Checking CO/HC

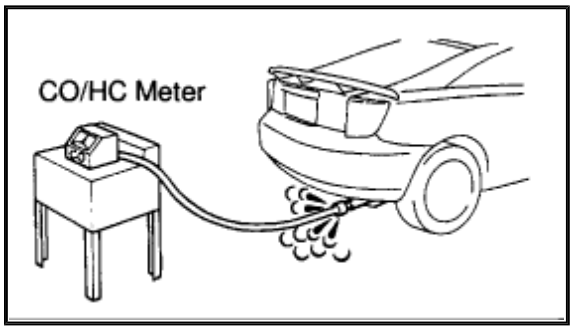
INSPECTION

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

1. INSTALL CONDITIONS

    a. Engine at normal operating temperature
    b. Air cleaner installed
    c. Air pipes and hoses of air induction system connected
    d. All accessories switched OFF
    e. All vacuum lines properly connected
    f. SFI system wiring connectors fully plugged
    g. Ignition timing check 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

CO	HC	Problems	Causes
Normal	High	Rough idle	1. Faulty ignitions: • Incorrect timing • Fouled, shorted or improperly gapped plugs • Open or crossed high–tension cords 2. Incorrect valve clearance 3. Leaky intake and exhaust valves 4. Leaky cylinders
Low	High	Rough idle (Fluctuating HC reading)	1. Vacuum leaks: • PCV hoses • Intake manifold • Throttle body • IAC valve • Brake booster line 2. Lean mixture causing misfire
High	High	Rough idle (Black smoke from exhaust)	1. Restricted air filter 2. Plugged PCV valve 3. Faulty SFI systems: • Faulty pressure regulator • Defective ECT sensor • Defective IAT sensor • Faulty ECM • Faulty injectors • Faulty throttle position sensor

5. IMMEDIATELY CHECK CO/HC CONCENTRATION AT IDLE AND/OR 2,500 RPM Complete the measuring with 3 minutes. **HINT:** When doing the 2 mode (idle and 2,500 rpm) test, these measurement order prescribed by the applicable local regulations. If the CO/HC concentration does not comply with regulations, troubleshoot in the order given below.

    - Check heated oxygen sensor operation.
    - See the table for possible causes, and then inspect and correct the applicable causes if necessary.