

## CO/HC INSPECTION

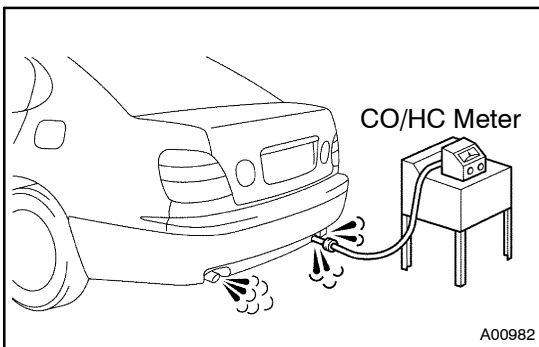
EM00Q-02

### 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
- (f) EFI system wiring connectors fully plugged
- (g) Ignition timing checked correctly
- (h) Transmission in neutral position
- (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

Complete the measuring within 3 minutes.

### HINT:

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

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

- (1) Check oxygen sensor operation.  
(See [page DI-118](#))
- (2) See the table below for possible causes, then inspect and correct the applicable causes if necessary.

CO	HC	Symptom	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 3. Leaky intake and exhaust valves 4. Leaky cylinder
Low	High	Rough idle (Fluctuating HC reading)	1. Vacuum leaks: <ul style="list-style-type: none"> <li>• PCV hose</li> <li>• Intake manifolds</li> <li>• Throttle body</li> </ul> 2. Lean mixture causing misfire
High	High	Rough idle (Black smoke from exhaust)	1. Restricted air filter 2. Faulty EFI system: <ul style="list-style-type: none"> <li>• Faulty pressure regulator</li> <li>• Defective water temperature sensor</li> <li>• Faulty engine ECU</li> <li>• Faulty injector</li> <li>• Faulty throttle position sensor</li> <li>• Air flow sensor</li> </ul>