Engine Tune-up

Idle Speed Inspection/Adjustment

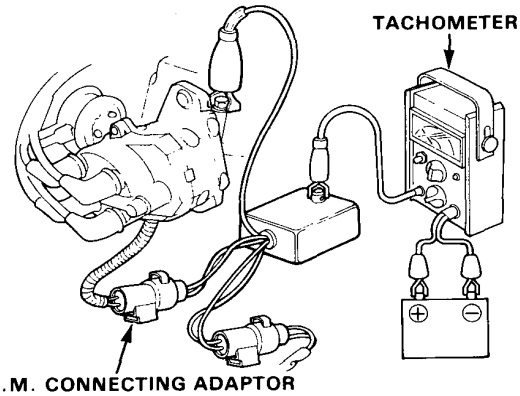
Carbureted Engine :

NOTE:
- Ignition timing and valve clearance must be correct, and engine must be normal operating temperature; the cooling fan will come on.
- Snap the accelerator pedal serveral times and check the idle speed with the accelerator pedal fully returned.
- Check the clutch pedal before making idle speed and mixture inspections.

⚠WARNING Do not smoke during this procedure. Keep any open flame away from your work area.

CO Meter Method

1. Warm up and calibrate the NDIR CO Meter in accordance with the manufacturer's recommended procedures.
2. Insert exhaust gas sampling probe into the tail pipe at least 40 cm and connect a tachometer.



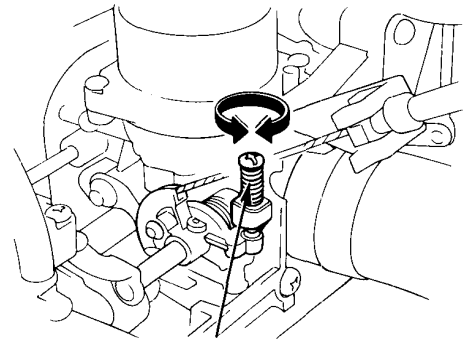
3. Check the idle speed with no load.

Idle speed should be:

Manual	750±50 min⁻¹ (rpm)
Automatic	700±50 min⁻¹ (rpm)

4. If not within specification, adjust by turning throttle stop screw to obtain proper idle speed.

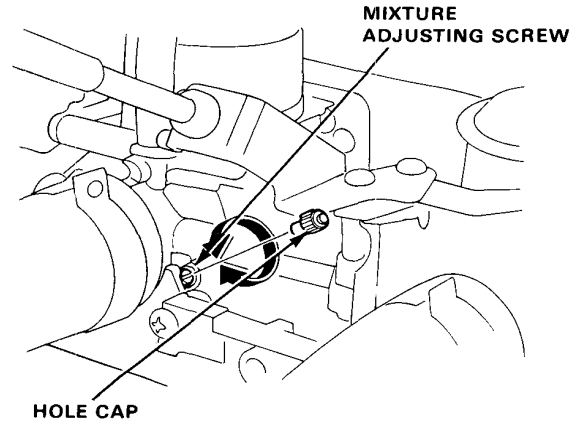
   If idle speed cannot be adjusted properly, check for proper throttle cable adjustment.



5. Check specification for idle CO with no load.

   Spcified CO %: below 0.1 %

6. If not within specification, remove mixture adjusting screw hole plug and adjust by turning mixture adjusting screw to obtain proper CO reading.



Turning mixture adjusting screw
clockwise: CO reading decreases
counterclockwise: CO reading increases

- Readjust idle speed if necessary, and recheck idle CO.

(Carbureted Engine)

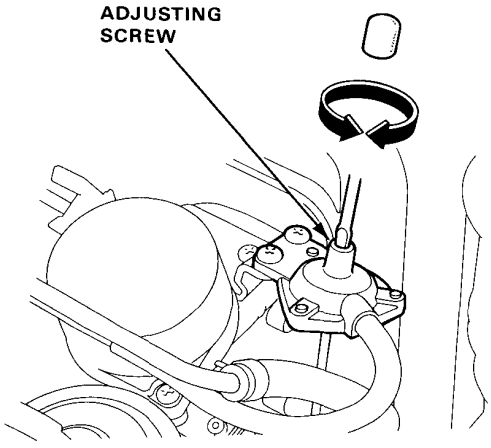
7. Install the hole plug.

   If unable to obtain a CO reading of specified % by this procedure, check the engine turn-up condition.

8. If equipped with air conditioner, check the idle speed with the A/C on.

   Idle speed should be: 750±50 min^{-1} (rpm)

   If not, adjust the idle speed by turning the adjusting screw.



Tailpipe Emissions :

Inspection

NOTE: It is not possible to use a CO meter to adjust the idle mixture; the effect of the catalytic converter prevents accurate tracking of such small changes in air-fuel ratio.

⚠WARNING Do not smoke during this procedure. Keep any open flame away from your work area.

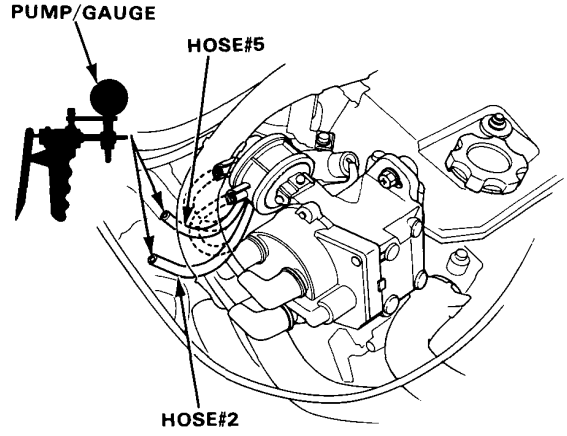
1. Follow steps the propane enrichment method.
2. Warm up and calibrate the CO meter according to the meter manufacture's instructions.
3. Check idle CO with the headlights, heater blower, rear window defogger, cooling fan, and air conditioner off.

   Specified CO%; 1.0%

Ignition Timing Inspection and Setting

Carbureted Engine :

1. Disconnect the vacuum hoses from the vacuum advance diaphragm, then connect the vacuum pump/gauges to the vacuum hoses.



2. Start the engine and let it idle.
3. When the engine is cool.
   Coolant temperature is below[45°C(113°F)].
   Check each hose for vacuum. The #2 and #5 hoses should have vacuum.

   - If the #2 hose has no vacuum, check the #2 hose of proper connection, cracks, blockage or disconnected hose.
   - If the #5 hose has no vacuum, check the #5 and #10 hoses for proper connections, cracks, blockage or disconnected hoses, and the check valve is not clogged.
     If the #5 and #10 hoses, and the check valve have no problem, replace the thermovalve and recheck the #5 hose for vacuum.

4. Connect the vacuum hoses to the vacuum advance diaphragm and allow the engine to warm up. (cooling fan comes on).
5. Disconnect the #5 hose from the vacuum advance diaphragm and connect the vacuum pump/gauge to the #5 hose.
6. Check the #5 hose for vacuum.
   The #5 hose should have no vacuum.

   - If the #5 hose has vacuum, replace the thermovalve and recheck the #5 hose for vacuum.

7. Disconnect the vacuum hoses from the vacuum advance diaphragm and plug them.
8. Connect a timing light.

(cont'd)