

# Engine Tune-up

## Tailpipe Emissions Inspection

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

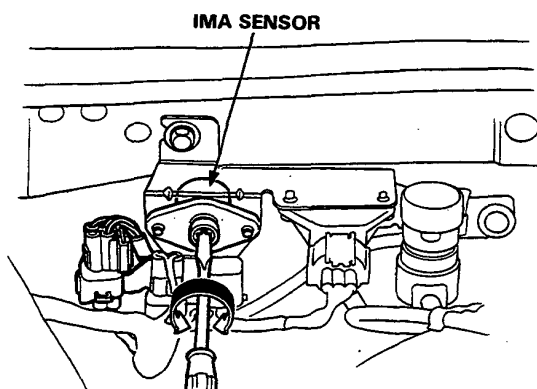
1. Start the engine and warm up to normal operating temperature (cooling fan comes on).
2. Connect tachometer.
3. Check idle speed and adjust the idle speed, if necessary (page 11-180).
4. Warm up and calibrate the CO meter according to the meter manufacturer's instructions.
5. Check idle CO with the headlights, heater blower, rear window defogger, cooling fan, and air conditioner off.

### Specified CO%:

KX, KS, KZ: 0.1% maximum

Other models:  $1.0 \pm 1.0\%$

- If unable to obtain this reading:  
On KX, KS, KZ, see ECU troubleshooting (page 6-134).  
On other models, adjust by turning the adjusting screw of the IMA sensor.

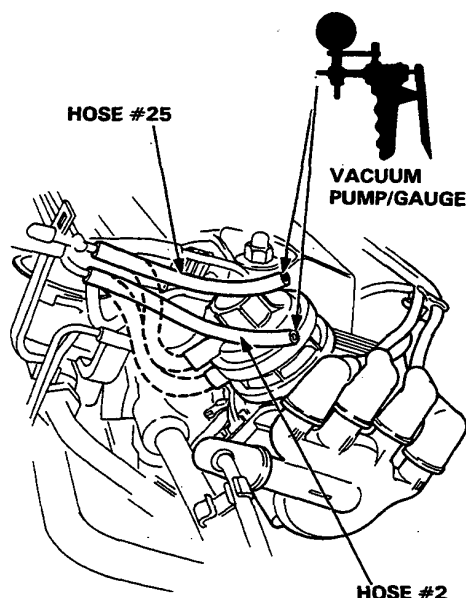


- If unable to obtain a CO reading of specified % by this procedure, check the engine tune-up condition.

## 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 140°F), check each hose for vacuum. The #2 and #25 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 #25 hose has no vacuum, check the #24 and #25 hoses for proper connections, cracks, blockage or disconnected hoses, and the check valve is not clogged.  
If the #24 and #25 hoses, and the check valve have no problem, replace the thermovalve and recheck the #25 hose for vacuum.
4. Connect the vacuum hoses to the vacuum advance diaphragm and allow the engine to warm up. (cooling fan comes on).