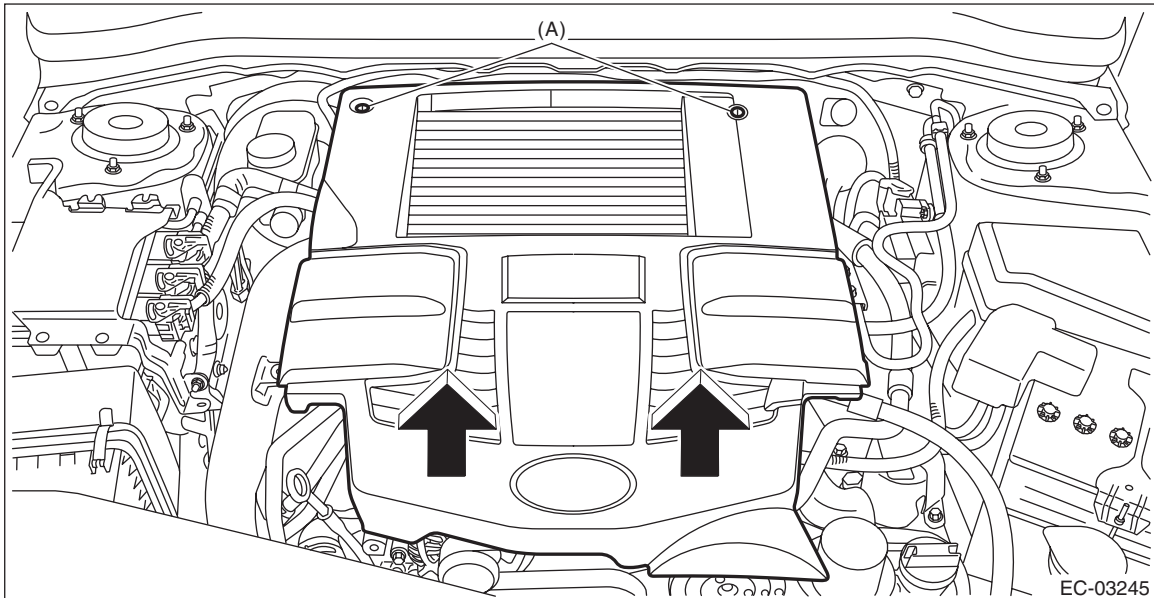


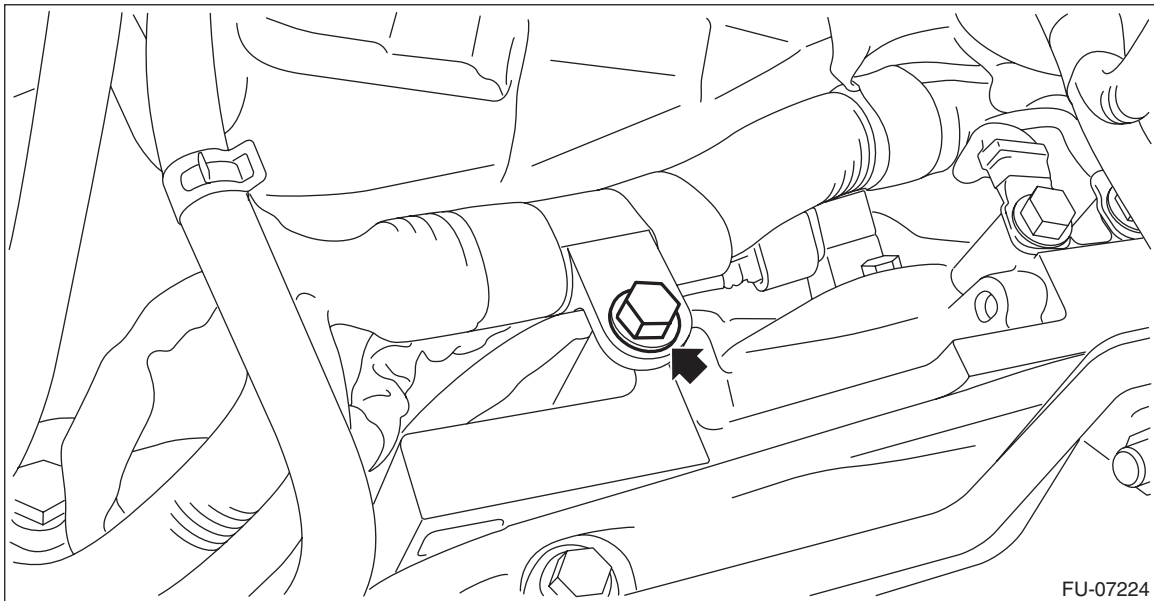
13.Crankshaft Position Sensor

A: REMOVAL

1) Remove the clip (A), lift the front of the collector cover in the direction of arrow, and then remove the collector cover.



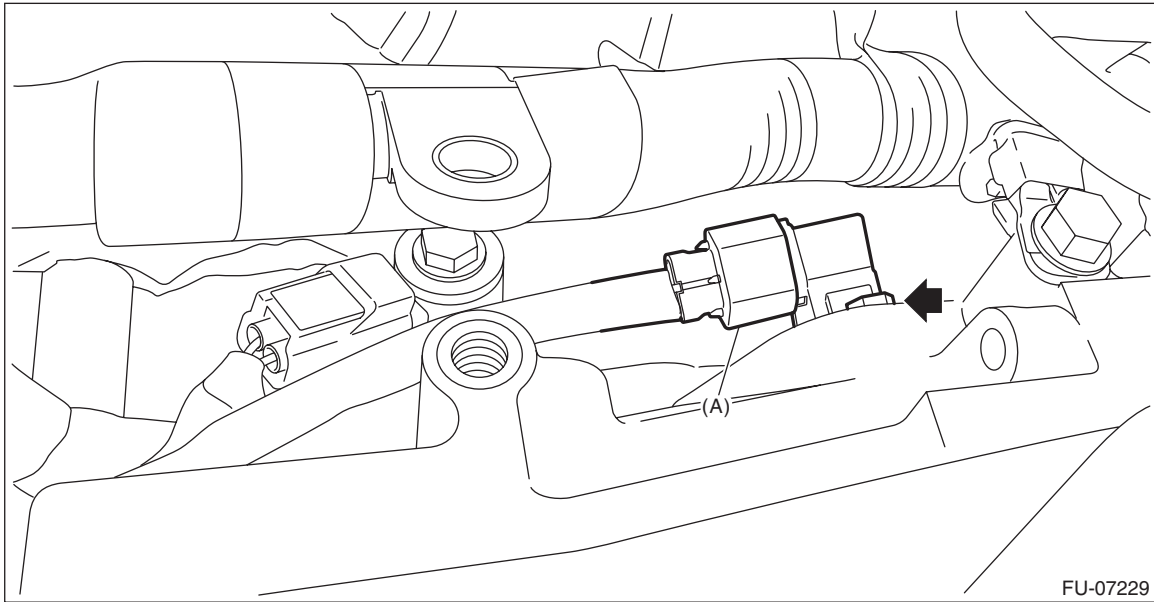
- 2) Disconnect the ground cable from battery.
- 3) Remove the intercooler. <Ref. to IN(H4DOTC)-35, REMOVAL, Intercooler.>
- 4) Remove the throttle body. <Ref. to FU(H4DOTC)-16, REMOVAL, Throttle Body.>
- 5) Remove the bolts securing the engine harness.



Crankshaft Position Sensor

FUEL INJECTION (FUEL SYSTEMS)

6) Disconnect the connector (A) from the crankshaft position sensor, and remove the crankshaft position sensor from the cylinder block.

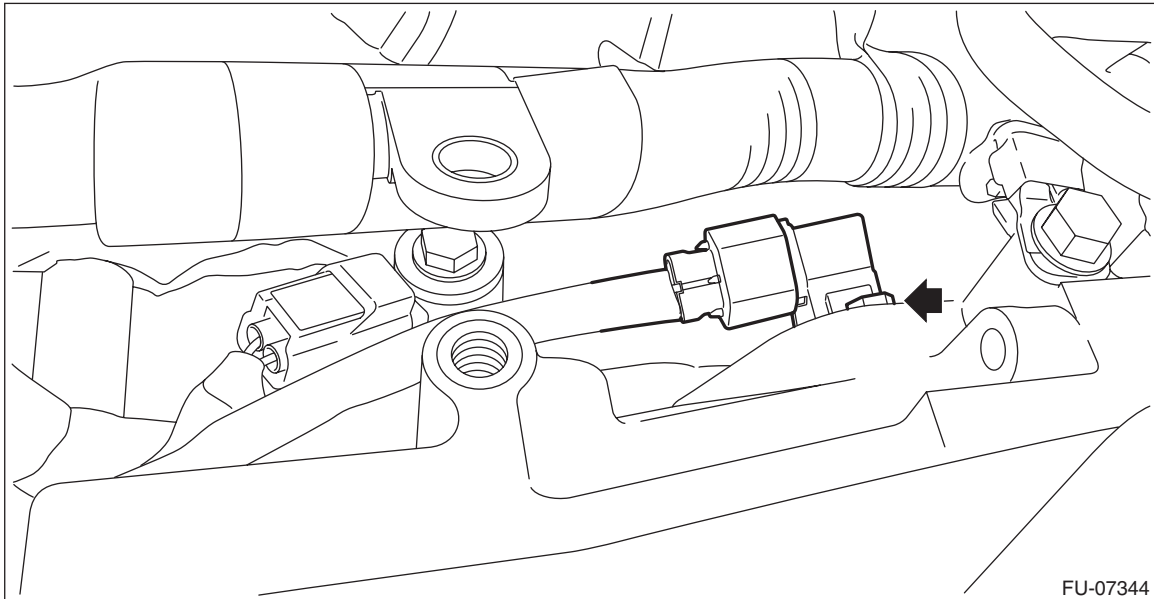


B: INSTALLATION

Install in the reverse order of removal.

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)

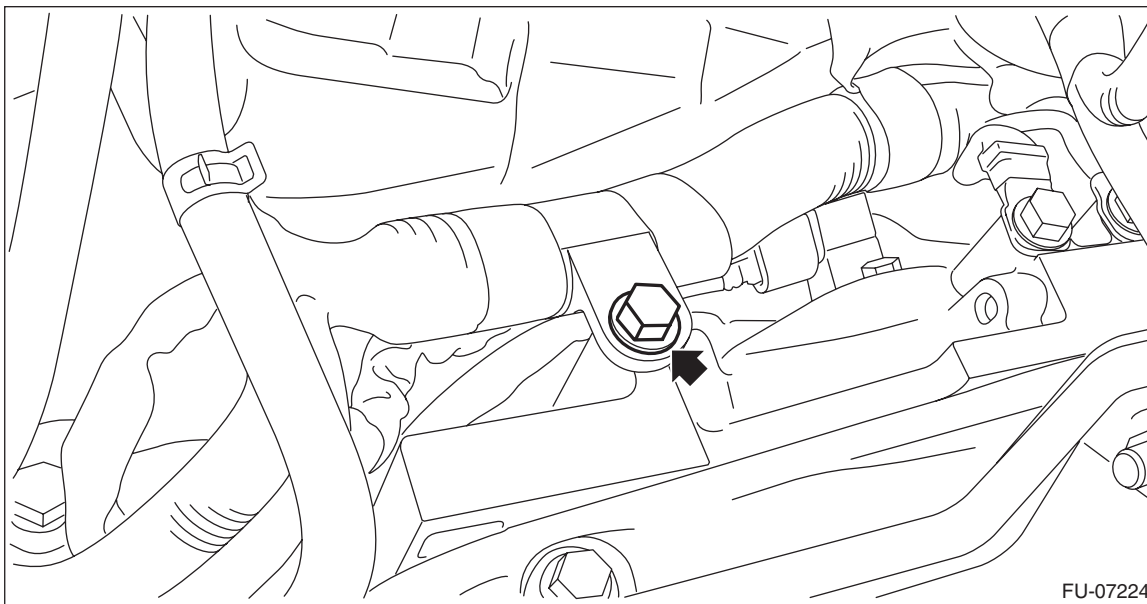


Crankshaft Position Sensor

FUEL INJECTION (FUEL SYSTEMS)

Tightening torque:

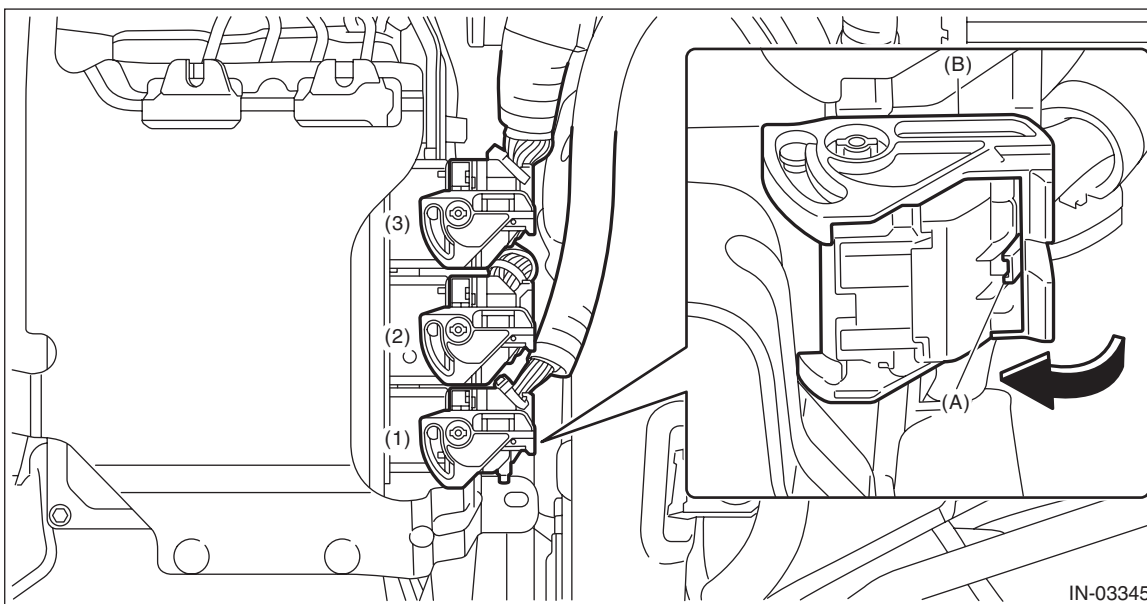
19 N·m (1.9 kgf-m, 14.0 ft-lb)



C: INSPECTION

1. CRANKSHAFT 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.

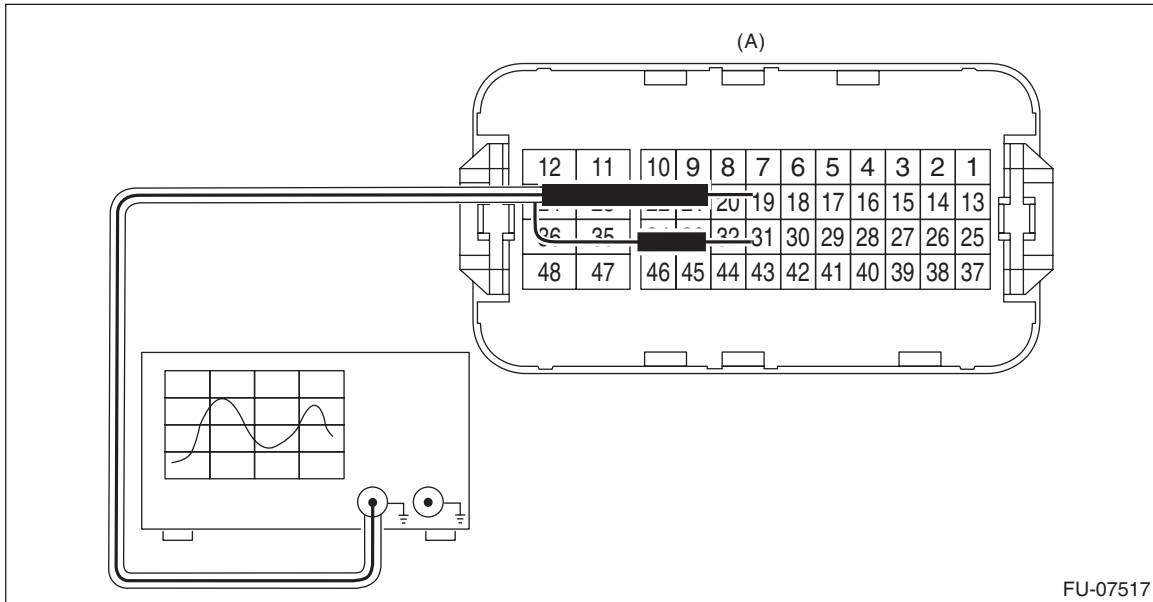


- 4) Install the special tool between the ECM and body harness and the engine harness. <Ref. to EN(H4DOTC)(diag)-6, CAUTION, General Description.>
ST 18460AA030 CHECK BOARD
- 5) Connect the battery ground terminal.

Crankshaft Position Sensor

FUEL INJECTION (FUEL SYSTEMS)

6) Connect the probe to ST.

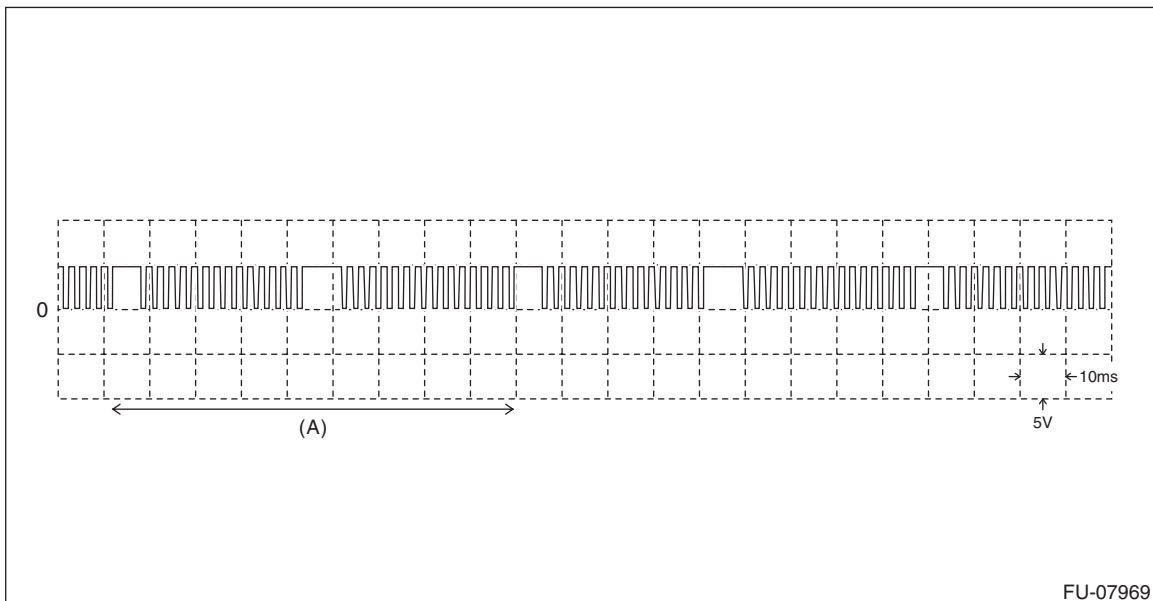


(A) To the check board connector
(ECM connector)

Terminal No.	Probe
19	+
31	-

7) Start the engine and let it idle.

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



(A) One crankshaft rotation

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

2. OTHER INSPECTIONS

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