

General Description

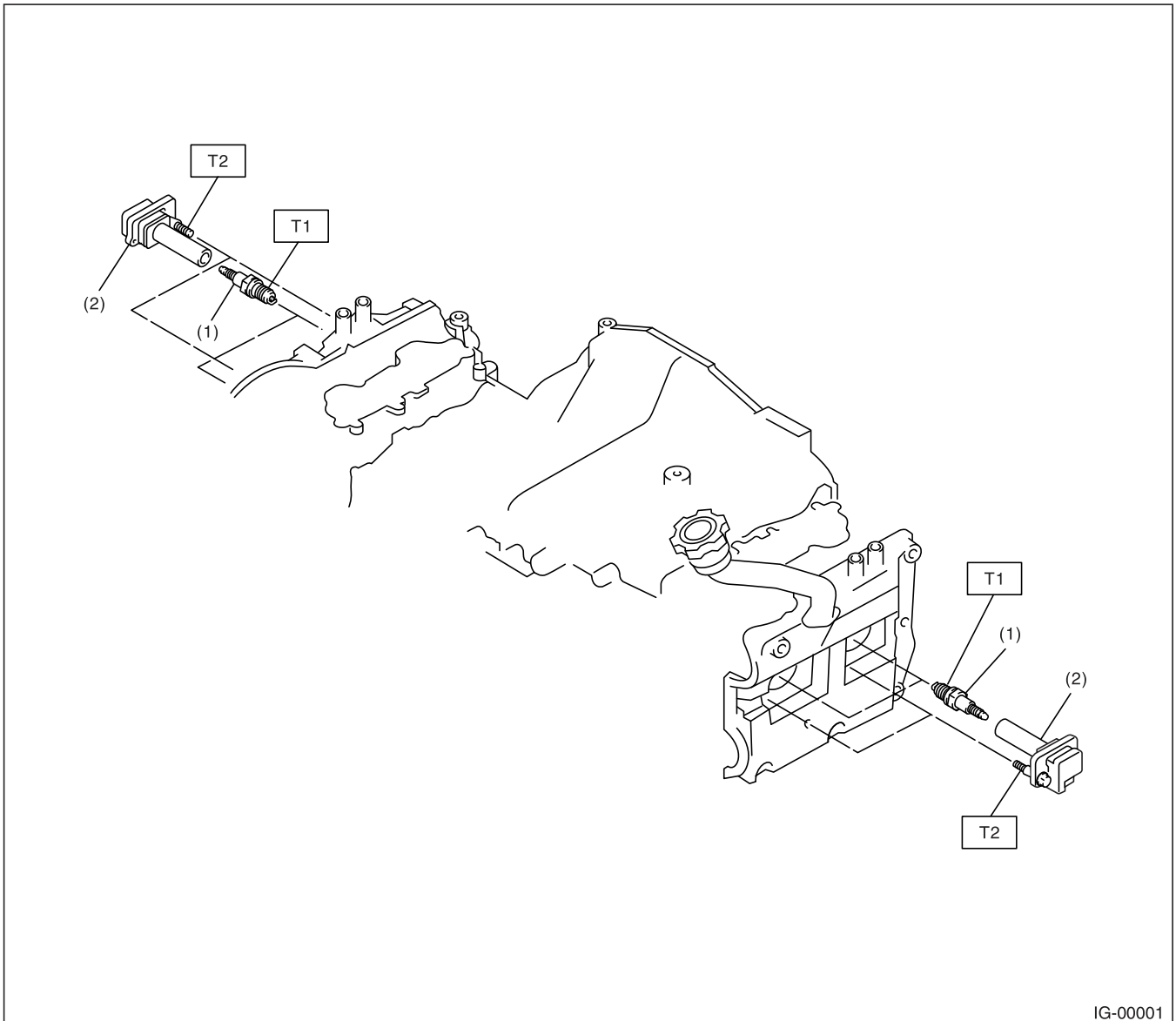
IGNITION

1. General Description

A: SPECIFICATION

| Item | | Designation | | |
|--------------------------------|--------------------------------|-----------------|---------------------------|----------------|
| Ignition coil and ignitor ASSY | Model | FK0186 | | |
| | Ignition type | Direct ignition | | |
| | Manufacturer | DIAMOND | | |
| Spark plug | Manufacturer and type | 2.0 L model | NGK: PFR6G | |
| | | 2.5 L model | NGK: ILFR6B | |
| | Thread diameter, pitch, length | mm | NGK: PFR6G | 14, 1.25, 26.5 |
| | | | NGK: ILFR6B | 14, 1.25, 19.0 |
| | Spark gap | mm (in) | 0.7 — 0.8 (0.028 — 0.031) | |
| | Center electrode | 2.0 L model | Platinum | |
| 2.5 L model | | Iridium | | |

B: COMPONENT



IG-00001

(1) Spark plug

(2) Ignition coil & ignitor ASSY

Tightening torque: N·m (kgf-m, ft-lb)

T1: 21 (2.1, 15.2)

T2: 16 (1.6, 11.8)

General Description

IGNITION

C: CAUTION

- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust or dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly, and replacement.
- Be careful not to burn yourself, because each part on the vehicle is hot after running.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or rigid racks at the specified points.
- Before disconnecting electrical connectors of sensors or units, be sure to disconnect the ground cable from battery.

2. Spark Plug

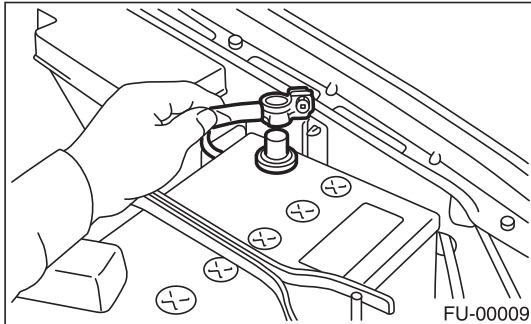
A: REMOVAL

CAUTION:

All spark plugs installed on an engine, must be of the same heat range. <Ref. to IG(H4DOTC 2.0)-2, General Description.>

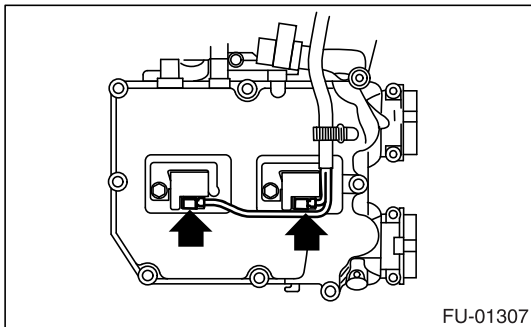
1. RH SIDE

- 1) Disconnect the ground cable from battery.

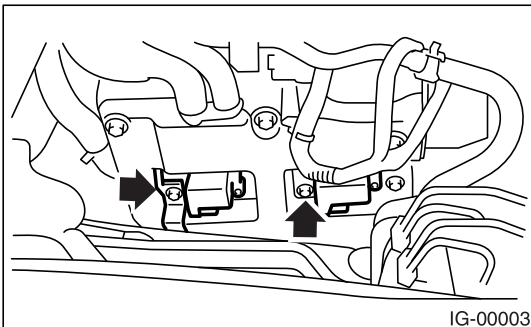


- 2) Remove the air cleaner lower case. <Ref. to IN(H4DOTC 2.0)-7, REMOVAL, Air Cleaner Case.>

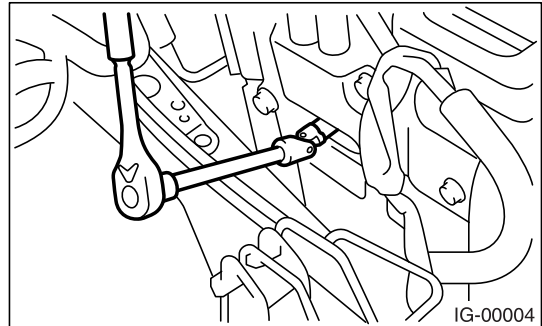
- 3) Disconnect the connector from ignition coil.



- 4) Remove the ignition coil.

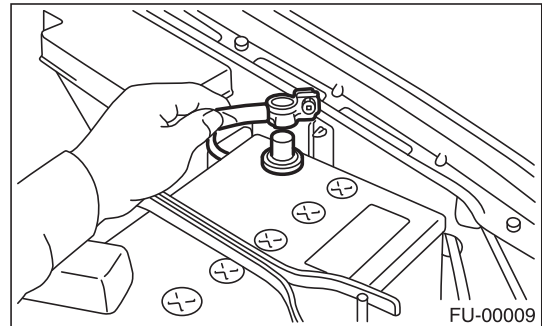


- 5) Remove the spark plugs with the spark plug sockets.

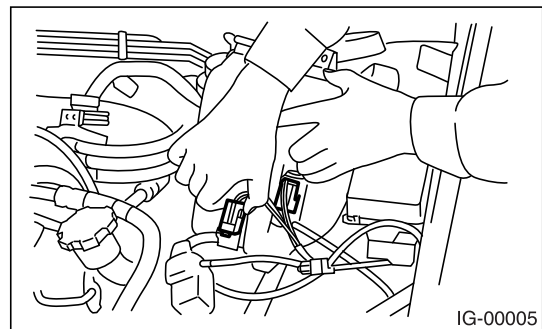


2. LH SIDE

- 1) Disconnect the battery cables, and then remove the battery and battery carrier.

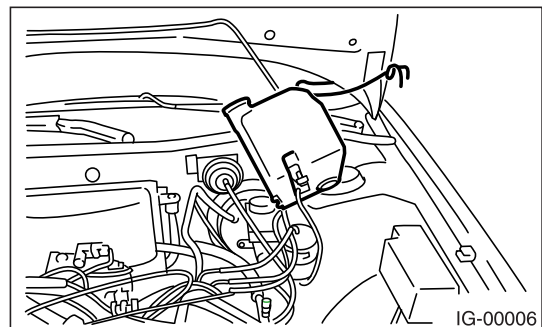


- 2) Disconnect the washer motor connector.



- 3) Disconnect the rear window glass washer hose from washer motor, then plug connection with a suitable cap.

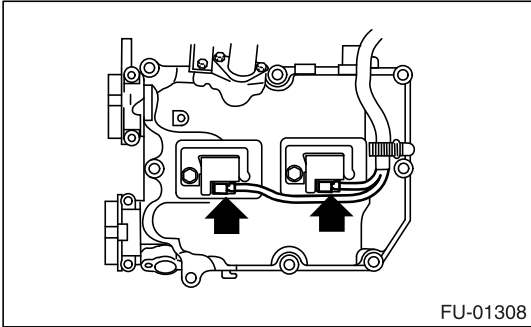
- 4) Remove the two bolts which hold washer tank, then take the tank away from working area.



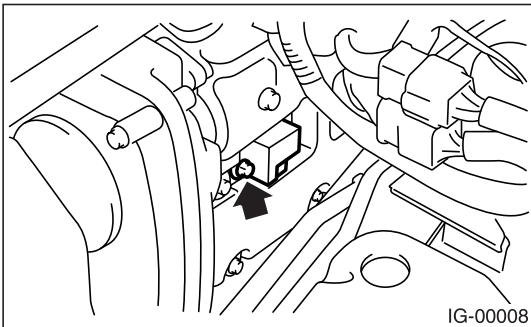
Spark Plug

IGNITION

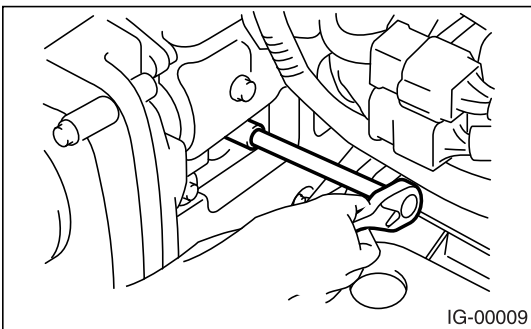
5) Disconnect the connector from ignition coil.



6) Remove the ignition coil.



7) Remove the spark plugs with the spark plug sockets.



B: INSTALLATION

1. RH SIDE

Install in the reverse order of removal.

Tightening torque (Spark plug):
21 N·m (2.1 kgf-m, 15.2 ft-lb)

Tightening torque (Ignition coil):
16 N·m (1.6 kgf-m, 11.8 ft-lb)

NOTE:

The above torque should be only applied to new spark plugs without oil on their threads. In case their threads are lubricated, the torque should be reduced by approx. 1/3 of the specified torque in order to avoid over-stressing.

2. LH SIDE

Install in the reverse order of removal.

Tightening torque (Spark plug):
21 N·m (2.1 kgf-m, 15.2 ft-lb)

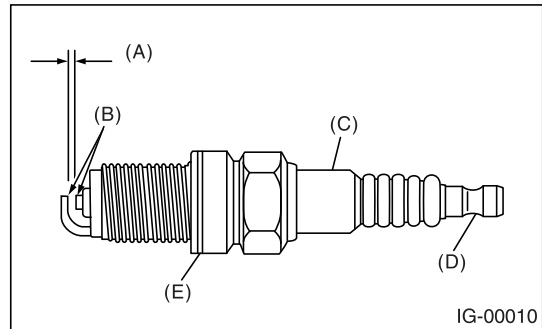
Tightening torque (Ignition coil):
16 N·m (1.6 kgf-m, 11.8 ft-lb)

NOTE:

The above torque should be only applied to new spark plugs without oil on their threads. In case their threads are lubricated, the torque should be reduced by approx. 1/3 of the specified torque in order to avoid over-stressing.

C: INSPECTION

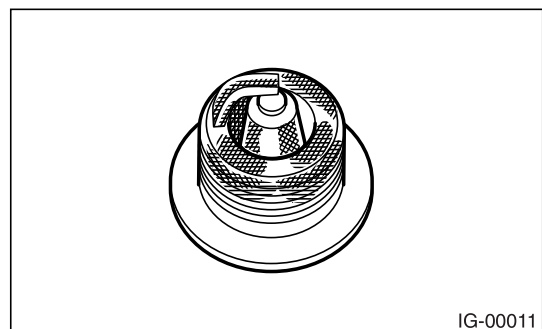
Check the electrodes and inner and ceramic insulator of plugs, noting the type of deposits and the degree of electrode erosion.



- (A) Electrode gap
- (B) Carbon accumulation or wear
- (C) Cracks
- (D) Damage
- (E) Damaged gasket

1) Normal:

Brown to grayish-tan deposits and slight electrode wear indicates correct spark plug heat range.

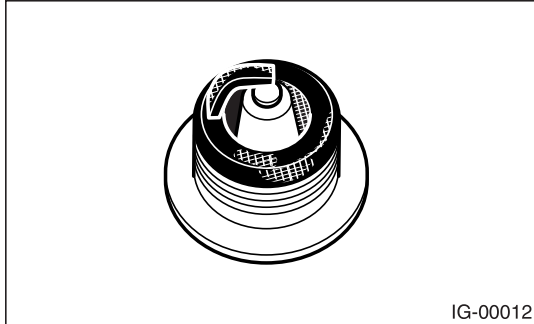


Spark Plug

IGNITION

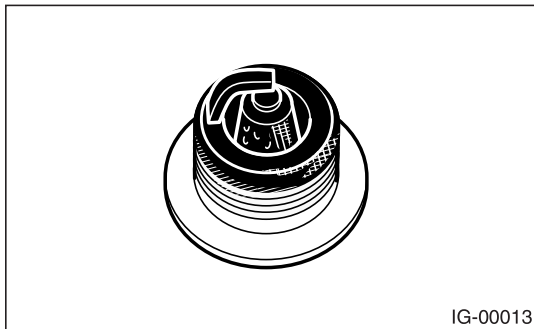
2) Carbon fouled:

Dry fluffy carbon deposits on insulator and electrode are mostly caused by slow speed driving in city, weak ignition, too rich fuel mixture, dirty air cleaner, etc.



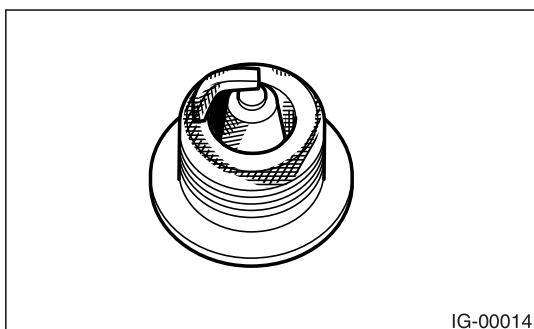
3) Oil fouled:

Wet black deposits show excessive oil entrance into combustion chamber through worn rings and pistons or excessive clearance between valve guides and stems.



4) Overheating:

White or light gray insulator with black or gray brown spots and bluish burnt electrodes indicates engine overheating. Moreover, the appearance results from incorrect ignition timing, loose spark plugs, wrong selection of fuel, hotter range plug, etc.



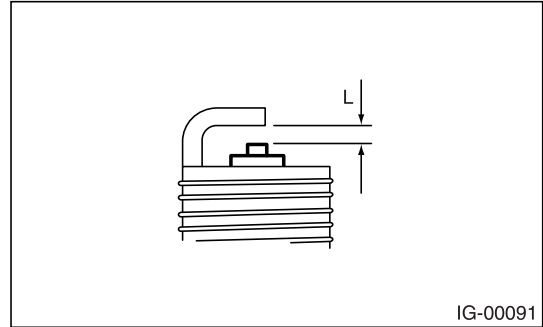
After cleaning the spark plugs, correct the spark plug gap using a gap gauge.

NOTE:

Do not use spark plug cleaners, because the spark plugs are applied with platinum or iridium tips.

Spark plug gap L:

0.7 — 0.8 mm (0.028 — 0.031 in)



D: ADJUSTMENT

Clean the spark plugs with a wire brush. Clean and remove the carbon or oxide deposits, but do not wear ceramic insulator.

If deposits are too stubborn, replace the plugs.

Ignition Coil & Ignitor ASSY

IGNITION

3. Ignition Coil & Ignitor ASSY

A: REMOVAL

Direct ignition type has been adopted. Refer to the "Spark Plug Removal" for removal procedure. <Ref. to IG(H4DOTC 2.0)-5, REMOVAL, Spark Plug.>

B: INSTALLATION

Install in the reverse order of removal.

Tightening torque:

16 N·m (1.6 kgf-m, 11.8 ft-lb)

C: INSPECTION

Ignitor is integrated with the coil. Therefore resistance cannot be measured.