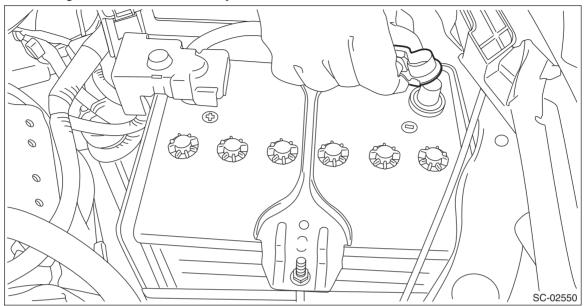
# 9. Camshaft Position Sensor

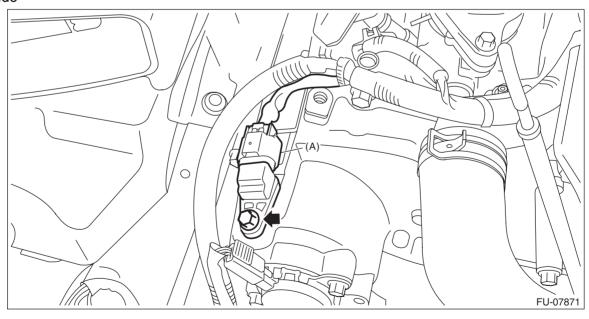
## A: REMOVAL

## 1. INTAKE SIDE

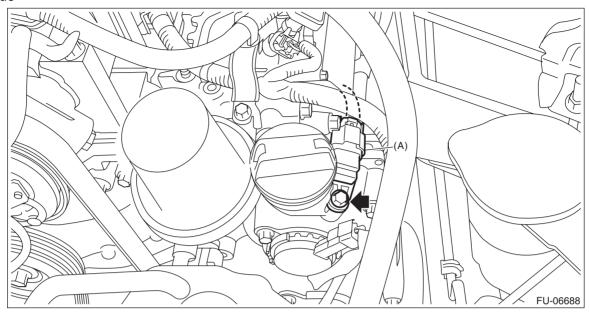
1) Disconnect the ground cable from battery.



- 2) Remove the air intake duct. (RH side only) <Ref. to IN(H4DO(w/o HEV))-13, REMOVAL, Air Intake Duct.>
- 3) Disconnect the connector (A) from the camshaft position sensor, and remove the camshaft position sensor from the chain cover.
- RH side

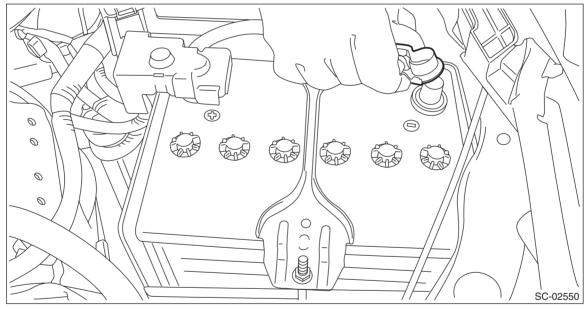


## • LH side



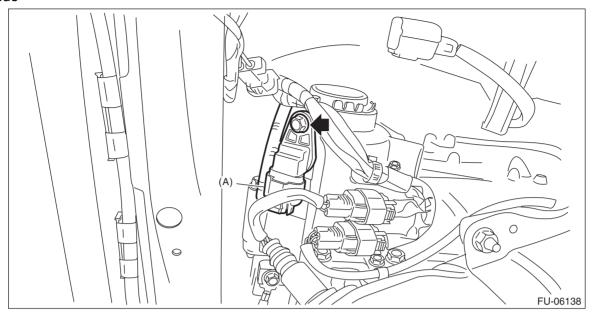
## 2. EXHAUST SIDE

1) Disconnect the ground cable from battery.

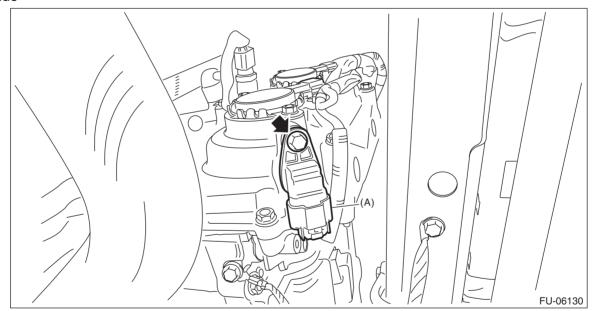


2) Remove the under cover. <Ref. to EI-32, REMOVAL, Front Under Cover.>

- 3) Disconnect the connector (A) from the camshaft position sensor, and remove the camshaft position sensor from the chain cover.
- RH side



• LH side



## **B: INSTALLATION**

Install in the reverse order of removal.

### NOTE:

- · Use new O-rings.
- Apply engine oil to O-ring.

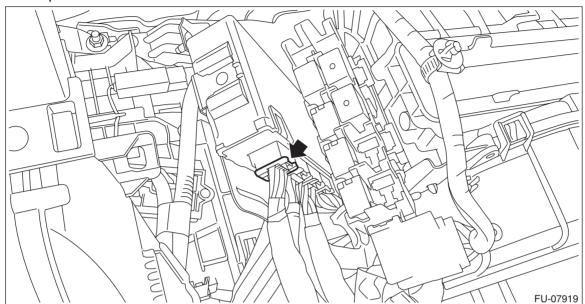
## Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)

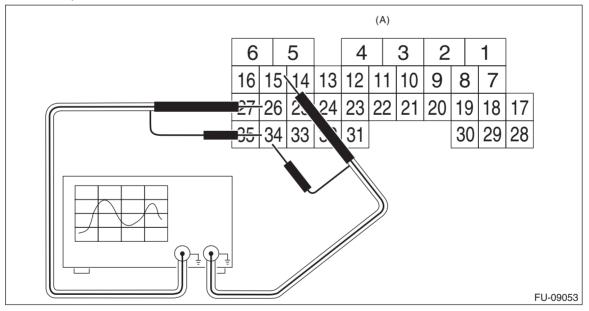
## C: INSPECTION

## 1. CAMSHAFT POSITION SENSOR (METHOD WITH OSCILLOSCOPE)

- 1) Prepare an oscilloscope.
- 2) Remove the glove box. <Ref. to EI-78, REMOVAL, Glove Box.>
- 3) Connect the probe to ECM connector.

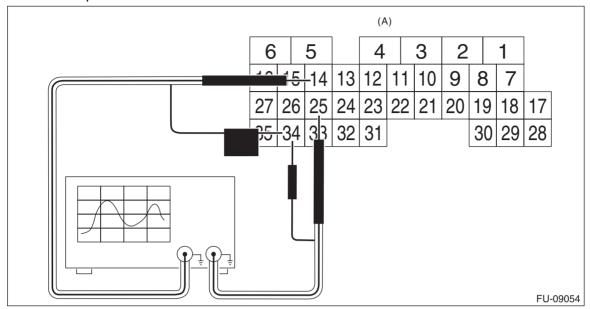


· Intake camshaft position sensor



(A) To ECM connector

#### · Exhaust camshaft position sensor



#### (A) To ECM connector

Camshaft position sensor		Terminal No.	Probe
Intake	RH	26	+
	LH	15	+
Exhaust	RH	14	+
	LH	25	+
RH and LH		34	_

- 4) Start the engine and let it idle.
- 5) Check the waveforms and voltage.

#### NOTF:

For waveform and voltage, refer to "Engine Control Module (ECM) I/O Signal". <Ref. to EN(H4DO w/o HEV)(diag)-19, ELECTRICAL SPECIFICATION, Engine Control Module (ECM) I/O Signal.>

6) After inspection, install the related parts in the reverse order of removal.

#### 2. OTHER INSPECTIONS

Check that the camshaft position sensor has no deformation, cracks or other damages.