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# IGNITION

# General Description

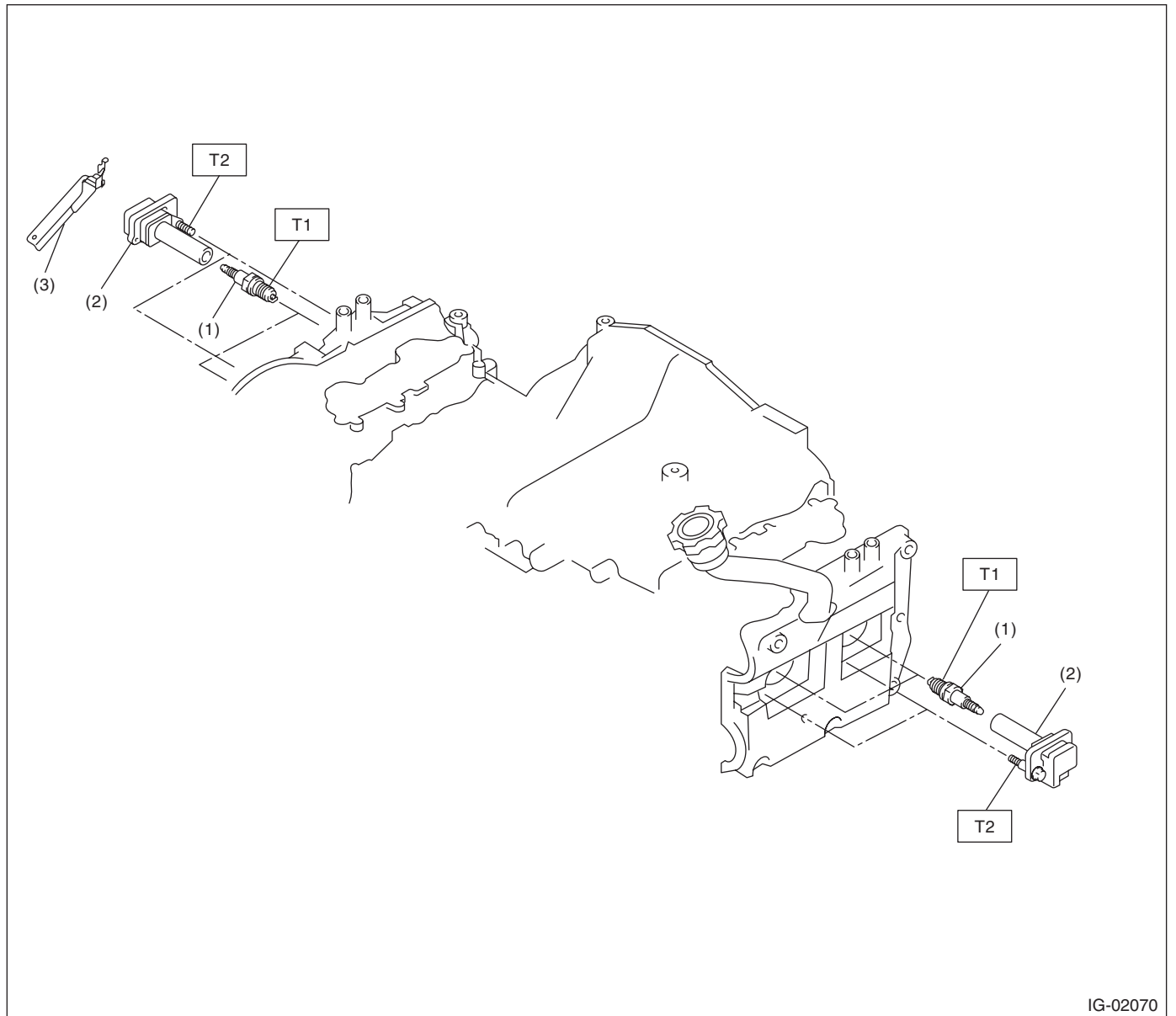
## IGNITION

### 1. General Description

#### A: SPECIFICATION

Item		Specification
Ignition coil	Type	FK0186
	Ignition system	Independent ignition coil
	Manufacturer	Diamond Electric
Spark plug	Manufacturer and type	NGK: ILFR6B
	Thread size (diameter, pitch, length)	mm 14, 1.25, 26.5
	Spark plug gap	mm (in) 0.7—0.8 (0.028—0.031)
	Electrode	Iridium

#### B: COMPONENT



IG-02070

- (1) Spark plug
- (2) Ignition coil

- (3) Engine harness stay

**Tightening torque: N·m (kgf·m, ft·lb)**

**T1: 21 (2.1, 15.2)**

**T2: 16 (1.6, 11.7)**

**C: CAUTION**

- Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust and dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
- Vehicle components are extremely hot after driving. Be wary of receiving burns from heated parts.
- 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 connectors of sensors or units, be sure to disconnect the ground cable from the battery.

## 2. Spark Plug

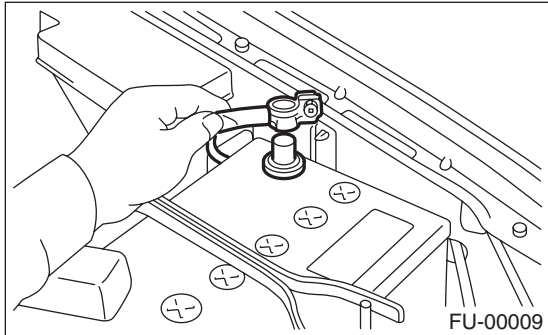
### A: REMOVAL

#### Spark plug:

Refer to "SPECIFICATION" for the spark plug. <Ref. to IG(H4DOTC)-2, SPECIFICATION, General Description.>

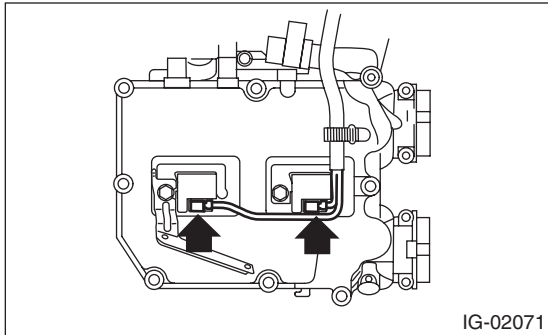
#### 1. RH SIDE

- 1) Disconnect the ground cable from the battery.

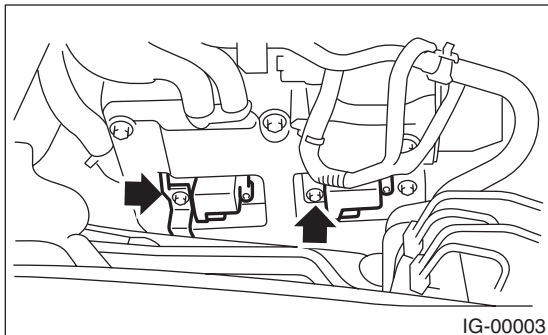


- 2) Remove the air cleaner case. <Ref. to IN(H4DOTC)-10, REMOVAL, Air Cleaner Case.>

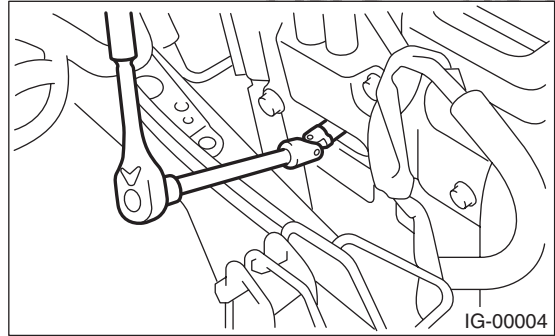
- 3) Disconnect the connector from ignition coil.



- 4) Remove the ignition coil.

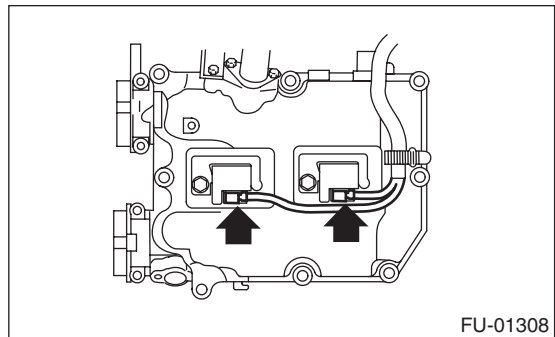


- 5) Remove the spark plug with a spark plug socket.



#### 2. LH SIDE

- 1) Remove the battery and battery carrier.
- 2) Remove the secondary air pump. <Ref. to EC(H4DOTC)-9, REMOVAL, Secondary Air Pump.>
- 3) Disconnect the connector from ignition coil.



- 4) Remove the ignition coil.
- 5) Remove the spark plug with a spark plug socket.

### B: INSTALLATION

#### 1. RH SIDE

Install in the reverse order of removal.

#### NOTE:

Tighten the engine harness stay together with #3 ignition coil.

**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, 11.7 ft-lb)

#### 2. LH SIDE

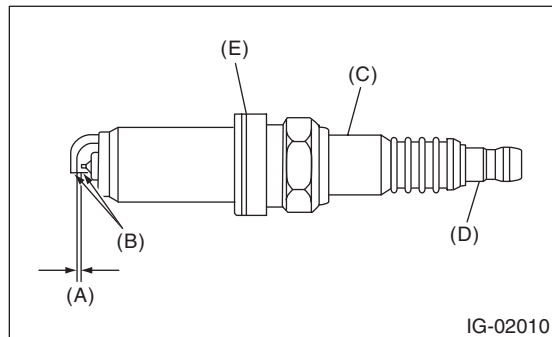
Install in the reverse order of removal.

**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, 11.7 ft-lb)

## C: INSPECTION

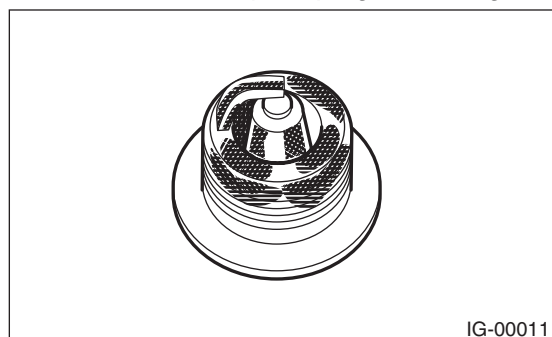
Check the electrodes and inner and outer ceramic insulator of plugs, noting the type of deposits and the degree of electrode erosion.



- (A) Spark plug gap
- (B) Carbon accumulation or wear
- (C) Crack
- (D) Damage
- (E) Damaged gasket

### 1) Normal:

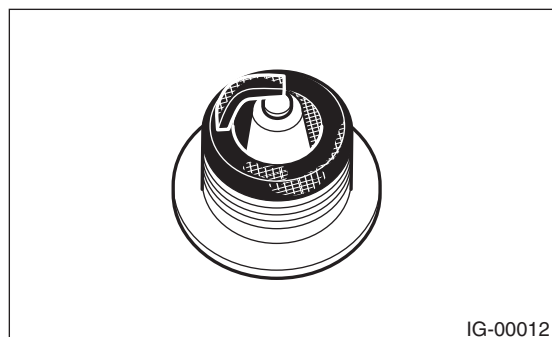
Brown to grayish-tan deposits and slight electrode wear indicate correct spark plug heat range.



IG-00011

### 2) Carbon fouled:

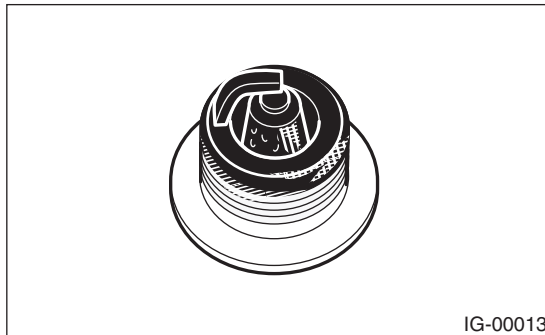
Dry fluffy carbon deposits on insulator and electrode are mostly caused by slow speed driving in the city, weak ignition, too rich fuel mixture and dirty air cleaner.



IG-00012

### 3) Oil fouled:

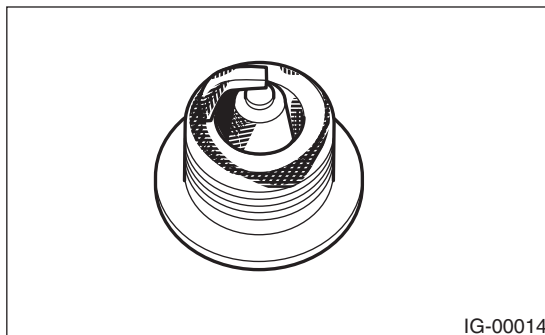
Wet black deposits show oil entrance into the combustion chamber through worn rings and excessive clearance between valve guides and stems.



IG-00013

### 4) Overheating:

White or light gray insulator with black or brown spots and bluish burnt electrodes indicate engine overheating, incorrect ignition timing, wrong selection of fuel, and loose spark plugs.



IG-00014

## D: ADJUSTMENT

Clean up the spark plug using nylon brush or equivalent.

Clean and remove the carbon or oxide deposits.

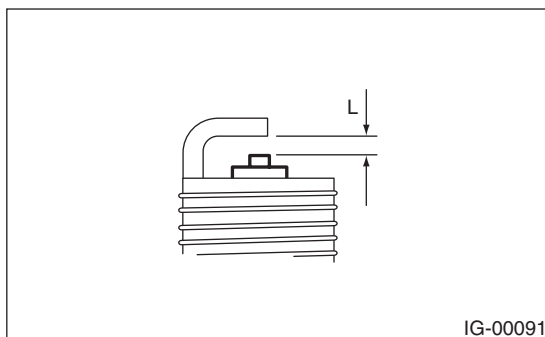
If deposits are too stubborn, replace the spark plugs. After cleaning the spark plugs, measure the spark plug gap using a gap gauge.

### NOTE:

- Never use a plug cleaner.
- Never use a metal brush because it makes insulator worn.

### Spark plug gap L:

**0.7 — 0.8 mm (0.028 — 0.031 in)**



IG-00091

### 3. Ignition Coil

#### A: REMOVAL

Direct ignition type has been adopted. Refer to "Spark Plug" for removal procedure. <Ref. to IG(H4DOTC)-4, REMOVAL, Spark Plug.>

#### B: INSTALLATION

Install in the reverse order of removal.

***Tightening torque:***

***16 N·m (1.6 kgf-m, 11.7 ft-lb)***

#### C: INSPECTION

For inspection procedure, refer to "Diagnostics for Engine Starting Failure". <Ref. to EN(H4DOTC)(diag)-70, IGNITION CONTROL SYSTEM, Diagnostics for Engine Starting Failure.> <Ref. to EN(STI)(diag)-65, IGNITION CONTROL SYSTEM, Diagnostics for Engine Starting Failure.>

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