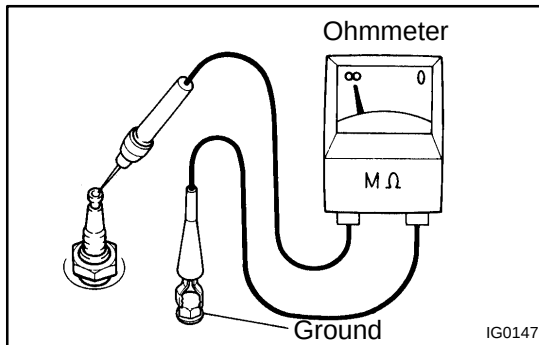


INSPECTION

1. INSPECT SPARK PLUG

NOTICE:

- Do not use a wire brush for cleaning.
- Do not attempt to adjust the electrode gap of a used spark plug.
- Spark plug should be replaced every 200,000 km (120,000 miles).



(a) Check the electrode.

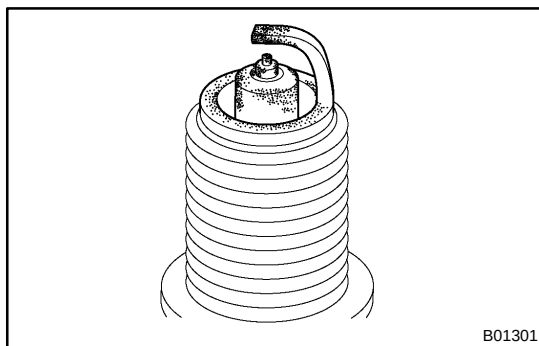
- (1) Using an ohmmeter, measure the insulation resistance.

Correct insulation resistance: 10 MΩ or more

If the resistance is less than the specified value, proceed to step (d).

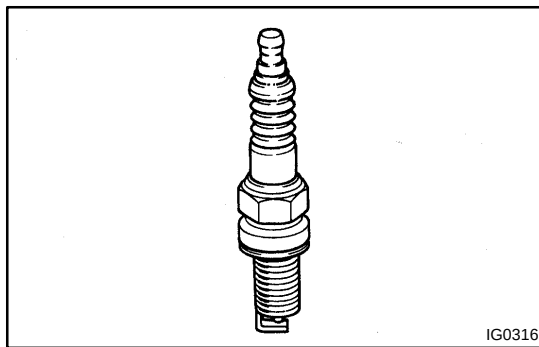
HINT:

If the ohmmeter is not available, do the following simple inspection instead.



(b) Simple inspection method:

- (1) Run the engine to 4,000 rpm 5 times quickly.
- (2) Remove the spark plug.
- (3) Visually check the spark plug.
- (4) If the electrode is dry...OK.
- (5) If the electrode is wet...Proceed to step (C).
- (6) Reinstall the spark plug.

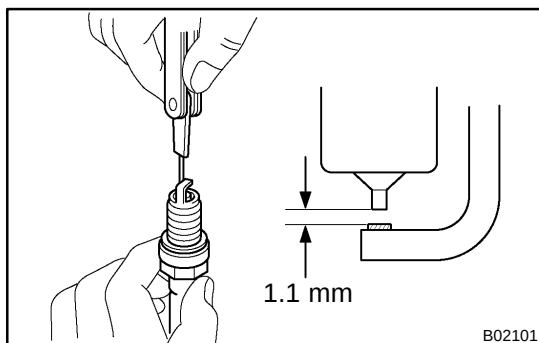


(c) Check the spark plug for any damage on its thread and insulator.

If there is damage, replace the spark plug.

Recommended spark plug:

DENSO made	SK20R11
NGK made	IFR6A11

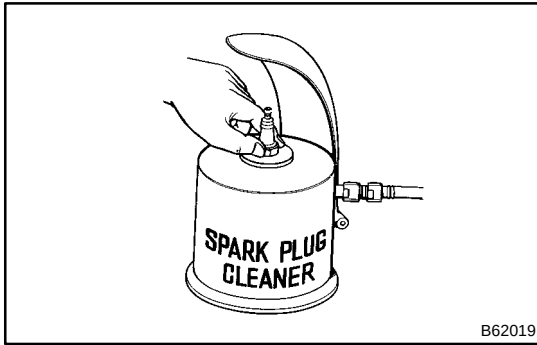


(d) Check the spark plug electrode gap.

**Maximum electrode gap for used spark plug:
1.3 mm (0.051 in.)**

If the gap is greater than maximum, replace the spark plug.

**Correct electrode gap for new spark plug:
1.0 to 1.1 mm (0.039 to 0.043 in.)**



(e) Clean the spark plugs.

If the electrode has traces of wet carbon, clean the electrode with a spark plug cleaner, then dry it.

Air pressure: Blow 588 kPa (6 kgf/cm², 85 psi)

Duration: 20 seconds or less

HINT:

If there are traces of oil, remove it with gasoline before using the spark plug cleaner.

2. INSPECT VVT SENSOR

(a) Using an ohmmeter, measure the resistance between the terminals.

RESISTANCE:

835 to 1,400 Ω at cold

1,060 to 1,645 Ω at hot

NOTICE:

"Cold" and "Hot" mean 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).

3. INSPECT CRANKSHAFT POSITION SENSOR

(a) Using an ohmmeter, measure the resistance between the terminals.

RESISTANCE:

1,630 to 2,740 Ω at cold

2,065 to 3,225 Ω at hot

NOTICE:

"Cold" and "Hot" mean 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).

IGNITION SYSTEM

ON-VEHICLE INSPECTION

1807F-02

NOTICE:

"Cold" and "Hot" in this section mean 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 IGNITION COIL (WITH IGNITER) AND SPARK TEST

(a) Check for DTCs.

NOTICE:

If DTC is present, perform a troubleshooting in accordance with a procedure for that DTC.

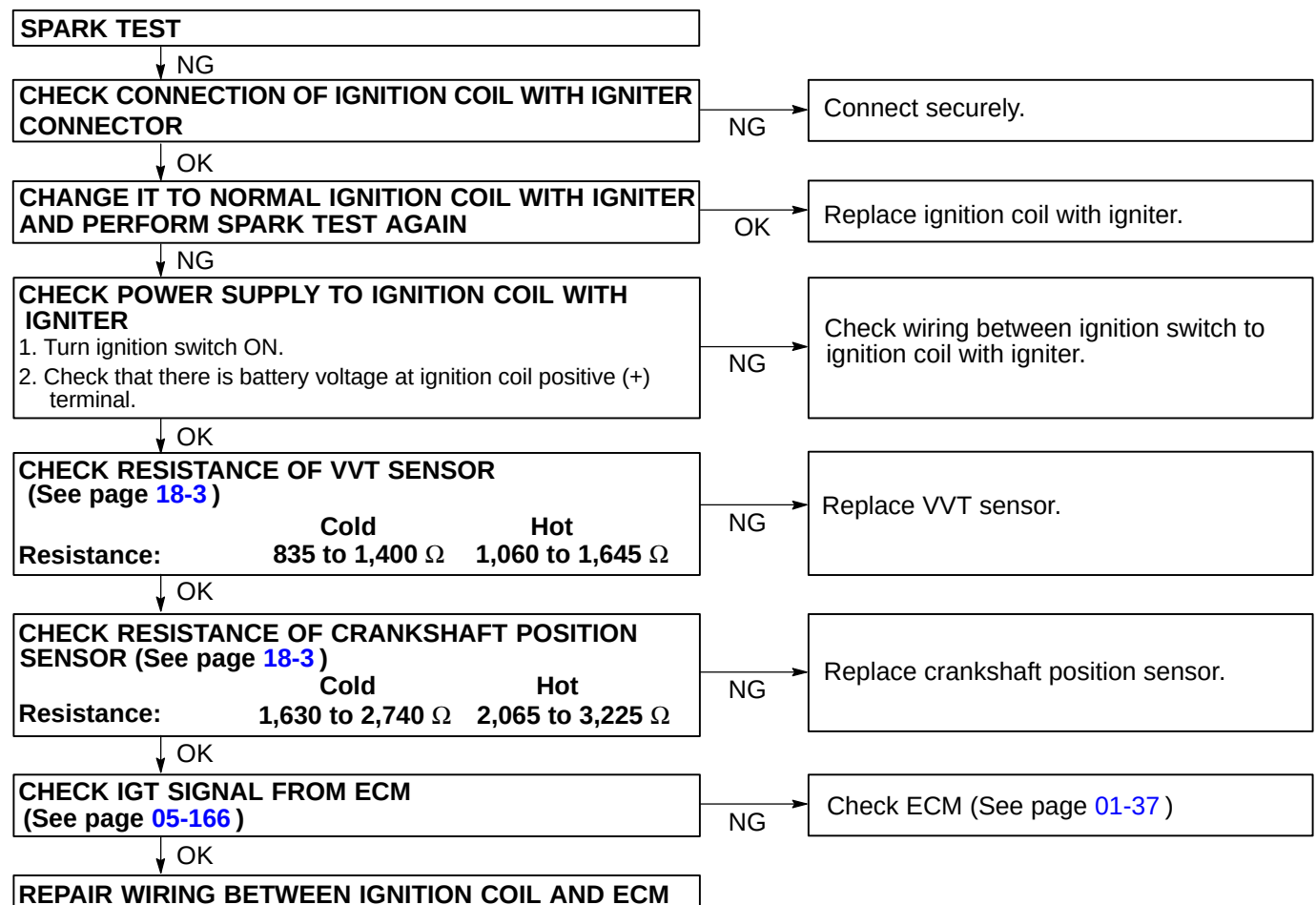
(b) Check that spark occurs.

- (1) Remove the V-bank cover sub-assy. (See page 10-13)
- (2) Remove the ignition coils (with igniter).
- (3) Using a 16mm (0.63 in) plug wrench, remove the spark plugs.
- (4) Install the spark plugs to each ignition coil (with igniter) and connect the ignition coil connectors.
- (5) Disconnect the 6 injector connectors.
- (6) Ground the spark plugs.
- (7) Check if spark occurs at each spark plug while engine is being cranked.

NOTICE:

- Be sure to ground the spark plug when checking.
- Replace the ignition coil when it is given physical impact.
- Do not crank the engine for more than 2 seconds.

If the sparks do not occur, do the following test:

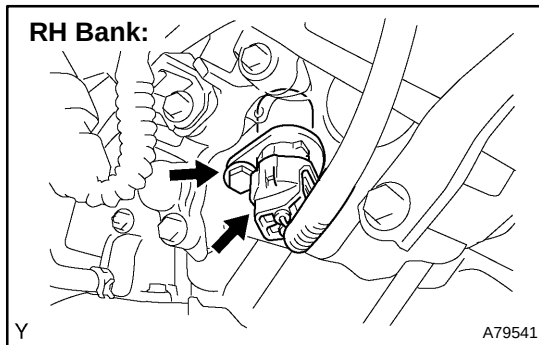


- (c) Using a 16 mm (0.63 in.) plug wrench, install the spark plugs.
Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)
- (d) Install the ignition coil with igniter.
Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)
- (e) Install the V-bank cover sub-assy. (See page [10-13](#))

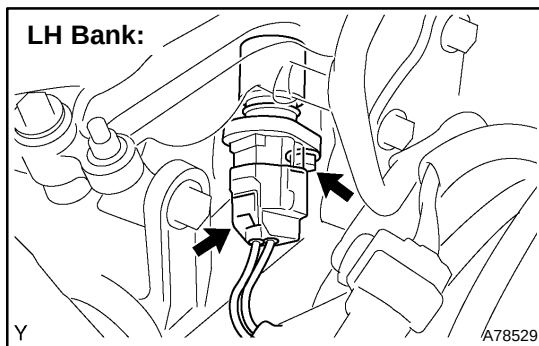
VVT SENSOR REPLACEMENT

18076-01

1. REMOVE AIR CLEANER INLET NO.2 (See page 19-5)
2. REMOVE AIR CLEANER ASSY (See page 19-5)



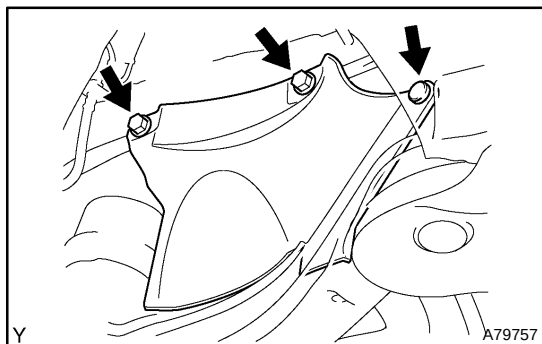
3. REMOVE VVT SENSOR
 - (a) Disconnect the 2 VVT sensor connectors.
 - (b) Remove the 2 bolts and the 2 VVT sensors.



4. INSTALL VVT SENSOR
 - (a) Apply a light coat of engine oil to the O-ring on the VVT sensor.
 - (b) Install the 2 VVT sensors with the 2 bolts.
Torque: 8.0 N·m (80 kgf·cm, 71 in·lbf)
 - (c) Connect the 2 VVT sensor connectors.
5. INSTALL AIR CLEANER ASSY (See page 19-5)
6. INSTALL AIR CLEANER INLET NO.2 (See page 19-5)

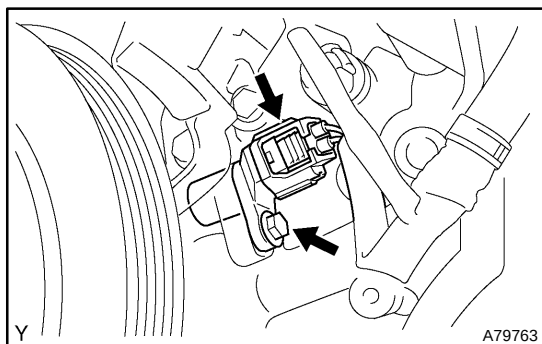
CRANKSHAFT POSITION SENSOR REPLACEMENT

18077-01



1. REMOVE FRONT FENDER APRON SEAL RH

- (a) Using a clip remover, remove the clip.
- (b) Remove the 2 bolts and the front fender apron seal.



2. REMOVE CRANKSHAFT POSITION SENSOR

- (a) Disconnect the crankshaft position sensor connector.
- (b) Remove the bolt and the crankshaft position sensor.

3. INSTALL CRANKSHAFT POSITION SENSOR

Torque: 8.0 N·m (80 kgf·cm, 71 in.·lbf)

4. INSTALL FRONT FENDER APRON SEAL RH