

CO/HC INSPECTION

EM115-01

HINT:

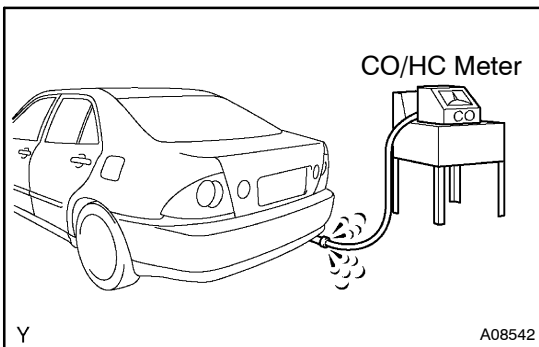
This check is used only to determine whether or not the idle CO/HC complies with specifications.

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 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 INTO TAILPIPE AT LEAST 40 cm (1.3 ft) DURING IDLING

5. CHECK CO/HC CONCENTRATION AT IDLE

Idle CO concentration: 0 – 0.5 %

Idle HC concentration: Applicable local regulation

If the CO/HC concentration does not conform to specifications, perform troubleshooting in the order given below.

- (a) Check oxygen sensor operation.
- (b) See the table next page for possible causes, and then inspect and correct the applicable causes if necessary.

HC	CO	Problems	Causes
Normal	High	Rough idle	1. Faulty ignition: <ul style="list-style-type: none"> • Incorrect timing • Fouled, shorted or improperly gapped plugs 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"> • 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. Plugged PCV valve 3. Faulty EFI systems: <ul style="list-style-type: none"> • Faulty pressure regulator • Defective water temp. sensor • Faulty engine ECU • Faulty injectors • Faulty throttle position sensor • Faulty vacuum sensor