

Camshaft Position Sensor

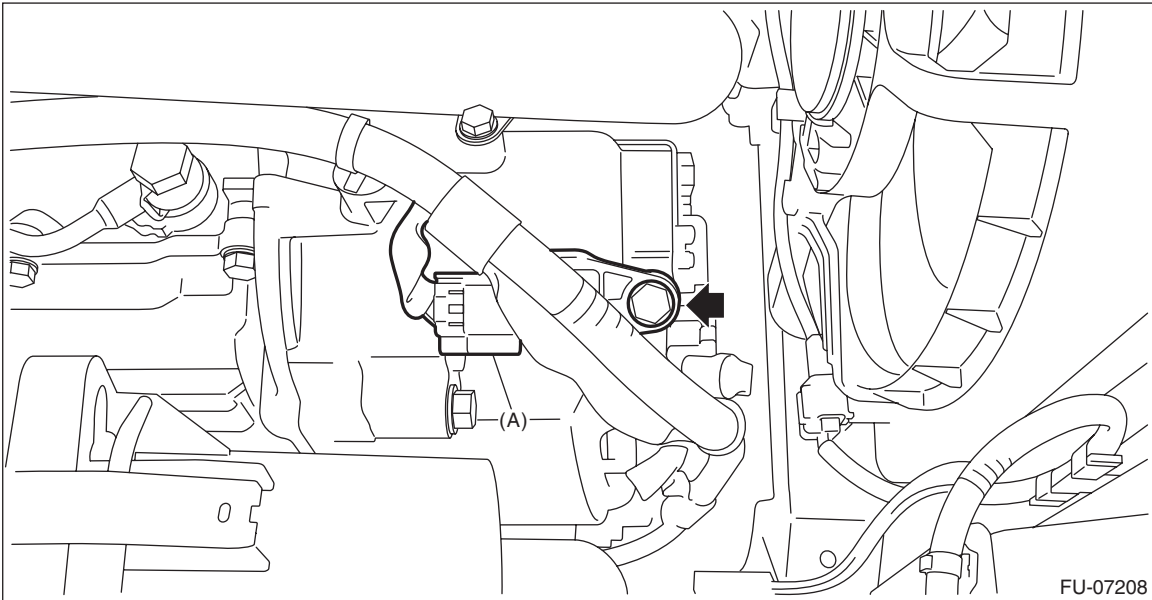
FUEL INJECTION (FUEL SYSTEMS)

15. Camshaft Position Sensor

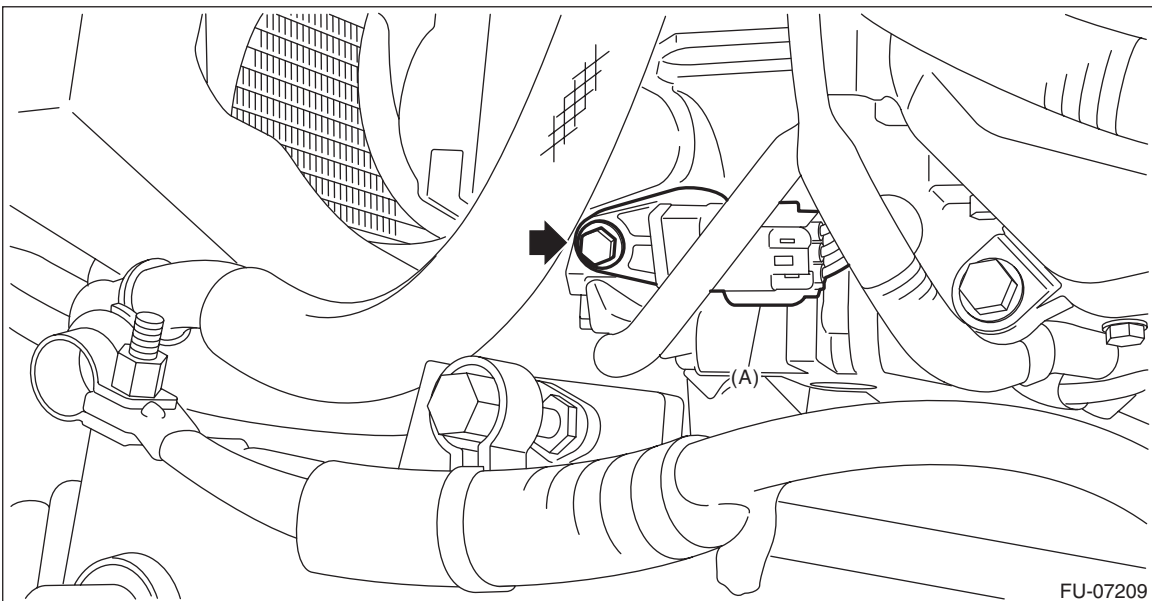
A: REMOVAL

1. INTAKE SIDE

- 1) Disconnect the ground cable from battery.
 - 2) Remove the air intake duct (rear). (RH side only) <Ref. to IN(H4DOTC)-19, 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



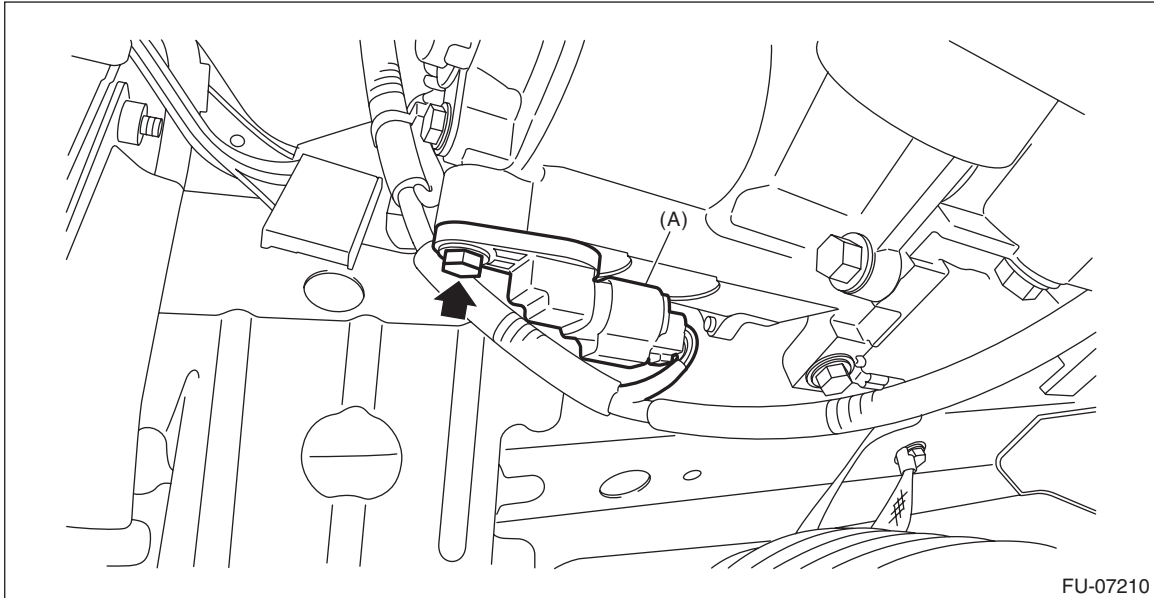
- LH side



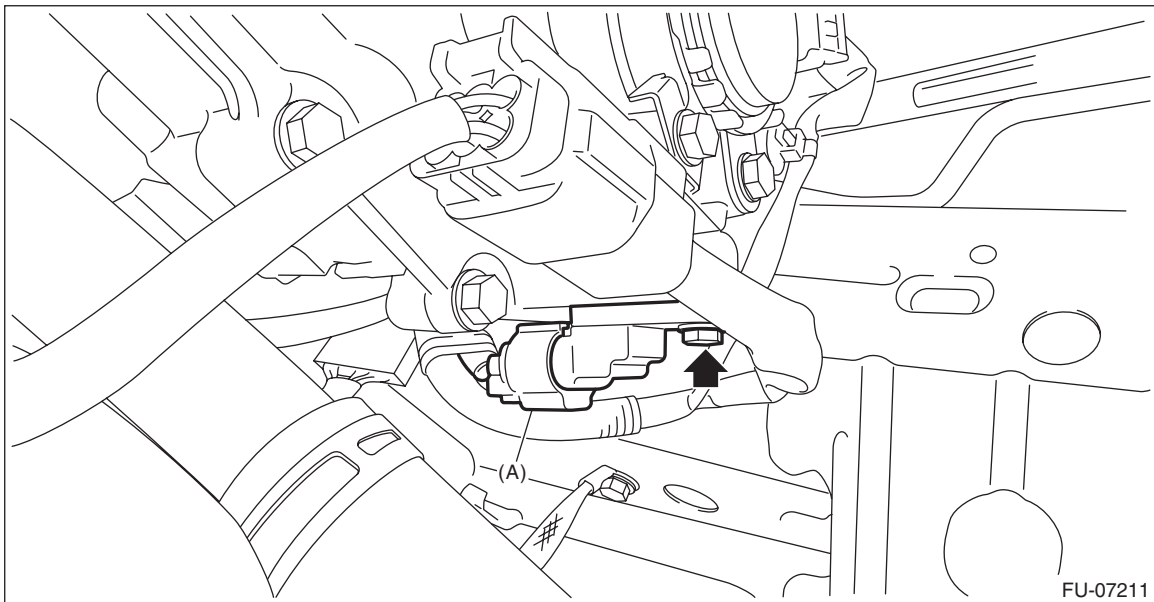
2. EXHAUST SIDE

- 1) Disconnect the ground cable from battery.
- 2) Remove the under cover. <Ref. to EI-22, 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)

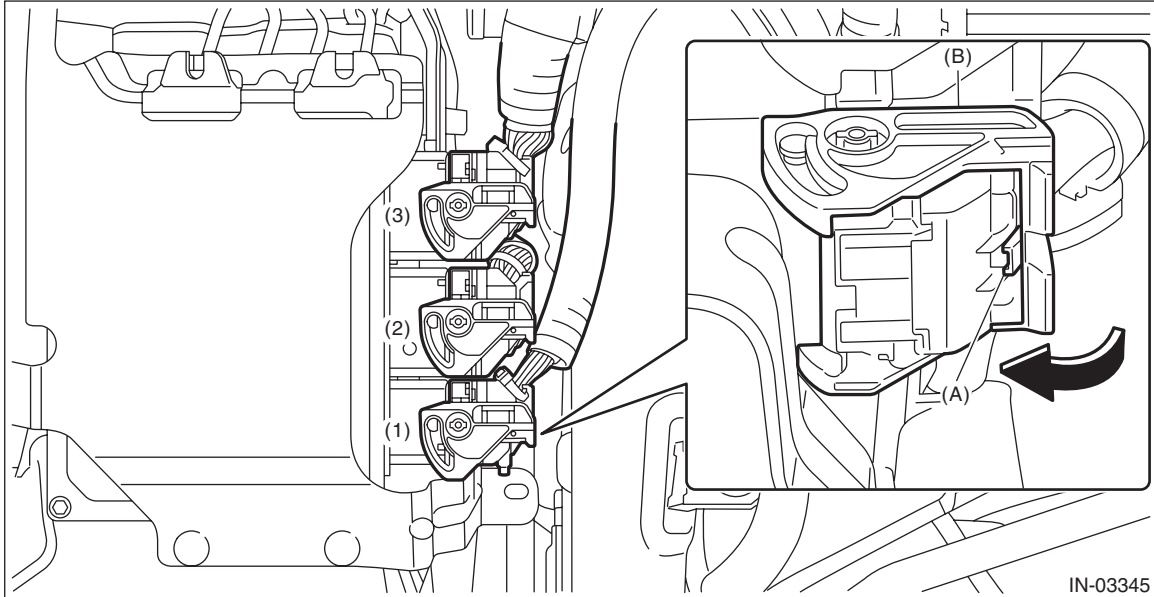
Camshaft Position Sensor

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C: INSPECTION

1. CAMSHAFT POSITION SENSOR (METHOD WITH OSCILLOSCOPE)

- 1) Disconnect the ground cable from battery.
- 2) Prepare an oscilloscope.
- 3) While pressing the section (A) shown in the figure, move the lock lever (B) in the direction of the arrow to disconnect the connectors from the ECM in numerical order as shown in the figure.



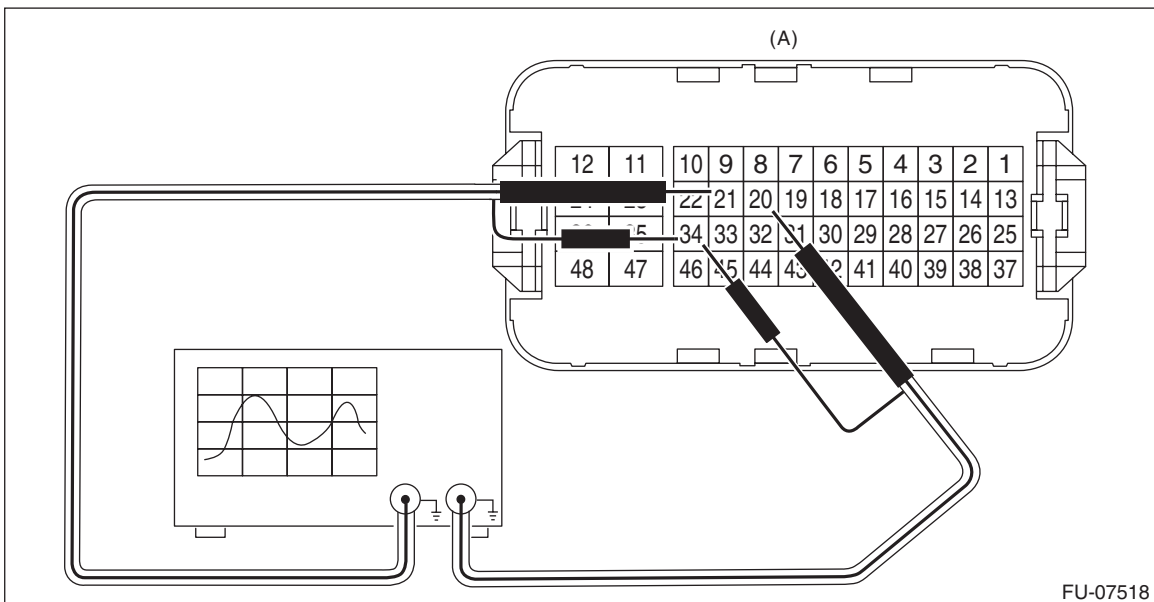
- 4) Install the special tool between the ECM and body harness and the engine harness. <Ref. to EN(H4DOTC)(diag)-6, CAUTION, General Description.>

ST 18460AA030 CHECK BOARD

- 5) Connect the battery ground terminal.

- 6) Connect the probe to ST.

- Intake camshaft position sensor

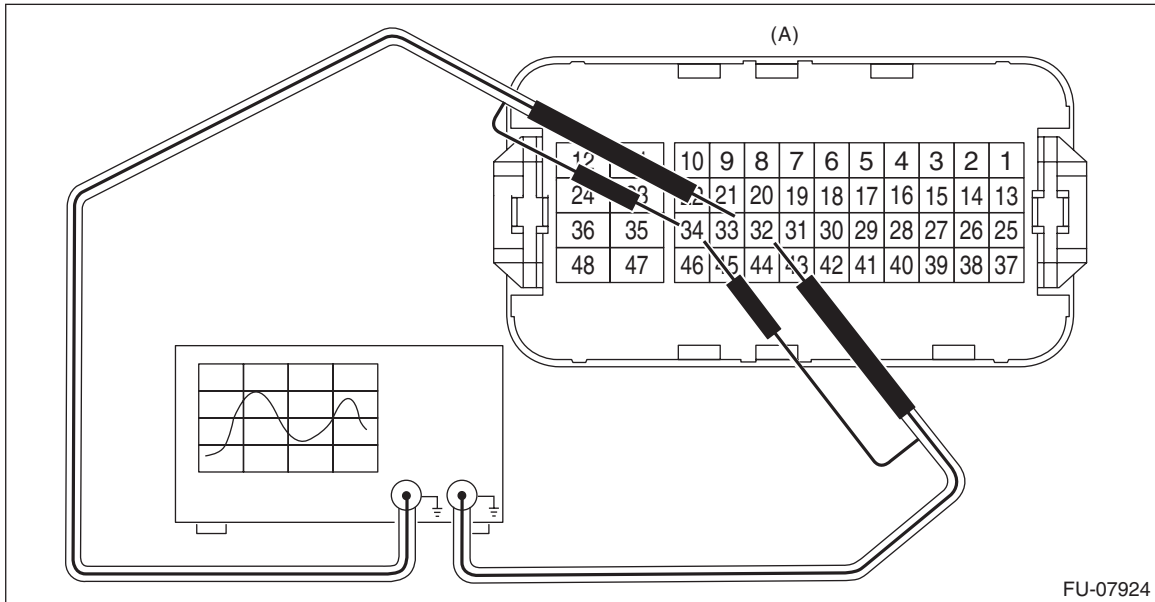


- (A) To the check board connector
(ECM connector)

Camshaft Position Sensor

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- Exhaust camshaft position sensor



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

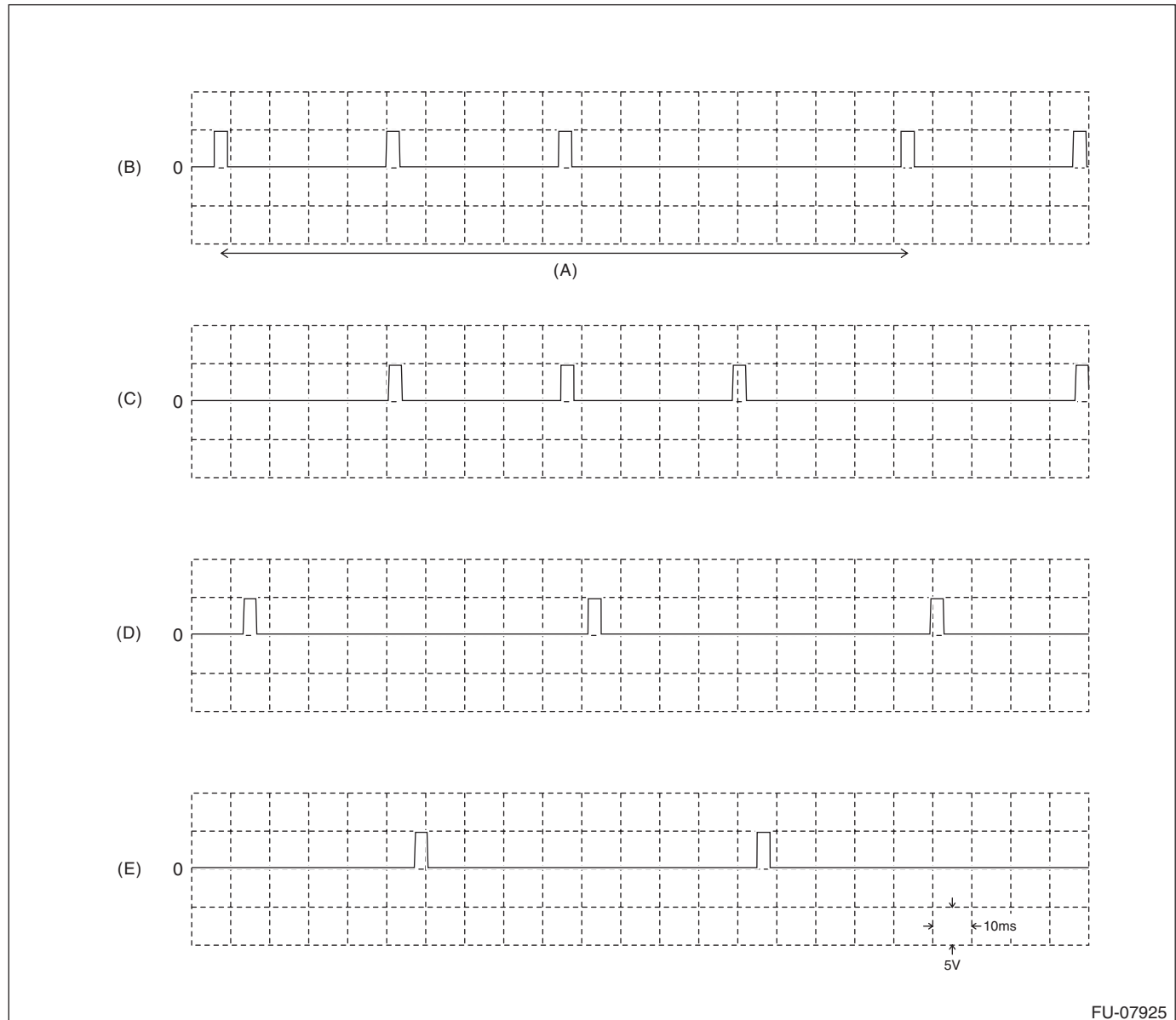
Camshaft position sensor		Terminal No.	Probe
Intake	RH	20	+
	LH	21	+
Exhaust	RH	32	+
	LH	33	+
RH and LH		34	-

7) Start the engine and let it idle.

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FUEL INJECTION (FUEL SYSTEMS)

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.