CO/HC (2RZ–FE)

EM06Q-01

INSPECTION

HINT:

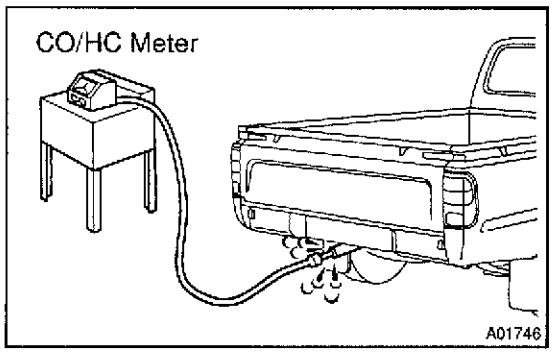
This check is used only to determine whether or not the idle CO/HC complies with specifications.

1. INITIAL CONDITIONS

(a) Engine at reach 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 set 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

6. TROUBLESHOOTING

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

(a) Check oxygen sensor operation.
(See page FI–59)
(b) See the table next page for possible causes, and then inspect and correct the applicable causes if necessary.

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CO	HC	Problems	Causes
Normal	High	Rough idle	1. Fault 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 EGR valve 5. Leaky cylinders
Low	High	Rough idle (Fluctuating HC reading)	1. Vacuum Leaks: • PCV hose • Intake manifold • Throttle body • Vacuum hose • Intake chamber
High	High	Rough idle (Black smoke from exhaust)	1. Restricted air filter 2. Plugged PCV valve 3. Faulty EFI system: • Faulty fuel pressure regulator • Clogged fuel return line • Defective water temperature sensor • Defective intake air temperature sensor • Faulty engine ECU • Faulty injectors • Faulty Air flow meter