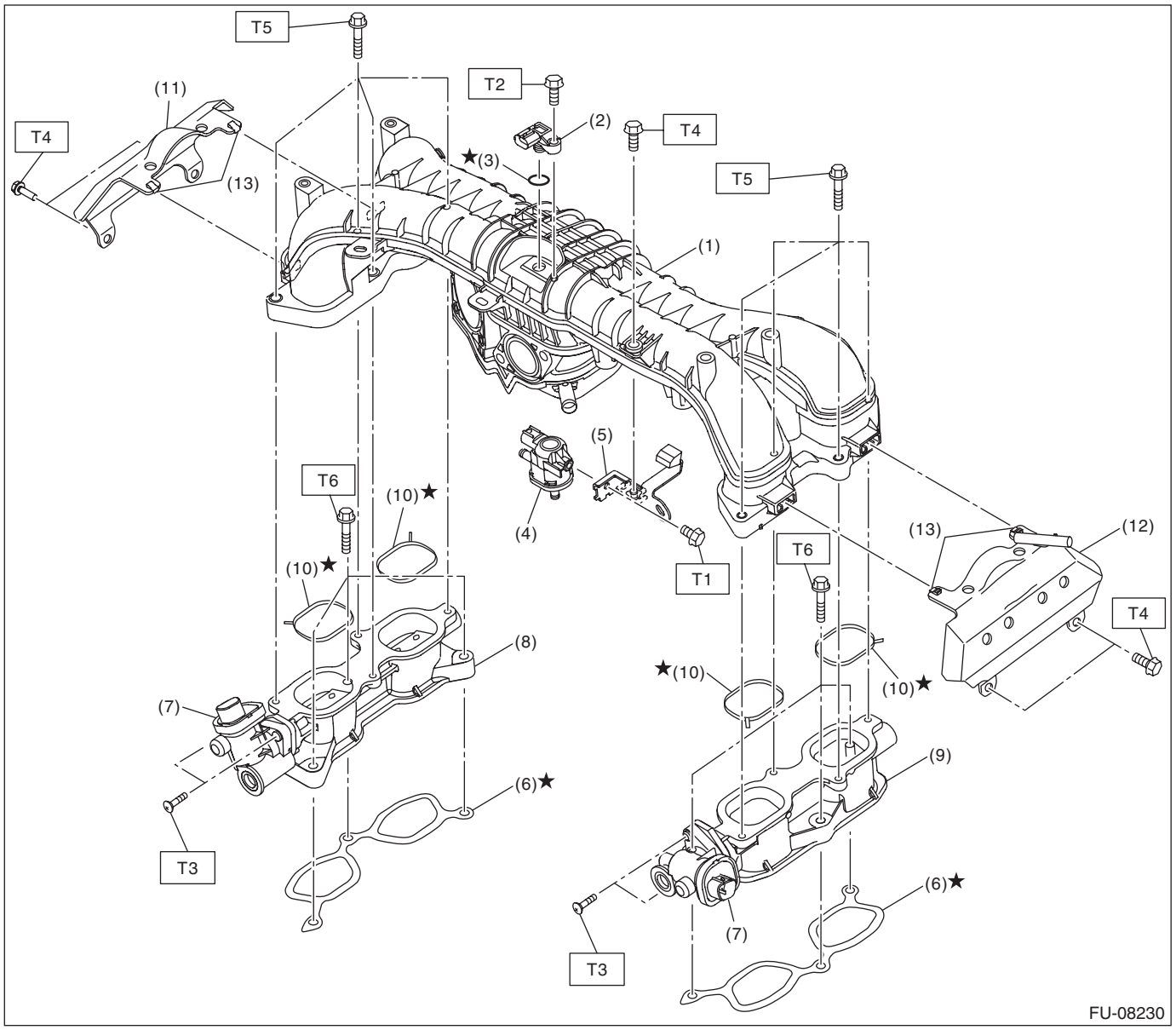
1. General Description

A: SPECIFICATION

Fuel tank	Capacity	52 L (13.7 US gal, 11.4 Imp gal)
	Location	Under rear seat
Fuel pump	Type	Impeller
	Shutoff discharge pressure	750 kPa (7.7 kg/cm^2, 108.8 psi) or less
	Discharge rate	82 L (21.7 US gal, 18 Imp gal)/h or more [12.5 V at 343 kPa (3.5 kg/cm^2, 49.7 psi)]
Fuel filter		In-tank type

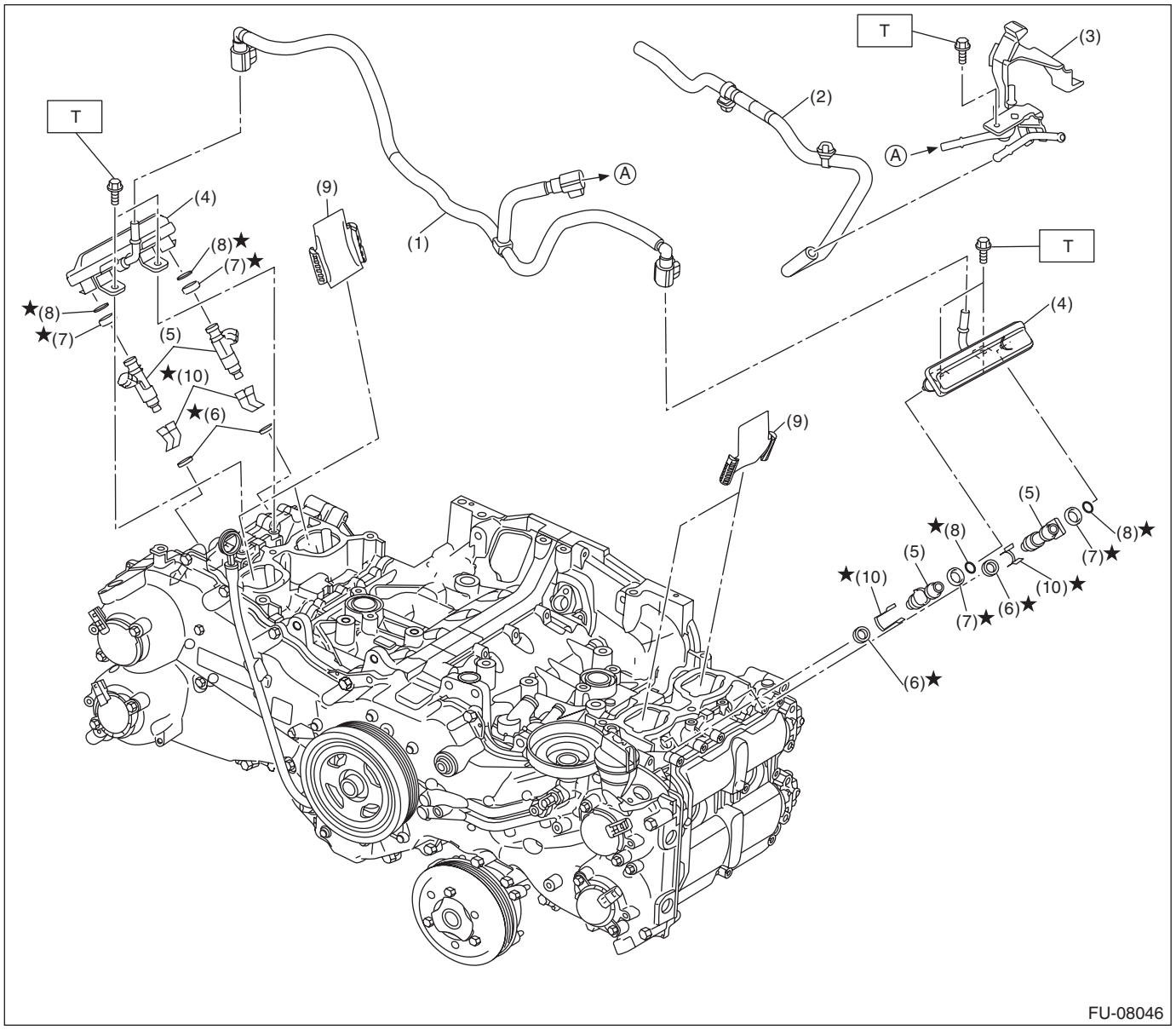
B: COMPONENT

1. INTAKE MANIFOLD 1



(1)	Intake manifold	(8)	Tumble generator valve LH	***Tightening torque: N·m (kgf-m, ft-lb)***
(2)	Manifold absolute pressure sensor	(9)	Tumble generator valve RH	***T1: 3.4 (0.3, 2.5)***
(3)	O-ring	(10)	Gasket	***T2: 4 (0.4, 3.0)***
(4)	Purge control solenoid valve	(11)	Intake manifold protector LH	***T3: 6 (0.6, 4.4)***
(5)	Purge control solenoid valve bracket	(12)	Intake manifold protector RH	***T4: 6.4 (0.7, 4.7)***
(6)	Gasket	(13)	Cushion	***T5: 8.3 (0.8, 6.1)***
(7)	Tumble generator valve actuator			***T6: 25 (2.5, 18.4)***

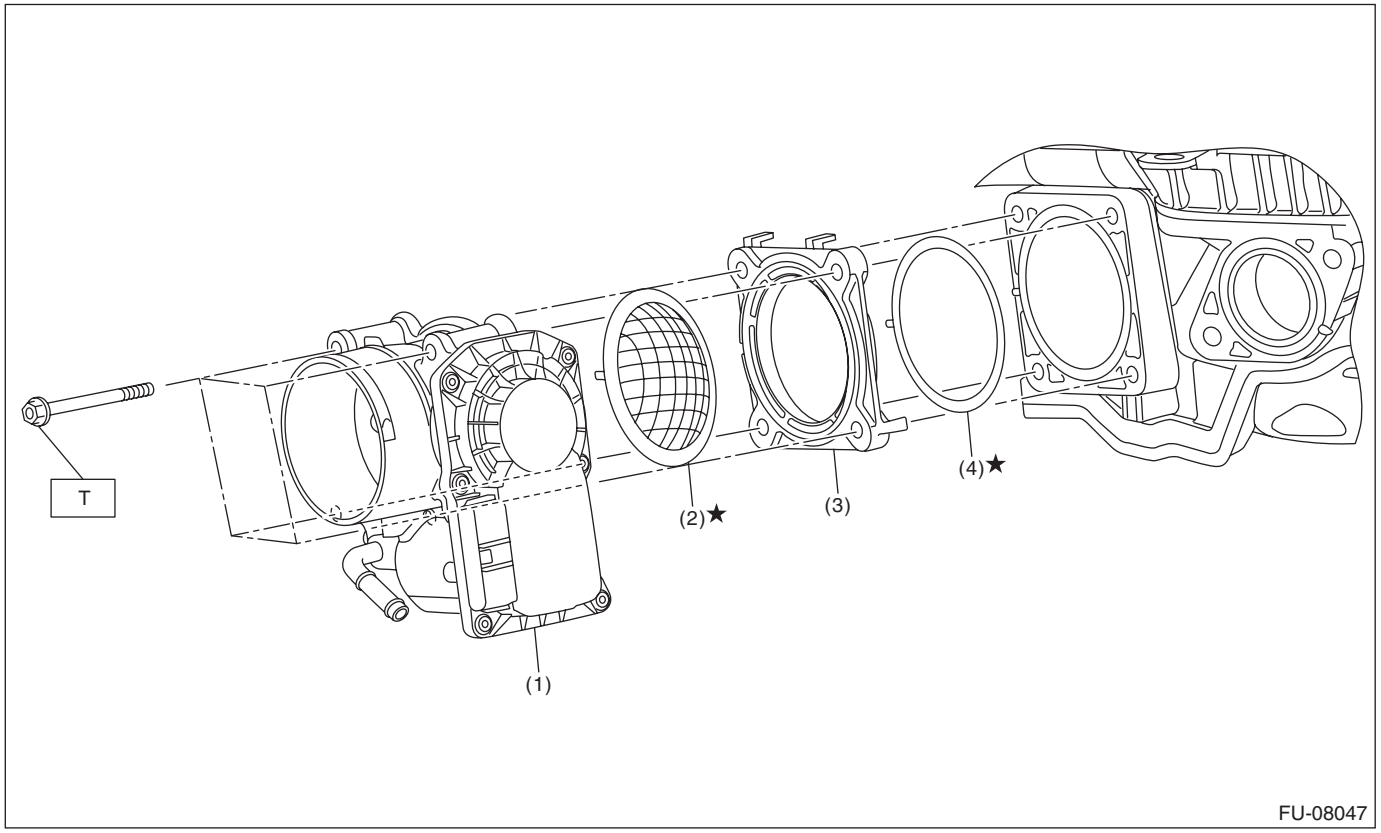
2. INTAKE MANIFOLD 2



(1) Fuel delivery pipe
(2) Vacuum hose
(3) Fuel pipe ASSY
(4) Fuel pipe
(5) Fuel injector
(6) Seal ring
(7) Rubber
(8) O-ring
(9) Cylinder head plate
(10) Fuel injector holder

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

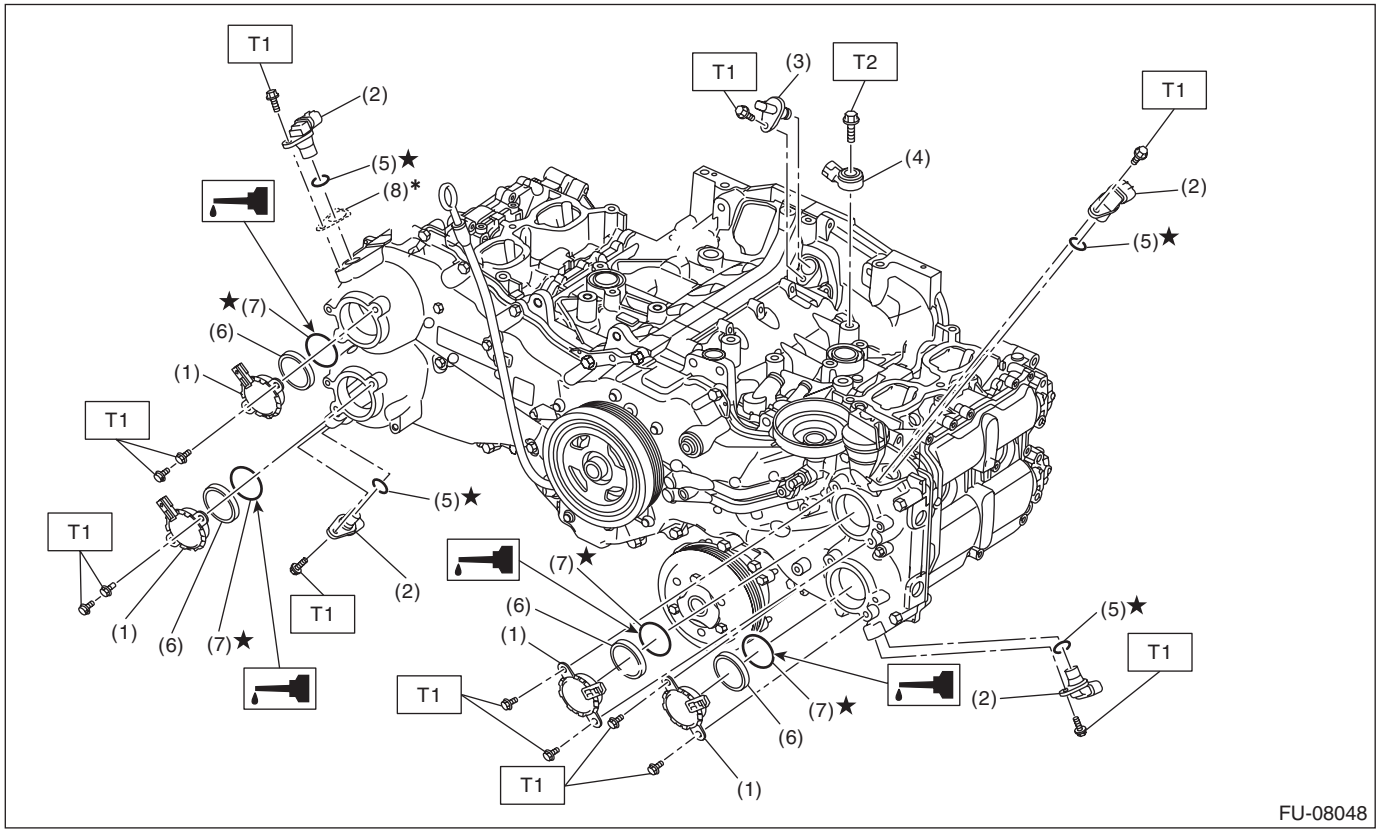
3. THROTTLE BODY



(1) Throttle body
(2) Gasket A
(3) Throttle chamber duct
(4) Gasket B

Tightening torque: N·m (kgf-m, ft-lb)
T: <Ref. to FU(H4DO(HEV))-16, INSTALLATION, Throttle Body.>

4. CRANKSHAFT POSITION, CAMSHAFT POSITION AND KNOCK SENSORS

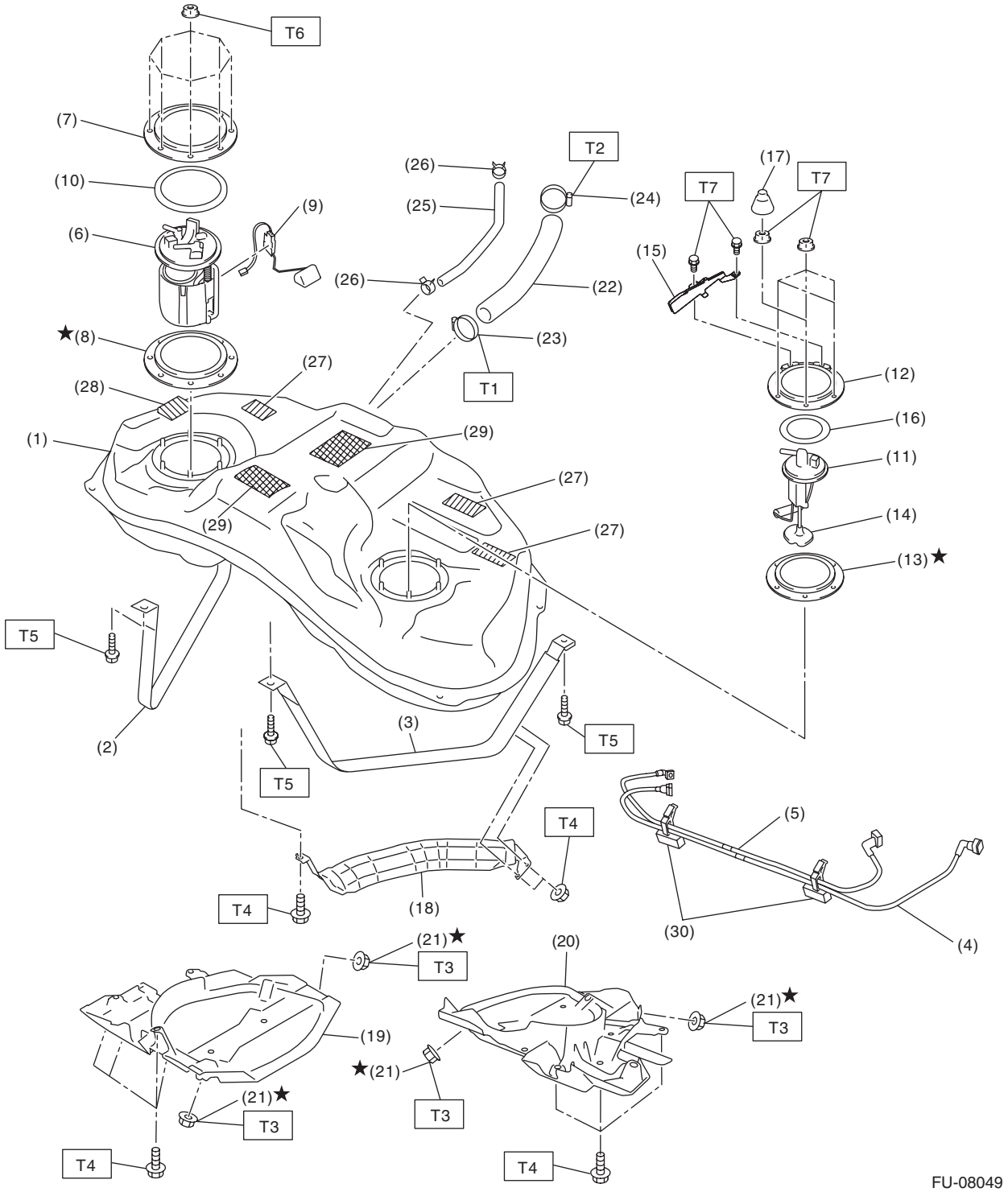


(1) Oil control solenoid
(2) Camshaft position sensor
(3) Crankshaft position sensor
(4) Knock sensor
(5) O-ring
(6) Back-up ring
(7) O-ring
(8) Spacer

* Zero or one spacer for gap adjustment.

Tightening torque: N·m (kgf-m, ft-lb)
T1: 6.4 (0.7, 4.7)
T2: 24 (2.4, 17.7)

5. FUEL TANK


T6
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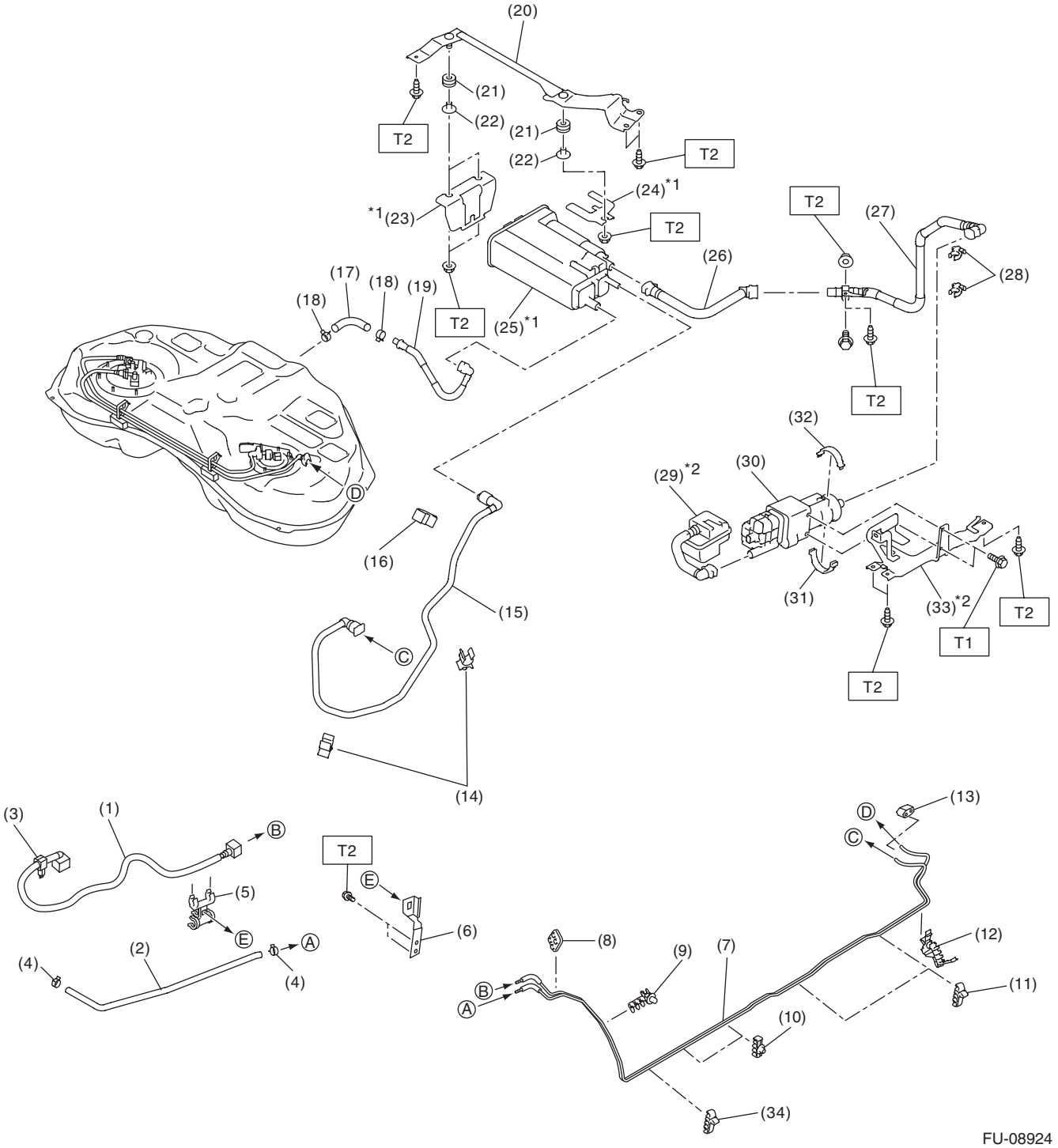
FU-08049

(1)	Fuel tank	(14)	Fuel sub level sensor filter	(27)	Cushion
(2)	Fuel tank band RH	(15)	Fuel sub level sensor protector	(28)	Cushion
(3)	Fuel tank band LH	(16)	Fuel sub level sensor upper plate cushion	(29)	Cushion
(4)	Delivery tube	(17)	Rubber cap	(30)	Tube clamp
(5)	Jet pump tube	(18)	Heat shield cover		
(6)	Fuel pump ASSY	(19)	Fuel tank protector RH		
(7)	Fuel pump upper plate	(20)	Fuel tank protector LH		
(8)	Fuel pump gasket	(21)	Self-locking nut		
(9)	Fuel level sensor	(22)	Fuel filler hose		
(10)	Fuel pump upper plate cushion	(23)	Clamp		
(11)	Fuel sub level sensor	(24)	Clamp		
(12)	Fuel sub level sensor upper plate	(25)	Evaporation hose		
(13)	Fuel sub level sensor gasket	(26)	Clip		

Tightening torque: N·m (kgf-m, ft-lb)

- ***T1: 2 (0.2, 1.5)***
- ***T2: 2.5 (0.3, 1.8)***
- ***T3: 9 (0.9, 6.6)***
- ***T4: 18 (1.8, 13.3)***
- ***T5: 33 (3.4, 24.3)***
- ***T6: <Ref. to FU(H4DO(HEV))-126, INSTALLATION, Fuel Pump.>***
- ***T7: <Ref. to FU(H4DO(HEV))-135, INSTALLATION, Fuel Sub Level Sensor.>***

6. FUEL LINE


(20)
(21)
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(7)
(12)
(11)
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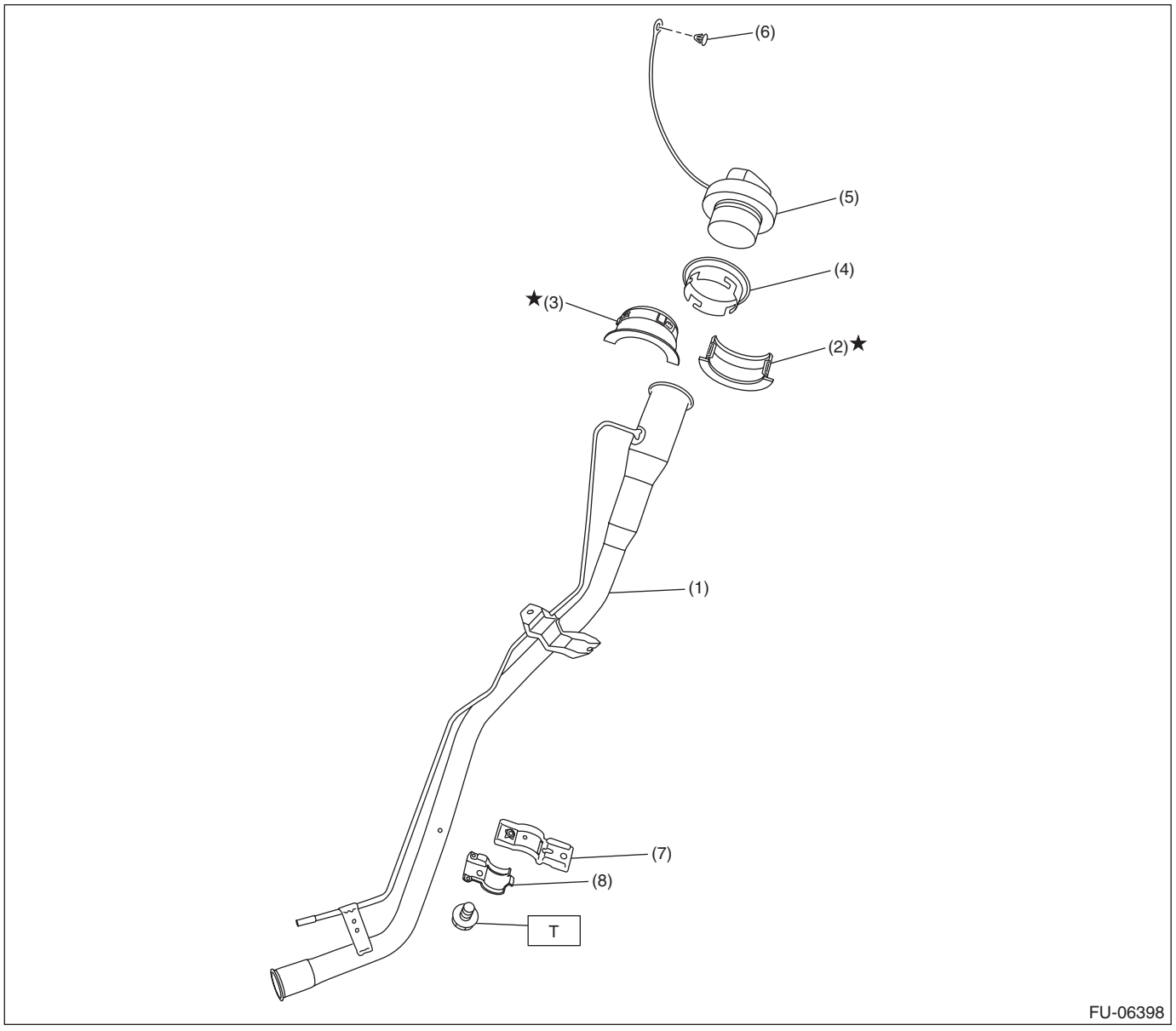
(34)
FU-08924

(1) Fuel delivery tube
(2) Evaporation hose
(3) Tube clamp
(4) Clip
(5) Hose clamp
(6) Hose clamp bracket
(7) Fuel pipe ASSY
(8) Fuel pipe front grommet
(9) Pipe clamp
(10) Pipe clamp
(11) Pipe clamp (with gasket)
(12) Pipe clamp
(13) Fuel pipe rear grommet
(14) Tube clamp
(15) Purge tube
(16) Clip
(17) Vent hose
(18) Clip
(19) Vent tube
(20) Canister bracket A
(21) Cushion
(22) Collar
(23) Canister bracket B
(24) Canister bracket C
(25) Canister
(26) Drain tube A
(27) Drain tube B
(28) Tube clamp
(29) Drain filter
(30) Leak check valve ASSY
(31) Clamp A
(32) Clamp B
(33) Drain bracket
(34) Pipe clamp (without gasket)

Tightening torque: N·m (kgf-m, ft-lb)
T1: 5.4 (0.6, 4.0)
T2: 7.5 (0.8, 5.5)

*1 When removing the canister bracket from the canister, use the new canister and canister bracket to install.
*2 When removing the drain bracket from the drain filter, use the new drain filter and drain bracket to install.

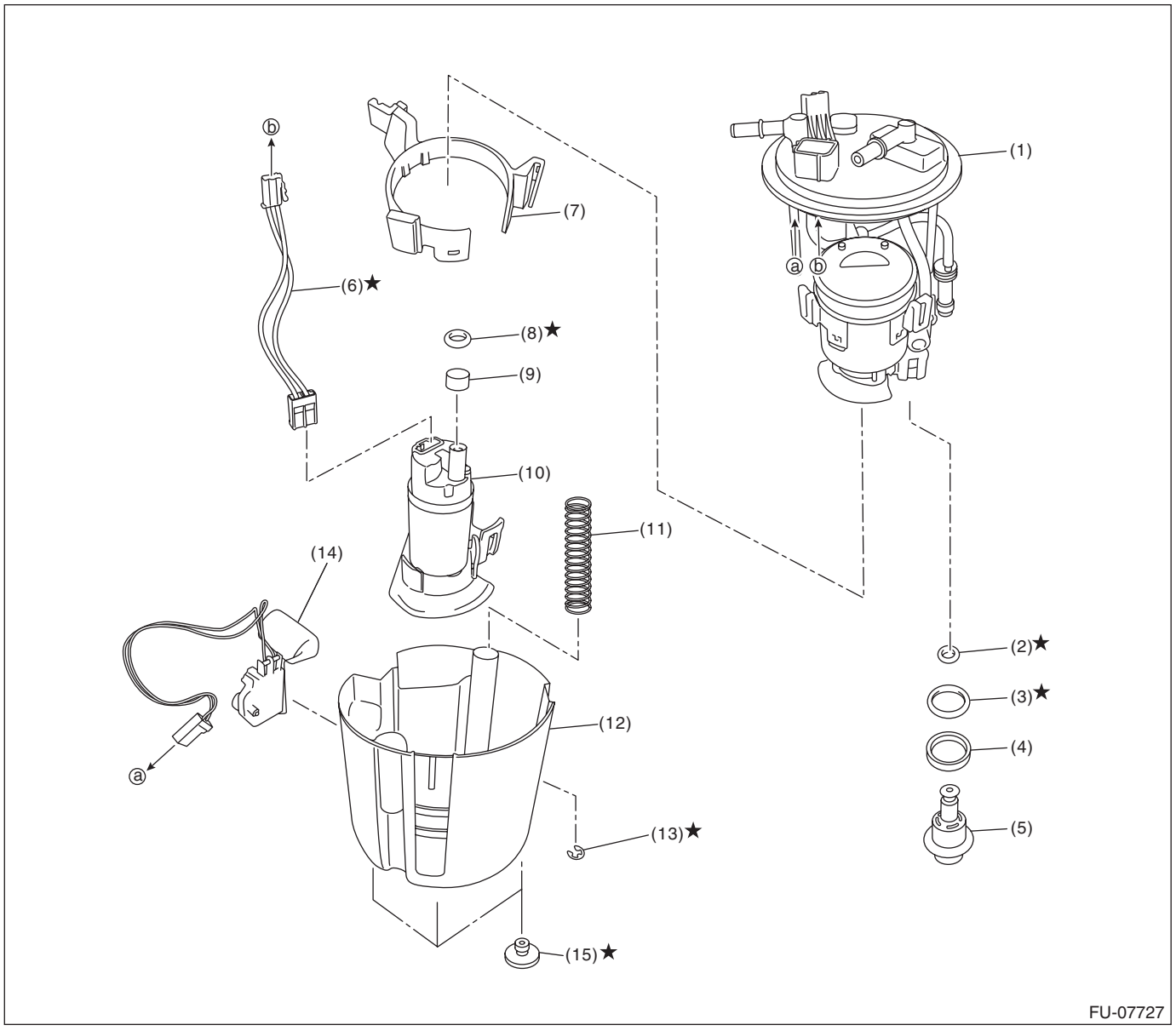
7. FUEL FILLER PIPE



(1) Fuel filler pipe ASSY
(2) Neck holder A
(3) Neck holder B
(4) Fuel filler pipe protector
(5) Fuel filler cap
(6) Clip
(7) Upper bracket
(8) Lower bracket

Tightening torque: N·m (kgf-m, ft-lb)
T: 7.5 (0.8, 5.5)

8. FUEL PUMP



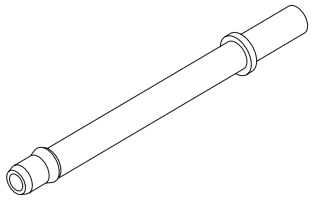
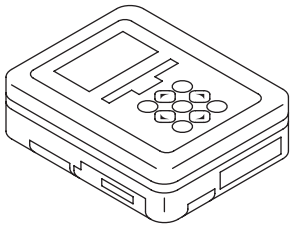
(1) Fuel filter ASSY
(2) O-ring
(3) O-ring
(4) Back-up ring
(5) Pressure regulator
(6) Connector cable
(7) Fuel pump holder
(8) O-ring
(9) Spacer
(10) Fuel pump
(11) Spring
(12) Fuel chamber ASSY
(13) Clip
(14) Fuel level sensor
(15) Cushion

C: CAUTION

- Prior to starting work, pay special attention to the following:
  1. Always wear work clothes, a work cap, and protective shoes. Additionally, wear a helmet, protective goggles, etc. if necessary.
  2. Protect the vehicle using a seat cover, fender cover, etc.
  3. Prepare the service tools, clean cloth, containers to catch grease and oil, etc.
- Place “NO OPEN FLAMES” signs near the working area.
- Prepare a container and cloth to prevent scattering of fuels when performing work where fuels can be spilled. If the oil spills, wipe it off immediately to prevent from penetrating into floor or flowing out for environmental protection.
- Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.
- When performing a repair, identify the cause of trouble and avoid unnecessary removal, disassembly and replacement.
- Before disconnecting connectors of sensors or units, be sure to disconnect the ground cable from battery.
- Always use the jack-up point when the shop jacks or rigid racks are used to support the vehicle.
- Remove contamination including dirt and corrosion before removal, installation, disassembly or assembly.
- Keep the removed parts in order and protect them from dust and dirt.
- All removed parts, if to be reused, should be reinstalled in the original positions with attention to the correct directions, etc.
- Bolts, nuts and washers should be replaced with new parts as required.
- Follow all government and local regulations concerning disposal of refuse when disposing fuel.

D: PREPARATION TOOL

1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST18471AA000	18471AA000	FUEL PIPE ADAPTER	Used for draining fuel.
 ST1B022XU0	1B022XU0	SUBARU SELECT MONITOR III KIT	Used for setting of each function and trouble-shooting for electrical system. NOTE: For detailed operation procedures of Subaru Select Monitor III, refer to “PC application help for Subaru Select Monitor”.

2. GENERAL TOOL

TOOL NAME	REMARKS
Circuit tester	Used for measuring resistance and voltage.
Oscilloscope	Used for inspecting the waveform of each sensor.
Mighty Vac	Used for inspecting the manifold absolute pressure sensor.