Emission Control System
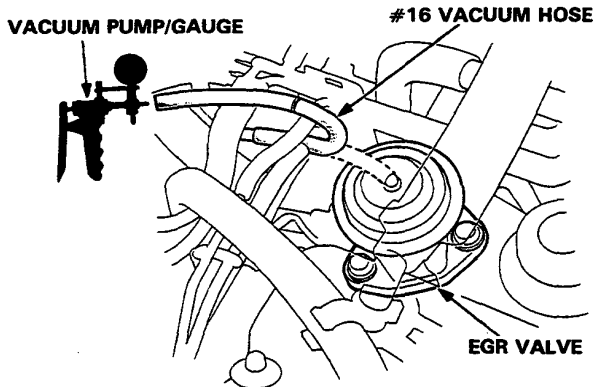
[KX, KS, KZ model]

Testing (COLD ENGINE)

NOTE: The engine coolant temperature must be below 63°C (145.4 °F)

1. Disconnect the #16 vacuum hose from the EGR valve and connect a vacuum pump to the hose.

VACUUM PUMP/GAUGE — **#16 VACUUM HOSE** — **EGR VALVE**

2. Start the engine and raise the engine speed to 3,000 min^{-1} (rpm).

   There should be no vacuum.

   ● If there is no vacuum, go on to the hot engine test (next column).

   ● If there is vacuum, go to troubleshooting (page 6-77).

Testing (HOT ENGINE)

1. Disconnect the #16 vacuum hose from the EGR valve and connect a vacuum pump to the hose.
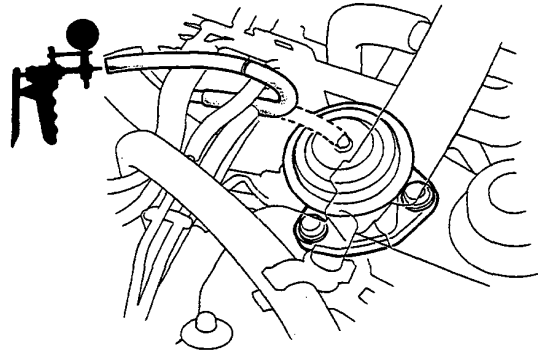
2. Start the engine and warm up to normal operating temperature (the cooling fan comes on).

   Vacuum should be as shown below:

	Condition	Vacuum at EGR hose
1	Idle	No
2	3,000 min^{-1} (rpm)	Yes, 2—6″ Hg
3	3,000 min^{-1} (rpm) with blocked vacuum bleed	Yes, Less than 2″ Hg
4	Rapid acceleration	Yes, 2—6″ Hg
5	Deceleration	No

3. Remove the control box and open the control box lid.


AIR FILTER — **PLUG**
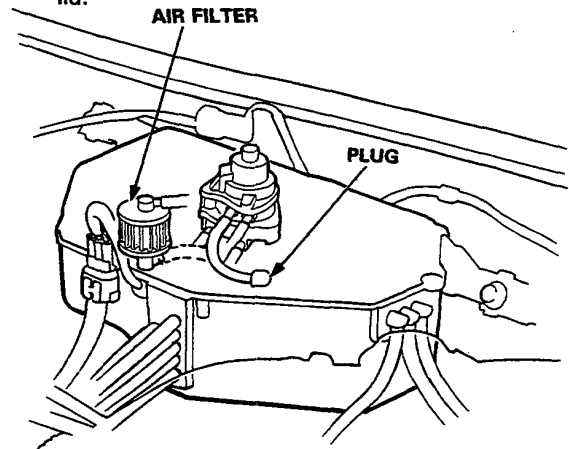
- If vacuum is available at idle (condition 1) check the vacuum hoses for proper routing and connections, then check for correct idle speed and idle mixture, and make adjustment as necessary.

- If there is no vacuum in conditions 2 and 4, go to troubleshooting (page 6-77).

- If vacuum is more than 2" Hg in condition 3, replace the EGR control valve and check the vacuum hoses for proper routing and connections.

EGR Valve Test

1. Start engine and allow to idle.

2. Disconnect vacuum hose from EGR valve and connect a vacuum pump to EGR valve.

VACUUM PUMP/GAUGE
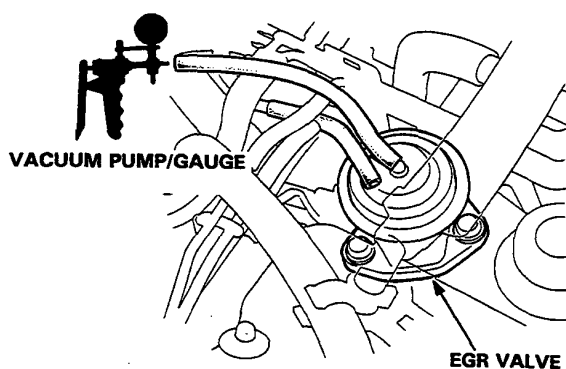
EGR VALVE

3. Apply 150 mm Hg (6 in. Hg) vacuum to EGR Valve. Vacuum should remain steady and engine should die.

   - If vacuum remains steady and engine dies, EGR valve is working properly. Remove the vacuum pump and reconnect EGR vacuum hose; test is complete.

   - If vacuum does not remain steady and engine does not die, replace EGR valve and retest.

   - If vacuum remains steady but engine does not die: Remove EGR valve; check EGR valve and manifold for blockage, clean or replace as necessary and retest.