

CO/HC INSPECTION

EMOKQ-07

HINT:

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

1. INITIAL CONDITIONS

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

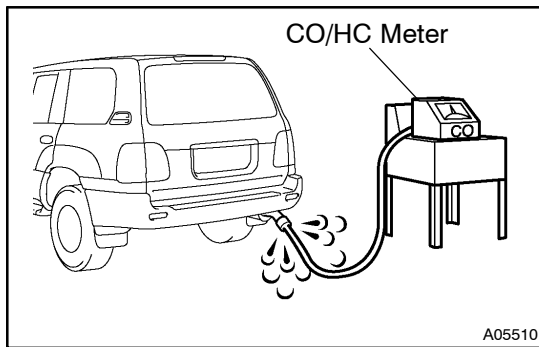
HINT:

All vacuum hoses should be properly connected.

- (f) SFI system wiring connectors are fully plugged.
- (g) Ignition timing is set correctly.
- (h) Transmission is in neutral range.
- (i) Tachometer and CO/HC meter are 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**HINT:**

If the CO/HC concentration does not comply with the 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: • Incorrect timing • Fouled, shorted or improperly gapped plugs 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 • Brake booster line 2. Lean mixture causing misfire
High	High	Rough idle (Black smoke from exhaust)	1. Restricted air filter 2. Faulty SFI systems: • Faulty pressure regulator • Defective ECT sensor • Faulty ECM • Faulty injectors • Faulty throttle position sensor • Faulty MAF meter