CO/HC

EM1AK–02

INSPECTION

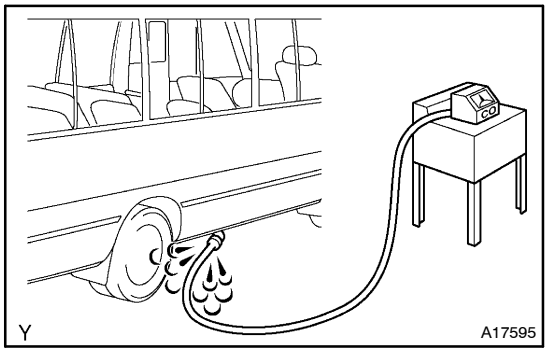
HINT:
This check is used only to determine whether or not the idle CO/HC complies with regulations.

1. INSTALLATION 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) EFI system wiring connectors fully plugged
(g) Ignition timing checked correctly
(h) Transmission in neutral range
(i) Tachometer and CO/HC meter calibrated by hand

2. START ENGINE

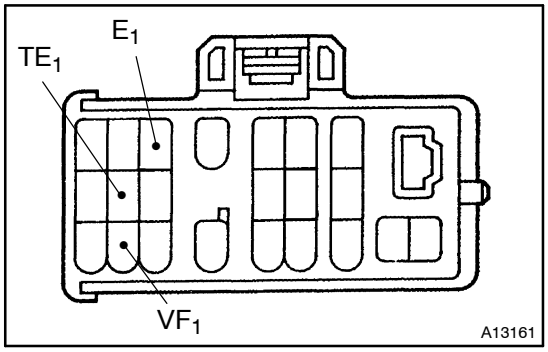
3. RACE ENGINE AT 2,500 RPM FOR APPROX. 120 SECONDS



4. INSERT CO/HC METER TESTING PROBE AT LEAST 40 cm (1.3 ft) INTO TAILPIPE WHILE IDLING THE ENGINE

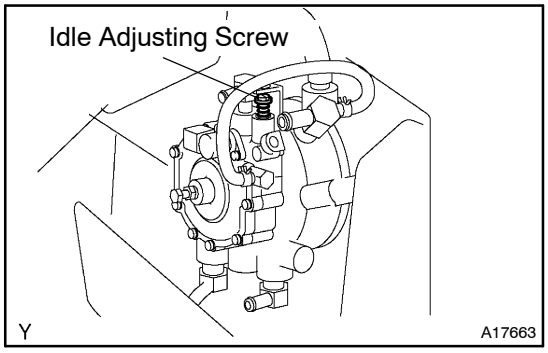
5. CHECK CO/HC CONCENTRATION AT IDLE

Idle CO concentration: 0 – 1.0 %
Idle HC concentration: Applicable local regulation



6. IF NOT AS SPECIFIED, ADJUST AIR FUEL RATIO

(a) Connect the positive (+) tester probe to V_{F1} terminal of the check connector and the negative (–) tester probe to E_1 terminal.
(b) Warm up the heated oxygen sensor, maintaining the engine speed at 2,500 rpm for approx. 2 minutes.
(c) Using SST, short–circuit between terminals T_{E1} and E_1 of the check connector.
(d) Maintaining the engine speed at 2,500 rpm, check that the tester indication changes between 0 and 5 V.
Standard:
More than 8 times of changes for 10 seconds
(e) Disconnect the short–circuit between terminals T_{E1} and E_1.
(f) Measure the indicated voltage (V_F voltage) at the idle speed.
Standard voltage: 2.5 ± 0.9 V



If the voltage is not as specified, adjust the V_F voltage within the specified value by turning the idle adjusting screw of the LPG regulator by 10° per second.

Reference:

V_F voltage	Condition	Measures
0 V	Air fuel ratio: Rich	Turn the screw clockwise
5 V	Air fuel ratio: Lean	Turn the screw counterclockwise

(g) After racing the engine speed several times, check that the VF voltage is within the specified value.

If not, readjust it.