

1-18 GENERAL INFORMATION AND MAINTENANCE

ings with the triangular portion pointing away from the fitting opening. Install the clip until the legs of the clip are locked on the outside of the body. Piloting with an index finger is necessary.

16. On 1992-up vehicles, install the fuel filter with the flow arrow facing the proper direction and tighten the filter retaining clamp.

17. On 1988-91 Town Cars, install the rubber insulator rings on the new filter (replace the insulator rings if the filter moves freely after the retainer is installed). Install the filter into the retainer with the flow arrow pointing out the open end of the retainer. Install the retainer on the bracket and tighten the mounting bolts to 27-44 inch lbs. (3-5 Nm).

a. Before installing the fitting on the filter, wipe the filter end with a clean cloth. Inspect the inside of the fitting to make sure it is free of dirt and/or obstructions.

b. Align the fitting and filter axially and push the fitting onto the filter end. When the fitting is engaged, a definite click will be heard. Pull on the fitting to make sure it is fully engaged.

18. Lower the vehicle and connect the negative battery cable.

19. Cycle the key (on-off, on-off.) at two second intervals. Do this three or four times, and check for leaks, before starting the vehicle.

PCV Valve

The crankcase ventilation system (PCV) must be operating correctly to provide complete scavenging of the crankcase vapors. Fresh air is supplied to the crankcase after passing through the air filter, mixed with the internal exhaust gases, passed through the PCV valve and into the intake manifold.

The PCV system should be checked at every oil change and serviced every 30,000 miles.

*** WARNING

Never operate an engine without a PCV valve or a ventilation system, for it can become damaged.

REMOVAL & INSTALLATION

♦ See Figures 50, 51 and 52

1. Locate the PCV valve — usually located either in the valve cover (3.8L or 4.6L engine) or in the intake manifold (5.0L engine).

2. Disconnect the crankcase ventilation tube from the positive crankcase ventilation valve.



Fig. 50 The PCV valve is located in the passenger side valve cover—4.6L engine

3. Remove the PCV valve from the PCV valve grommet.

To install:

4. Install the PCV valve into the grommet.

5. Connect the ventilation tube to the PCV valve.

Evaporative Canister

SERVICING

♦ See Figure 53

The evaporative canister requires no periodic servicing. However, a careful inspection of the canister and hoses should be made frequently. Replace damaged components as required.

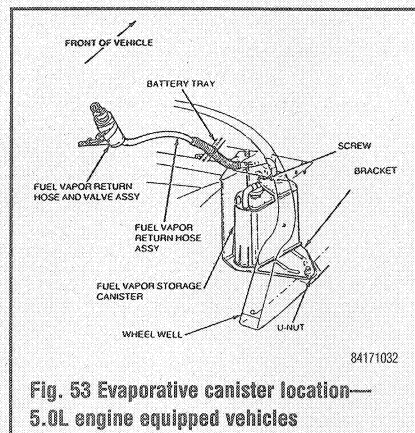


Fig. 53 Evaporative canister location—5.0L engine equipped vehicles

Battery

PRECAUTIONS

Always use caution when working on or near the battery. Never allow a tool to bridge the gap between the negative and positive battery terminals. Also, be careful not to allow a tool to provide a ground between the positive cable/terminal and any metal component on the vehicle. Either of these conditions will cause a short circuit, leading to sparks and possible personal injury.

Do not smoke or all open flames/sparks near a battery; the gases contained in the battery are very explosive and, if ignited, could cause severe injury or death.

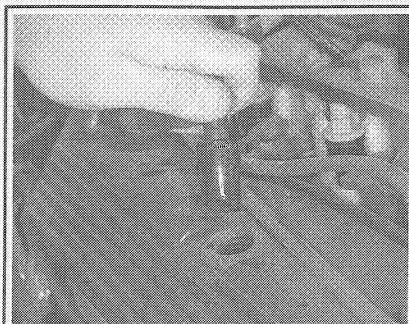


Fig. 51 Grasp the valve and gently remove it from the grommet in the valve cover

All batteries, regardless of type, should be carefully secured by a battery hold-down device. If not, the terminals or casing may crack from stress during vehicle operation. A battery which is not secured may allow acid to leak, making it discharge faster. The acid can also eat away at components under the hood.

Always inspect the battery case for cracks, leakage and corrosion. A white corrosive substance on the battery case or on nearby components would indicate a leaking or cracked battery. If the battery is cracked, it should be replaced immediately.

GENERAL MAINTENANCE

Always keep the battery cables and terminals free of corrosion. Check and clean these components about once a year.

Keep the top of the battery clean, as a film of dirt can help discharge a battery that is not used for long periods. A solution of baking soda and water may be used for cleaning, but be careful to flush this off with clear water. DO NOT let any of the solution into the filler holes. Baking soda neutralizes battery acid and will de-activate a battery cell.

Batteries in vehicles which are not operated on a regular basis can fall victim to parasitic loads (small current drains which are constantly drawing current from the battery). Normal parasitic loads may drain a battery on a vehicle that is in storage and not used for 6-8 weeks. Vehicles that have additional accessories such as a phone or an alarm system may discharge a battery sooner. If the vehicle is to be stored for longer periods in a secure area and the alarm system is not necessary, the negative battery cable should be disconnected to protect the battery.

Remember that constantly deep cycling a battery (completely discharging and recharging it) will shorten battery life.

BATTERY FLUID

♦ See Figure 54

Check the battery electrolyte level at least once a month, or more often in hot weather or during periods of extended vehicle operation. On non-sealed batteries, the level can be checked either through the case (if translucent) or by removing the cell caps. The electrolyte level in each cell should be kept filled to the split ring inside each cell, or the line marked on the outside of the case.

If the level is low, add only distilled water through the opening until the level is correct. Each cell must be checked and filled individually. Dis-

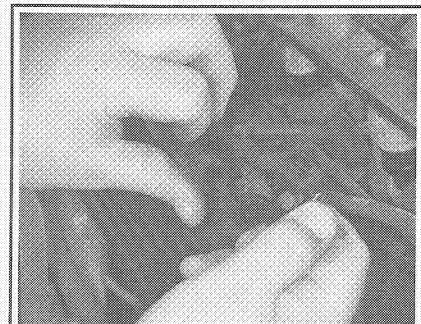


Fig. 52 Remove the valve from the hose by carefully twisting it out