

CO/HC INSPECTION

EM03L-09

HINT:

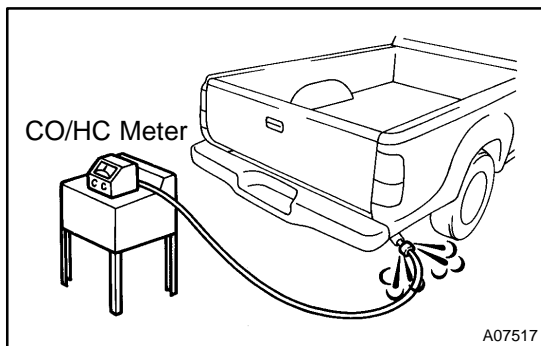
This check is used only to determine whether or not the idle CO/HC complies with regulations.

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) SFI 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 doing 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, troubleshoot in the order given below.

- (1) Check the A/F sensor or heated oxygen sensor operation (See page [DI-288](#)).
- (2) See the table below for possible causes, and then inspect and correct the applicable causes if necessary.

CO	HC	Symptoms	Causes
Normal	High	Rough idle	5. Faulty ignition: <ul style="list-style-type: none"> • Incorrect timing • Fouled, shorted or improperly gapped plugs • Open or crossed high-tension cords 6. Incorrect valve clearance 7. Leaky intake and exhaust valves 8. Leaky cylinder
Low	High	Rough idle (Fluctuating HC reading)	1. Vacuum leak: <ul style="list-style-type: none"> • PCV hose • Intake manifold • Air intake chamber • Intake air connector • 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: <ul style="list-style-type: none"> • Faulty fuel pressure regulator • Clogged fuel return line • Defective ECT sensor • Faulty ECM • Faulty injector • Faulty throttle position sensor • Faulty MAF meter