

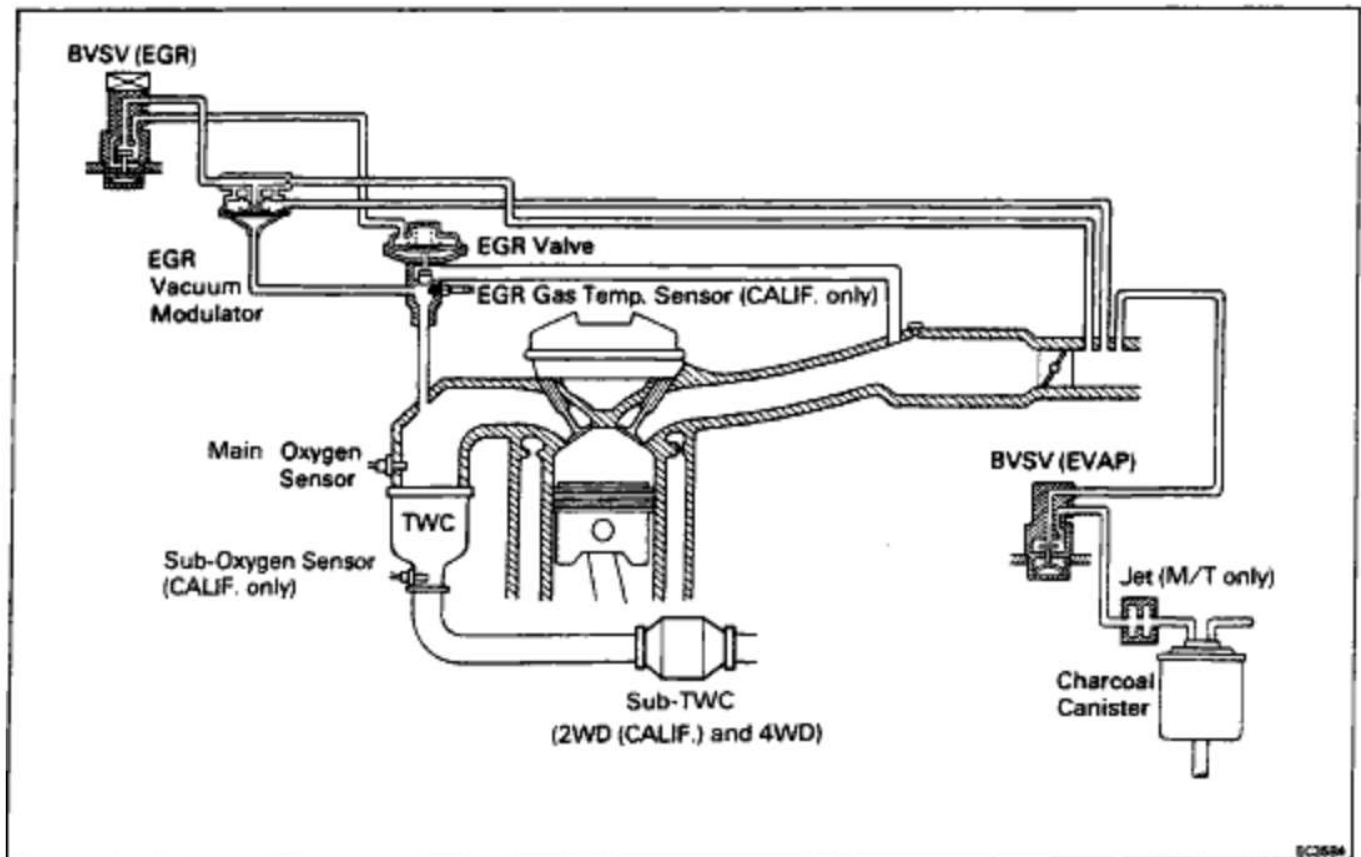
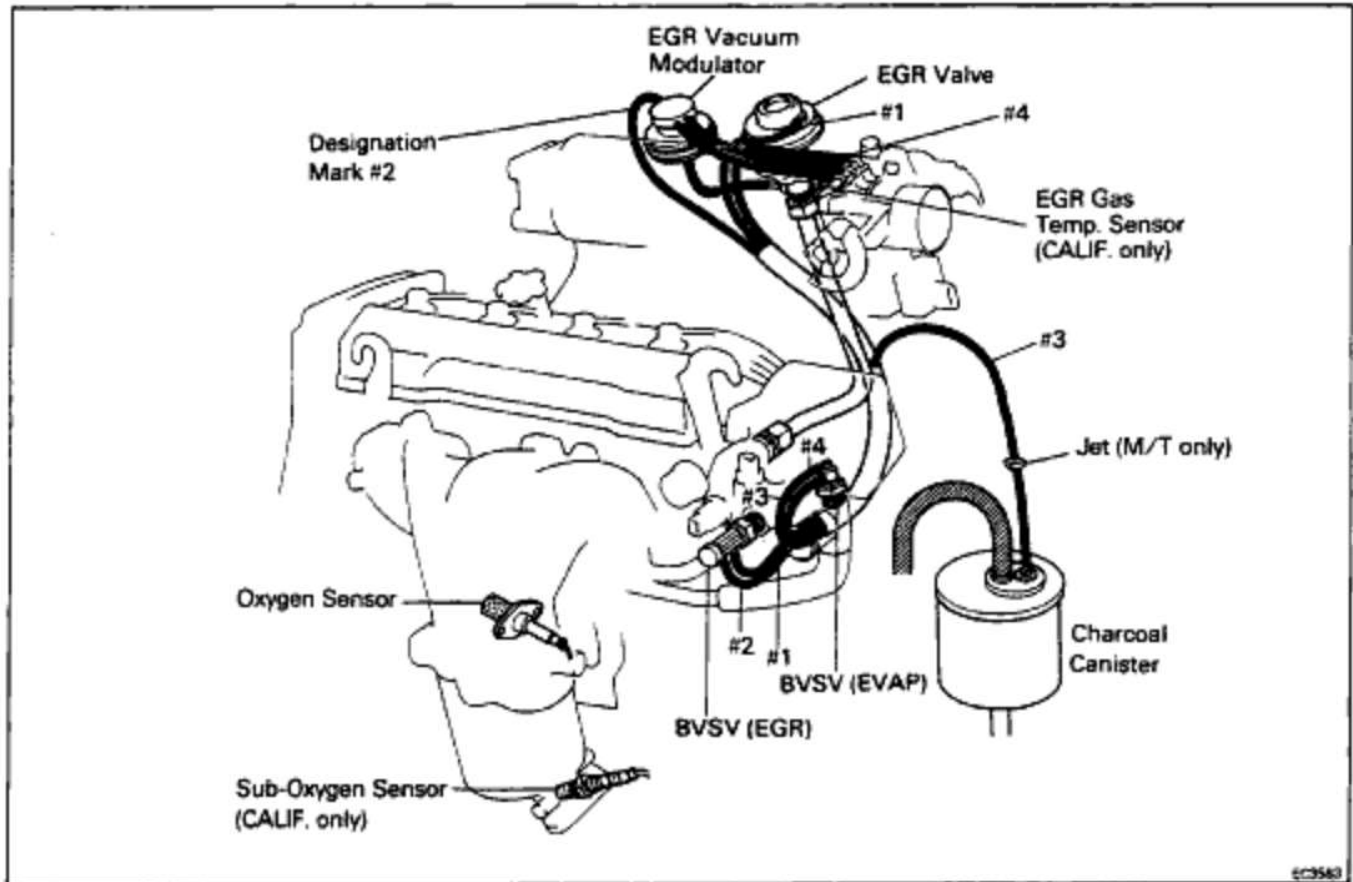
EMISSION CONTROL SYSTEMS

EC-2**EMISSION CONTROL SYSTEMS (3S-FE) – System Purpose****SYSTEM PURPOSE**

System	Abbreviation	Purpose
Positive crankcase ventilation Fuel evaporative emission control Exhaust gas recirculation Three-way catalyst Electronic fuel injection*	PCV EVAP EGR TWC EFI	Reduced blow-by gas (HC) Reduced evaporative HC Reduces NOx Reduces HC ₁ CO and NOx Regulates all engine conditions for reduction of exhaust emissions.

Remarks *For inspection and repair of the EFI system, refer to the EFI section of this manual.

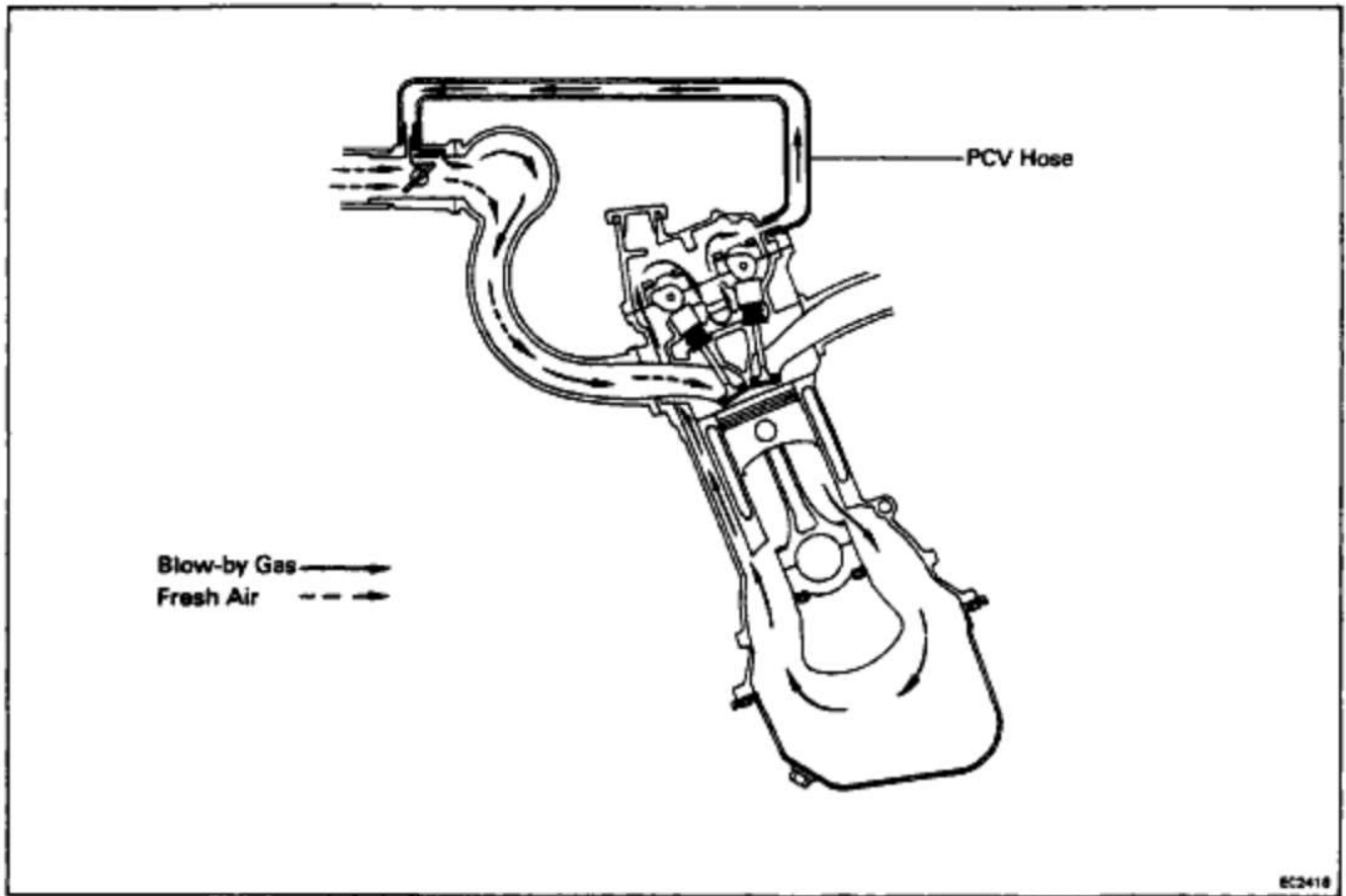
COMPONENT LAYOUT AND SCHEMATIC DRAWING



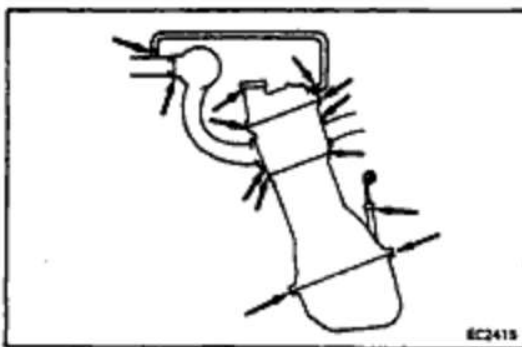
EC-4

EMISSION CONTROL SYSTEMS (3S-FE) — Positive Crankcase Ventilation (PCV) System

POSITIVE CRANKCASE VENTILATION (PCV) SYSTEM



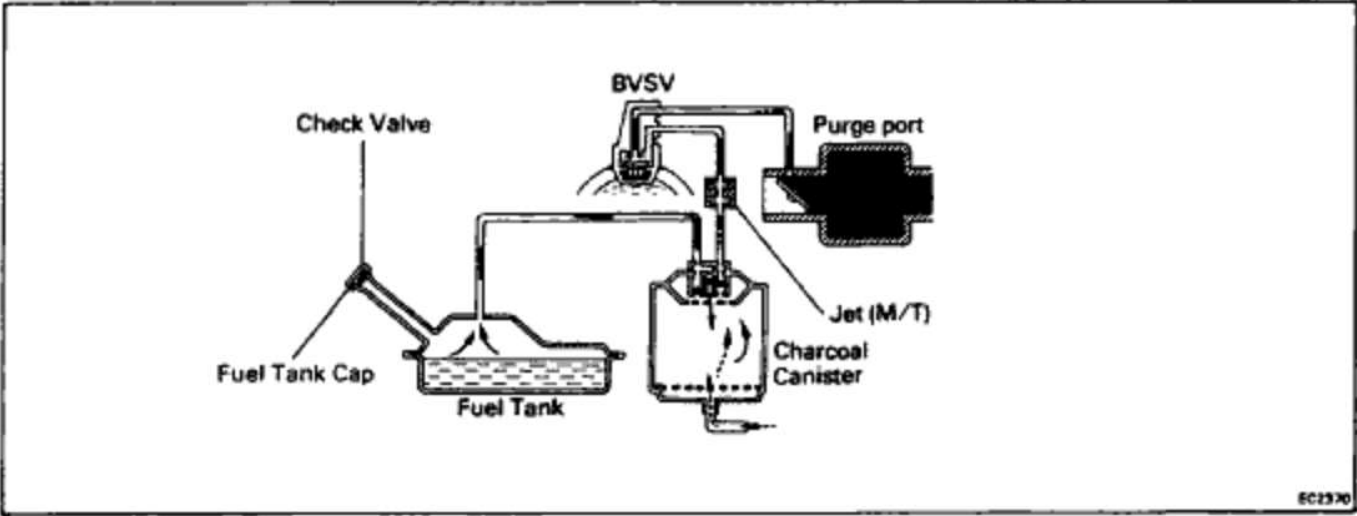
To reduce HC emission, crankcase blow-by gas (HC) is routed to the intake manifold for combustion in the cylinders.



INSPECTION OF PCV HOSE AND CONNECTIONS

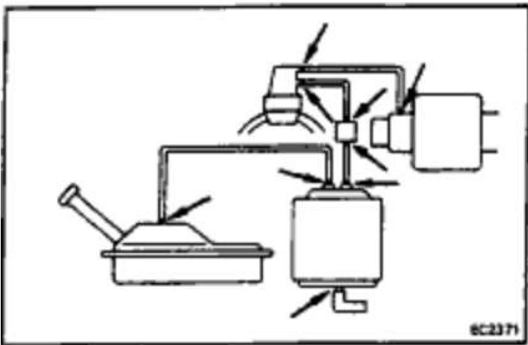
VISUALLY INSPECT HOSE AND CONNECTIONS
Check for cracks, leaks, or damage.

FUEL EVAPORATIVE EMISSION CONTROL (EVAP) SYSTEM



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

Coolant Temp.	SVSV	Throttle Valve Opening	Canister Check Valve			Check Valve in Cap	Evaporated Fuel (HO
			(1)	(2)	(3)		
Below 35°C (95°F)	CLOSED	—	—	—	—	—	NC from tank is absorbed into the canister.
Above 54°C (129°F)	OPEN	Positioned below purge port	CLOSED	—	—	—	
		Positioned above purge port	OPEN	—	—	—	HC from canister is led into air intake chamber.
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 fuel tank.



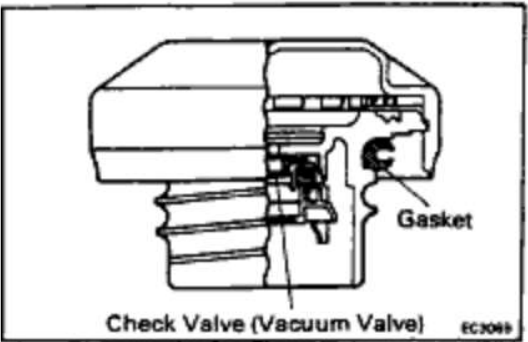
INSPECTION OF FUEL VAPOR LINES, FUEL TANK AND TANK CAP

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.

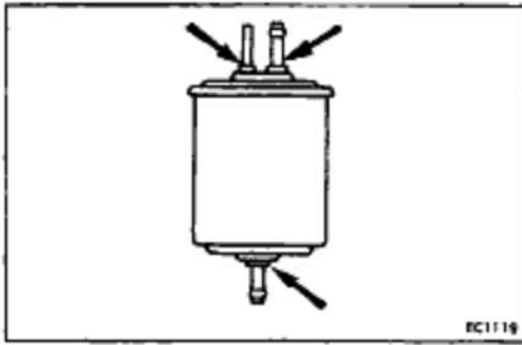


3. VISUALLY INSPECT FUEL TANK CAP

Check if the cap and/or gasket are deformed or damaged if necessary, repair or replace. the cap.

EC-6

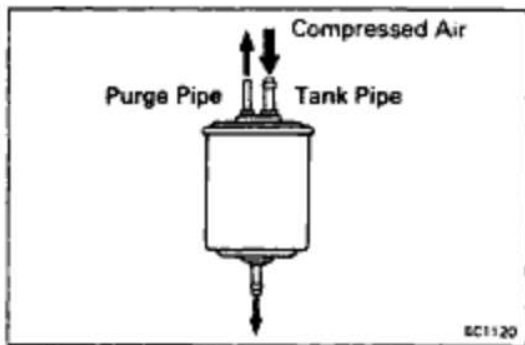
EMISSION CONTROL SYSTEMS (3S-FE) — Fuel Evaporative Emission Control (EVAP) System



INSPECTION OF CHARCOAL CANISTER

1. REMOVE CHARCOAL CANISTER
2. REMOVE DUST COVER FROM CHARCOAL CANISTER
3. VISUALLY INSPECT CHARCOAL CANISTER

Look for cracks or damage.

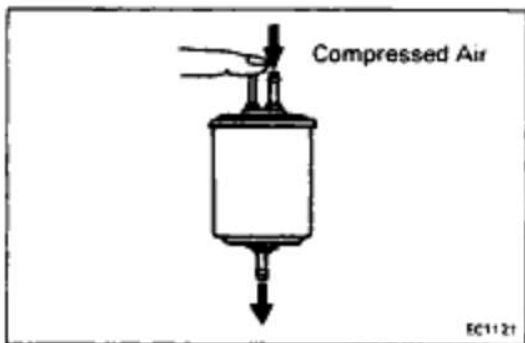


4. CHECK FOR CLOGGED FILTER AND STUCK CHECK VALVE

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

(b) Blow into the purge pipe and check that air does not flow from the other pipes.

If a problem is found, replace the charcoal canister.



5. CLEAN FILTER IN CANISTER

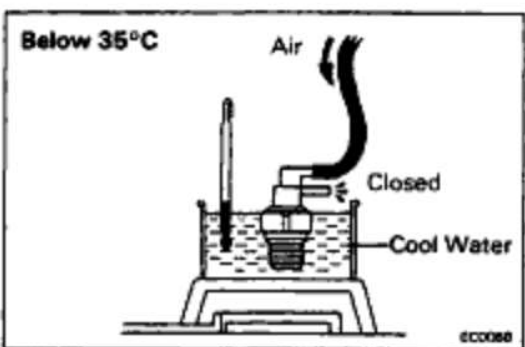
Clean the filter by blowing 3 kg/cm² (43 psi, 294 kPa) of compressed air into the tank pipe while holding the other upper canister pipe closed.

HINT:

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

6. REINSTALL DUST COVER TO CHARCOAL CANISTER

7. REINSTALL CHARCOAL CANISTER



INSPECTION OF BVS

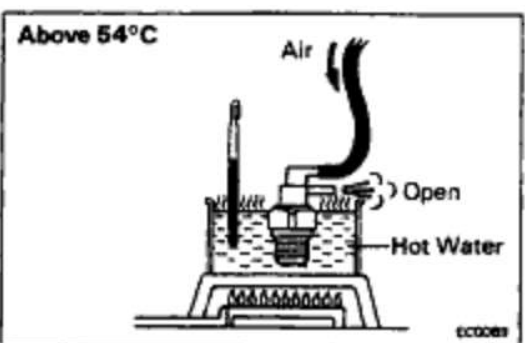
CHECK BVS BY BLOWING AIR INTO PIPE

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

(b) Remove the BVS.

(c) Cool the BVS to below 35°C (95°F) with cool water.

(d) Blow air into a pipe and check that the BVS is closed.



(e) Heat the BVS to above 54°C (129°F) with hot water.

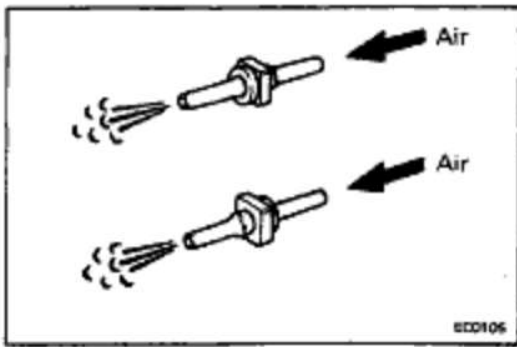
(f) Blow air into a pipe and check that the BVS is open.

If a problem is found, replace the BVS.

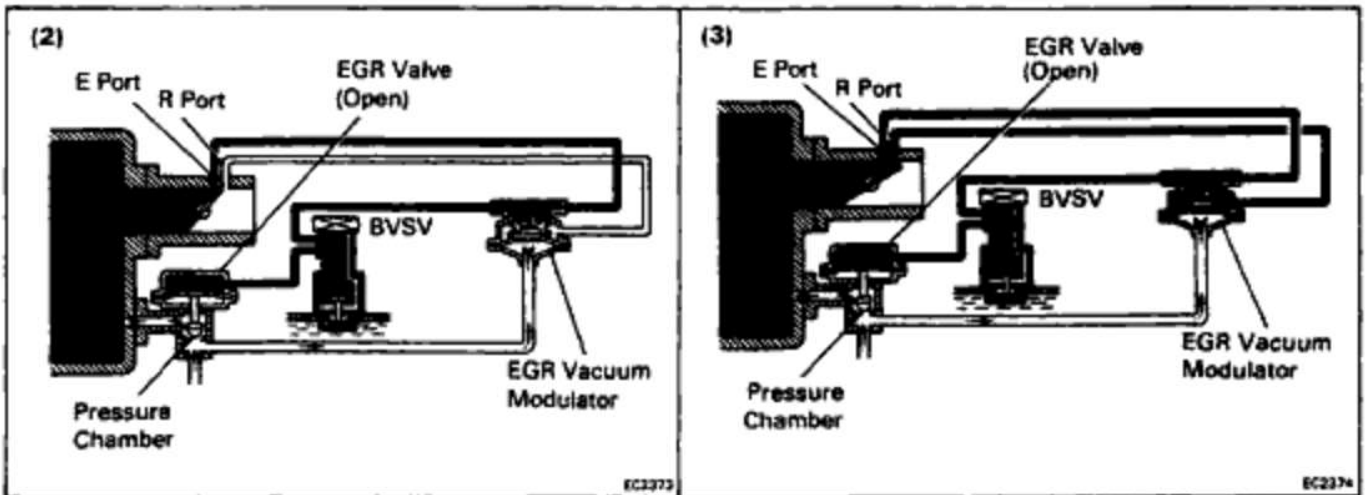
(g) Apply adhesive to two or three threads of the BVS, and re-install.

Adhesive: Part No. 08833-00070, THREE BOND 1324 or equivalent

(h) Refill the radiator with coolant.

**INSPECTION OF JET (M/T only)****CHECK JET BY BLOWING AIR FROM EACH SIDE**

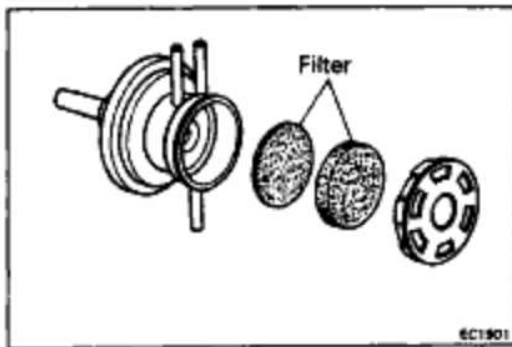
Check for stoppage.



To reduce NOx emission, part of the exhaust gases are recirculated through the EGR valve to the intake manifold to lower the maximum combustion temperature.							
Coolant Temp.	BVSV	Throttle Valve Opening Angle	Pressure in the EGR Valve Pressure Chamber		EGR Vacuum Modulator	EGR Valve	Exhaust Gas
Below 45°C (113°F)	CLOSED	—	—		—	CLOSED	Not recirculated
Above 66°C (151°F)	OPEN	Positioned below E port	—		—	CLOSED	Not recirculated
		Positioned between E port and R port	(1) LOW	*Pressure constantly alternating between low and high	OPENS passage to atmosphere	CLOSED	Not recirculated
			(2) HIGH		CLOSES passage to atmosphere	OPEN	Recirculated
		Positioned above R port	(3) HIGH	**	CLOSES passage to atmosphere	OPEN	Recirculated (increase)

Remarks: * Pressure increase → Modulator closes → EGR valve opens → Pressure drops
 ← EGR valve closes ← Modulator opens ←

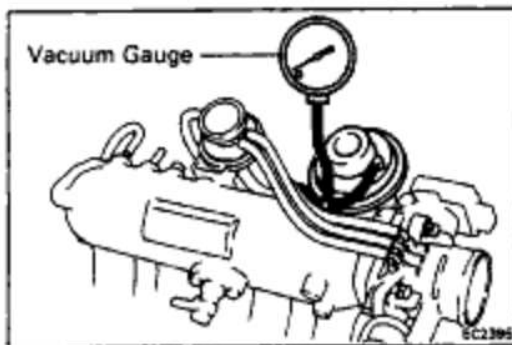
** When the throttle valve is positioned above the R port, the EGR vacuum modulator will close the atmosphere passage and open the EGR valve to increase the EGR gas, even if the exhaust pressure is insufficiently low.



INSPECTION OF EGR SYSTEM

1. CHECK AND CLEAN FILTERS IN EGR VACUUM MODULATOR

- Check the filters for contamination or damage.
- Using compressed air, clean the filters

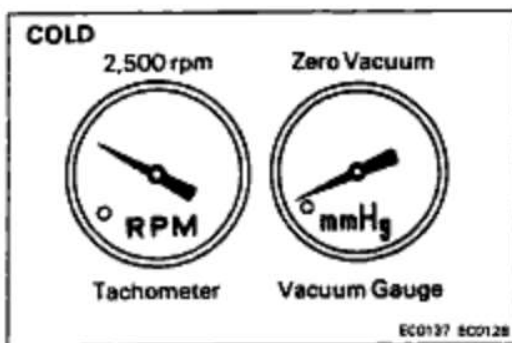


2. PREPARATION

Using a 3-way connector, connect a vacuum gauge to the hose between the EGR valve and vacuum pipe.

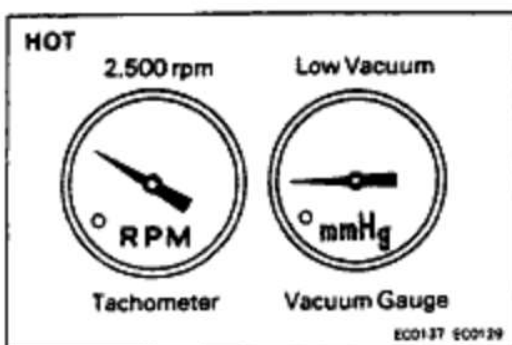
3. CHECK SEATING OF EGR VALVE

Start the engine and check that the engine starts and runs at idle.



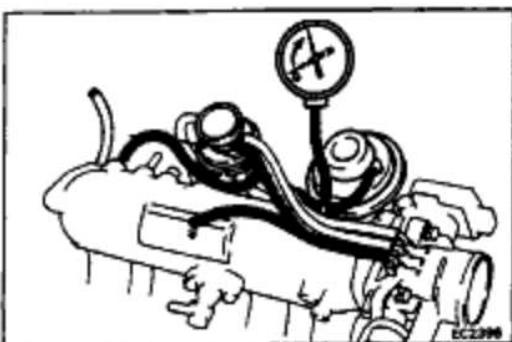
4. CHECK 6VSV WITH COLD ENGINE

- The coolant temperature should be below 45°C (113°F).
- Check that the vacuum gauge indicates zero at 2,500 rpm.



5. CHECK 6VSV AND EGR VACUUM MODULATOR WITH HOT ENGINE

- Warm up the engine.
- Check that the vacuum gauge indicates low vacuum at 2,500 rpm.



- Disconnect the vacuum hose from port R of the EGR vacuum modulator and connect port R directly to the intake manifold with another hose.

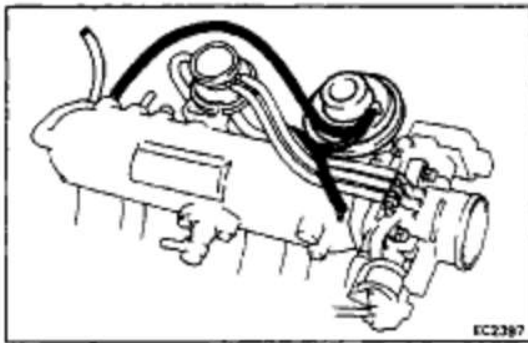
- Check that the vacuum gauge indicates high vacuum at 2,500 rpm.

HINT: As large amount of EGR gas enters, the engine will misfire slightly.

- Remove the vacuum gauge and reconnect the vacuum hoses to the proper locations.

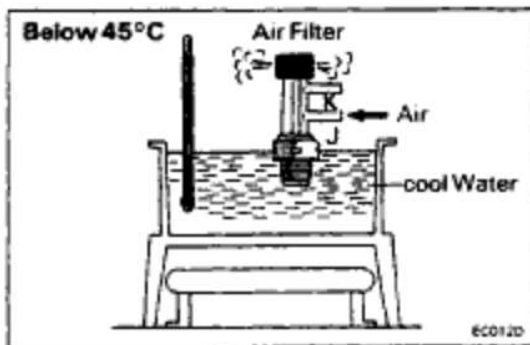
EC-10

EMISSION CONTROL SYSTEMS (3S-FE) — Exhaust Gas Recirculation (EGR) System

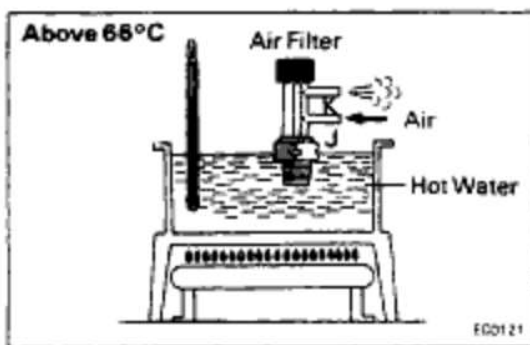
**6. CHECK EGR VALVE**

- Apply vacuum directly to the EGR valve with the engine idling.
- Check that the engine runs rough or dies.
- Reconnect the vacuum hoses to the proper locations.

IF NO PROBLEM IS FOUND WITH THIS INSPECTION, SYSTEM IS OK; OTHERWISE INSPECT EACH PART

**INSPECTION OF BVS****CHECK BVS BY SLOWING AIR INTO PIPE**

- Drain the coolant from the radiator into a suitable container.
- Remove the BVS from the water outlet.
- Cool the BVS to below 45°C (113°F) with cool water.
- Check that air flows from pipe J to the air filter.



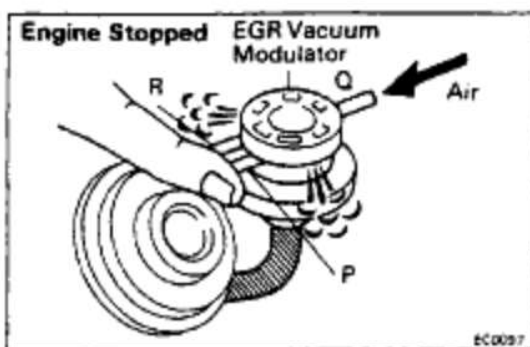
- Heat the BVS to above 66°C (51°F) with hot water.
- Check that air flows from pipe J to pipe K.

If a problem is found, replace the BVS.

- Apply adhesive to two or three threads of the BVS, and reinstall.

Adhesive: Part No. 08833-00070, THREE BOND 1324 or equivalent

- Refill the radiator with coolant.

**INSPECTION OF EGR VACUUM MODULATOR****CHECK EGR VACUUM MODULATOR OPERATION**

- Disconnect the vacuum hoses from ports P, Q and R of the EGR vacuum modulator.
- Block ports P and R with your finger.
- Blow air into port Q and check that the air passes through to the air filter side freely.
- Start the engine and maintain speed at 2,500 rpm.
- Repeat the above test. Check that there is a strong resistance to airflow.

- Reconnect the vacuum hoses to the proper locations.

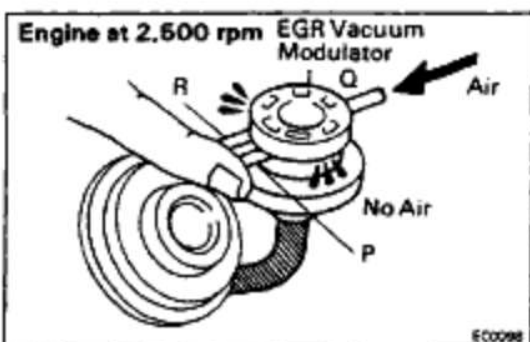
INSPECTION OF EGR VALVE**1. REMOVE EGR VALVE**

Check for sticking and heavy carbon deposits.

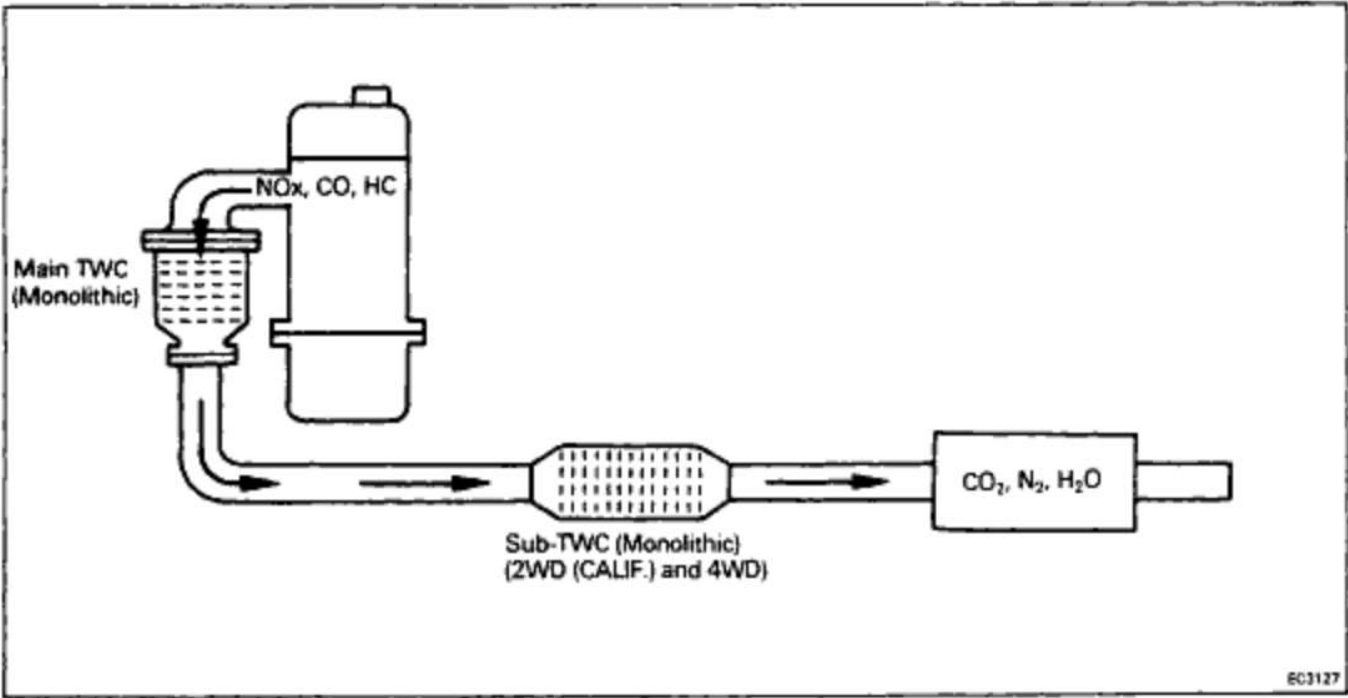
If a problem is found, replace the valve.

2. REINSTALL EGR VALVE

Install a new gasket.



THREE-WAY CATALYST (TWC) SYSTEM



To reduce HC, CO and NOx emissions, they are oxidized, reduced and converted to nitrogen (N2), carbon dioxide (CO2) and water (H2O) by the catalyst.

Exhaust Port		Main TWC		Sub-TWC		Exhaust Gas
HC, CO AND NOx	→	OXIDATION AND REDUCTION	→	OXIDATION AND REDUCTION	→	CO2 H2O N2

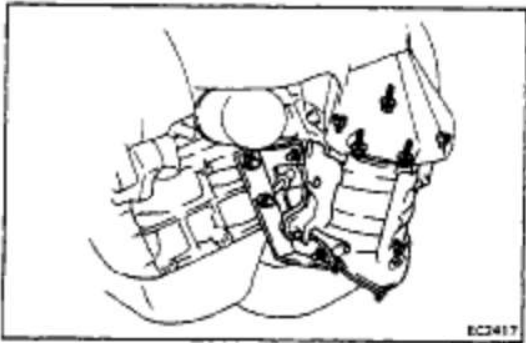
INSPECTION OF EXHAUST PIPE ASSEMBLY

CHECK CONNECTIONS FOR LOOSENESS OR DAMAGE

REPLACEMENT OF CATALYTIC CONVERTERS

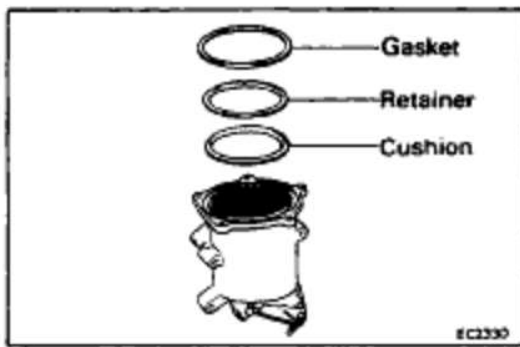
1. REMOVE CONVERTERS

- (a) Jack up the vehicle.
- (b) Check that the converter is cool.
- (e) Remove the suspension lower crossmember.
(See page EM-44)
- (d) Remove the front exhaust pipe (Sub-converter).
 - Loosen the bolt, and disconnect the clamp the exhaust pipe bracket.
 - Remove the three nuts, and remove the exhaust pipe. Remove the three nuts, and remove the exhaust pipe. Remove the gasket.
- (e) Remove the two bolts, two nuts and two converter stays.
- (f) Remove the three bolts, two nuts, gasket, retainer, cushion and main converter.
- (g) Remove the eight bolts and two heat insulators from the main converter.



EC-12

EMISSION CONTROL SYSTEMS (3S-FE) – Way Catalyst (TWC) System

**2. INSTALL CONVERTERS**

(a) Install the two heat insulators to the main converter with the nine bolts.

(b) Place a new cushion, retainer and gasket on the main converter.

(c) Install the main converter with the three bolts and two nuts. Torque the bolts and nuts.

Torque: 300 kg-cm (21 ft-lb, 29 N-m)

(d) Install the two converter stays with the two bolt and two nuts.

Torque: 650 kg-cm (46 ft-lb, 64 N-m)

(e) Install the front exhaust pipe (Sub-converter).

- Place new two gaskets on the exhaust pipe.
- Install the exhaust pipe with the two bolts and five nuts.

Torque: To converter 630 kg-cm (46 ft-lb, 63 N-m)

To center exhaust pipe

440 kg-cm (32 ft-lb, 43 N-m)

- Install the exhaust pipe clamp with the bolt.

(f) Install the suspension lower crossmember

(See page [EM-50](#))

SYSTEM PURPOSE

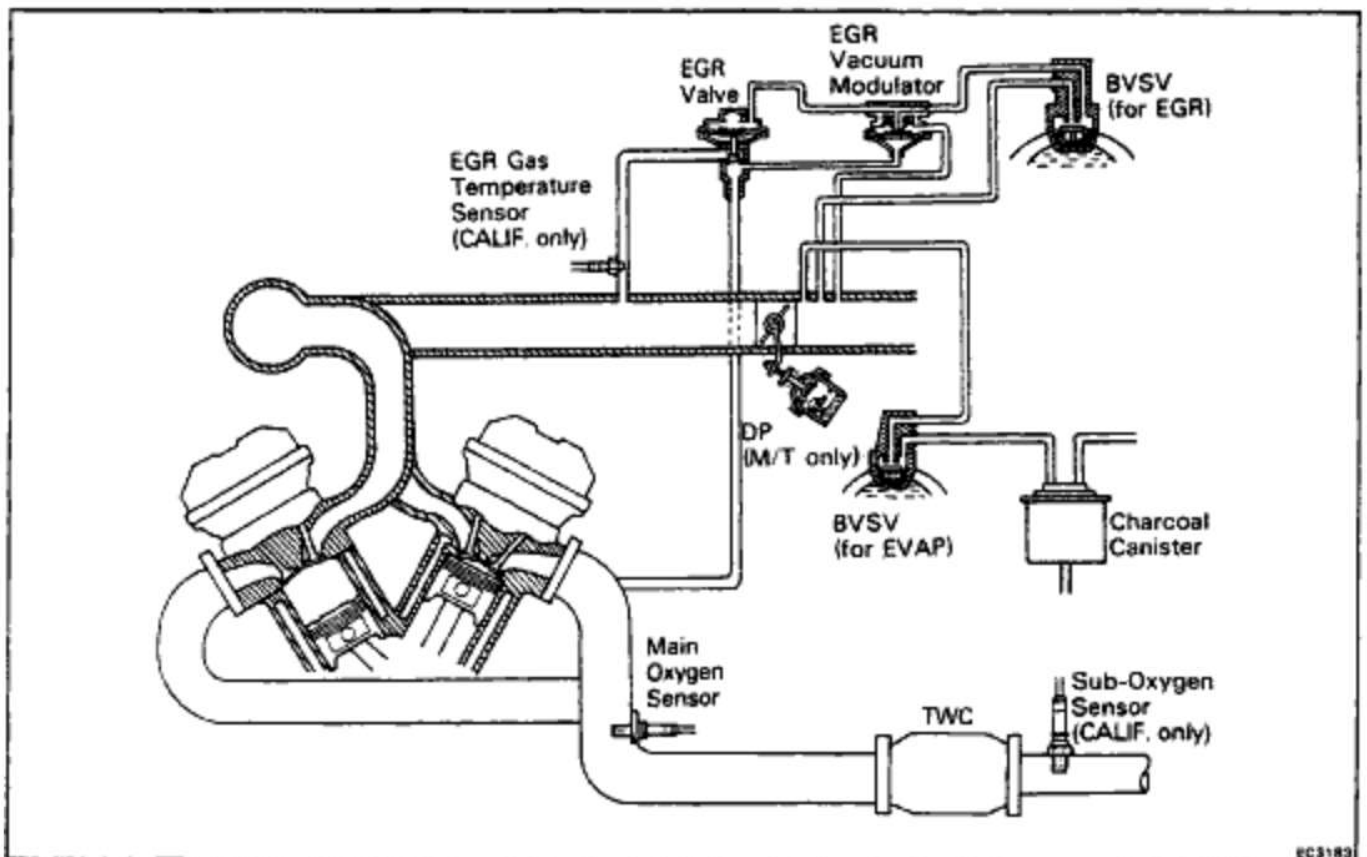
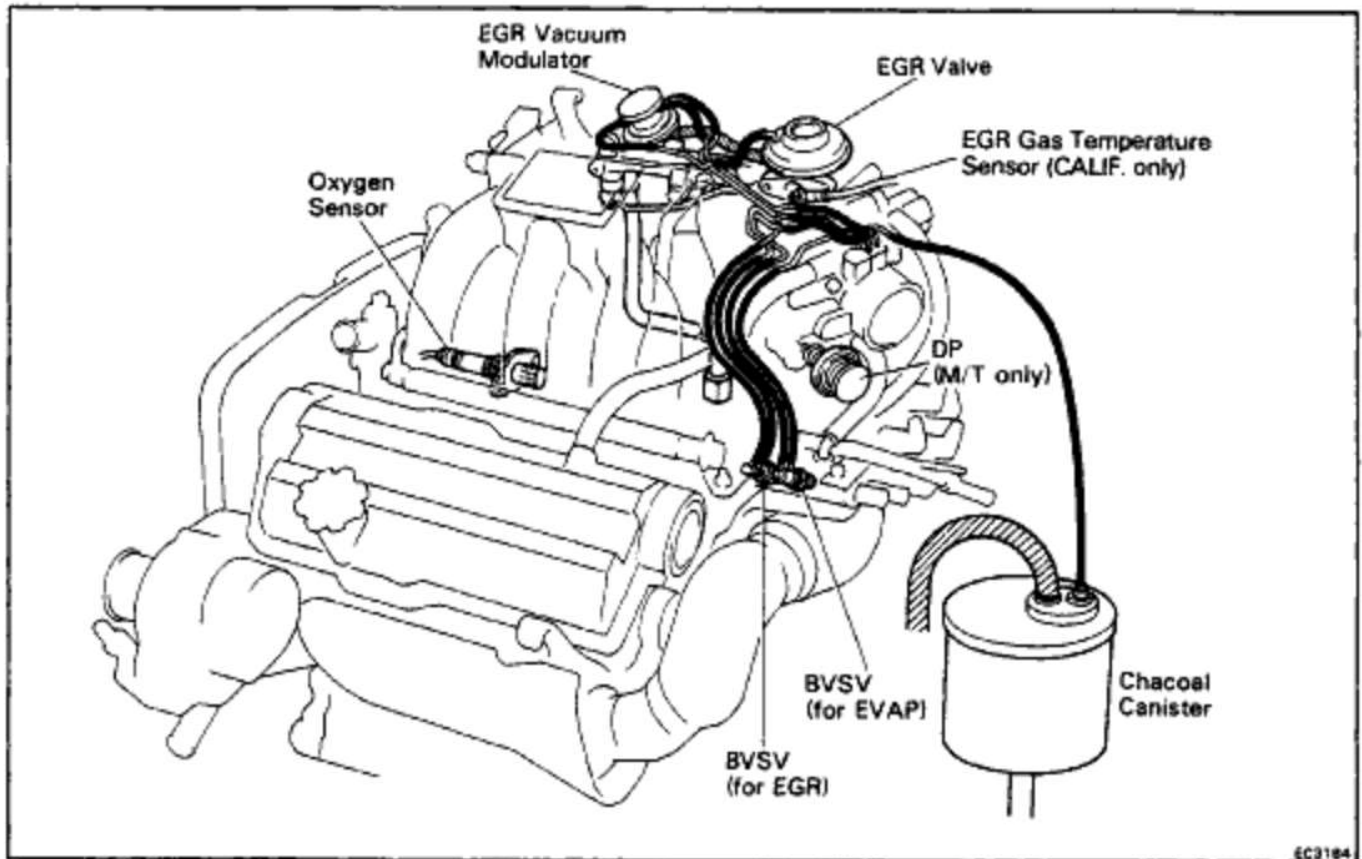
System	Abbreviation	Purpose
Positive Crankcase ventilation Fuel evaporative emission control Dash pot Exhaust gas recirculation Three-way catalyst Electronic fuel injection*	PCV EVAP DP EGR TWC EFI	Reduces blow-by gas (HC) Reduces evaporative HC Reduces HC and CO Reduces NOx Reduces HC, CO and NOx Regulates all engine conditions for reduction of exhaust emissions.

Remarks *For inspection and repair of the EFI system, refer to EFI section of this manual.

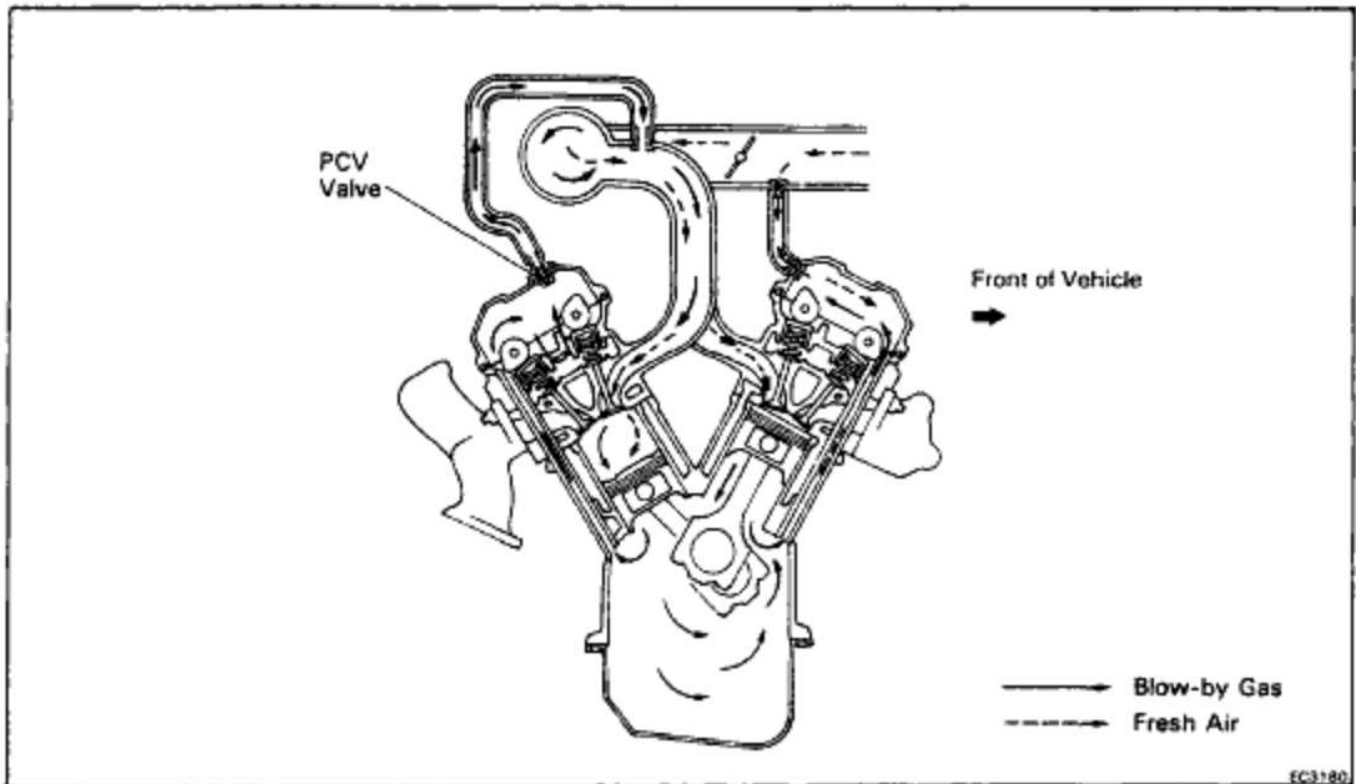
EC-14

EMISSION CONTROL SYSTEMS (2VZ-FE) — Component Layout and Schematic Drawing

COMPONENT LAYOUT AND SCHEMATIC DRAWING

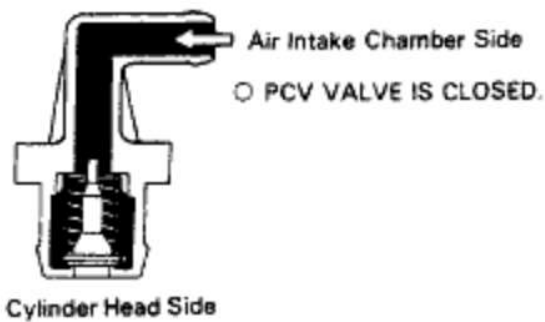


POSITIVE CRANKCASE VENTILATION (PCV) SYSTEM

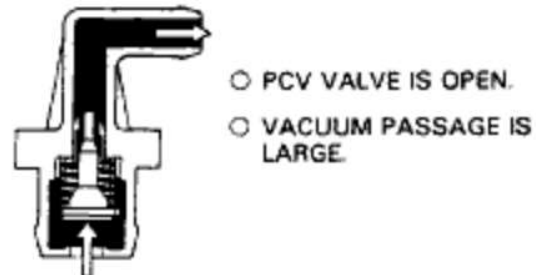


To reduce HC emission, crankcase blow-by gas (HC) is routed through the PCV valve to the air intake chamber for combustion in the cylinders.

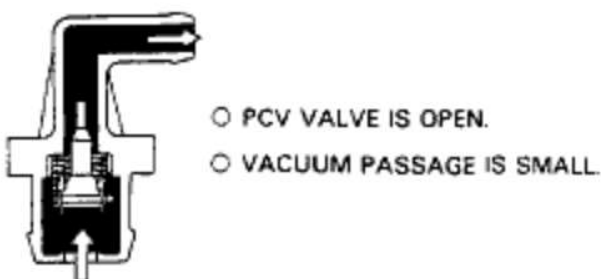
Engine not Running or Backfiring



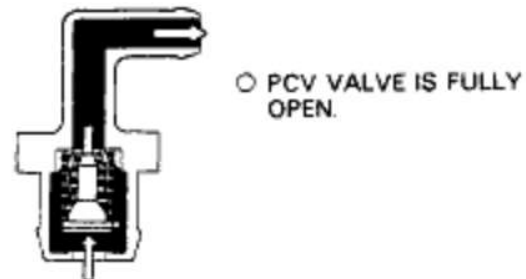
Normal Operation



Idling or Deceleration

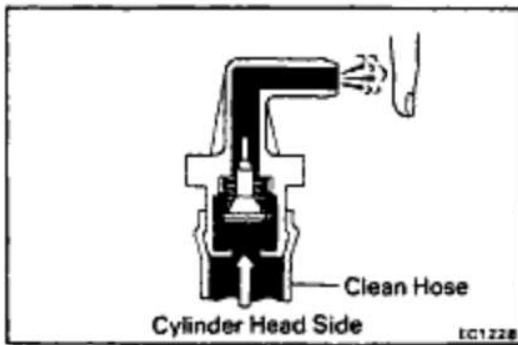


Acceleration or High Load



EC-16

EMISSION CONTROL SYSTEMS (2VZ-FE) – Crankcase Ventilation (PCV) System

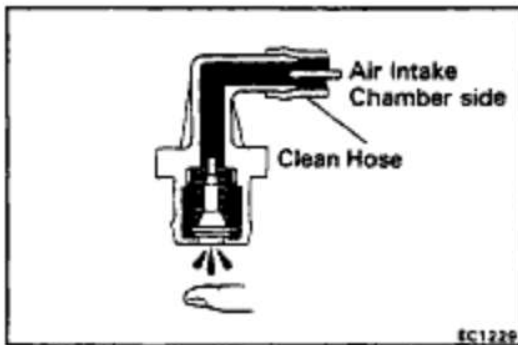
**INSPECTION OF PCV VALVE**

1. REMOVE PCV VALVE
2. INSTALL CLEAN HOSE TO PCV VALVE
3. BLOW FROM CYLINDER HEAD SIDE

Check that air passes through easily.

NOTICE: Do not suck air through the valve.

Petroleum substances inside the valve are harmful.

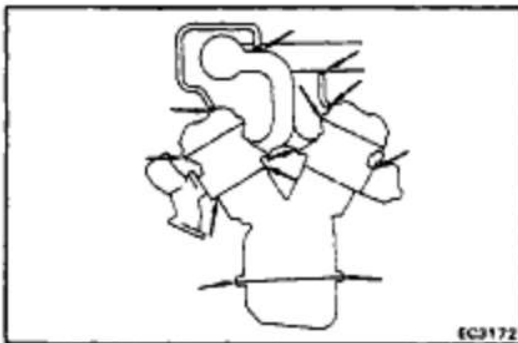


4. BLOW FROM AIR INTAKE CHAMBER SIDE

Check that air passes through with difficulty.

If the PCV valve fails either of the checks, replace it.

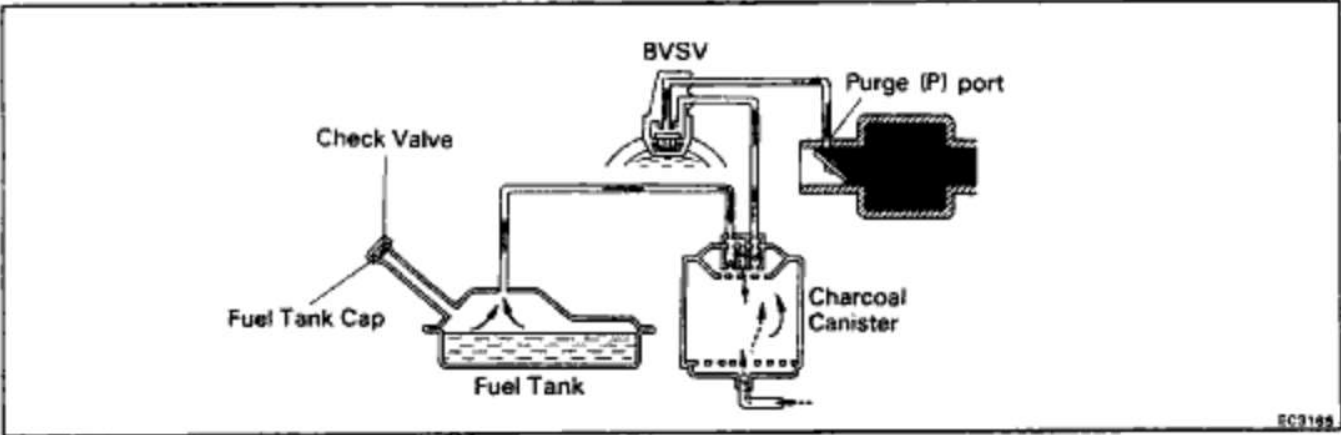
5. REMOVE CLEAN HOSE FROM PCV VALVE
6. REINSTALL PCV VALVE

**INSPECTION OF PCV HOSE AND CONNECTIONS**

VISUALLY INSPECT HOSE AND CONNECTIONS

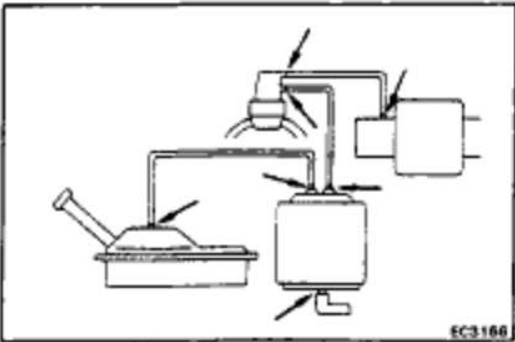
Check for cracks, leaks, or damage.

FUEL EVAPORATIVE EMISSION CONTROL (EVAP) SYSTEM



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

Coolant Temp.	BVS	Throttle Valve Opening	Canister Check Valve			Check Valve in Cap	Evaporated Fuel (HC)
			(1)	(2)	(3)		
Below 35°C (95°F)	CLOSED	—	—	—	—	—	HC from tank is absorbed into the canister.
Above 54°C (129°F)	OPEN	Positioned below purge port	CLOSED	—	—	—	HC from canister is led into air intake chamber.
		Positioned above purge port	OPEN	—	—	—	
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 fuel tank.



INSPECTION OF FUEL VAPOR LINES, FUEL TANK AND TANK CAP

1. VISUALLY INSPECT LINES AND CONNECTIONS

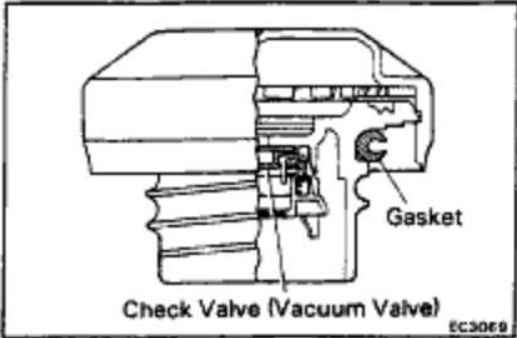
Look for loose connections, sharp bends or damage.

2. VISUALLY INSPECT FUEL TANK

Look for deformation, cracks or fuel leakage.

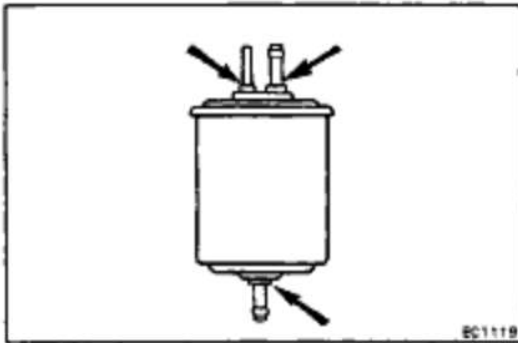
3. VISUALLY INSPECT FUEL TANK CAP

Check if the cap and/or gasket are deformed or damaged. If necessary, repair or replace the cap.



EC-18

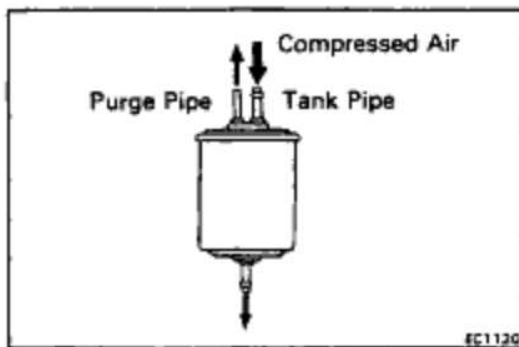
EMISSION CONTROL SYSTEMS (2VZ-FE) – Fuel Evaporative Emission Control (EVAP) System



INSPECTION OF CHARCOAL CANISTER

1. REMOVE CHARCOAL CANISTER
2. REMOVE DUST COVER FROM CHARCOAL CANISTER
3. VISUALLY INSPECT CHARCOAL CANISTER

Look for cracks or damage.

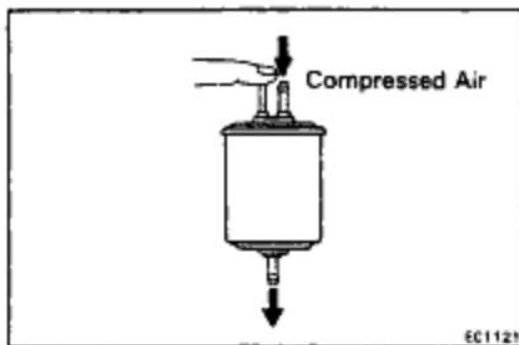


4. CHECK FOR CLOGGED FILTER AND STUCK CHECK VALVE

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

(b) Blow into the purge pipe and check that air does not flow from the other pipes.

If a problem is found, replace the charcoal canister.



5. CLEAN FILTER IN CANISTER

Clean the filter by blowing 3 kg/cm² (43 psi, 294 kPa) of air into the tank pipe while holding the other upper canister pipe closed.

HINT

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

6. REINSTALL DUST COVER TO CHARCOAL CANISTER

7. REINSTALL CHARCOAL CANISTER

INSPECTION OF BVSV CHECK BVSV

BY BLOWING AIR INTO PIPE

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

(b) Remove the BVSV from the water by-pass outlet.

(c) Cool the BVSV to below 35°C (95°F) with cool water.

(d) Blow air into a pipe and check that the BVSV is closed.

(e) Heat the BVSV to above 54°C (129°F) with hot water.

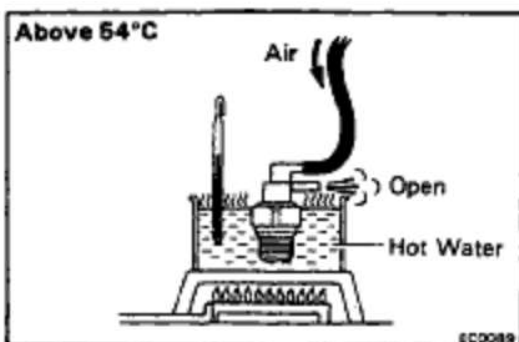
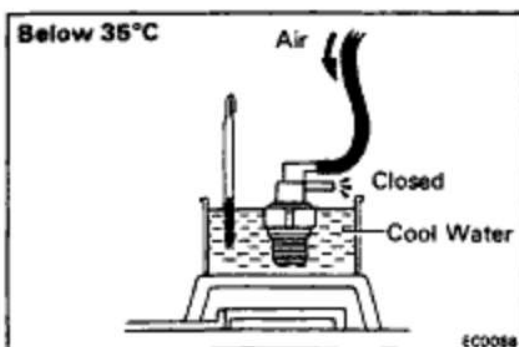
(f) Blow air into a pipe and check that the BVSV is open.

If a problem is found, replace the BVSV.

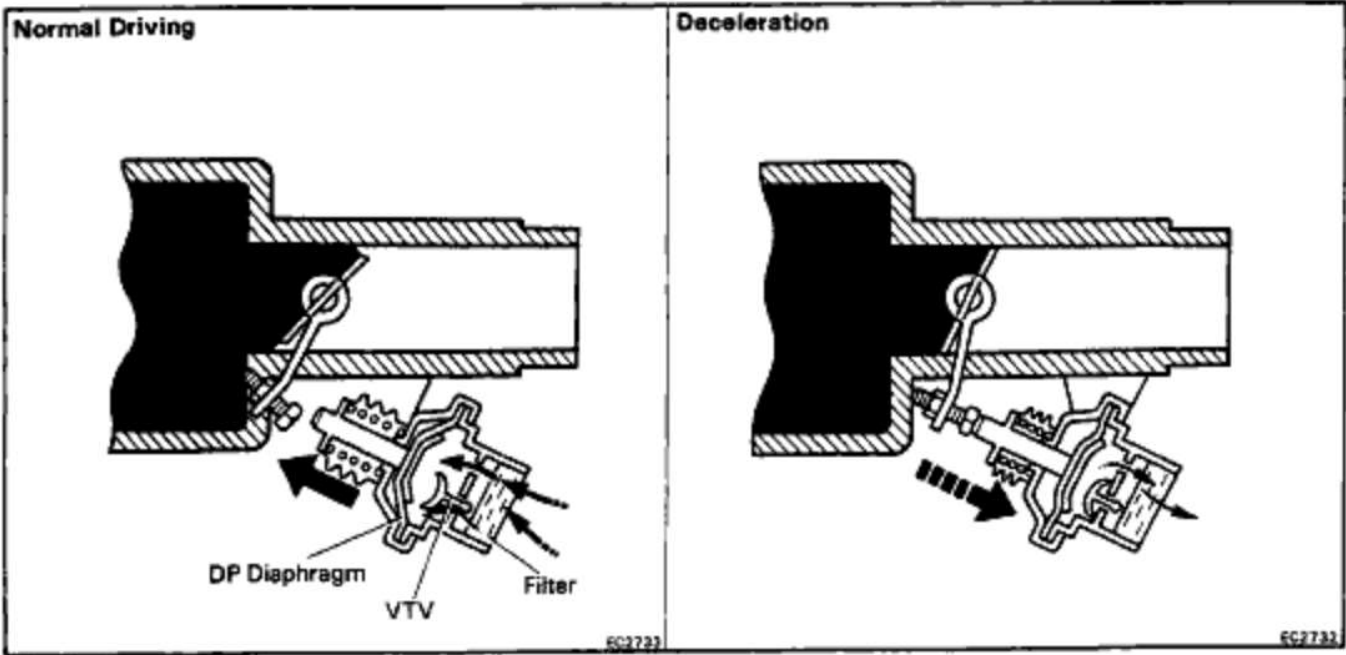
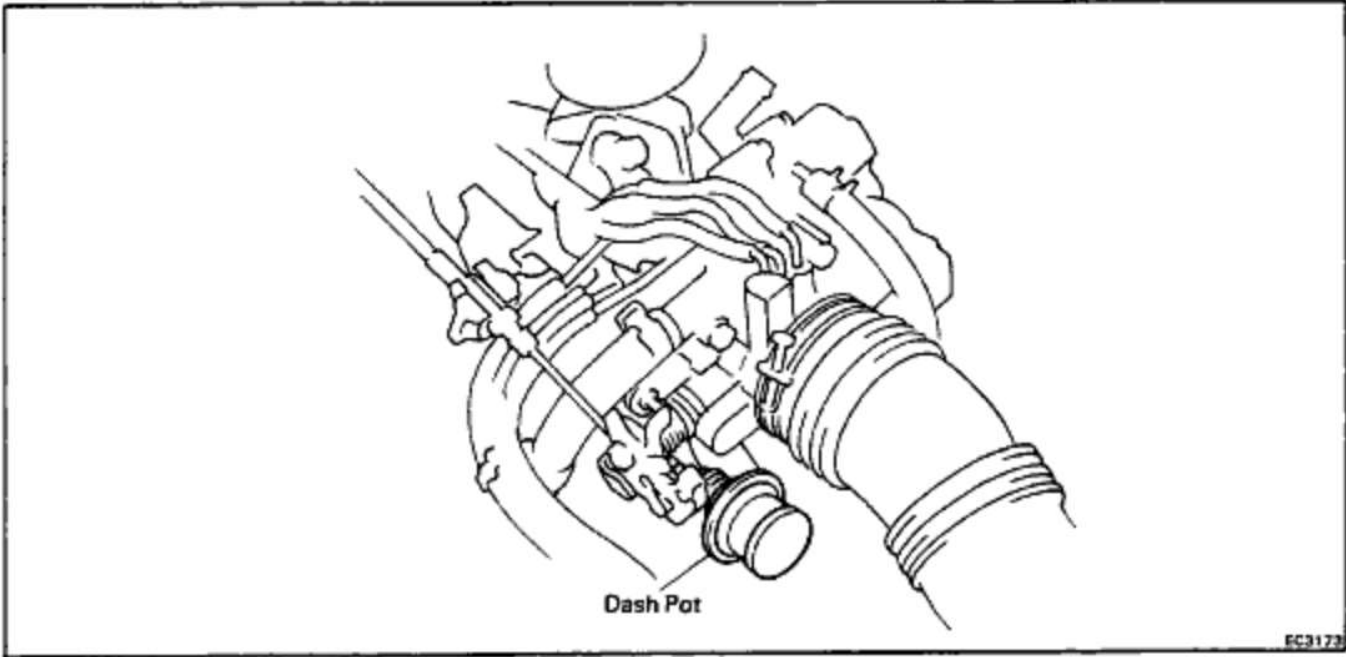
(g) Apply adhesive to two or three threads of the BVSV, and re-install.

Adhesive: Part No. 08833-00070, THREE BOND 1324 or equivalent

(h) Refill the radiator with coolant.



DASH POT (DP) SYSTEM
(MT only)

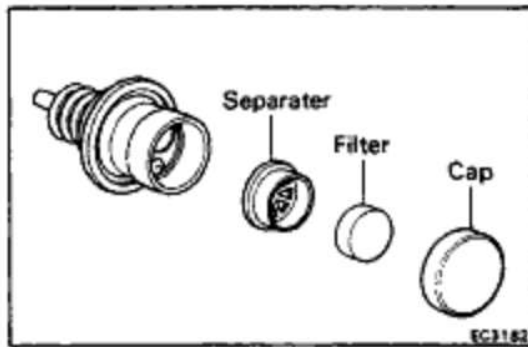


To reduce NC and CO emissions, when decelerating the dash pot opens the throttle valve slightly more than at idle. This causes the air-fuel mixture to burn completely.

Condition	Diaphragm	VTV	Throttle Valve
Idling	Pushed in by return force of throttle valve	CLOSED	Idle speed position
Normal driving	Pushed out by diaphragm spring	OPEN	High speed position
Deceleration	Pushed in by return force of throttle valve	CLOSED	Slightly opens and then slowly closes to idle position

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EMISSION CONTROL SYSTEMS (2VZ-FE) – Dash Pot (DP) System (M T only)



INSPECTION OF DASH POT (DP) SYSTEM

1. WARM UP ENGINE

Allow the engine to normal operating temperature.

2. CHECK IDLE SPEED

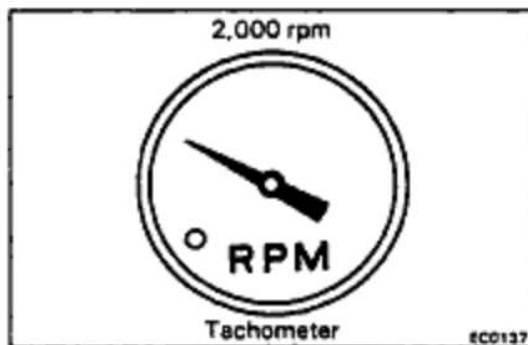
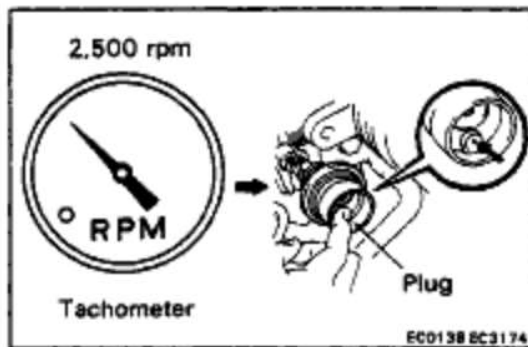
Idle speed: 700 rpm

3. REMOVE CAP, FILTER AND SEPARATOR FROM DP

4. CHECK DP SETTING SPEED

(a) Maintain the engine at 2,500 rpm.

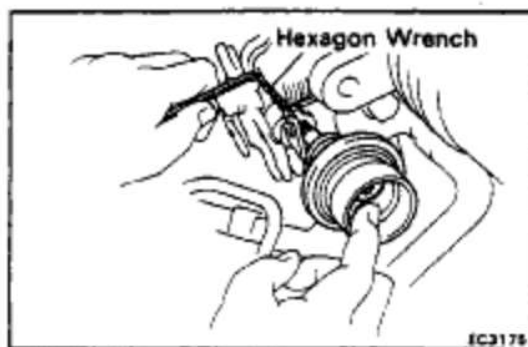
(b) Plug the VTV hole, with your finger.



(c) Release the throttle valve.

(d) Check that the DP is set.

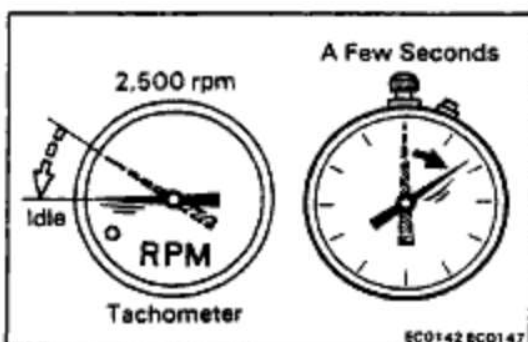
DP setting speed: 2,000 rpm
(w/ Cooling fan OFF)



If not as specified, adjust with the DP adjusting screw.

5. REINSTALL DP SEPARATOR, FILTER AND CAP

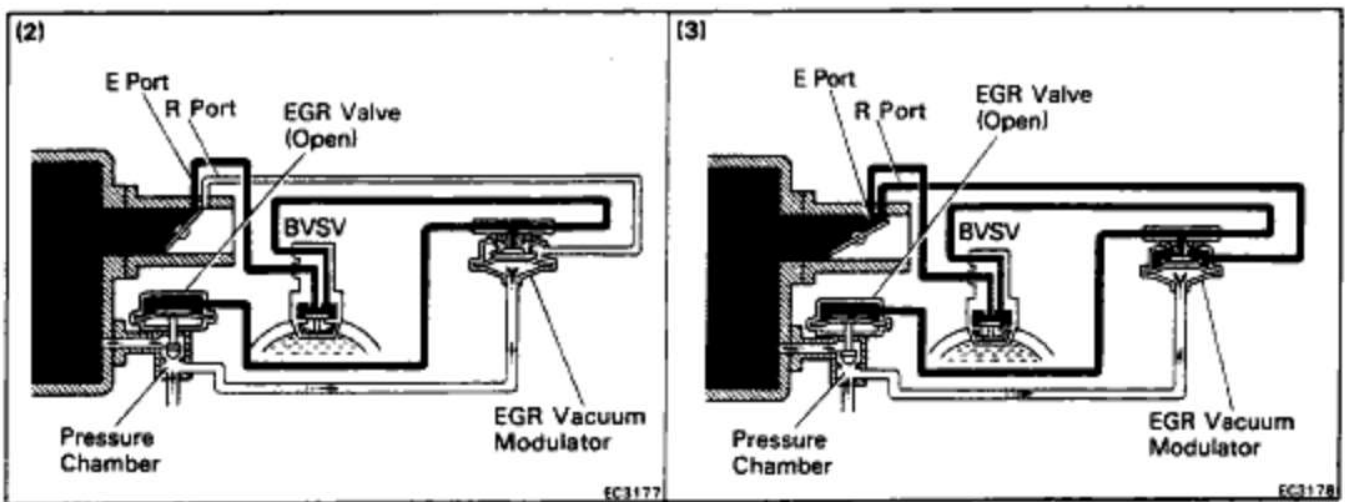
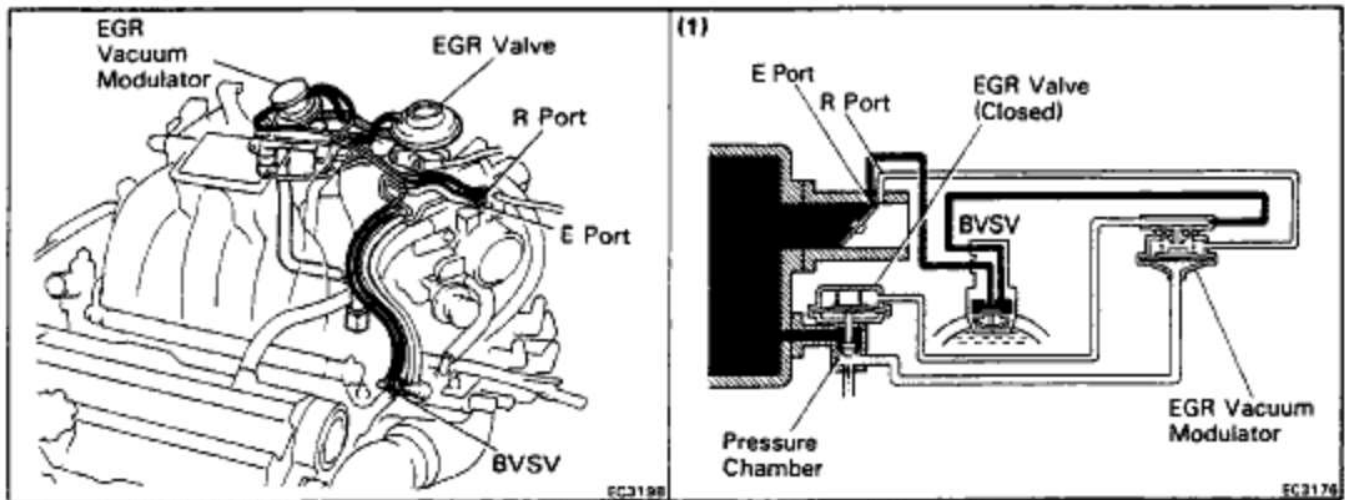
HINT: Install the filter with the coarser surface facing the atmospheric side (outward).



6. CHECK VTV OPERATION

Race the engine at 2,500 rpm for a few seconds, release the throttle valve and check that the engine returns to idle in a few seconds.

EXHAUST GAS RECIRCULATION (EGR) SYSTEM



To reduce NO_x emissions, part of the exhaust gases are recirculated through the EGR valve to the intake manifold to lower the maximum combustion temperature.

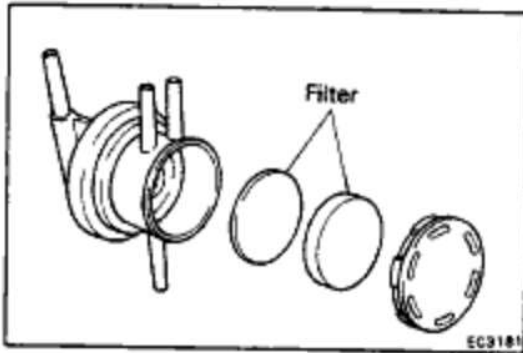
Coolant Temp.	BVSV	Throttle Valve Opening Angle	Pressure in the EGR Valve Pressure Chamber		EGR Vacuum Modulator	EGR Valve	Exhaust Gas
Below 40°C (104°F)	CLOSED	—	—		—	CLOSED	Not recirculated
Above 54°C (129°F)	OPEN	Positioned below E port	—		—	CLOSED	Not recirculated
		Positioned between E port and R port	(1) LOW	*Pressure constantly alternating between low and high	OPENS passage to atmosphere	CLOSED	Not recirculated
			(2) HIGH		CLOSES passage to atmosphere	OPEN	Recirculated
			(3) HIGH		**	CLOSES passage to atmosphere	OPEN

Remarks: * Pressure increase → Modulator closes → EGR valve opens → Pressure drops
 ← EGR valve closes ← Modulator opens ←

** When the throttle valve is positioned above the R port, the EGR vacuum modulator will close the atmosphere passage and open the EGR valve to increase the EGR gas, even if the exhaust pressure is insufficiently low.

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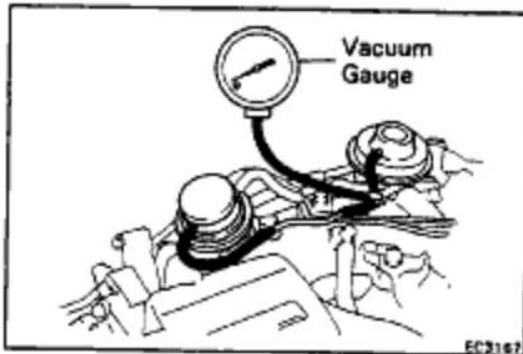
EMISSION CONTROL SYSTEMS (2VZ-FE) – Exhaust Gas Recirculation (EGR) System

**INSPECTION OF EGR SYSTEM****1. CHECK AND CLEAN FILTERS IN EGR VACUUM MODULATOR**

(a) Check the filters for contamination or damage.

(b) Using compressed air, clean the filters.

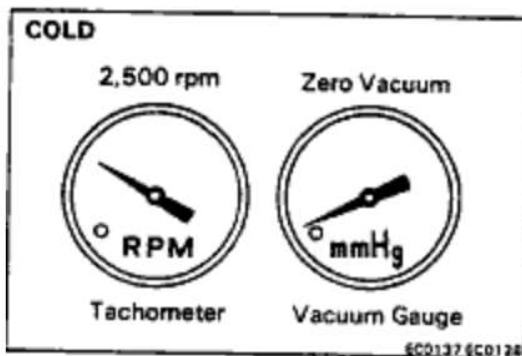
HINT: Install the filters with the coarser surface facing the atmospheric side (outward).

**2. PREPARATION**

Using a 3-way connector, connect a vacuum gauge to the hose between the EGR valve and vacuum pipe.

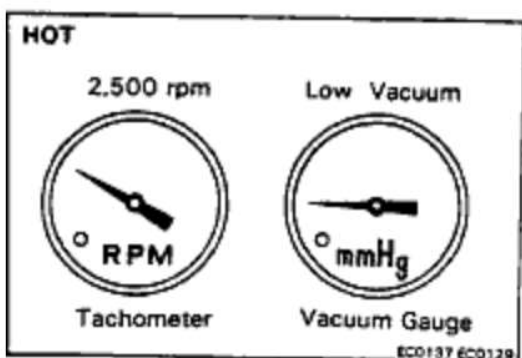
3. CHECK SEATING OF EGR VALVE

Start the engine and check that the engine starts and runs at idle.

**4. CHECK 6VSV WITH COLD ENGINE**

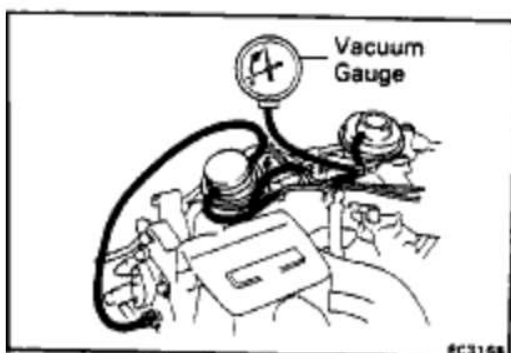
(a) The coolant temperature should be below 40°C (104°F).

(b) Check that the vacuum gauge indicates zero at 2,500 rpm.

**5. CHECK 6VSV AND EGR VACUUM MODULATOR WITH HOT ENGINE**

(a) Warm up the engine.

(b) Check that the vacuum gauge indicates low vacuum at 2,500 rpm.

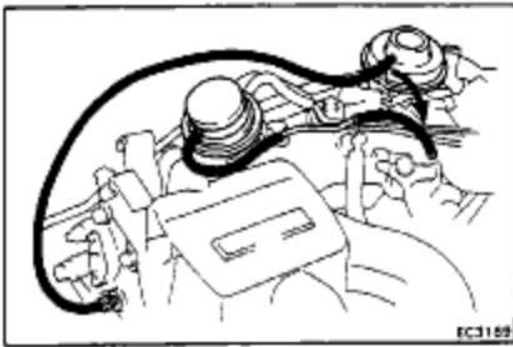


(c) Disconnect the vacuum hose from the R port of the EGR vacuum modulator and connect the R port directly to the intake manifold with another hose.

(d) Check that the vacuum gauge indicates high vacuum at 3,500 rpm.

HINT: As large amount of EGR gas enters, the engine will misfire slightly.

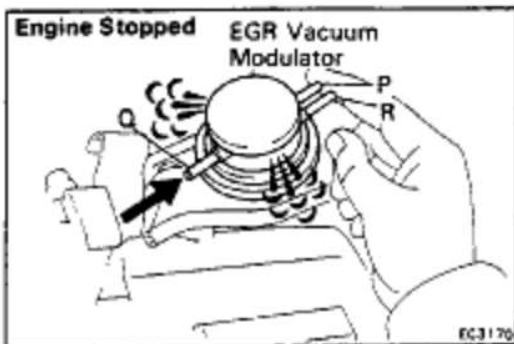
(e) Remove the vacuum gauge and reconnect the vacuum hoses to the proper locations.



6. CHECK EGR VALVE

- Apply vacuum directly to the EGR valve with the engine idling.
- Check that the engine runs rough or dies.
- Reconnect the vacuum hoses to the proper locations.

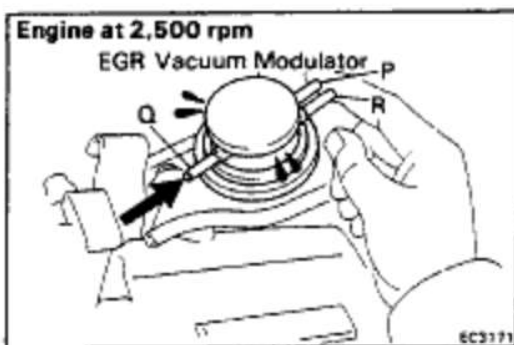
IF NO PROBLEM IS FOUND WITH THIS INSPECTION, SYSTEM IS OK; OTHERWISE INSPECT EACH PART



INSPECTION OF EGR VACUUM MODULATOR

CHECK EGR VACUUM MODULATOR OPERATION

- Disconnect the vacuum hoses from ports P, Q and R of the EGR vacuum modulator.
- Block ports P and R with your finger.
- Blow air into port Q, and check that the air passes through to the air filter side freely.
- Start the engine, and maintain speed at 3,500 rpm.
- Repeat the above test. Check that there is a strong resistance to air flow.
- Reconnect the vacuum hoses to the proper locations.



INSPECTION OF EGR VALVE

1. REMOVE EGR VALVE

Check for sticking and heavy carbon deposits. If a problem is found, replace the valve.

2. REINSTALL EGR VALVE

Install a new gasket.

INSPECTION OF BVS

CHECK BVS BY BLOWING AIR INTO PIPE

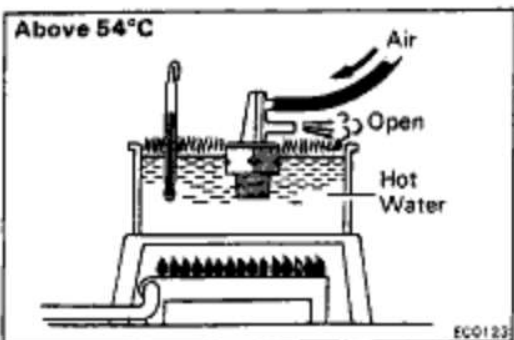
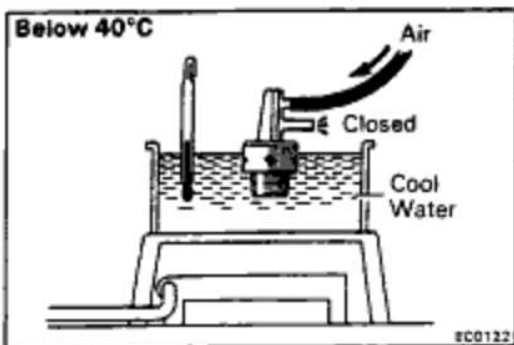
- Drain the coolant from the radiator into a suitable container.
- Remove the BVS from the water by-pass outlet.
- Cool the BVS to below 40°C (104°F) with cool water.
- Blow air into the pipe, and check that the BVS is closed.
- Heat the BVS to above 54°C (129°F) with hot water.
- Blow air into the pipe, and check that the BVS is open.

If a problem is found, replace the BVS.

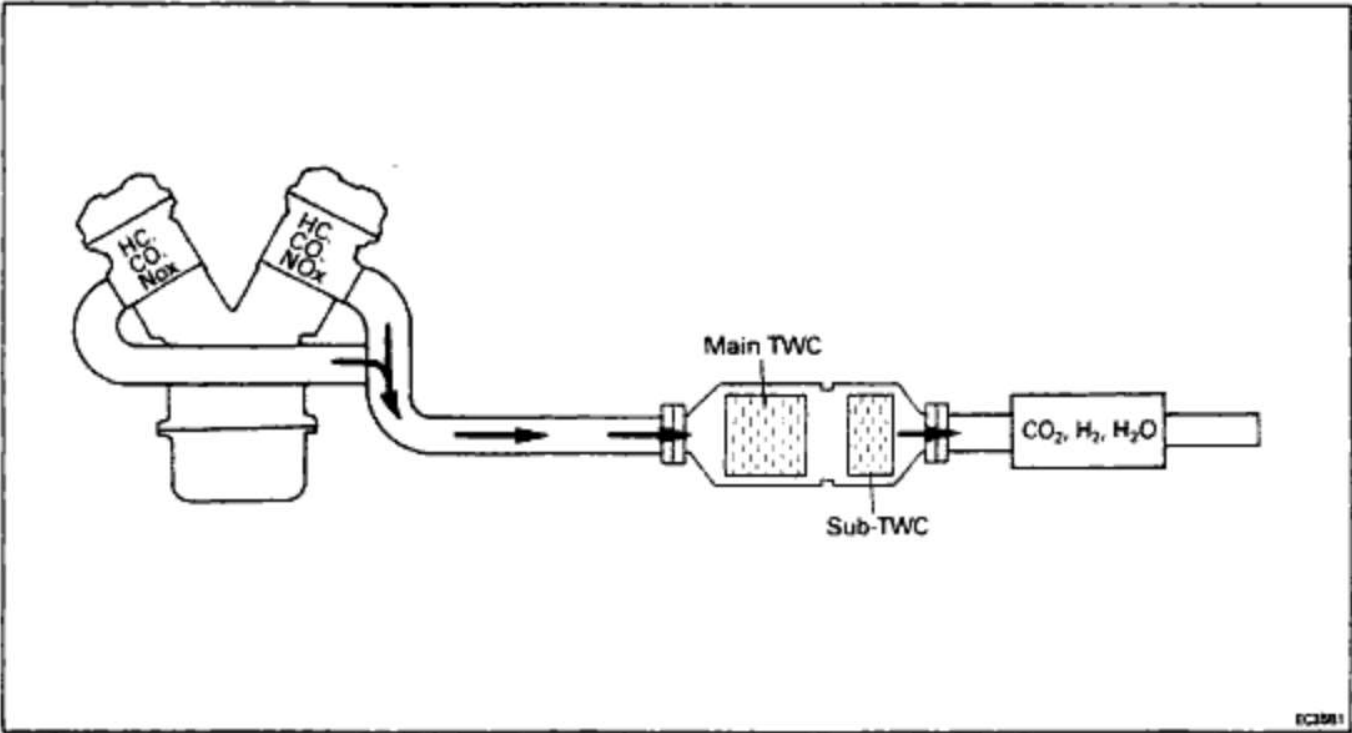
- Apply adhesive to two or three threads of the BVS, and reinstall.

Adhesive: Part No. 08833-00070, THREE BOND 1324 or equivalent

- Refill the radiator with coolant.



THREE-WAY CATALYST (TWC) SYSTEM

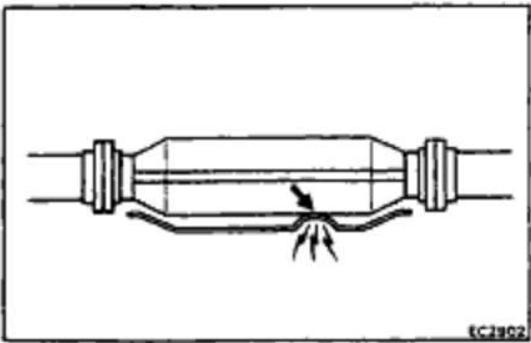


To reduce HC, CO and NOx emissions, they are oxidized, reduced and converted to nitrogen (NO), carbon dioxide (CO2) and water (H2O) by the catalyst.

Exhaust Port		Main TWC		Sub-TWC		Exhaust Gas
HC, CO AND NOx	→	OXIDATION AND REDUCTION	→	OXIDATION AND REDUCTION	→	CO ₂ H ₂ O N ₂

INSPECTION OF EXHAUST PIPE ASSEMBLY

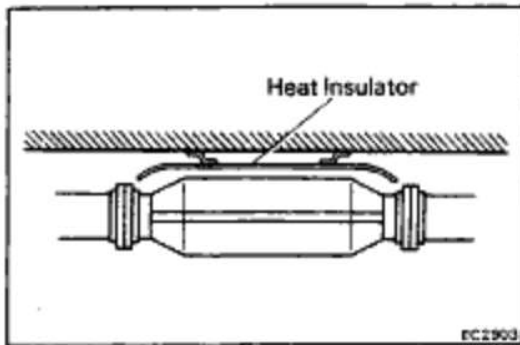
- 1. CHECK CONNECTIONS FOR LOOSENESS OR DAMAGE
- 2. CHECK CLAMPS FOR WEAKNESS, CRACKS OR DAMAGE



INSPECTION OF CATALYTIC CONVERTER

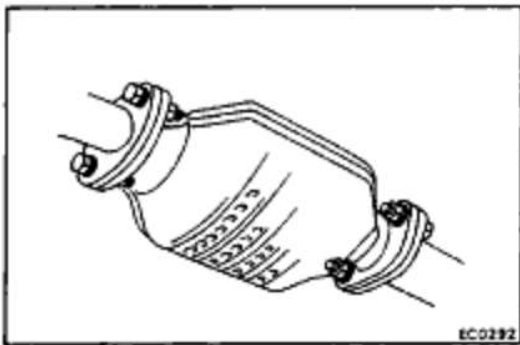
CHECK FOR DENTS OR DAMAGE

If any part of protector is damaged or dented to the extent that it contacts the converter, repair or replace it.



INSPECTION OF HEAT INSULATOR

1. CHECK HEAT INSULATOR FOR DAMAGE
2. CHECK FOR ADEQUATE CLEARANCE BETWEEN CATALYTIC CONVERTER AND HEAT INSULATOR



REPLACEMENT OF CATALYTIC CONVERTER

1. REMOVE CONVERTER

- (a) Jack up the vehicle.
- (b) Check that the converter is cool.
- (c) Remove the four bolts and nuts holding the pipes to the converter.
- (d) Remove the converter and two gaskets.

2. REINSTALL CONVERTER

- (a) Place new two gaskets on the front and rear pipes.
- (b) Install the converter with the bolts and nuts. Torque the bolts and nuts. ,

Torque: 440 kg-cm (32 ft-lb, 43 N-m)