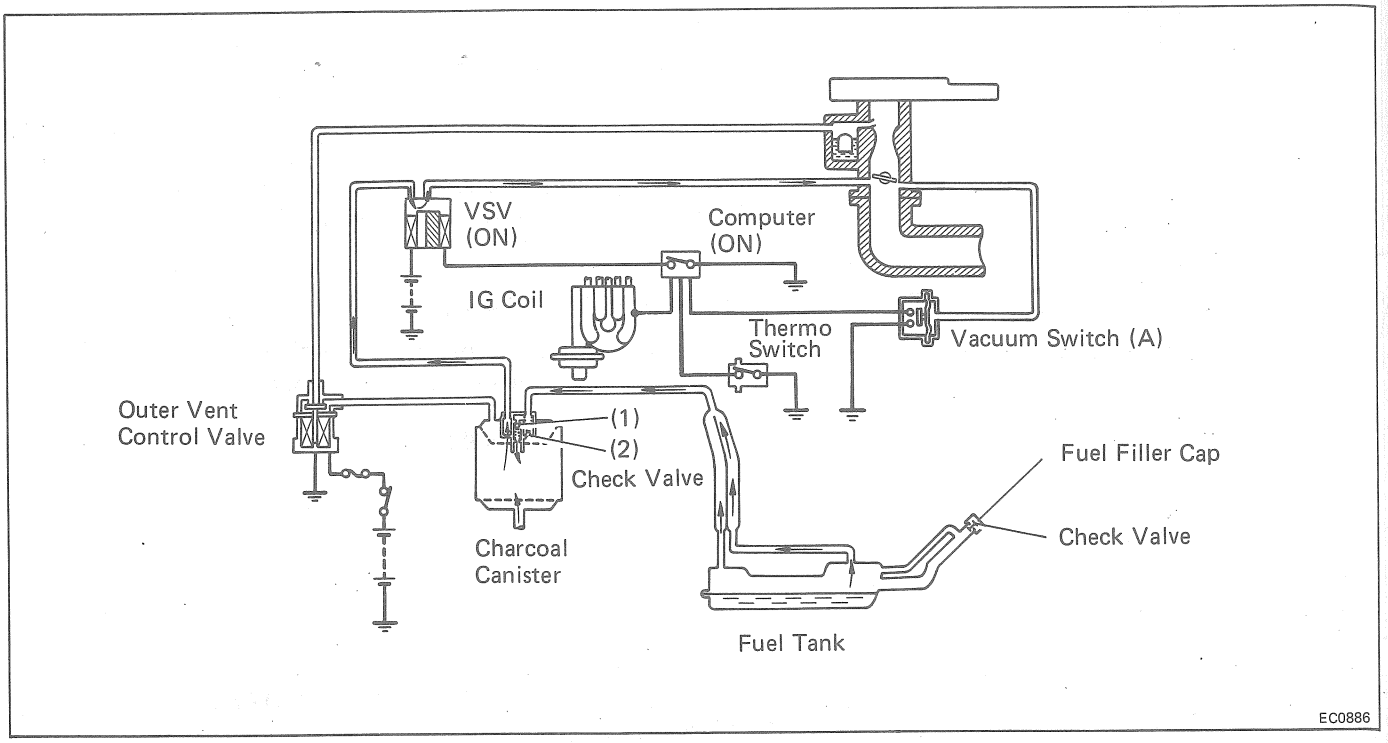
FUEL EVAPORATIVE EMISSION CONTROL (EVAP) SYSTEM (For USA Vehicles)



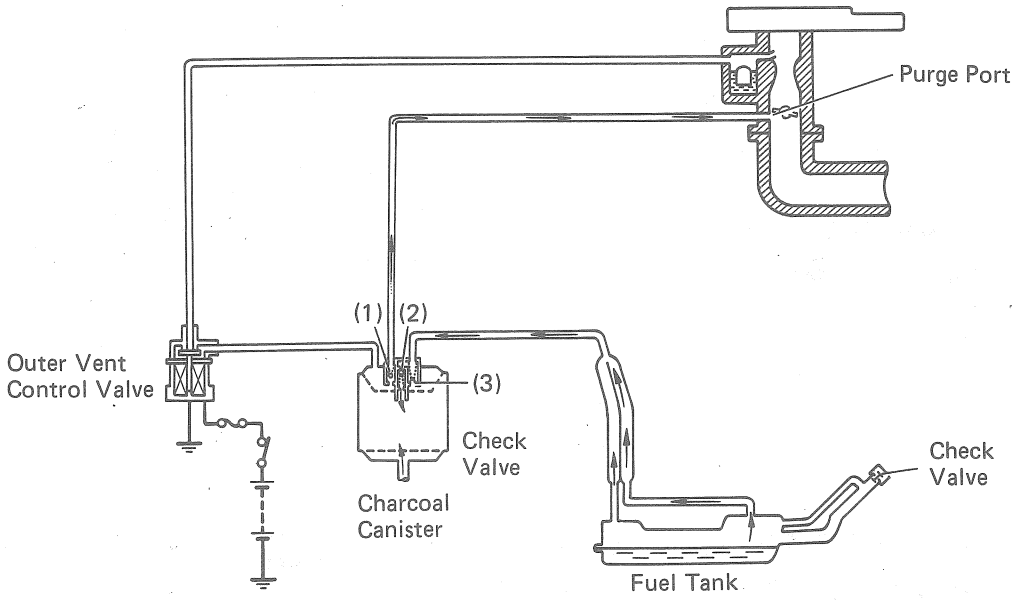
To reduce HC emission, evaporated fuel from the fuel tank and float chamber is routed through the charcoal canister to the intake manifold for combustion in the cylinders.

IG S/W	Outer Vent Control Valve	Coolant Temp.	Thermo Temp.	Engine RPM	Vacuum S/W (A)	VSV	Canister Check Valve (1)	Canister Check Valve (2)	Check Valve in Fuel Filler Cap	Evaporation Fuel (HC)
OFF	OPEN	—	—	—	—	—	—	—	—	HC from tank and float chamber is absorbed into the canister.
ON	CLOSED	Below 43°C (109°F)	ON	—	OFF	OFF	—	—	—	HC from tank is absorbed into the canister.
		Above 55°C (131°F)	OFF	Below 1,180 rpm	—	OFF*1	—	—	—	
				Between 1,600 and 1,900 rpm	—	ON	—	—	—	HC from canister is led into the intake manifold.
				Above 2,290 rpm	OFF	OFF*2	—	—	—	HC from tank is absorbed into the canister.
					ON	ON	—	—	—	HC from canister is led into the intake manifold.
High pressure in tank		—	—	—	—	—	OPEN	CLOSED	CLOSED	HC from tank is absorbed into the canister.
High vacuum in tank		—	—	—	—	—	CLOSED	OPEN	OPEN	(Air is led into the tank.)

Remarks: *1. When the throttle valve is slightly open and the vacuum switch (A) is on, however, the computer turns the VSV on and HC is led into the intake manifold.

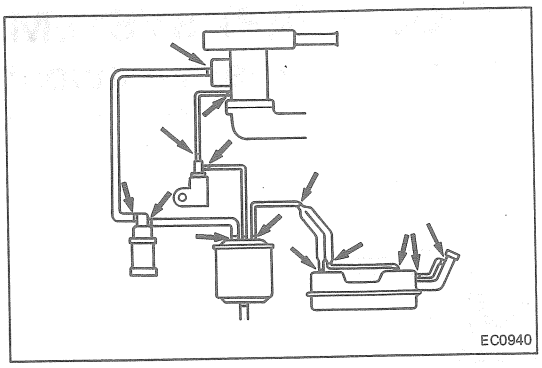
*2. When the deceleration fuel cut system is on, however, the computer turns the VSV off and HC is not led into the intake manifold (See page EC-47).

FUEL EVAPORATIVE EMISSION CONTROL (EVAP) SYSTEM (For Canada Vehicles)



To reduce HC emission, evaporated fuel from the fuel tank and float chamber is routed through the charcoal canister to the intake manifold for combustion in the cylinders.

IG S/W	Outer Vent Control Valve	Condition	Canister Check Valve (1)	Canister Check Valve (2)	Canister Check Valve (3)	Check Valve in Fuel Filler Cap	Evaporated Fuel (HC)
OFF	OPEN	—	—	—	—	—	HC from tank and float chamber is absorbed into the canister
ON	CLOSED	Idling and low speed	CLOSED	—	—	—	HC from tank is absorbed in the canister.
		Medium and high speed	OPEN	—	—	—	HC from canister is led into the intake manifold.
High pressure in tank		—	—	OPEN	CLOSED	CLOSED	HC from tank is absorbed in the canister.
High vacuum in tank		—	—	CLOSED	OPEN	OPEN	(Air is led into the tank.)


EC0940

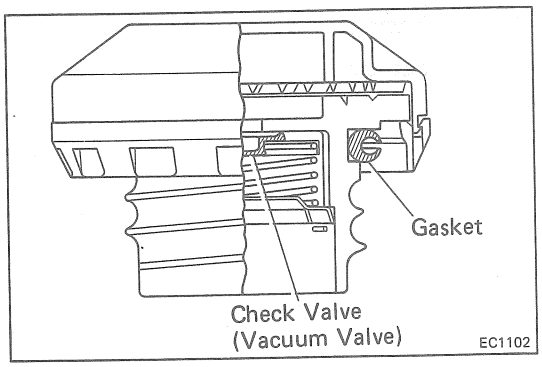
INSPECTION OF FUEL VAPOR LINES, FUEL TANK AND FUEL FILLER CAP

1. VISUALLY INSPECT LINES AND CONNECTIONS

Look for loose connections, sharp bends or damage.

2. VISUALLY INSPECT FUEL TANK

Look for deformation, cracks or fuel leakage.

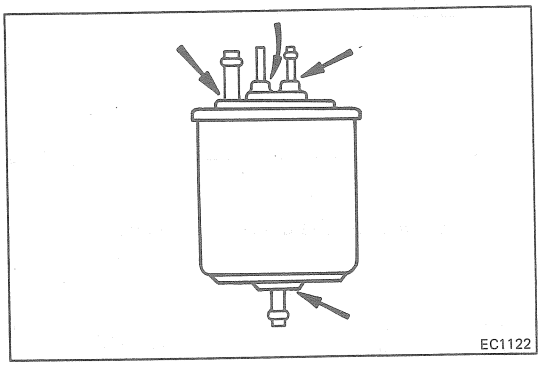


EC1102

3. VISUALLY INSPECT FUEL FILLER CAP

Look for a damaged or deformed gasket and cap.

If necessary, repair or replace the cap.

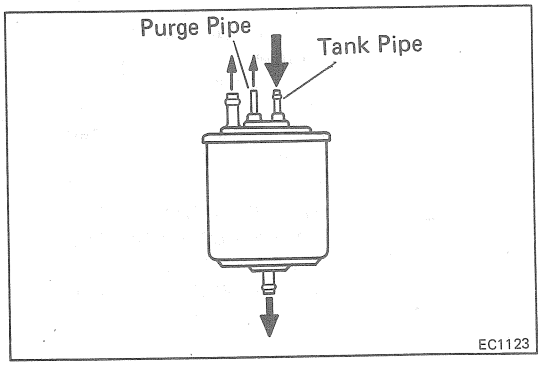

EC1122

INSPECTION OF CHARCOAL CANISTER

1. REMOVE CHARCOAL CANISTER

2. VISUALLY INSPECT CHARCOAL CANISTER

Look for cracks or damage.

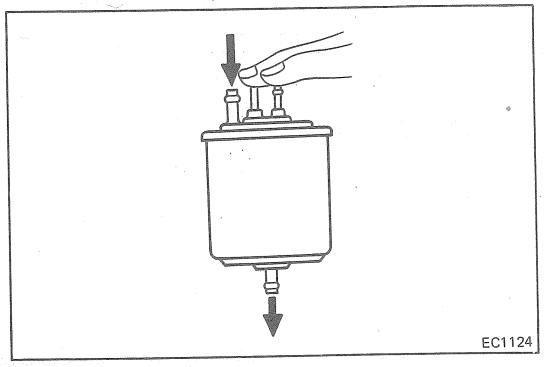


EC1123

3. CHECK FOR CLOGGED FILTER AND STUCK CHECK VALVE

Using low pressure compressed air, blow into the tank pipe and check that the air flows without resistance from the other pipes.

If a problem is found, replace the charcoal canister.


EC1124

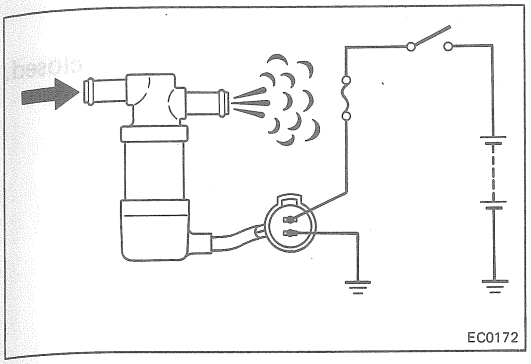
4. CLEAN FILTER IN CANISTER

Clean the filter by blowing 3 kg/cm² (43 psi, 294 kPa) of compressed air into the pipe to the outer vent control valve while holding the other upper canister pipes closed.

NOTE:

- Do not attempt to wash the canister.
- No activated carbon should come out.

5. INSTALL CHARCOAL CANISTER

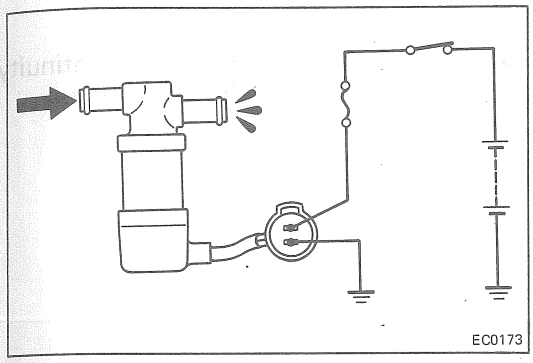


INSPECTION OF OUTER VENT CONTROL VALVE

CHECK OUTER VENT CONTROL VALVE OPERATION

(a) Disconnect the hoses from the valve.

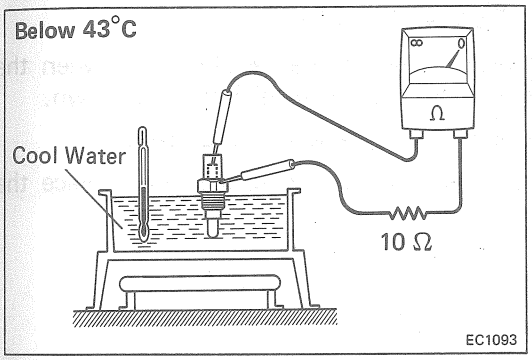
(b) Check that the valve is open when the ignition switch is OFF.



(c) Check that the valve is closed when the ignition switch is ON.

(d) Reconnect the hoses to the proper locations.

If the valve does not operate, check the fuse and the wiring connections.



INSPECTION OF THERMO SWITCH (Ex. Canada)

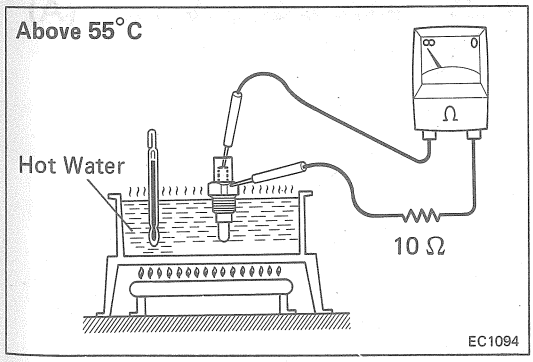
CHECK THERMO SWITCH BY USING OHMMETER

(a) Drain the coolant from the radiator into a suitable container.

(b) Remove the thermo switch from the intake manifold.

(c) Cool the thermo switch to below 43°C (109°F).

(d) Using an ohmmeter, check that there is continuity.

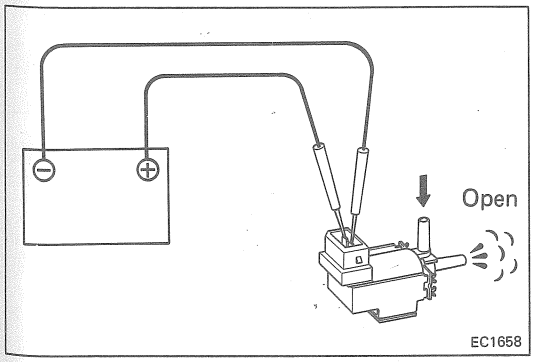


(e) Heat the switch to above 55°C (131°F) with hot water.

(f) Check that there is no continuity.

(g) Apply liquid sealer to the threads of the switch and reinstall.

(h) Fill the radiator with coolant.

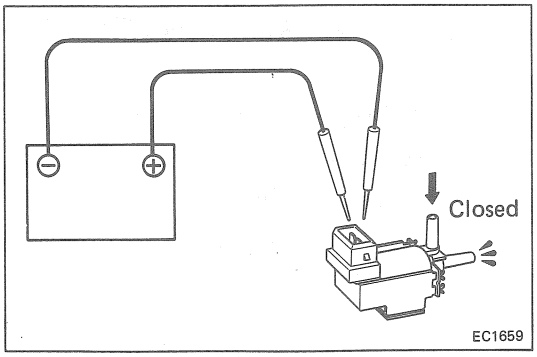


INSPECTION OF VSV (Ex. Canada)

1. CHECK VACUUM CIRCUIT CONTINUITY IN VSV BY BLOWING AIR INTO PIPE

(a) Connect the VSV terminals to the battery terminals as shown.

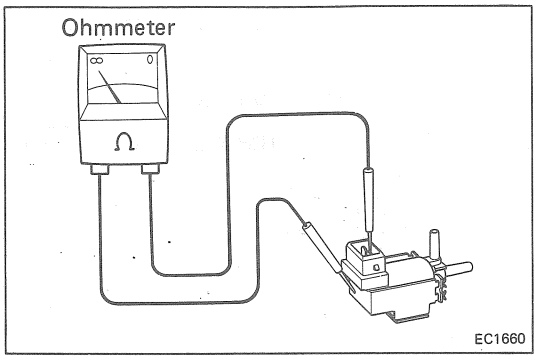
(b) Blow into the pipe, and check that the VSV is open.



(c) Disconnect the battery positive (+) terminal.

(d) Blow into the pipe and check that the VSV is closed.

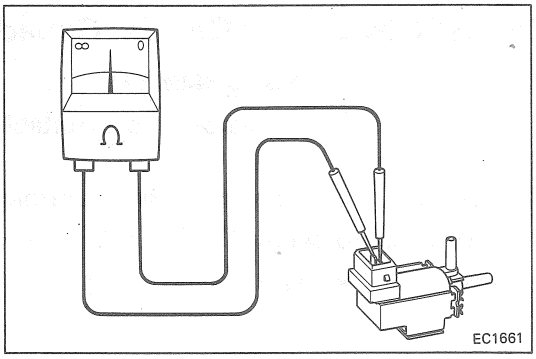
If a problem is found, replace the VSV.



2. CHECK FOR SHORT CIRCUIT

Using an ohmmeter, check that there is no continuity between the positive (+) terminal and the VSV body.

If there is continuity, replace the VSV.



3. CHECK FOR OPEN CIRCUIT

Using an ohmmeter, measure the resistance between the positive (+) terminal and the other terminals as shown.

Specified resistance: 38 – 44 Ω at 20°C (68°F)

If the resistance is not within specification, replace the VSV.

INSPECTION OF VACUUM SWITCH (A)

(See page EC-26)