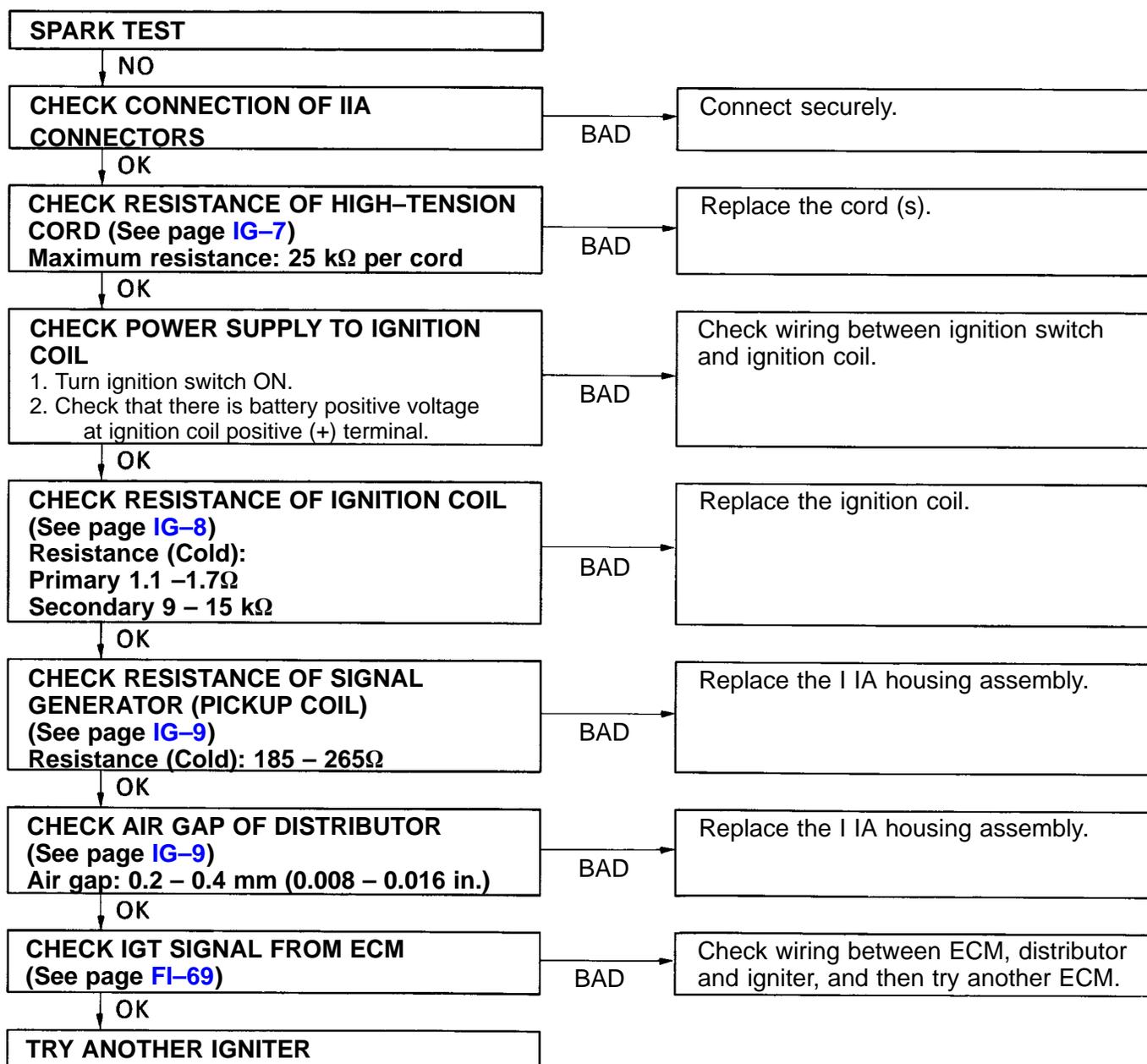


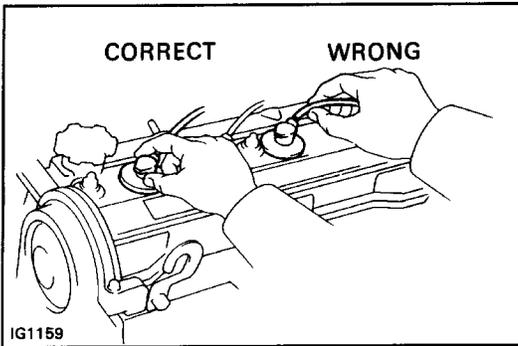
## ON-VEHICLE INSPECTION (4A-FE)

### SPARK TEST

#### CHECK THAT SPARK OCCURS

- Disconnect the high-tension cords from the spark plugs. (See page IG-7)
- Remove the spark plugs. (See page IG-7)
- Install the spark plugs to the each high-tension cord.
- Ground the spark plug.
- Check if spark occurs while engine is being cranked.  
HINT: To minimize the amount of fuel injected into cylinders during this test, crank the engine for no more than 1 - 2 seconds at a time.  
If the spark does not occur, perform the test as follows:





## INSPECTION OF HIGH-TENSION CORDS

### 1. DISCONNECT HIGH-TENSION CORDS FROM SPARK PLUGS

Disconnect the high-tension cords at the rubber boot. DO NOT pull on the cords.

**NOTICE:** Pulling on or bending the cords may damage the conductor inside.

### 2. REMOVE IIA CAP WITHOUT DISCONNECTING HIGH-TENSION CORDS

### 3. INSPECT HIGH-TENSION CORD RESISTANCE

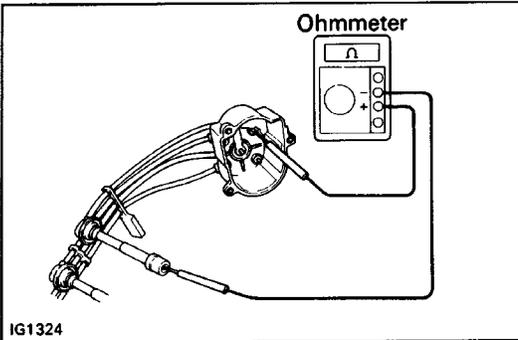
Using an ohmmeter: measure the resistance without disconnecting the IIA cap.

**Maximum resistance: 25 k $\Omega$  per cord**

If the resistance is greater than maximum, check the terminals. If necessary, replace the high-tension cord and/or IIA cap.

### 4. REINSTALL IIA CAP

### 5. RECONNECT HIGH-TENSION CORDS TO SPARK PLUGS

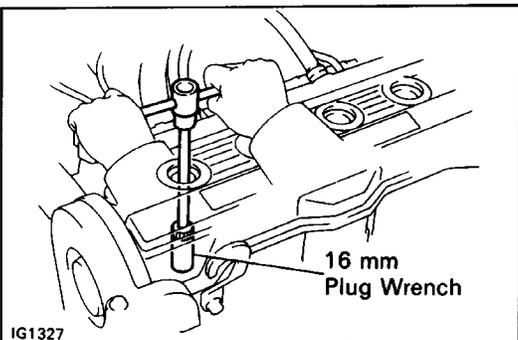


## INSPECTION OF SPARK PLUGS

### 1. DISCONNECT HIGH-TENSION CORDS FROM SPARK PLUGS

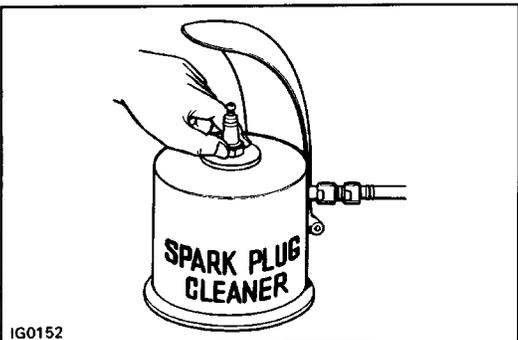
### 2. REMOVE SPARK PLUGS

Using a 16 mm plug wrench, remove the spark plug.



### 3. CLEAN SPARK PLUGS

Using spark plug cleaner or wire brush, clean the spark plug.

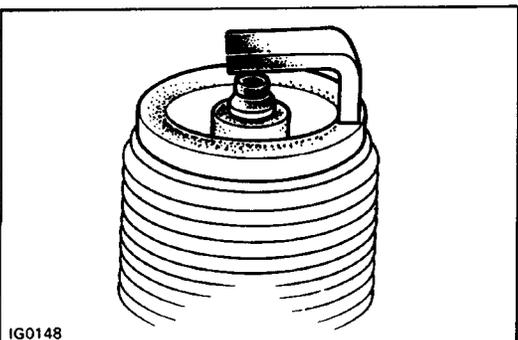


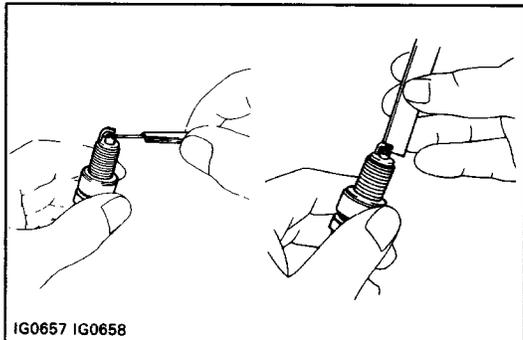
### 4. VISUALLY INSPECT SPARK PLUGS

Check the spark plug for electrode wear, thread damage and insulator damage.

If abnormal, replace the spark plug.

**Recommended spark plug: ND Q16R-U  
NGK BCPR5EY**

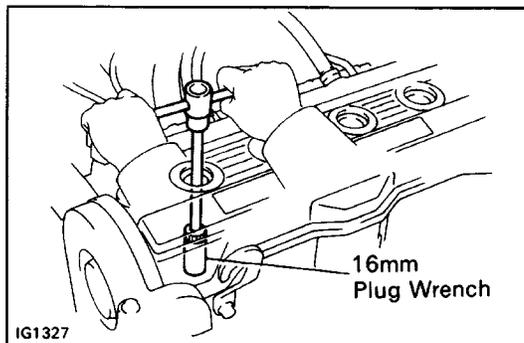




### 5. ADJUST ELECTRODE GAP

Carefully bend the outer electrode to obtain the correct electrode gap.

**Correct electrode gap: 0.8 mm (0.31 in.)**



### 6. INSTALL SPARK PLUGS

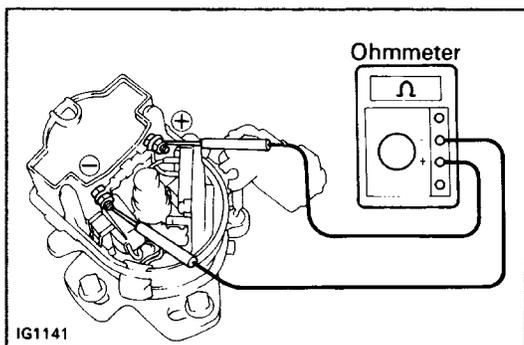
Using a 16 mm plug wrench, install the spark plug.

**Torque: 18 N·m (180 kgf·cm, 13 ft·lbf)**

### 7. RECONNECT HIGH-TENSION CORDS TO SPARK PLUGS

## INSPECTION OF IIA

1. DISCONNECT IIA CONNECTORS
2. REMOVE IIA CAP
3. REMOVE DISTRIBUTOR ROTOR
4. REMOVE IGNITION COIL AND IGNITER DUST COVERS



### Ignition Coil

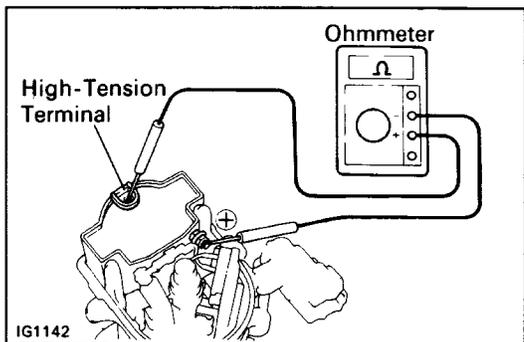
#### 5. INSPECT PRIMARY COIL RESISTANCE

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

**Primary coil resistance (Cold):**

**1.1 ~ 1.7Ω at -10 ~ +400C (14 ~ 1040F)**

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



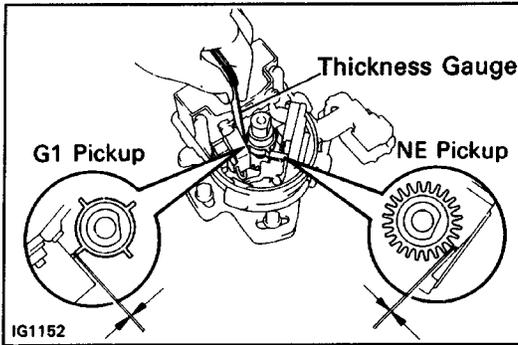
#### 6. INSPECT SECONDARY COIL RESISTANCE

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

**Secondary coil resistance (Cold):**

**9 ~ 15 kΩ at -10 ~ +400C (14 ~ 104°F)**

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



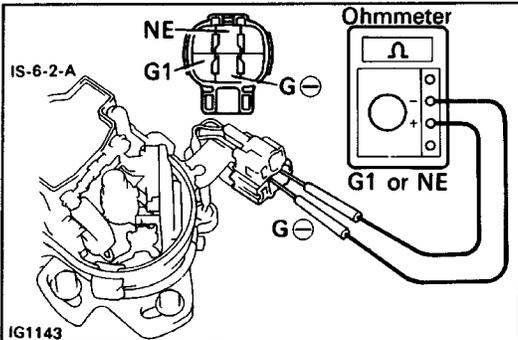
## Distributor

### 7. INSPECT AIR GAP

Using a thickness gauge, measure the gap between the signal rotor and pickup coil projection.

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

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



### 8. INSPECT SIGNAL GENERATOR (PICKUP COIL) RESISTANCE

Using an ohmmeter, measure the resistance between the terminals (G1 and GE(-), NE and G(-)).

**Pickup coil resistance (Cold):**

**185 – 265  $\Omega$  at -10 – +40°C (14 – 104°F)**

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

### 9. REINSTALL IGNITION COIL AND IGNITER DUST COVERS

### 10. REINSTALL DISTRIBUTOR ROTOR

### 11. REINSTALL IIA CAP

### 12. RECONNECT IIA CONNECTORS

## Igniter

(See procedure Spark Test on page [IG-6](#))