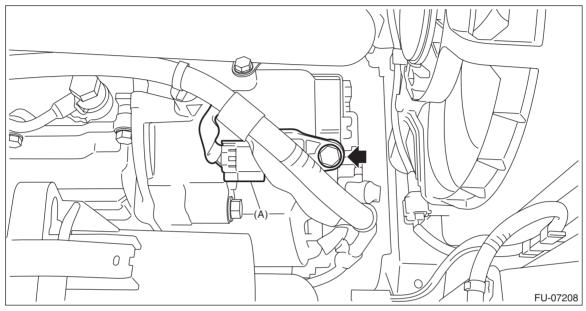
# 15. Camshaft Position Sensor

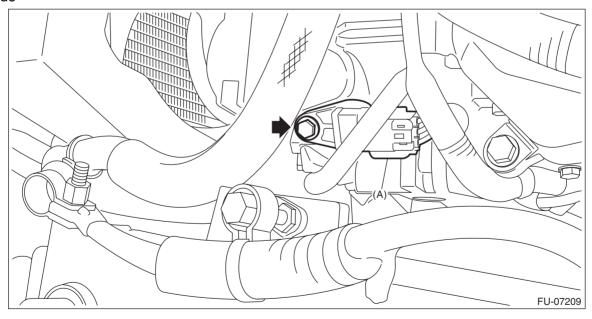
# A: REMOVAL

### 1. INTAKE SIDE

- 1) Disconnect the ground terminal from battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>
- 2) Remove the air intake duct. (RH side only) <Ref. to IN(w/o STI)-22, 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

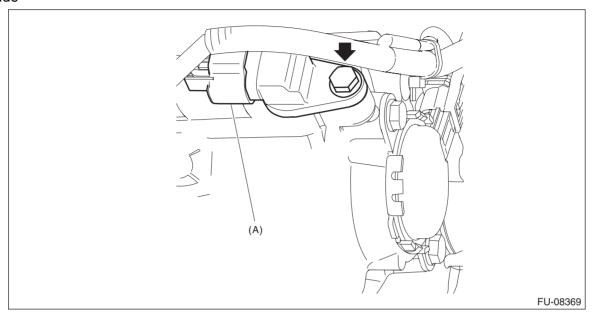


#### • LH side

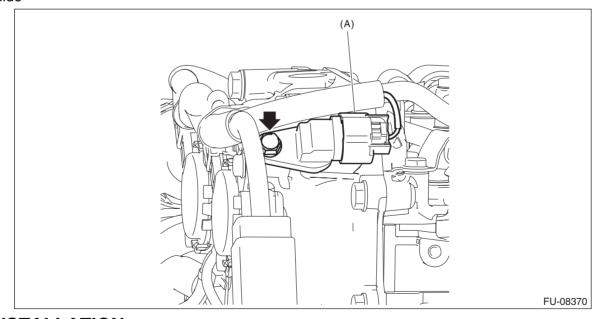


#### 2. EXHAUST SIDE

- 1) Disconnect the ground terminal from battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>
- 2) Remove the under cover. <Ref. to El-21, 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.

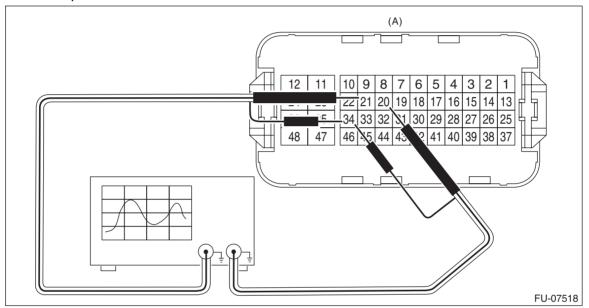
#### Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)

#### C: INSPECTION

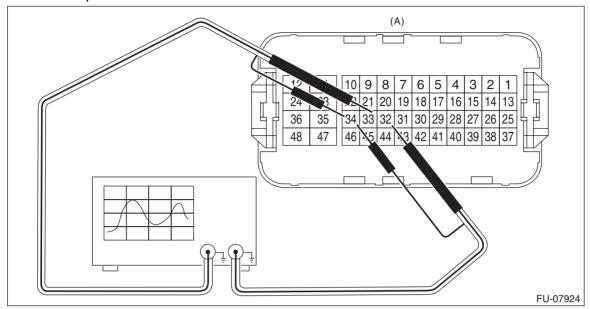
#### 1. CAMSHAFT POSITION SENSOR (METHOD WITH OSCILLOSCOPE)

- 1) Disconnect the ground terminal from battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>
- 2) Prepare an oscilloscope.
- 3) Remove the engine control module (ECM). <Ref. to FU(w/o STI)-132, REMOVAL, Engine Control Module (ECM).>
- 4) Install the ST between the ECM and bulkhead harness and the engine harness. <Ref. to EN(w/o STI)(diag)-6, CAUTION, General Description.>
- ST 18460AA030 CHECK BOARD
- 5) Connect the ground terminal to battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>
- 6) Connect the probe to ST.
- Intake camshaft position sensor



(A) To the check board connector (ECM connector)

# • Exhaust camshaft position sensor

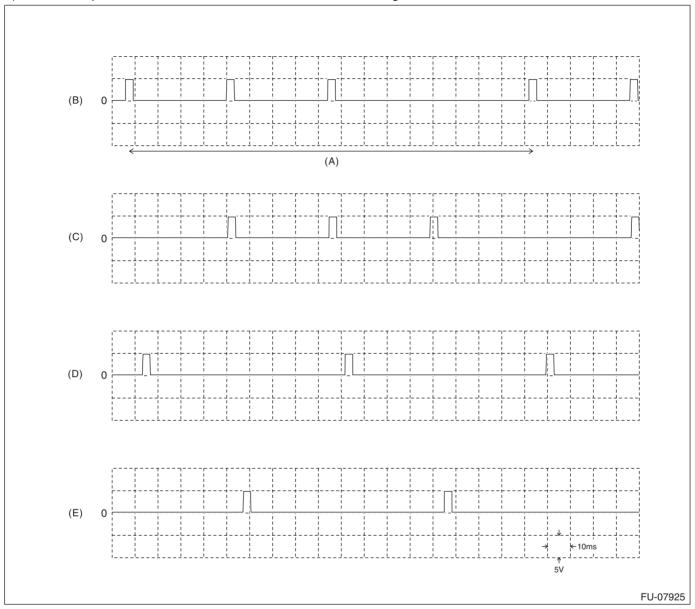


# (A) To the check board connector (ECM connector)

Camshaft position sensor		Terminal No.	Probe
Intake	RH	20	+
	LH	21	+
Exhaust	RH	32	+
	LH	33	+
RH and LH		34	_

<sup>7)</sup> Start the engine and let it idle.

8) Check the pattern is the same as the waveform and voltage shown below.



- (A) One camshaft rotation
- (C) Intake camshaft position sensor LH
- (E) Exhaust camshaft position sensor LH

- (B) Intake camshaft position sensor RH
- (D) Exhaust camshaft position sensor RH
- 9) 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.