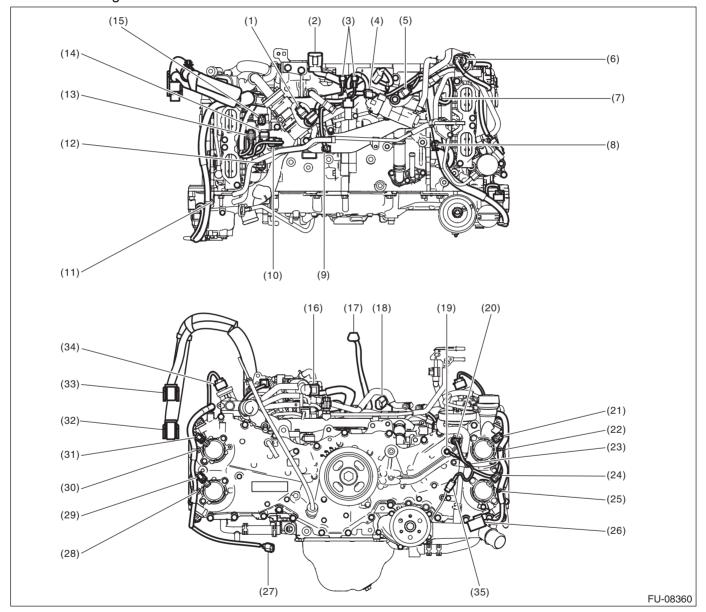
10.Engine Wiring Harness

A: REMOVAL

- 1) Disconnect the ground terminal from battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>
- 2) Remove the intake manifold. <Ref. to FU(w/o STI)-18, REMOVAL, Intake Manifold.>
- 3) Remove the fuel insulator. <Ref. to FU(w/o STI)-46, REMOVAL, Fuel Insulator.>
- 4) Remove the engine control module (ECM). <Ref. to FU(w/o STI)-132, REMOVAL, Engine Control Module (ECM).>
- 5) Disconnect the connector from the engine.
- Structural diagram 1

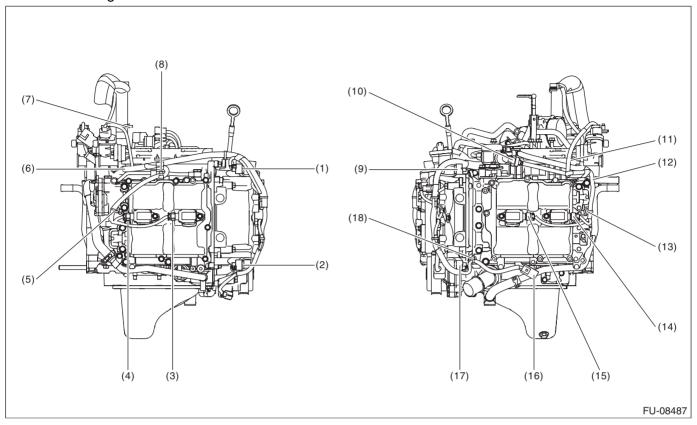


Engine Wiring Harness

FUEL INJECTION (FUEL SYSTEMS)

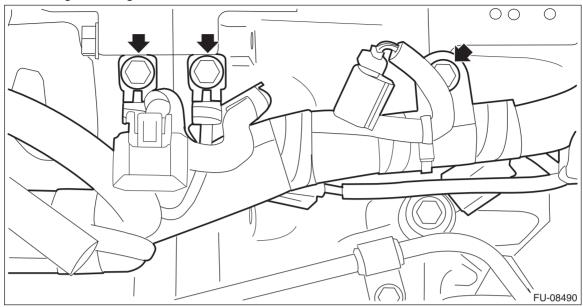
- (1) Knock sensor RH
- (2) Engine harness connector (16P)
- (3) Engine ground (2 locations)
- (4) Crankshaft position sensor
- (5) Knock sensor LH
- (6) Tumble generator valve actuator LH
- (7) Fuel injector (#4)
- (8) Fuel injector (#2)
- (9) Engine coolant temperature sensor
- (10) Fuel pressure sensor
- (11) Remove clip from screw hole.
- (12) Fuel injector (#1)
- (13) Purge control solenoid valve (#2) (black connector)
- (14) Purge control solenoid valve (#1) (blue connector)
- (15) Fuel injector (#3)
- (16) EGR valve
- (17) Manifold absolute pressure and intake air temperature sensor
- (18) Throttle position sensor
- (19) Oil pressure switch
- (20) Engine oil temperature sensor
- (21) Intake oil control solenoid LH
- (22) Remove clip from screw hole.
- (23) Remove clip from the round hole of stay.
- (24) Exhaust oil control solenoid LH
- (25) Remove clip from screw hole.
- (26) Front oxygen (A/F) sensor (remove from the front oxygen (A/F) sensor bracket)
- (27) Wastegate solenoid
- (28) Remove clip from screw hole.
- (29) Exhaust oil control solenoid RH
- (30) Remove clip from screw hole.
- (31) Intake oil control solenoid RH
- (32) Engine harness connector (48P)
- (33) Engine harness connector (32P)
- (34) Tumble generator valve actuator RH
- (35) Oil level sensor connector

Structural diagram 2



- (1) Intake camshaft position sensor RH
- (2) Exhaust camshaft position sensor RH
- (3) Ignition coil No. 1
- (4) Ignition coil No. 3
- (5) Remove clip from screw hole.
- (6) Pull out from the lower side of the tumble generator valve RH.
- (7) Remove clip from the round hole.
- (8) Remove clip from the oil pipe.
- (9) Intake camshaft position sensor LH
- (10) High-pressure fuel pump
- (11) Pull out from the outside of the fuel tube.
- (12) Pull out from the lower side of the tumble generator valve LH.
- (13) Remove clip from screw hole.
- (14) Ignition coil No. 4
- (15) Ignition coil No. 2
- (16) Oxygen sensor
- (17) Exhaust camshaft position sensor LH
- (18) Remove clip from screw hole.

6) Remove the engine wiring harness.

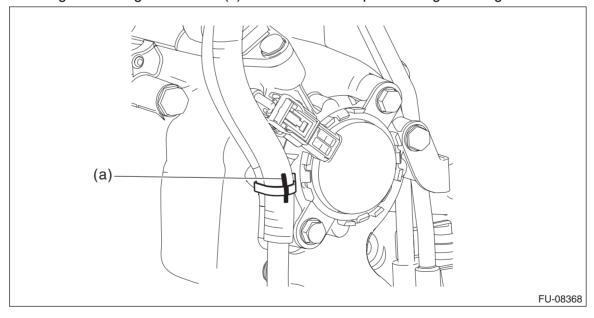


B: INSTALLATION

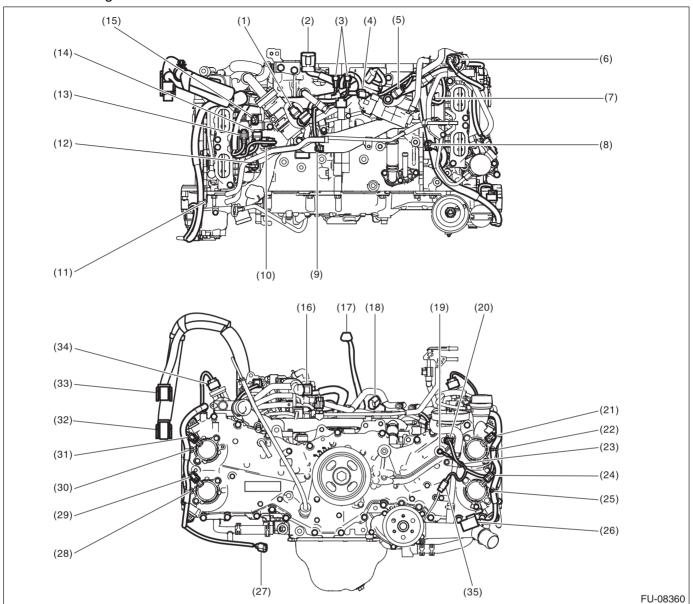
1) Set the engine wiring harness to the engine, and connect the connector.

NOTE:

- If the clip is damaged, replace it with a new part.
- Before replacing the clip, put an alignment mark (a) on both engine wiring harness and clip to remove the clip, and then align to the alignment mark (a) to attach a new clip to the engine wiring harness.



Structural diagram 1

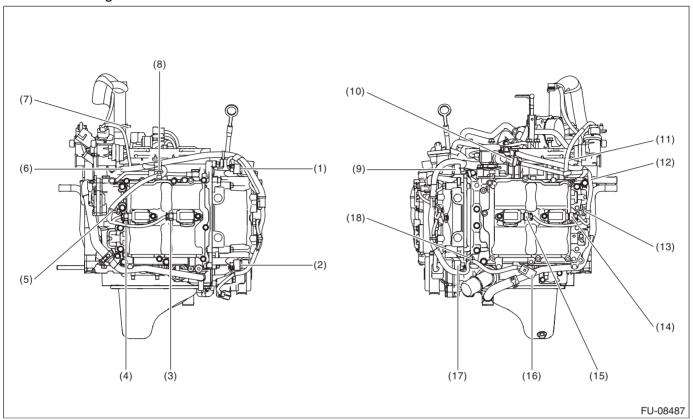


Engine Wiring Harness

FUEL INJECTION (FUEL SYSTEMS)

- (1) Knock sensor RH (routed under the insulator)
- (2) Engine harness connector (16P) (secured to engine hanger)
- (3) Engine ground (2 places) (During installation, let the terminal tip come in contact with the block step.)
- (4) Crankshaft position sensor
- (5) Knock sensor LH (routed under the insulator)
- (6) Tumble generator valve actuator LH
- (7) Fuel injector (#4) (routed under the insulator)
- (8) Fuel injector (#2) (routed under the insulator)
- (9) Engine coolant temperature sensor
- (10) Fuel pressure sensor
- (11) Secure the clip to the screw hole.
- (12) Fuel injector (#1) (routed under the insulator)
- (13) Purge control solenoid valve (#2) (black connector)
- (14) Purge control solenoid valve (#1) (blue connector)
- (15) Fuel injector (#3) (routed under the insulator)
- (16) EGR valve
- (17) Manifold absolute pressure and intake air temperature sensor
- (18) Throttle position sensor
- (19) Oil pressure switch
- (20) Engine oil temperature sensor
- (21) Intake oil control solenoid LH
- (22) Secure the clip to the screw hole.
- (23) Secure the clip to the round hole of stay.
- (24) Exhaust oil control solenoid LH
- (25) Secure the clip to the screw hole.
- (26) Front oxygen (A/F) sensor (secured to the front oxygen (A/F) sensor bracket)
- (27) Wastegate solenoid
- (28) Secure the clip to the screw hole.
- (29) Exhaust oil control solenoid RH
- (30) Secure the clip to the screw hole.
- (31) Intake oil control solenoid RH
- (32) Engine harness connector (48P)
- (33) Engine harness connector (32P)
- (34) Tumble generator valve actuator RH
- (35) Oil level sensor connector

Structural diagram 2

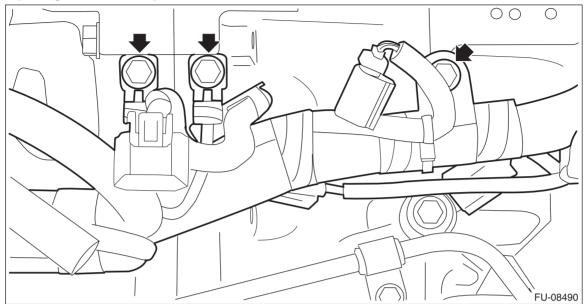


- (1) Intake camshaft position sensor RH
- (2) Exhaust camshaft position sensor RH
- (3) Ignition coil No. 1
- (4) Ignition coil No. 3
- (5) Secure the clip to the screw hole.
- (6) Route under the tumble generator valve.
- (7) Secure the clip to the round hole.
- (8) Secure the clip to the oil pipe.
- (9) Intake camshaft position sensor LH
- (10) High-pressure fuel pump
- (11) Route outside of the fuel tube.
- (12) Route under the tumble generator valve.
- (13) Secure the clip to the screw hole.
- (14) Ignition coil No. 4
- (15) Ignition coil No. 2
- (16) Oxygen sensor (secured to the heater pipe)
- (17) Exhaust camshaft position sensor LH
- (18) Secure the clip to the screw hole.

2) Install the engine wiring harness.

Tightening torque:

19 N⋅m (1.9 kgf-m, 14.0 ft-lb)



- 3) Install the engine control module (ECM). <Ref. to FU(w/o STI)-134, INSTALLATION, Engine Control Module (ECM).>
- 4) Install the fuel insulator. <Ref. to FU(w/o STI)-49, INSTALLATION, Fuel Insulator.>
- 5) Install the intake manifold. <Ref. to FU(w/o STI)-29, INSTALLATION, Intake Manifold.>
- 6) Connect the ground terminal to battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>

C: INSPECTION

- 1) Check that the engine wiring harness does not have deformation, cracks and any other damage.
- 2) Check the engine wiring harness for contamination or clogging.