CO (1RZ, 3RZ–F)

EM080–01

INSPECTION

1. VISUALLY INSPECT CARBURETOR

(a) Check for loose screws or a loose mounting to the manifold.

(b) Check for wear in the linkage, missing snap rings or excessive looseness in the throttle shaft. Correct any problems found.

2. INITIAL CONDITIONS

(a) Air cleaner installed

(b) Normal operating coolant temperature

(c) Choke fully open

(d) All accessories switched off

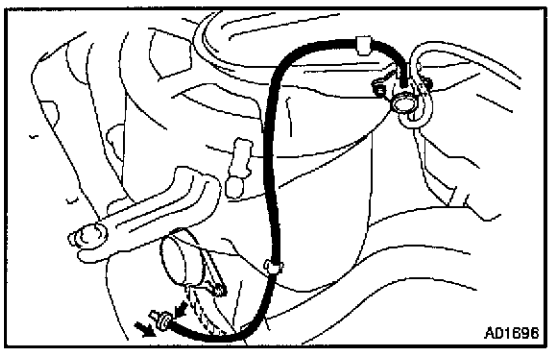
(e) All vacuum lines connected

(f) Ignition timing set correctly

(g) Transmission in the neutral range

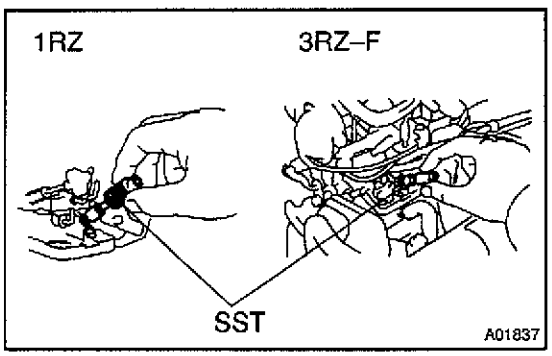
(h) Fuel level should be about even with the correct level in the sight glass.

(i) CO meter operates normally



3. W/

DISCONNECT HOT AIR INTAKE (HAI) VACUUM HOSE AND PLUG HOSE END

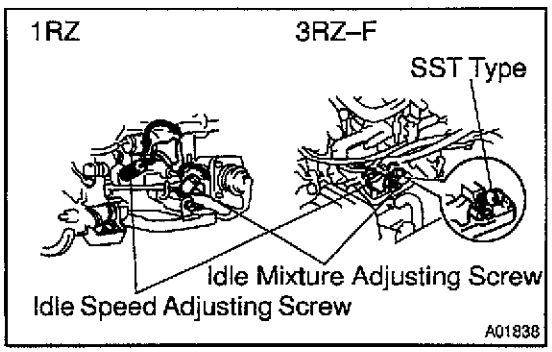


4. ADJUST IDLE SPEED AND IDLE MIXTURE

HINT:

Use SST if necessary

SST 09243–00020



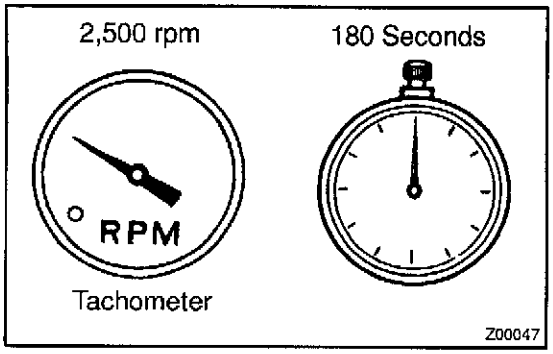
(a) Start the engine.

(b) Using a CO meter to measure the CO concentration in the exhaust, turn the idle speed and idle mixture adjusting screws to obtain the specified concentration value at idle speed.

Idle speed:

1RZ 700 – 800 rpm

3RZ–F 750 – 850rpm

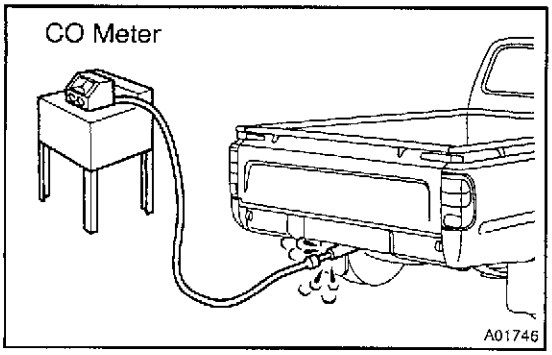


5. INSPECT CO CONCENTRATION

(a) Check that the CO meter is properly calibrated.

(b) Race the engine 180 seconds at about 2,500 rpm before measuring concentration.

(c) Wait 1–3 minutes after racing the engine to allow the concentration to stabilize.



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(d) Insert a testing probe at least 40 cm (1.3 ft) into the tailpipe, and measure the CO concentration within a short time.

Idle CO concentration:

1.5 ± 0.5 %

- If the CO concentration is within specification this adjustment is complete.
- If the CO concentration is not within specification, turn the idle mixture adjusting screw to obtain the specified concentration value.
- If the CO concentration cannot be corrected by adjusting the idle mixture, see table below for other possible causes.

(e) Reconnect the HAI vacuum hose.

6. TROUBLESHOOTING

CO	Problems	Causes
High	Rough idle (Black smoke from exhaust)	1. Restricted air filter 2. Plugged PCV valve 3. Faulty carburetion: • Faulty choke action • Incorrect float setting • Leaking needle or seat • Leaking power valve