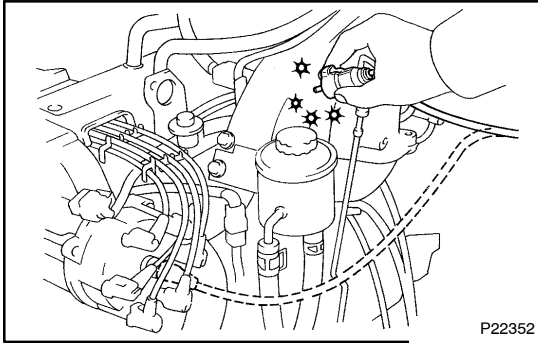


IGNITION SYSTEM ON-VEHICLE INSPECTION

IG0J2-01

NOTICE:

”Cold” and ”Hot” in the following sentences express the temperature of the coils themselves. ”Cold” is from -10°C (14°F) to 50°C (122°F) and ”Hot” is from 50°C (122°F) to 100°C (212°F).

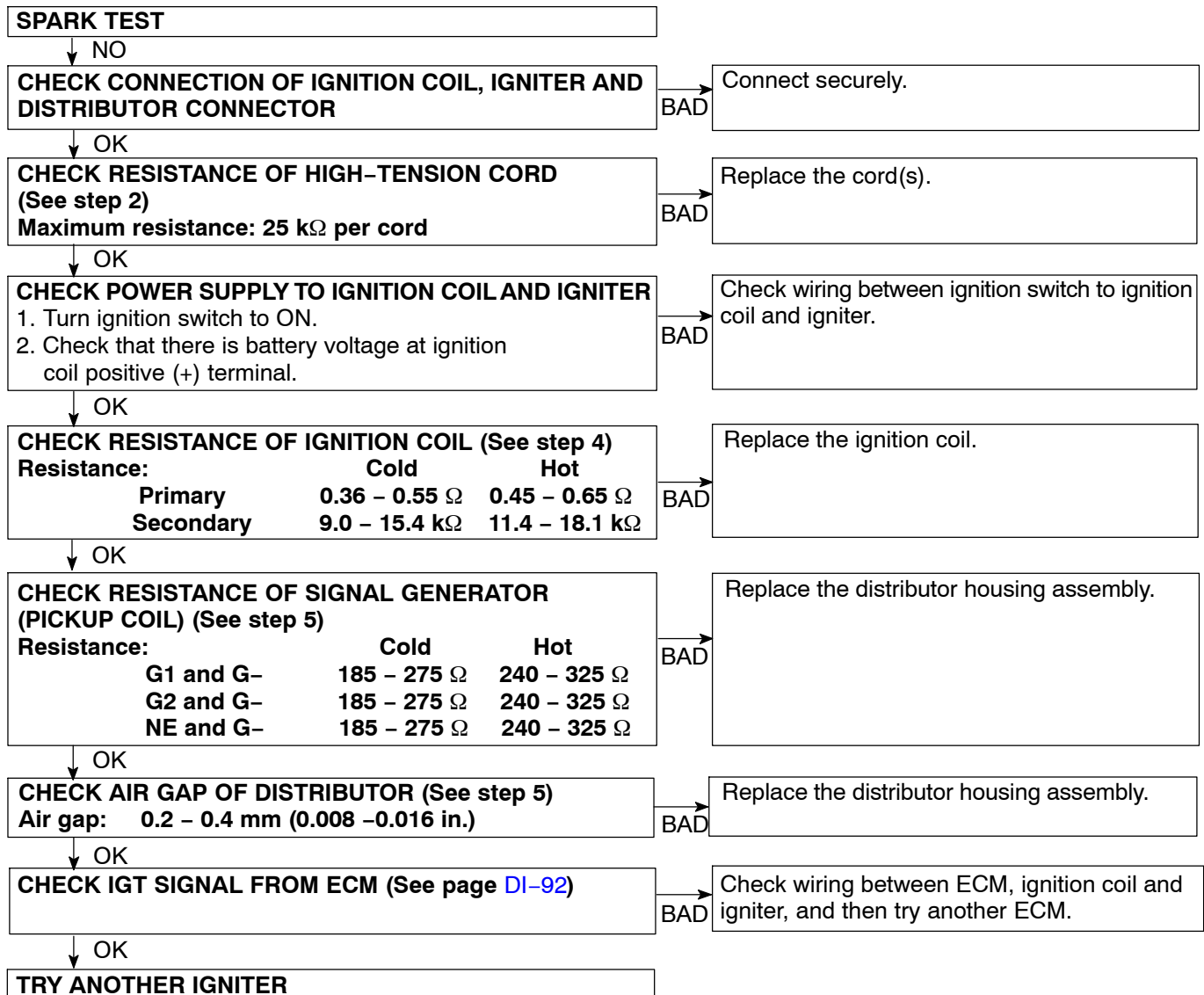
**1. INSPECT IGNITER AND SPARK TEST**

- (a) Disconnect the high-tension cords (from the ignition coil) from the distributor cap.
- (b) Hold the end approx. 12.5 mm (0.50 in.) from the body ground.
- (c) Check if spark occurs while engine is being cranked.

HINT:

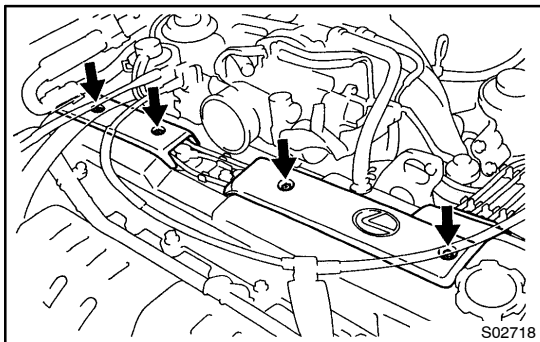
To prevent gasoline from being injected from injectors during this test, crank the engine for no more than 1 – 2 seconds at a time.

If the spark does not occur, do the test as follows:

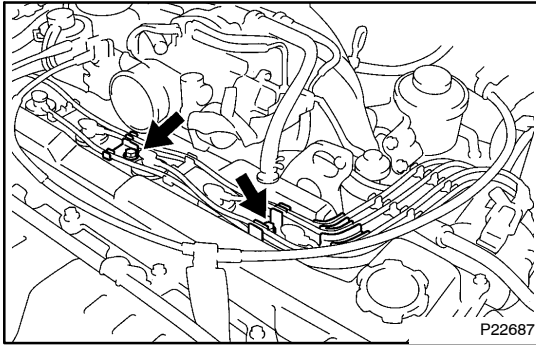


2. INSPECT HIGH-TENSION CORDS

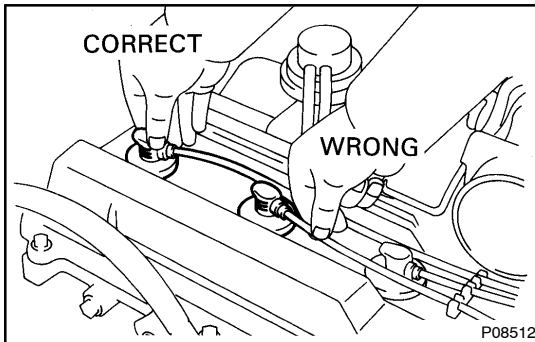
- Remove the No. 2 PCV hose.
- Remove the air cleaner hose.
- Disconnect the throttle cable.



- Remove the 4 bolts, No. 2 and No. 3 cylinder head covers.



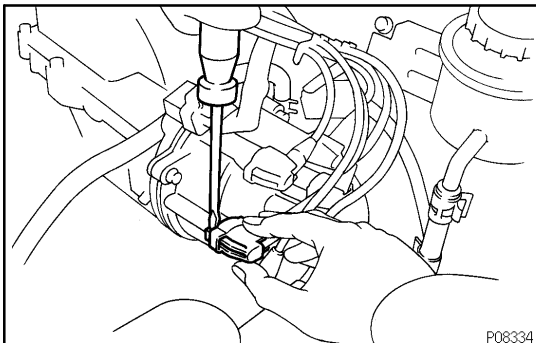
- (e) Disconnect the high-tension cords from the spark plugs.
 (1) Remove the 2 mounting bolts of the No. 1 and No. 2 cord clamps.



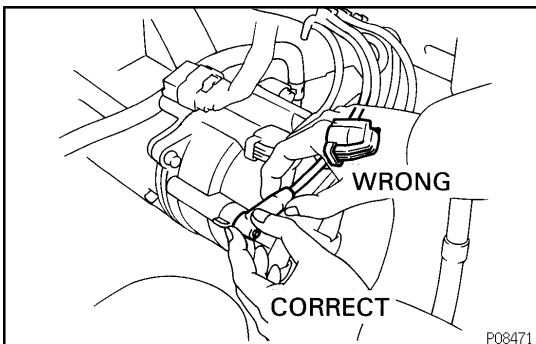
- (2) Disconnect the high-tension cords at the rubber boot.

NOTICE:

- Do not pull on the cords.
- Pulling on or bending the cords may damage the conductor inside.



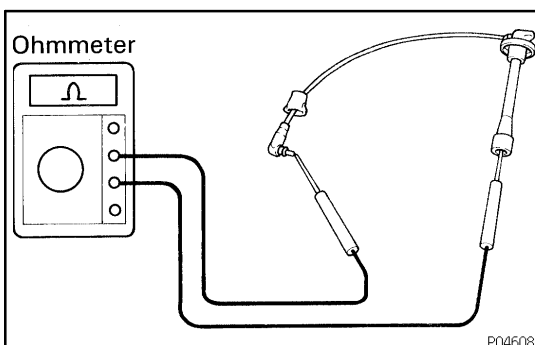
- (f) Disconnect the high-tension cords from the distributor cap and ignition coil.
 (1) Using a screwdriver, lift up the lock claw and disconnect the holder from the distributor cap (ignition coil).



- (2) Disconnect the high-tension cord at the grommet.

NOTICE:

- Do not pull on the cords.
- Pulling on or bending the cords may damage the conductor inside. Do not wipe any of the oil from the grommet after the high-tension cord is disconnected.



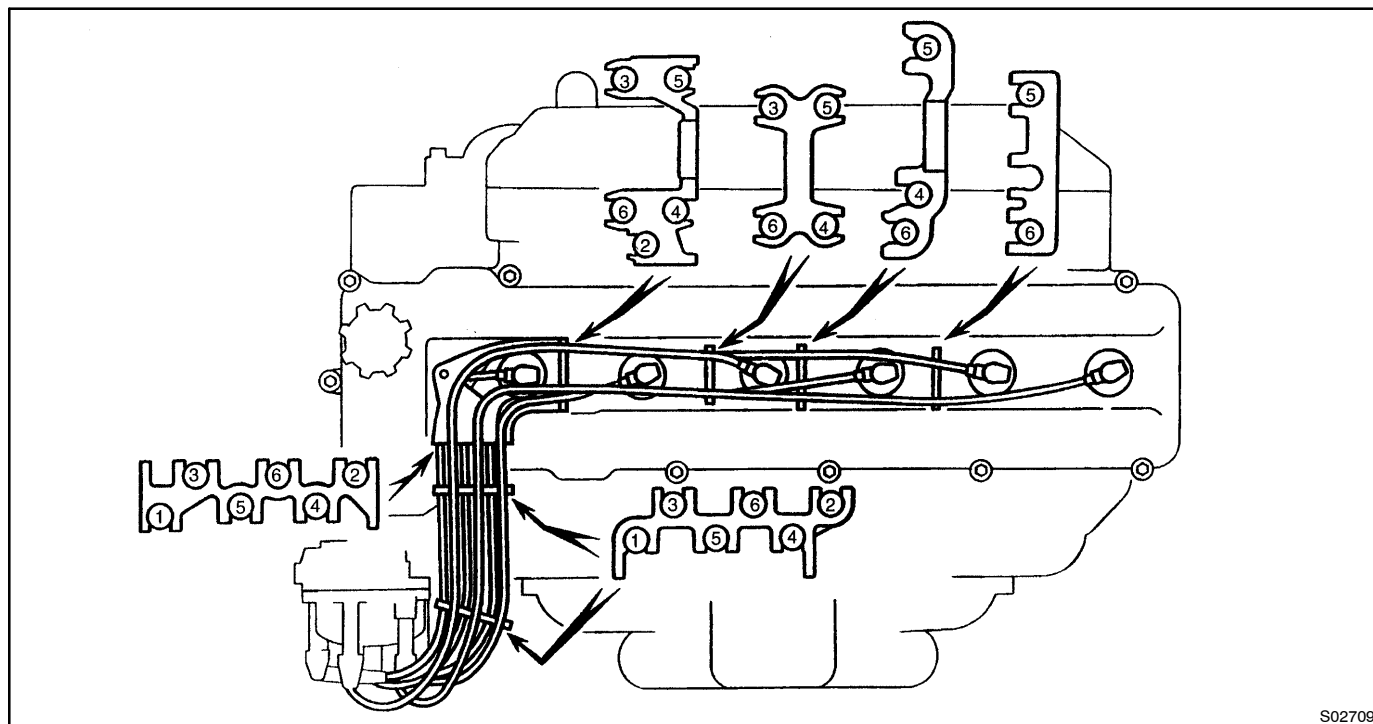
- (g) Inspect the high-tension cord resistance.
 Using an ohmmeter, measure the resistance.

Maximum resistance: 25 k Ω per cord

If the resistance is greater than maximum, check the terminals.
 If necessary, replace the high-tension cord.

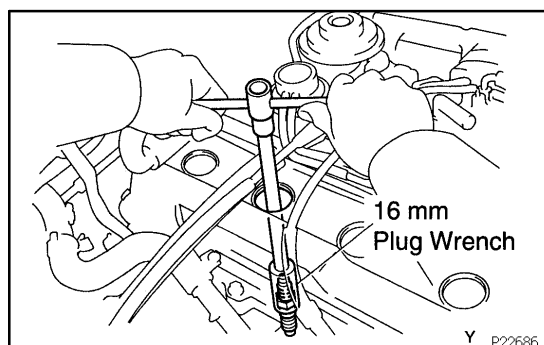
- (h) Reconnect the high-tension cords to the distributor cap and ignition coil.
 (i) Reconnect the high-tension cords to spark plugs.

- (1) Secure the high-tension cords with the cord clamps as shown in the illustration.



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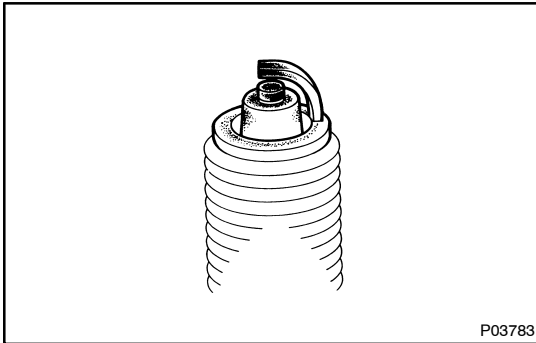
- (2) Install the No. 1 and No. 2 cord clamps with the 2 bolts.
- (j) Reinstall the No. 2 and No. 3 cylinder head covers with the 4 bolts.
 - (k) Reinstall the throttle cable.
 - (l) Reinstall the air cleaner hose.
 - (m) Reinstall the No. 2 PCV hose.
- 3. INSPECT SPARK PLUGS**
- (a) Disconnect the high-tension cords from the spark plugs (See step 2).



- (b) Using a 16 mm plug wrench, remove the spark plug.



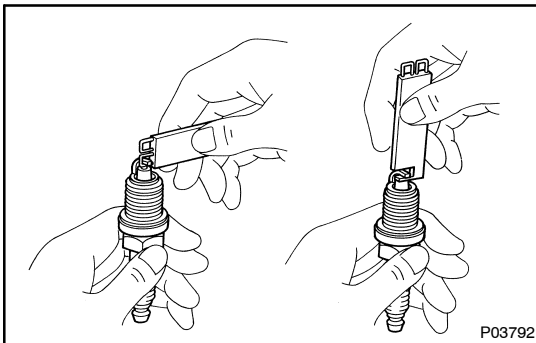
- (c) Clean the spark plugs.
Using a spark plug cleaner or wire brush, clean the spark plug.



- (d) Check the spark plug for electrode wear, threads damage and insulator damage.
If abnormal, replace the plugs.

Recommended spark plugs:

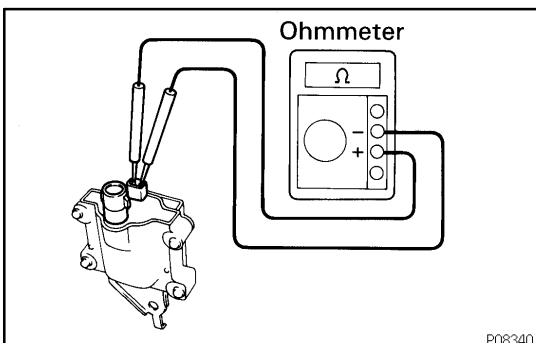
DENSO	K16R-U
NGK	BKR5EYA



- (e) Adjust the electrode gap.
Carefully bend the outer electrode to obtain the correct electrode gap.
Correct electrode gap: 0.8 mm (0.031 in.)
- (f) Using a 16 mm plug wrench, reinstall the spark plugs.
Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)
- (g) Reconnect the high-tension cords to the spark plugs (See step 2).

4. INSPECT IGNITION COILS

- (a) Disconnect the ignition coil connector.
(b) Disconnect the high-tension cord.

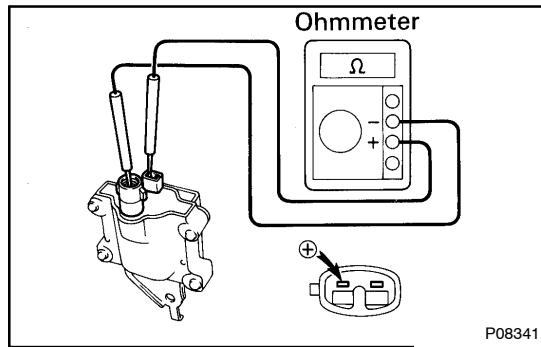


- (c) Inspect the primary coil resistance.
Using an ohmmeter, measure the resistance between the positive (+) and negative (-) terminals.

Primary coil resistance:

Cold	0.36 - 0.55 Ω
Hot	0.45 - 0.65 Ω

If the resistance is not as specified, replace the ignition coil.



- (d) Inspect the secondary coil resistance.
Using an ohmmeter, measure the resistance between the positive (+) and high-tension terminals.

Secondary coil resistance:

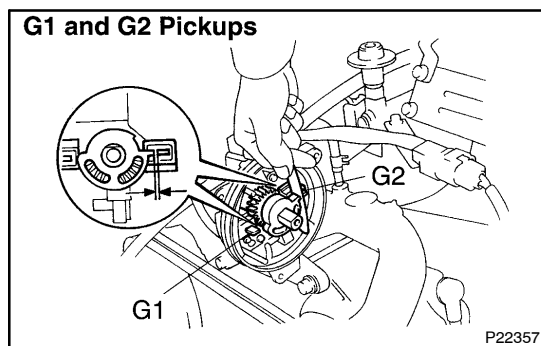
Cold	9.0 – 15.4 kΩ
Hot	11.4 – 18.1 kΩ

If the resistance is not as specified, replace the ignition coil.

- (e) Reconnect the high-tension cord.
(f) Reconnect the ignition coil connector.

5. INSPECT DISTRIBUTOR

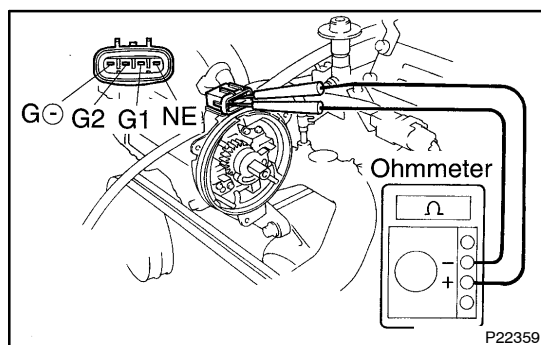
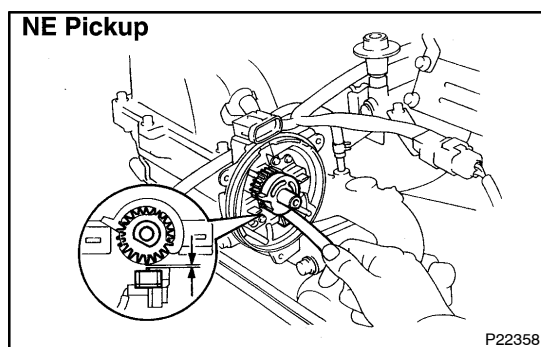
- (a) Disconnect the distributor connector.
(b) Remove the distributor cap without disconnecting high-tension cords.
(c) Remove the rotor.



- (d) Inspect the air gaps.
Using a thickness gauge, measure the gap between the signal rotor and the pickup coil projection.

Air gap: 0.2 – 0.4 mm (0.008 – 0.016 in.)

If the gap is not as specified, replace the distributor housing assembly.



- (e) Inspect the signal generator (pickup coil) resistance.
Using an ohmmeter, measure the pickup coil resistance between the terminals.

Pickup coil resistance:

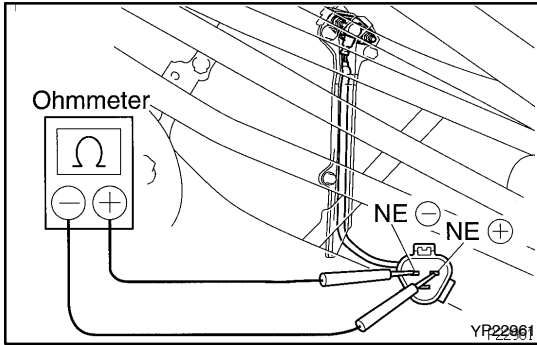
Cold	G1 and G-	185 – 275 Ω
	G2 and G-	185 – 275 Ω
	NE and G-	185 – 275 Ω
Hot	G1 and G-	240 – 325 Ω
	G2 and G-	240 – 325 Ω
	NE and G-	240 – 325 Ω

If the resistance is not as specified, replace the distributor housing assembly.

- (f) Reinstall the rotor.
- (g) Reinstall the distributor cap.
- (h) Reconnect the distributor connector.

6. INSPECT CRANKSHAFT POSITION SENSOR

- (a) Disconnect the crankshaft position sensor connector and bracket.



- (b) Inspect the crankshaft position sensor resistance. Using an ohmmeter, measure the resistance between the terminals.

Resistance (NE+ - NE-):

Cold	1,630 - 2,740 Ω
Hot	2,065 - 3,225 Ω

If the resistance is not as specified, replace the crankshaft position sensor.

- (c) Reconnect the crankshaft position sensor bracket and connector.