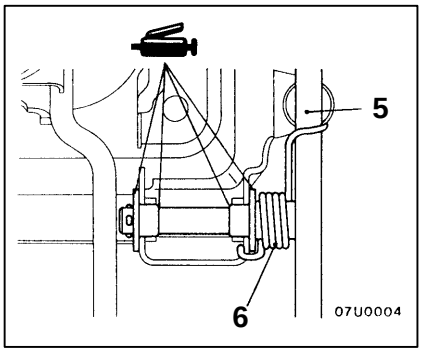
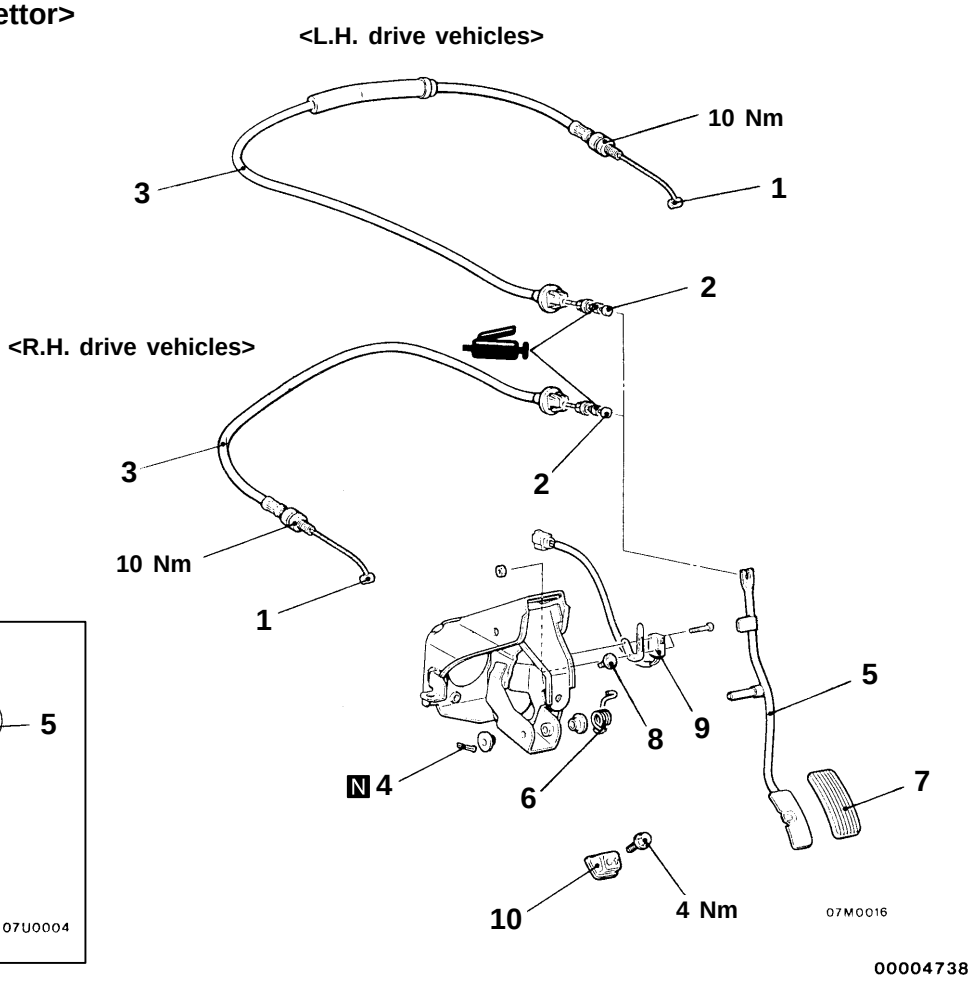
ACCELERATOR CABLE AND PEDAL

REMOVAL AND INSTALLATION

Post-installation Operation
- (Refer to Adjusting the Accelerator Cable.)

<Variable-venturi carburettor>





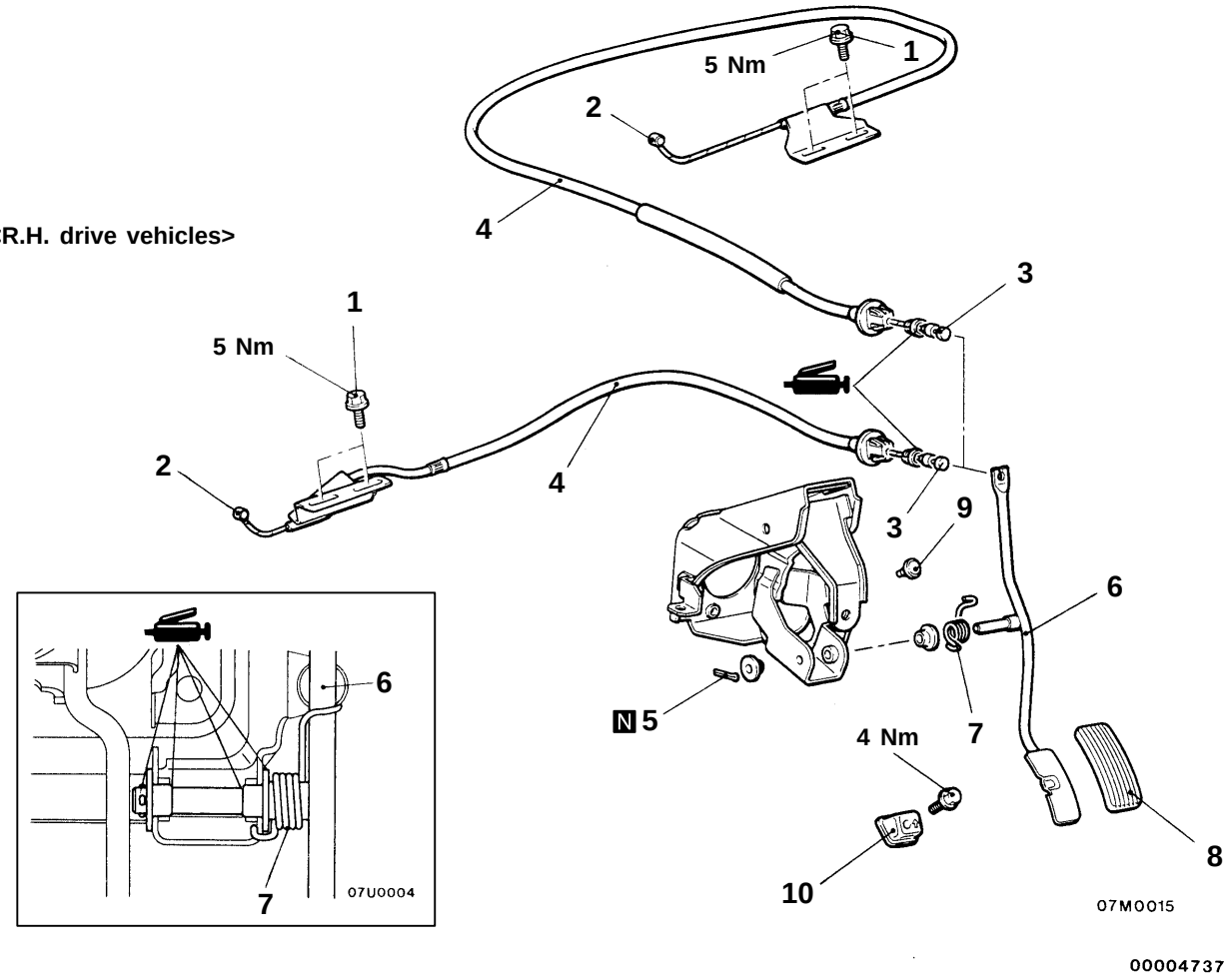
Removal steps

1. Inner cable connection (Throttle body side)
2. Inner cable connection (Accelerator pedal side)
3. Accelerator cable
4. Split pin
5. Accelerator pedal
6. Spring
7. Pedal pad
8. Stopper
9. Accelerator pedal switch <A/T>
10. Accelerator pedal stopper

<MPI>

<L.H. drive vehicles>

<R.H. drive vehicles>



Removal steps

1. Adjusting bolts
2. Inner cable connection (Throttle body side)
3. Inner cable connection (Accelerator pedal side)
4. Accelerator cable
5. Split pin
6. Accelerator pedal
7. Spring
8. Pedal pad
9. Stopper
10. Accelerator pedal stopper

EMISSION CONTROL SYSTEM <VARIABLE-VENTURI CARBURETTOR>

GENERAL INFORMATION

The emission control system consists of the following subsystems:
- Crankcase emission control system
- Evaporative emission control system
- Exhaust emission control system

Items	Name	Specification
Crankcase emission control system	Positive crankcase ventilation (PCV) valve	Variable flow type (Purpose: HC reduction)
Evaporative emission control system	Canister Purge control valve	Equipped Single diaphragm type (Purpose: HC reduction)
Exhaust emission control system	Exhaust gas recirculation (EGR) system*1 ● EGR valve ● Thermo valve	Equipped Single type Bimetal type (Purpose: NOx reduction)
	Intake air temperature control system	Vacuum control type (Purpose: CO, HC reduction)
	High altitude compensation system*2 ● High altitude compensator	Equipped Bellows type (Purpose: CO, HC reduction)
	Deceleration spark advance control system*3	Vacuum control type

NOTE
*1: Vehicles for GCC (A/T)
*2: Vehicles for high altitude
*3: M/T

EMISSION CONTROL DEVICE REFERENCE TABLE

Related parts	Crankcase emission control system	Evaporative emission control system	Exhaust gas recirculation system	Intake air temperature control system	High altitude compensation system	Deceleration spark advance control system
PCV valve	X					
Purge control valve		X				
Canister		X				
EGR valve			X			
Thermo valve			X			
Air control valve				X		
Thermo sensor				X		
High altitude compensator					X	
Vacuum control valve						X

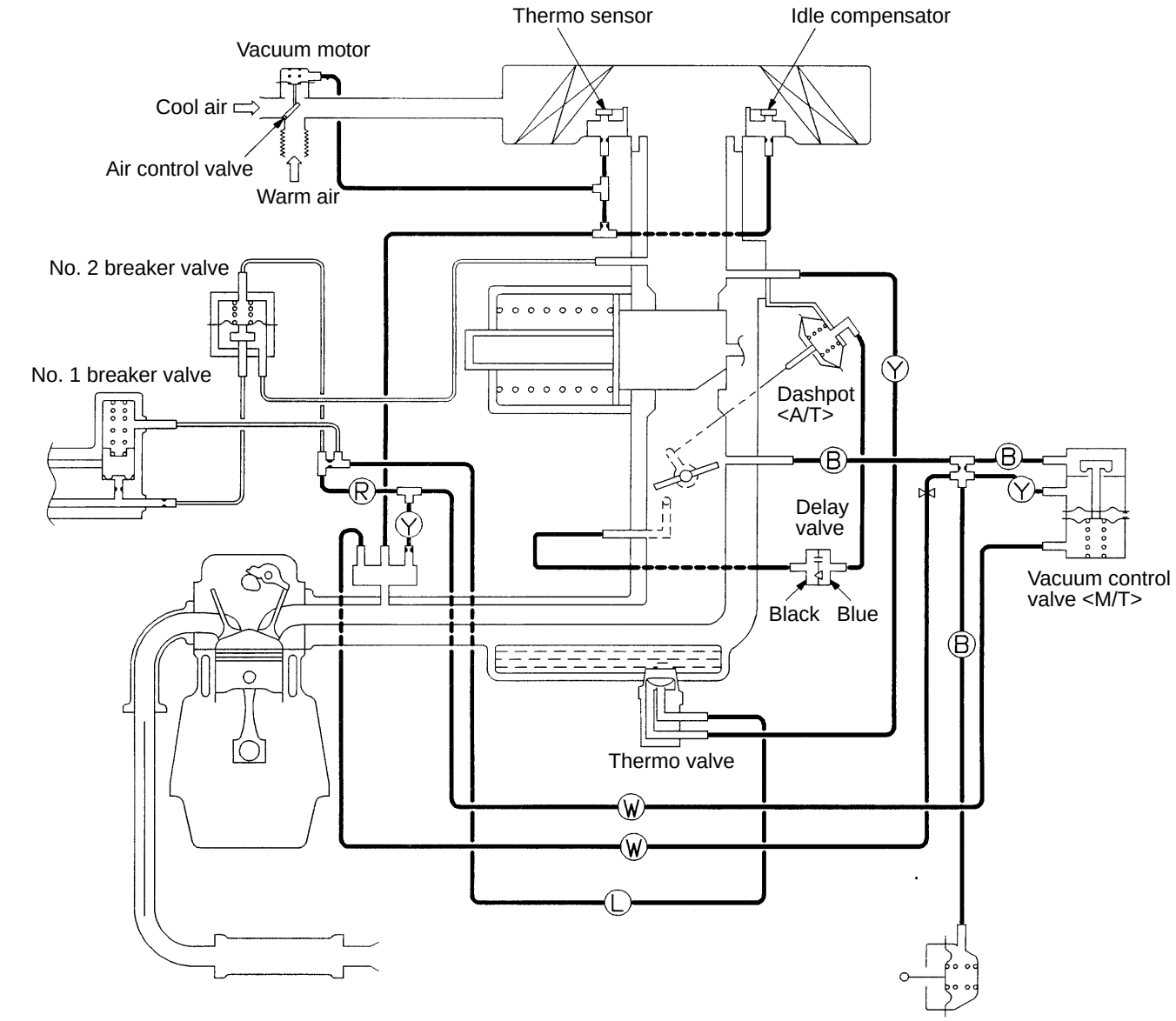
SEALANT

Item	Specified sealant	Remarks
Thermo valve threaded portion	Mitsubishi Genuine Part No. MD970389 or equivalent	Drying sealant

VACUUM HOSE

VACUUM HOSE PIPING DIAGRAM

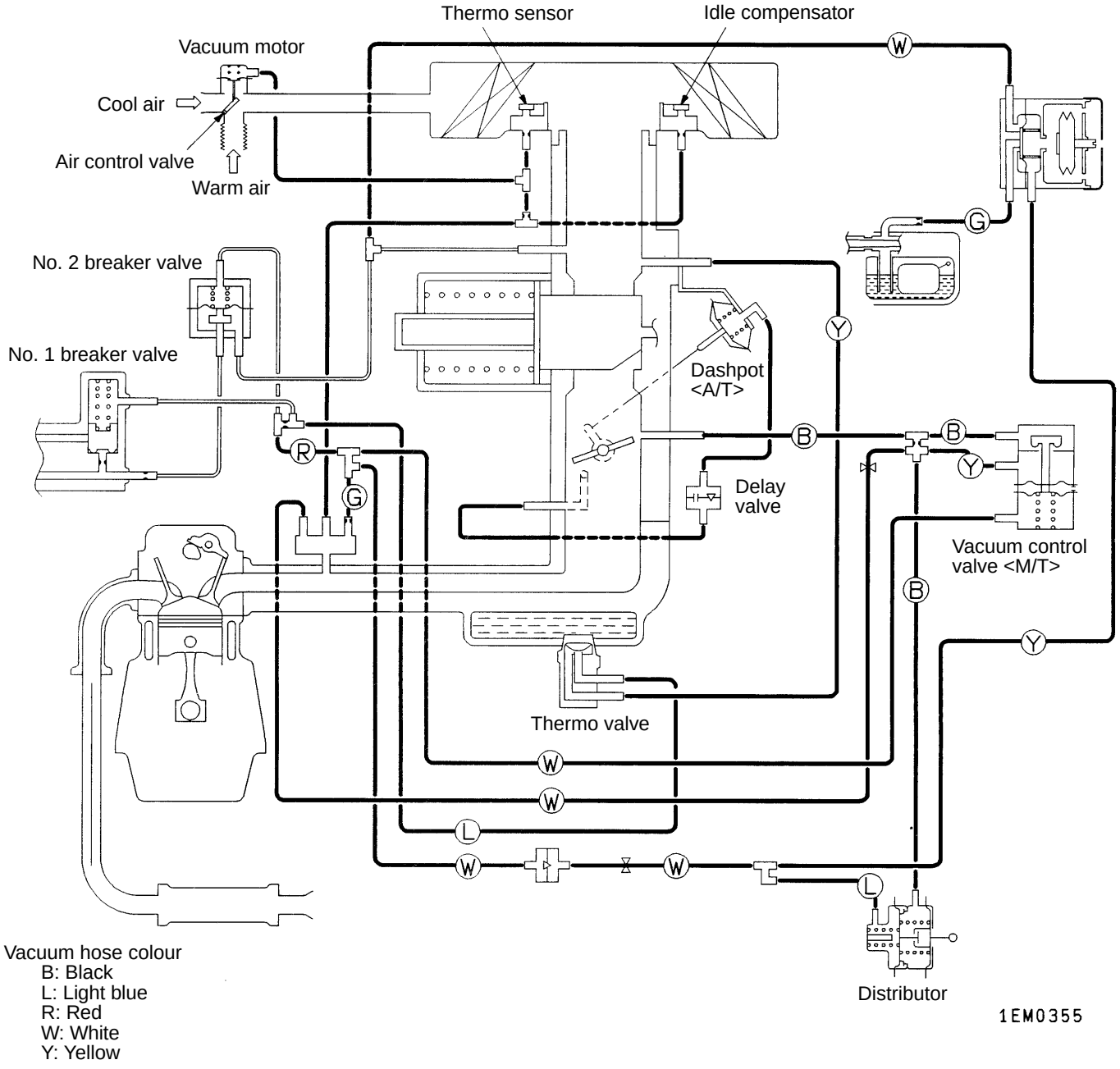
<General export – except vehicles for high altitude>



Vacuum hose colour
B: Black
L: Light blue
R: Red
W: White
Y: Yellow

1EM0354

<General export – vehicles for high altitude>



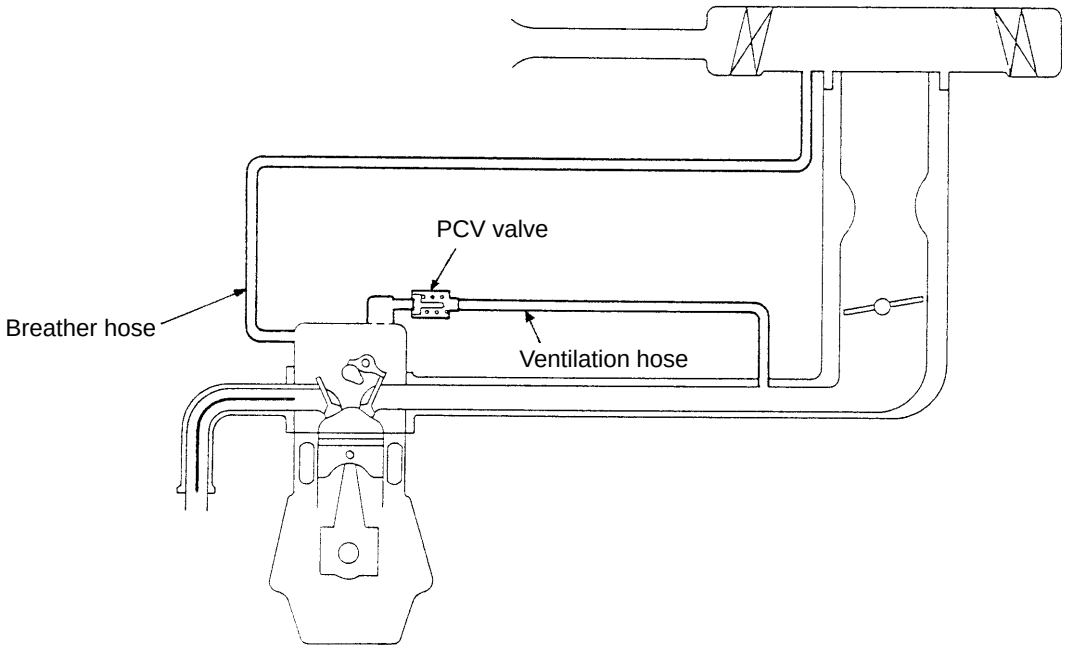
CRANKCASE EMISSION CONTROL SYSTEM

GENERAL INFORMATION

The crankcase emission control system prevents blow-by gases from escaping inside the crankcase into the atmosphere.
Fresh air is sent from the air cleaner into the crankcase through the breather hose. The air becomes mixed with the blow-by gases inside the crankcase.
The blow-by gas inside the crankcase is drawn into the intake manifold through the positive crankcase ventilation (PCV) valve.

The PCV valve lifts the plunger according to the intake manifold vacuum so as to regulate the flow of blow-by gas properly. In other words, the blow-by gas flow is regulated during low load engine operation to maintain engine stability, while the flow is increased during high load operation to improve the ventilation performance.

SYSTEM DIAGRAM



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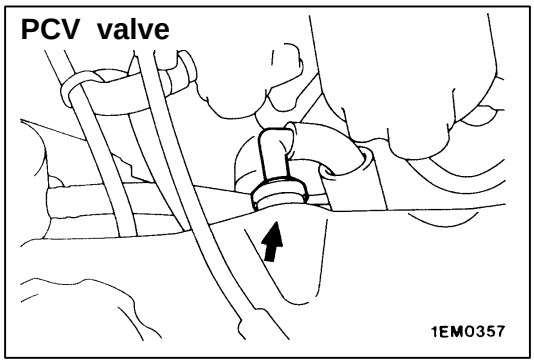
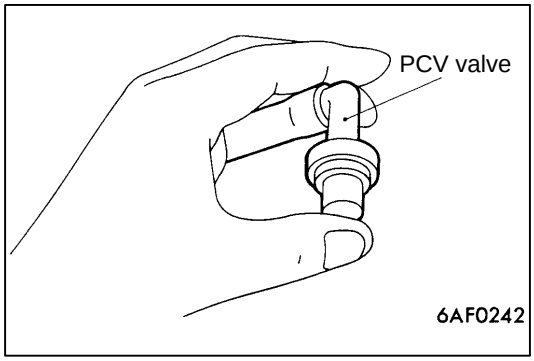
COMPONENT LOCATION



POSITIVE CRANKCASE VENTILATION SYSTEM CHECK

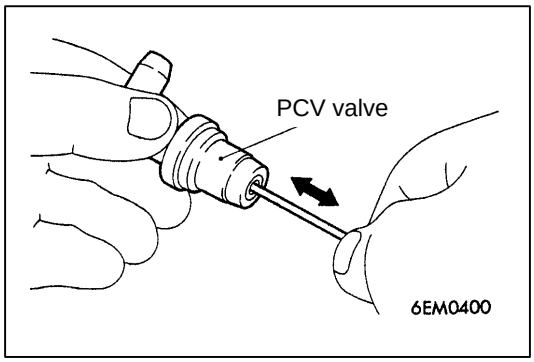
1. Remove the ventilation hose from the PCV valve.
2. Remove the PCV valve from the rocker cover.
3. Reinstall the PCV valve at the ventilation hose.
4. Start the engine and run at idle.



5. Place a finger at the opening of the PCV valve and check that vacuum of the intake manifold is felt.

   NOTE
   At this moment, the plunger in the PCV valve moves back and forth.

6. If vacuum is not felt, clean the PCV valve or replace it.



PCV VALVE CHECK

1. Insert a thin rod into the PCV valve from the side shown in the illustration (rocker cover installation side), and move the rod back and forth to check that the plunger moves.
2. If the plunger does not move, there is clogging in the PCV valve. In this case, clean or replace the PCV valve.

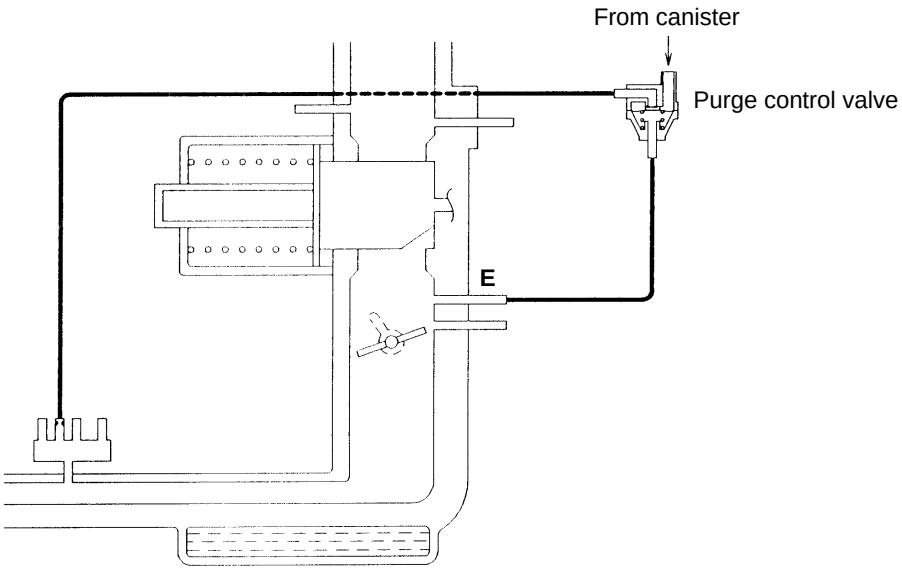
EVAPORATIVE EMISSION CONTROL SYSTEM

GENERAL INFORMATION

The evaporative emission control system prevents fuel vapours generated in the fuel tank from escaping into the atmosphere.
Fuel vapours from the fuel tank flow through the fuel tank pressure control valve and vapour pipe/hose to be stored temporarily in the canister. When driving the vehicle, fuel vapours stored in the canister flow through the purge control valve and carburettor and go into the intake manifold to be sent to the combustion chamber.
Furthermore, the purge control valve prevents fuel vapour from entering the engine under low load range when the amount of intake air is small.

SYSTEM DIAGRAM

<M/T>



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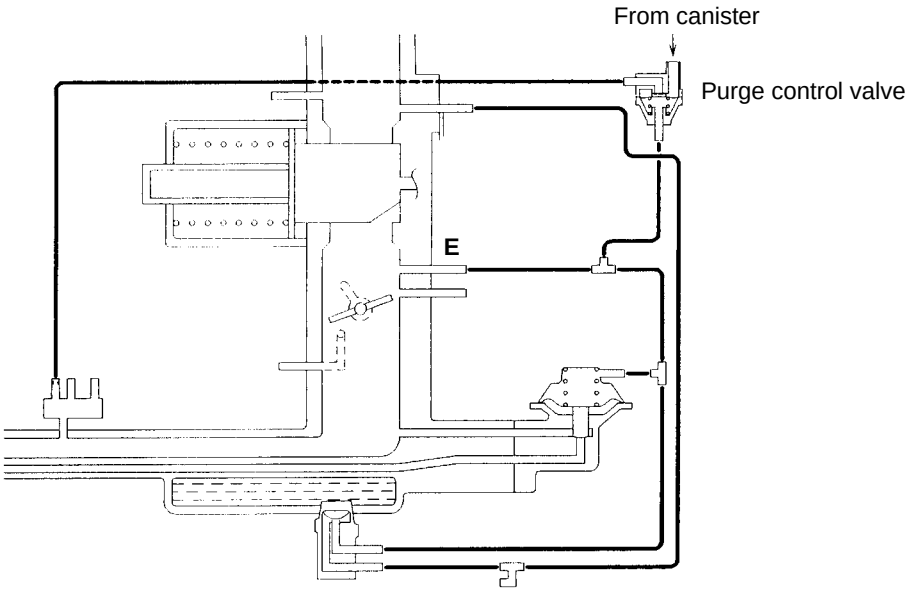

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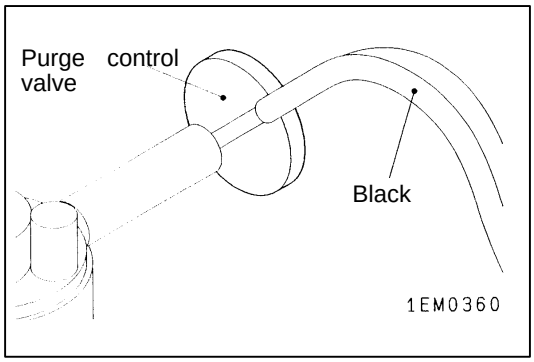
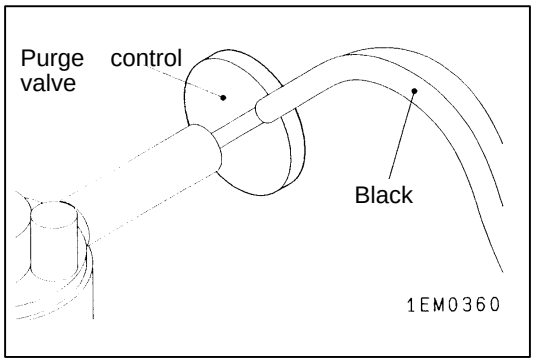


PURGE CONTROL SYSTEM CHECK <M/T>

Engine coolant temperature: 80 – 95°C
1. Disconnect the vacuum hose (black) from the purge control valve, and then connect a hand vacuum pump to the nipple of the purge control valve.
2. Plug the disconnected vacuum hose (black).
3. Apply a vacuum of 53 kPa and check the condition of the vacuum.

Engine condition	Normal condition
Idle	Vacuum is maintained.
2,500 r/min	Vacuum is not maintained.



PURGE CONTROL SYSTEM CHECK <A/T>

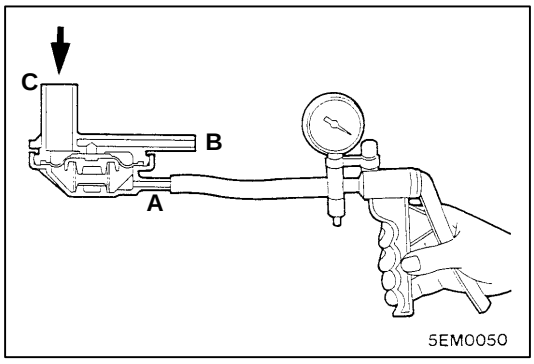
Engine coolant temperature: 80 – 95°C
1. Disconnect the vacuum hose (black) from the purge control valve, and then connect a hand vacuum pump to the nipple of the purge control valve.
2. Plug the disconnected vacuum hose (black).
3. When the engine is cold or hot, apply a vacuum of 53 kPa and check the condition of the vacuum.

When engine is cold
(Engine coolant temperature: 40°C or less)

Engine condition	Normal condition
2,500 r/min	Vacuum is maintained.

When engine is hot
(Engine coolant temperature: 80°C or less)

Engine condition	Normal condition
Idle	Vacuum is maintained.
2,500 r/min	Vacuum is no maintained.

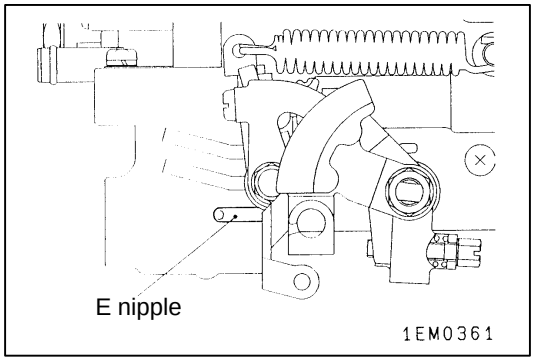


PURGE CONTROL VALVE CHECK

1. Remove the purge control valve.
2. Connect a hand vacuum pump to the nipple A of the purge control valve.
3. Apply 53 kPa of vacuum, and check that the vacuum is maintained.

4. Blow the air from the nipple C and check the air passage.

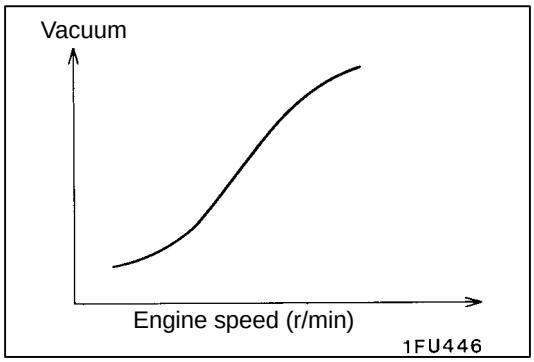
Vacuum	Passage of air
Not applied	Air is not blown out
9.3 kPa or more	Air is blown out



PURGE CONTROL (E NIPPLE) VACUUM CHECK

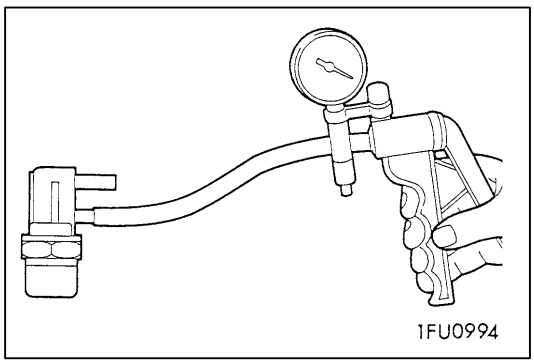
Engine coolant temperature: 80 – 95°C

1. Disconnect the vacuum hose (green stripe) from carburettor purge control vacuum nipple (E nipple) and connect a hand vacuum pump to the nipple.



2. Start the engine and check purge control vacuum raises according to engine speed after racing the engine.

   NOTE
   If there is a problem with the change in vacuum, the carburettor E port may be clogged and require cleaning.



THERMO VALVE CHECK <A/T>

Caution
When removing and installing, do not apply the spanner to the resin section of the thermo valve.

1. Disconnect the vacuum hose (yellow stripe, green stripe) and connect a hand vacuum pump to the nipple of thermo valve.
2. Apply a vacuum to check the thermo valve.

Engine coolant temperature	Normal condition
40°C or less	Vacuum is not maintained
80°C or higher	Vacuum is maintained.

3. Apply sealant to threaded portion.

   Specified sealant:
   Mitsubishi Genuine Part No. MD970389 or equivalent

4. Tighten to the specified torque.

   Specified torque: 27 Nm