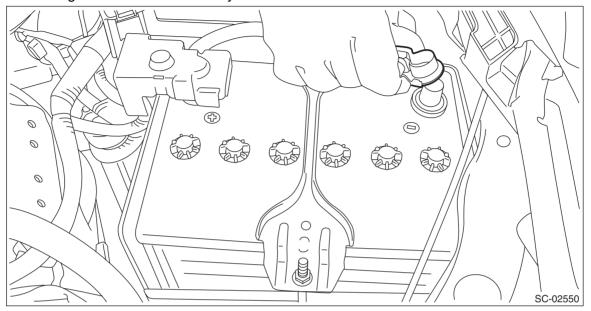
4. Engine Wiring Harness

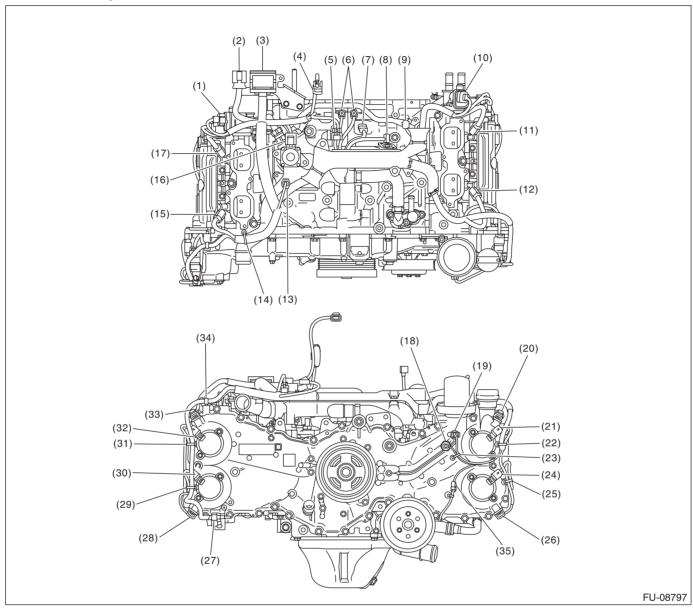
A: REMOVAL

- 1) Release the fuel pressure. <Ref. to $FU(H4DO(w/o\ HEV))-109$, RELEASING OF FUEL PRESSURE, PROCEDURE, Fuel.>
- 2) Disconnect the ground cable from battery.



- 3) Open the fuel filler lid and remove the fuel filler cap.
- 4) Remove the intake manifold. <Ref. to FU(H4DO(w/o HEV))-19, REMOVAL, Intake Manifold.>

- 5) Disconnect the connector from the engine.
- Structural diagram 1

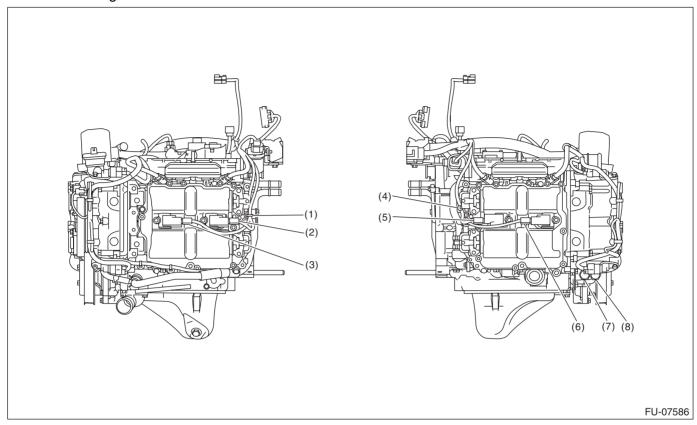


Engine Wiring Harness

FUEL INJECTION (FUEL SYSTEMS)

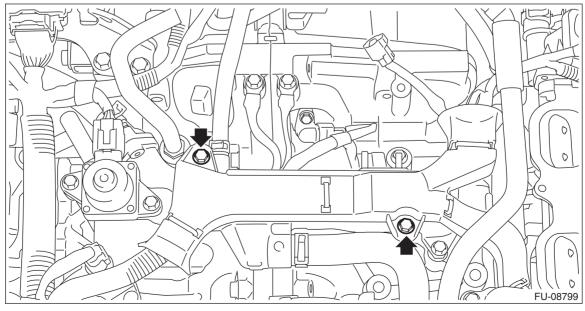
- (1) Tumble generator valve actuator RH
- (2) Engine harness connector (16P)
- (3) Engine harness connector (54P)
- (4) Throttle position sensor connector
- (5) Manifold absolute pressure sensor connector
- (6) Engine ground (2 locations)
- (7) Crankshaft position sensor
- (8) Knock sensor
- (9) Purge control solenoid valve connector
- (10) Tumble generator valve actuator LH
- (11) Fuel injector (#4)
- (12) Fuel injector (#2)
- (13) Engine coolant temperature sensor
- (14) Remove the clip from the screw hole.
- (15) Fuel injector (#1)
- (16) EGR valve
- (17) Fuel injector (#3)
- (18) Oil pressure switch
- (19) Engine oil temperature sensor
- (20) Intake camshaft position sensor LH
- (21) Intake oil control solenoid LH
- (22) Remove the clip from the screw hole.
- (23) Remove the clip from the screw hole.
- (24) Exhaust oil control solenoid LH
- (25) Remove the clip from the screw hole.
- (26) Exhaust camshaft position sensor LH
- (27) Remove the clip from the oval hole.
- (28) Exhaust camshaft position sensor RH
- (29) Remove the clip from the screw hole.
- (30) Exhaust oil control solenoid RH
- (31) Remove the clip from the screw hole.
- (32) Intake oil control solenoid RH
- (33) Intake camshaft position sensor RH
- (34) Remove the clip from the screw hole.
- (35) Oil level switch connector

• Structural diagram 2



- (1) Remove the clip from the screw hole.
- (2) Ignition coil No. 4
- (3) Ignition coil No. 2
- (4) Remove the clip from the screw hole.
- (5) Ignition coil No. 3
- (6) Ignition coil No. 1
- (7) Front oxygen (A/F) sensor
- (8) Rear oxygen sensor

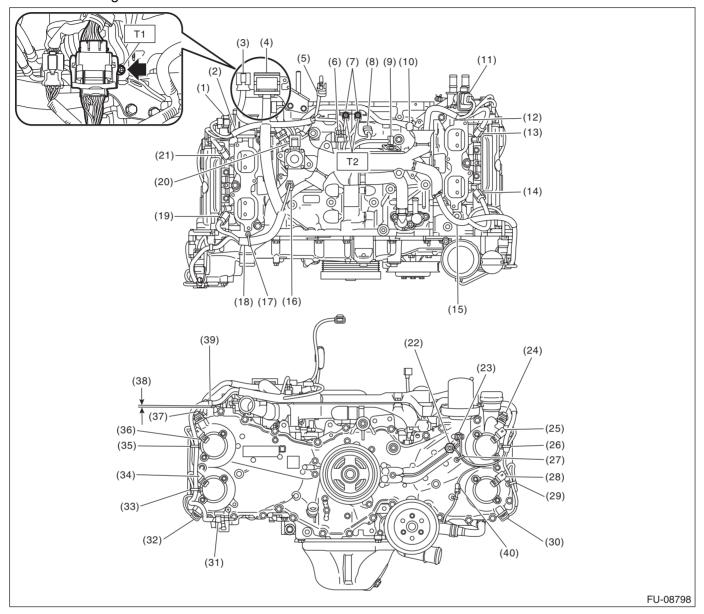
6) Remove the engine wiring harness.



FU(H4DO(w/o HEV))-46

B: INSTALLATION

- 1) Route the engine wiring harness around the engine and connect connectors.
- Structural diagram 1



Engine Wiring Harness

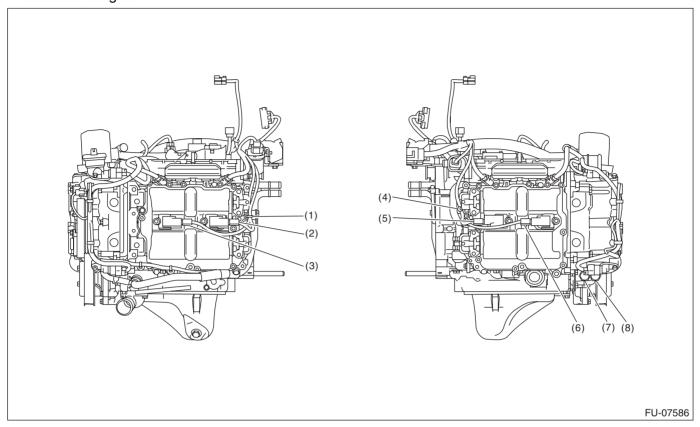
FUEL INJECTION (FUEL SYSTEMS)

- (1) Tumble generator valve actuator RH
- (2) Be careful of pinching when installing the intake manifold.
- (3) Engine harness connector (16P)
- (4) Engine harness connector (54P)
- (5) Throttle position sensor connector
- (6) Manifold absolute pressure sensor connector
- (7) Engine ground (2 locations)
- (8) Crankshaft position sensor
- (9) Knock sensor
- (10) Purge control solenoid valve connector
- (11) Tumble generator valve actuator LH
- (12) Be careful of pinching when installing the intake manifold.
- (13) Fuel injector (#4)
- (14) Fuel injector (#2)
- (15) Be careful of pinching when installing the intake manifold and A/C bracket.
- (16) Engine coolant temperature sensor
- (17) Secure the clip to the screw hole.
- (18) Be careful of pinching when installing the intake manifold.
- (19) Fuel injector (#1)
- (20) EGR valve
- (21) Fuel injector (#3)
- (22) Oil pressure switch
- (23) Engine oil temperature sensor
- (24) Intake camshaft position sensor LH
- (25) Intake oil control solenoid LH
- (26) Secure the clip to the screw hole.
- (27) Secure the clip to the screw hole.
- (28) Exhaust oil control solenoid LH
- (29) Secure the clip to the screw hole.
- (30) Exhaust camshaft position sensor LH
- (31) Secure the clip to the oval hole.
- (32) Exhaust camshaft position sensor RH
- (33) Secure the clip to the screw hole.
- (34) Exhaust oil control solenoid RH
- (35) Secure the clip to the screw hole.
- (36) Intake oil control solenoid RH
- (37) Intake camshaft position sensor RH
- (38) Maximum of 0 2 mm (0 0.079 in) gap is allowed.
- (39) Secure the clip to the screw hole.
- (40) Oil level switch connector

Tightening torque: N⋅m (kgf-m, ft-lb)

T1: 7.5 (0.8, 5.5)
T2: 19 (1.9, 14.0)

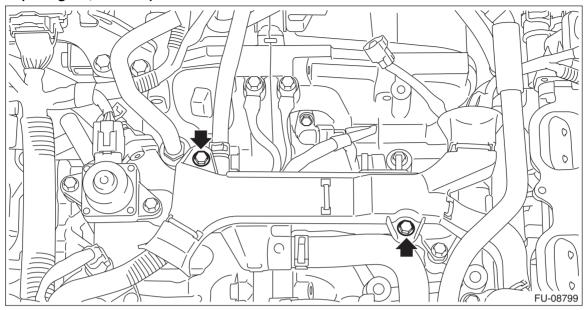
Structural diagram 2



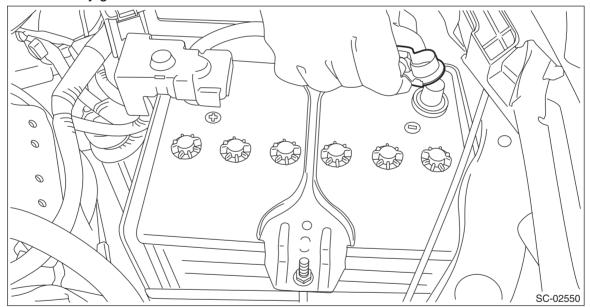
- (1) Secure the clip to the screw hole.
- (2) Ignition coil No. 4
- (3) Ignition coil No. 2
- (4) Secure the clip to the screw hole.
- (5) Ignition coil No. 3
- (6) Ignition coil No. 1
- (7) Front oxygen (A/F) sensor
- (8) Rear oxygen sensor

2) Install the engine wiring harness.

Tightening torque: 6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



- 3) Install the intake manifold. <Ref. to FU(H4DO(w/o HEV))-29, INSTALLATION, Intake Manifold.>
- 4) Connect the battery ground terminal.



C: INSPECTION

Check that the engine wiring harness does not have deformation, cracks and any other damage.