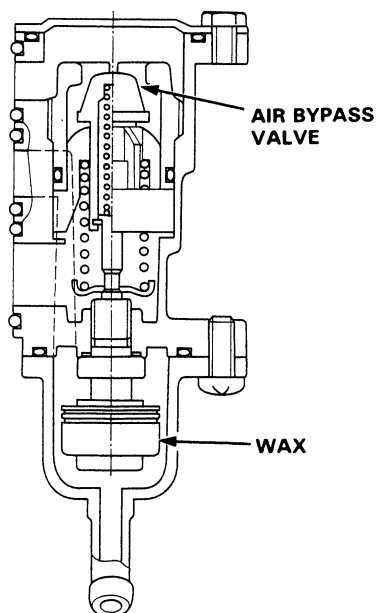
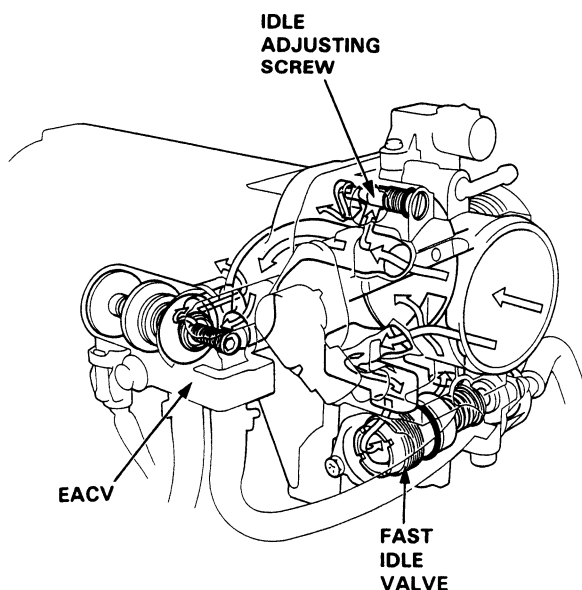




Fast Idle Valve

Description

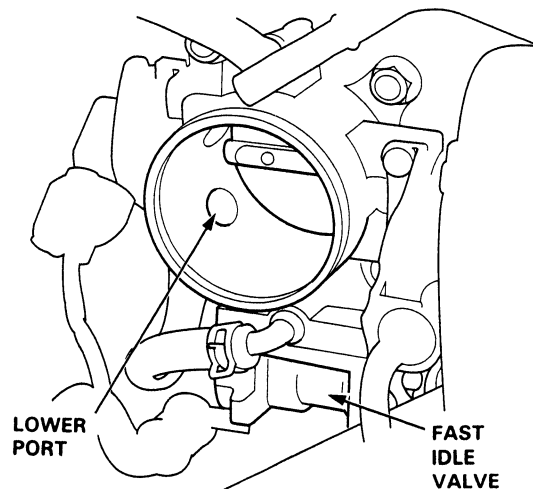
To prevent erratic running when the engine is warming up, it is necessary to raise the idle speed. The fast idle air bypass valve is controlled by a thermowax plunger. When the engine is cold, the engine coolant surrounding the thermowax contracts the plunger, allowing additional air to be bypassed into the intake manifold so that the engine idles faster. When the engine reaches operating temperature, the valve closes, reducing the amount of air bypassing into the manifold.



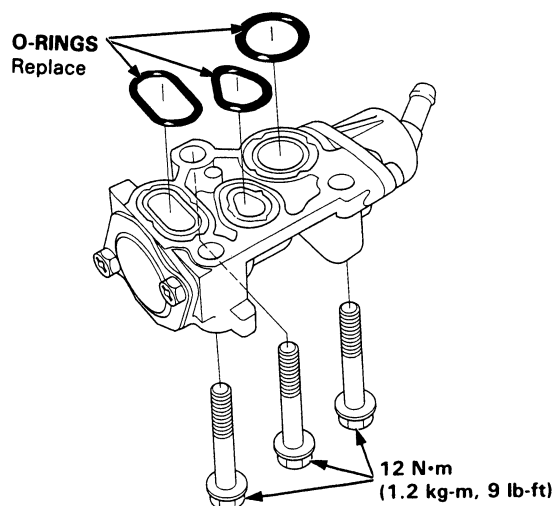
Inspection

NOTE: The fast idle valve is factory adjusted; it should not be disassembled.

1. Remove the intake air duct from the throttle body.
2. Start the engine.
3. Put your finger over the lower port in throttle body and make sure that there is air flow with the engine cold (coolant temperature below 30°C, 86°F).



- If not, replace the fast idle valve and retest.



4. Warm up the engine (cooling fan comes on).
5. Check that the valve is completely closed. If not, air suction can be felt at the lower port in the throttle body.
 - If any suction is felt, the valve is leaking. Replace the fast idle valve and recheck.

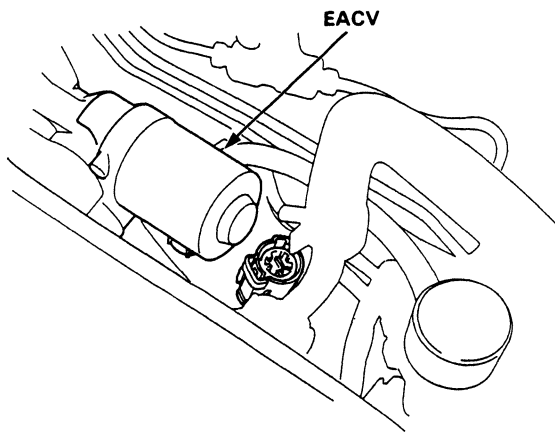
Idle Control System

Idle Speed Setting

Inspection/Adjustment

NOTE: (CANADA) Pull the parking brake lever up. Start the engine, then check that the headlights are off.

1. Start the engine and warm it up to normal operating temperature (the cooling fan comes on).
2. Connect a tachometer.
3. Disconnect the 2P connector from the EACV.



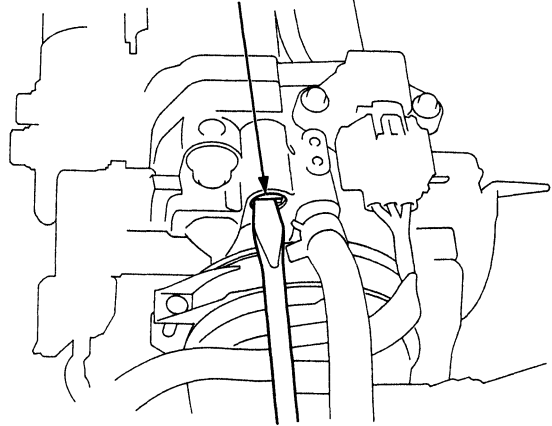
4. Start the engine with the accelerator pedal slightly depressed. Stabilize the rpm at 1000, then slowly release the pedal until the engine idles.
5. Check idling in no-load conditions: headlights, blower fan, rear defogger, cooling fan, and air conditioner are not operating.

Idle speed should be:

Manual	D15Z1 engine: 420 ± 50 rpm Others: 420 ± 50 rpm
Automatic	420 ± 50 rpm (in N or P)

Adjust the idle speed, if necessary, by turning the idle adjusting screw.

IDLE ADJUSTING SCREW



6. Turn the ignition switch OFF.
7. Reconnect the 2P connector on the EACV, then remove BACK UP fuse in the under-hood fuse/relay box for 10 seconds to reset the ECU.
8. Restart and idle the engine with no-load conditions for one minute, then check the idle speed.

NOTE: (CANADA) Pull the parking brake lever up. Start the engine, then check that the headlights are off.

Idle speed should be:

Manual	D15Z1 engine: 600 ± 50 rpm Others: 670 ± 50 rpm
Automatic	700 ± 50 rpm (in N or P)

9. Idle the engine for one minute with headlights (Hi) ON and check the idle speed.

Idle speed should be:

Manual	D15Z1 engine: 700 ± 50 rpm Others: 750 ± 50 rpm
Automatic	750 ± 50 rpm (in N or P)

10. Turn the headlights and rear defogger off. Idle the engine for one minute with heater fan switch at HI and air conditioner on, then check the idle speed.

Idle speed should be:

Manual	D15Z1 engine: 810 ± 50 rpm Others: 810 ± 50 rpm
Automatic	810 ± 50 rpm (in N or P)

NOTE: If the idle speed is not within specification, see System Troubleshooting Guide on page 11-82.