

ENGINE TUNE-UP

INSPECTION OF ENGINE COOLANT

(See steps 1 and 2 on page [CO-5](#))

INSPECTION OF ENGINE OIL

(See steps 1 and 2 on page [LU-4](#))

INSPECTION OF AIR FILTER

(See step 3 on page [MA-5](#))

INSPECTION OF BATTERY

(See steps 1 and 2 on page [CH-3](#))

Standard specific gravity:

1.25 – 1.27 when fully charged at 20°C (68°F)

INSPECTION OF HIGH-TENSION CORDS

(See page [IG-6](#))

Maximum resistance: 25 k Ω per cord

INSPECTION OF SPARK PLUGS

(See page [IG-6](#))

Recommended spark plug: ND W16EXR-U11

NGK BPR5EY11

Correct electrode gap: 1.1 mm (0.043 in.)

INSPECTION OF ALTERNATOR DRIVE BELT

(See page [CH-3](#))

Drive belt tension:

New belt 145 $\pm$ 25 lbf

Used belt 100 $\pm$ 20 lbf

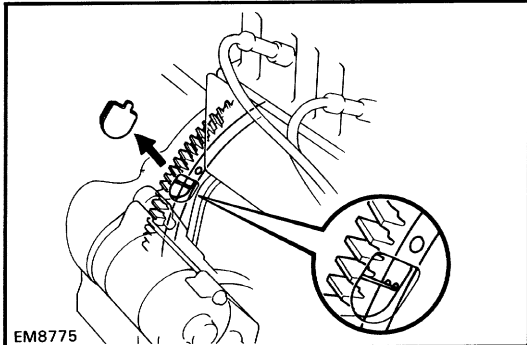
INSPECTION AND ADJUSTMENT OF VALVE CLEARANCE

HINT: Inspect and adjust the valve clearance after engine has reached normal operating temperature.

1. REMOVE AIR CLEANER HOSE

2. REMOVE CYLINDER HEAD COVER

(See step 21 on page [EM-16](#))

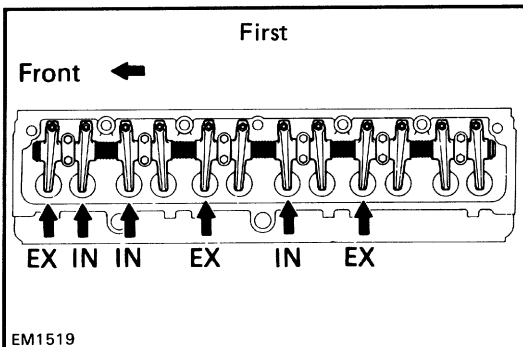


3. SET NO-1 CYLINDER TO TDC/COMPRESSION

(a) Align the TDC mark of the drive plate with the timing pointer by turning the crankshaft clockwise with a wrench.

(b) Check that the rocker arms on the No. 1 cylinder are loose and rocker arms on the No. 6 are tight.

If not, turn the crankshaft one revolution (360°) and align the mark as above.



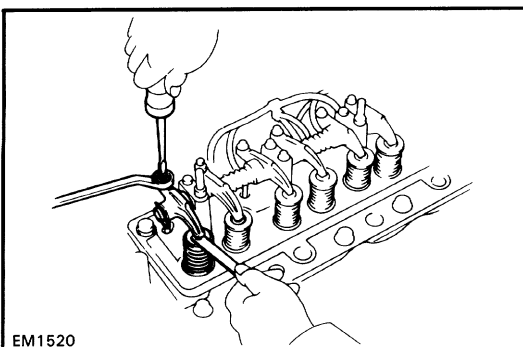
4. INSPECT AND ADJUST VALVE CLEARANCE

(a) Measure only those valves indicated by arrows.

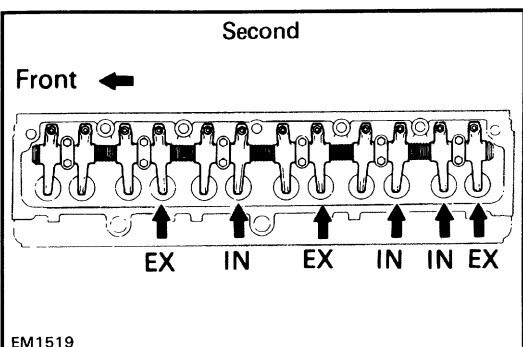
Valve clearance (Hot):

Intake 0.20 mm (0.008 in.)

Exhaust 0.35 mm (0.014 in.)



- Using a thickness gauge, measure the valve clearance between the valve stem and rocker arm. Loosen the lock nut and turn the adjusting screw to set the proper clearance. Hold the adjusting screw in position and tighten the lock nut.
- Recheck the valve clearance. The thickness gauge should slide with a very slight drag.



(b) Turn the crankshaft one revolution (360°) clockwise and align the mark as above step 3 (a).

Adjust only the valves indicated by arrows.

5. INSTALL CYLINDER HEAD COVER

(See step 6 on page [EM-31](#))

6. INSTALL AIR CLEANER HOSE

INSPECTION OF IDLE SPEED

HINT: Allow the engine to warm up to normal operating temperature.

Idle speed: 650 rpm

INSPECTION AND ADJUSTMENT OF IGNITION TIMING

(See steps 10 to 14 on page [IG-11](#))

Ignition timing:

7° BTDC @ idle

(w/ Terminals TE1 and E1 connected)

IDLE AND OR 2,500 RPM CO/HC CHECK

HINT: This check is used only to determine whether or not the idle and/or 2,500 rpm CO/HC complies with regulations.

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

HINT: All vacuum hoses for EGR system, etc. should be properly connected.

- (f) EFI system wiring connectors fully plugged
- (g) Idle speed correct
- (h) Ignition timing set correctly
- (i) Transmission in neutral
- (j) Tachometer and CO/HC meter calibrated and at hand

2. START ENGINE

3. RACE ENGINE AT 2,500 RPM FOR APPROX. 2 MINUTES

4. INSERT CO/HC METER TESTING PROBE INTO

TAIL PIPE AT LEAST 40 cm (1.3 ft)

5. CHECK CO/HC AT IDLE AND/OR 2,500 RPM

Complete the measuring within three minutes.

HINT:

When performing the 2 mode (2,500 rpm and idle) test, follow the measurement order prescribed by the regulations.

If the CO/HC reading at 2,500 rpm does not comply with regulations, try the following procedure.

Race the engine again at 2,500 rpm for approx. 1 minute, and quickly repeat step 4 and 5 above. This may correct the problem.