal canister.
- 4. Install the replacement charcoal canister on the vehicle.
- 5. Install the mounting fasteners. If the mounting fasteners are being replaced, use fasteners that are the same size and strength as the original fasteners.
- 6. Torque all fasteners to the vehicle maker’s recommendations.
- 7. Replace any damaged vacuum lines.
- 8. Test the performance of the evaporative emissions system following the vehicle maker’s recommendations. See 11.1.
- 9. Continue vehicle reassembly.

10. Use Of Recycled [Salvage] Parts

Does not apply.

11. Inspection And Testing

11.1 Testing A Replaced Charcoal Canister

After installing a charcoal canister, perform these tests of the evaporative emissions system, following the vehicle maker’s recommendations:

- fuel and vacuum leak tests with the engine running
- canister purge valve test with the engine off
- vacuum tests with the engine off
- electrical tests of system solenoids