ON-VEHICLE INSPECTION

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).

1. INSPECT IGNITION COIL (WITH IGNITER) AND SPARK TEST

(a) Check the DTCs.
NOTICE:
If a DTC is indicated, perform troubleshooting in accordance with the procedure for that DTC.

(b) Check that sparks occur.
(1) Remove the ignition coils (with igniter).
(2) Using a 16 mm (0.63 in) plug wrench, remove the spark plugs.
(3) Install each spark plugs onto each ignition coils (with igniter), and connect the ignition coil connectors.
(4) Disconnect the 4 injector connectors.
(5) Ground the spark plugs.
(6) Check that sparks occur at each spark plug while the engine is being cranked.
NOTICE:
- **Be sure to ground the spark plug when checking.**
- **Replace the ignition coil if a physical impact is felt while holding the spark plug.**
- **Do not crank the engine for more than 2 seconds.**

HINT:
If sparks do not occur, perform the following procedure.

(c) Using a 16 mm (0.63 in.) plug wrench, install the spark plugs.
Torque: 25 N*m (255 kgf*cm, 18 ft.*lbf)

(d) Install the ignition coil with igniter.
Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)

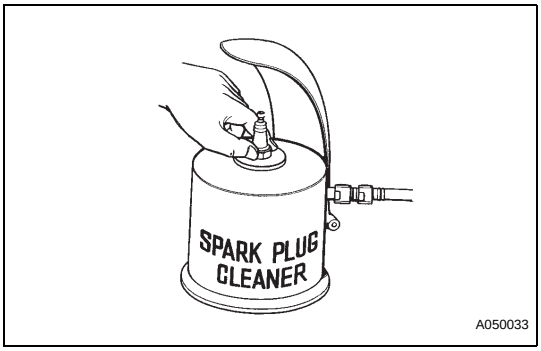
cardiag.com

INSPECTION

1. INSPECT SPARK PLUG

NOTICE:

- **Never use a wire brush for cleaning.**
- **Never attempt to adjust the electrode gap on used spark plug.**
- **Spark plug should be replaced every 192,000 km (120,000 miles).**



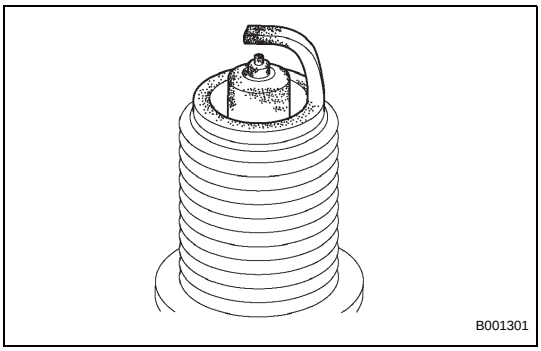
(a) Clean the spark plugs.

Air pressure:

Below 588 kPa (6.0 kgf/cm^2, 85 psi)

Duration:

20 seconds or less



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

HINT:

If damaged, replace the spark plug.

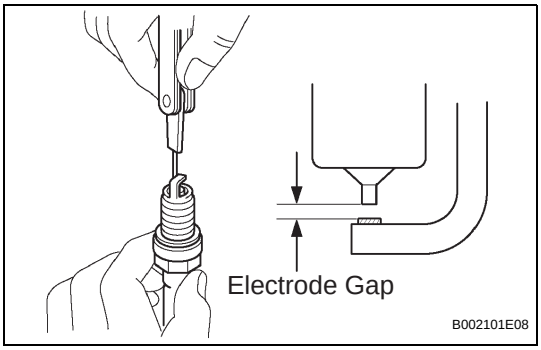
Recommended spark plug:

DENSO made:

SK16R11

NGK made:

IFR5A11



(c) Check the spark plug electrode gap.

Electrode gap:

1.0 to 1.3 mm (0.039 to 0.051 in.)

IG

cardiagn.com