

## CO/HC INSPECTION

EMOM8-01

**HINT:**

This check is used only to determine whether or not the idle CO/HC complies with regulations.

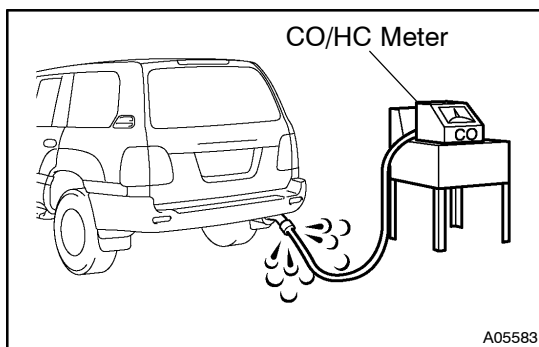
**1. INITIAL CONDITIONS**

- (a) Engine at normal operating temperature.
- (b) Air cleaner installed.
- (c) All pipes and hoses of air induction system connected.
- (d) All accessories switched OFF.
- (e) All vacuum lines properly connected.

**HINT:**

All vacuum hoses should be properly connected.

- (f) SFI system wiring connectors fully plugged.
- (g) Ignition timing set correctly.
- (h) Transmission in neutral range.
- (i) Tachometer and CO/HC meter calibrated by hand.

**2. START ENGINE****3. RACE ENGINE AT 2,500 RPM FOR APPROX. 180 SECONDS**

- 4. INSERT CO/HC METER TESTING PROBE AT LEAST 40 cm (1.3 ft) INTO TAILPIPE DURING IDLING**
- 5. IMMEDIATELY CHECK CO/HC CONCENTRATION AT IDLE AND/OR 2,500 RPM**

**HINT:**

When performing the 2 mode (2,500 rpm and idle) test, follow the measurement order prescribed by the applicable local regulations.

**6. TROUBLESHOOTING**

If the CO/HC concentration does not comply with regulations, perform troubleshooting in the order given below.

See the table below for possible causes, and then inspect and correct the applicable causes if necessary.

| CO     | HC   | Problems                                 | Causes                                                                                                                                                                                                                                                                                    |
|--------|------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Normal | High | Rough idle                               | 1. Faulty ignitions: <ul style="list-style-type: none"> <li>• Incorrect timing</li> <li>• Fouled, shorted or improperly gapped plugs</li> </ul> 2. Incorrect valve clearance<br>3. Leaky intake and exhaust valves<br>4. Leaky cylinders                                                  |
| Low    | High | Rough idle<br>(fluctuating HC reading)   | 1. Vacuum leaks: <ul style="list-style-type: none"> <li>• PCV hoses</li> <li>• Intake manifold</li> <li>• Throttle body</li> <li>• Brake booster line</li> </ul> 2. Lean mixture causing misfire                                                                                          |
| High   | High | Rough idle<br>(Black smoke from exhaust) | 1. Restricted air filter<br>2. Faulty SFI systems: <ul style="list-style-type: none"> <li>• Faulty pressure regulator</li> <li>• Defective ECT sensor</li> <li>• Faulty ECM</li> <li>• Faulty injectors</li> <li>• Faulty throttle position sensor</li> <li>• Faulty MAF meter</li> </ul> |