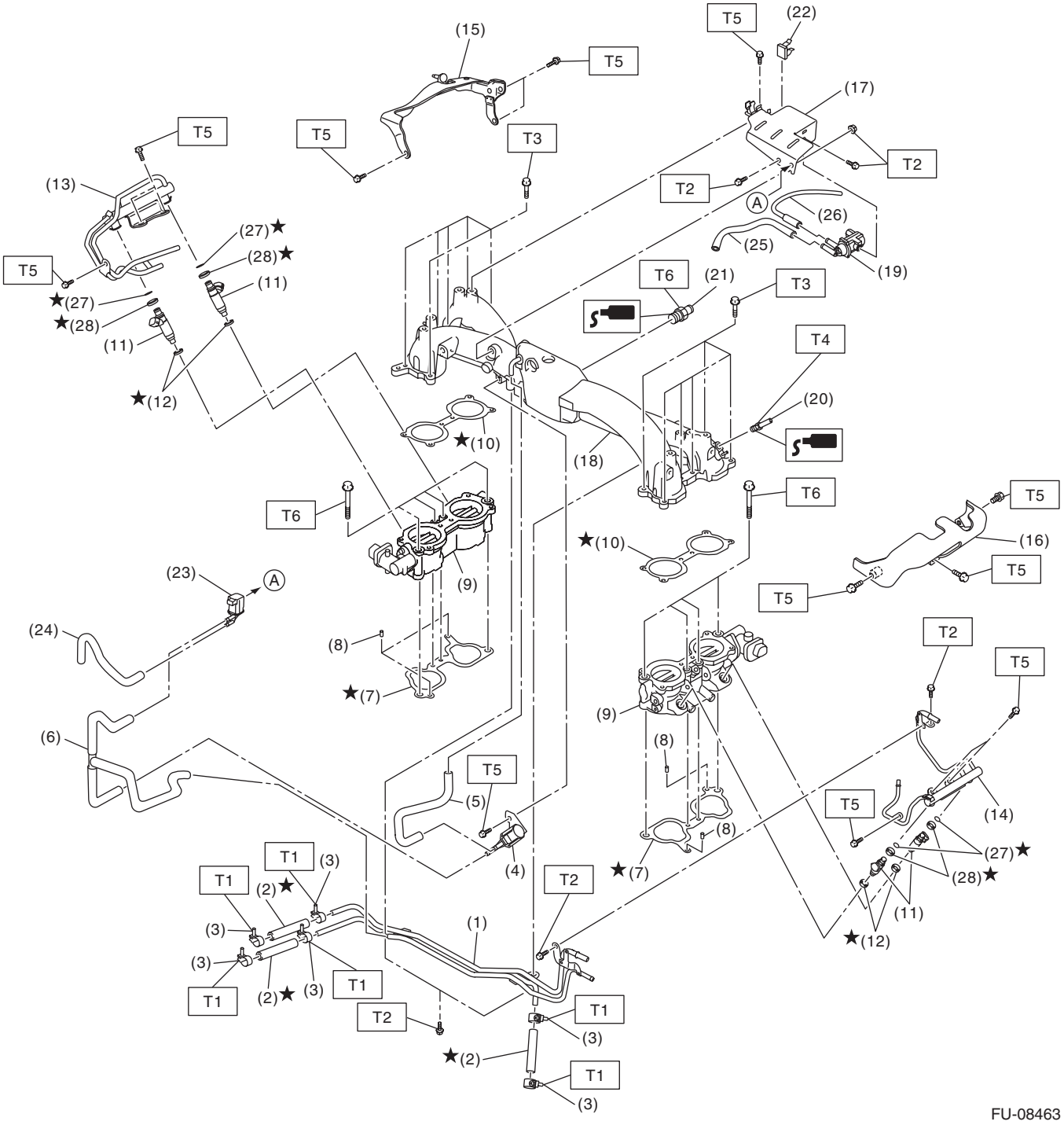
1. General Description

A: SPECIFICATION

Fuel tank	Capacity	60 L (15.9 US gal, 13.2 Imp gal)
	Location	Under rear seat
Fuel pump	Type	Impeller
	Shutoff discharge pressure	900 kPa (9.18 kg/cm^2, 130.5 psi) or less
	Discharge rate	175 L (46.2 US gal, 38.5 Imp gal)/h or more [12 V at 300 kPa (3.06 kg/cm^2, 43.5 psi)]
Fuel filter		In-tank type

B: COMPONENT

1. INTAKE MANIFOLD

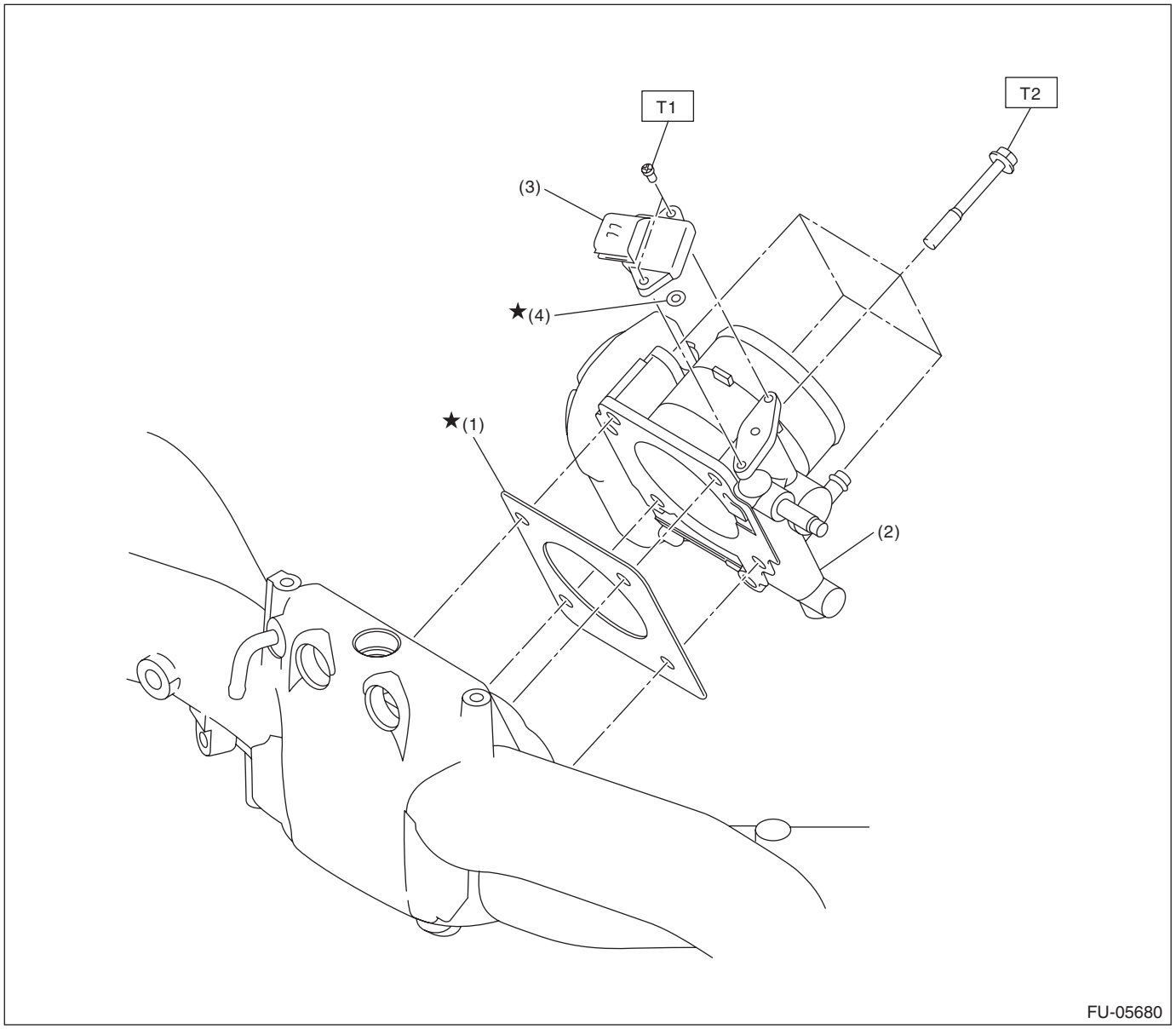


FU-08463

(1) Fuel pipe ASSY
(2) Fuel hose
(3) Clamp
(4) Purge control solenoid valve 1
(5) Vacuum hose A
(6) Vacuum control hose
(7) Intake manifold gasket
(8) Guide pin
(9) Tumble generator valve ASSY
(10) Tumble generator valve gasket
(11) Fuel injector
(12) Seal ring
(13) Fuel injector pipe RH
(14) Fuel injector pipe LH
(15) Fuel pipe protector RH
(16) Fuel pipe protector LH
(17) Solenoid valve bracket
(18) Intake manifold
(19) Wastegate control solenoid valve
(20) Nipple
(21) Nipple
(22) Clip
(23) Purge control solenoid valve 2
(24) Vacuum hose
(25) Vacuum hose
(26) Air control hose
(27) O-ring
(28) Rubber

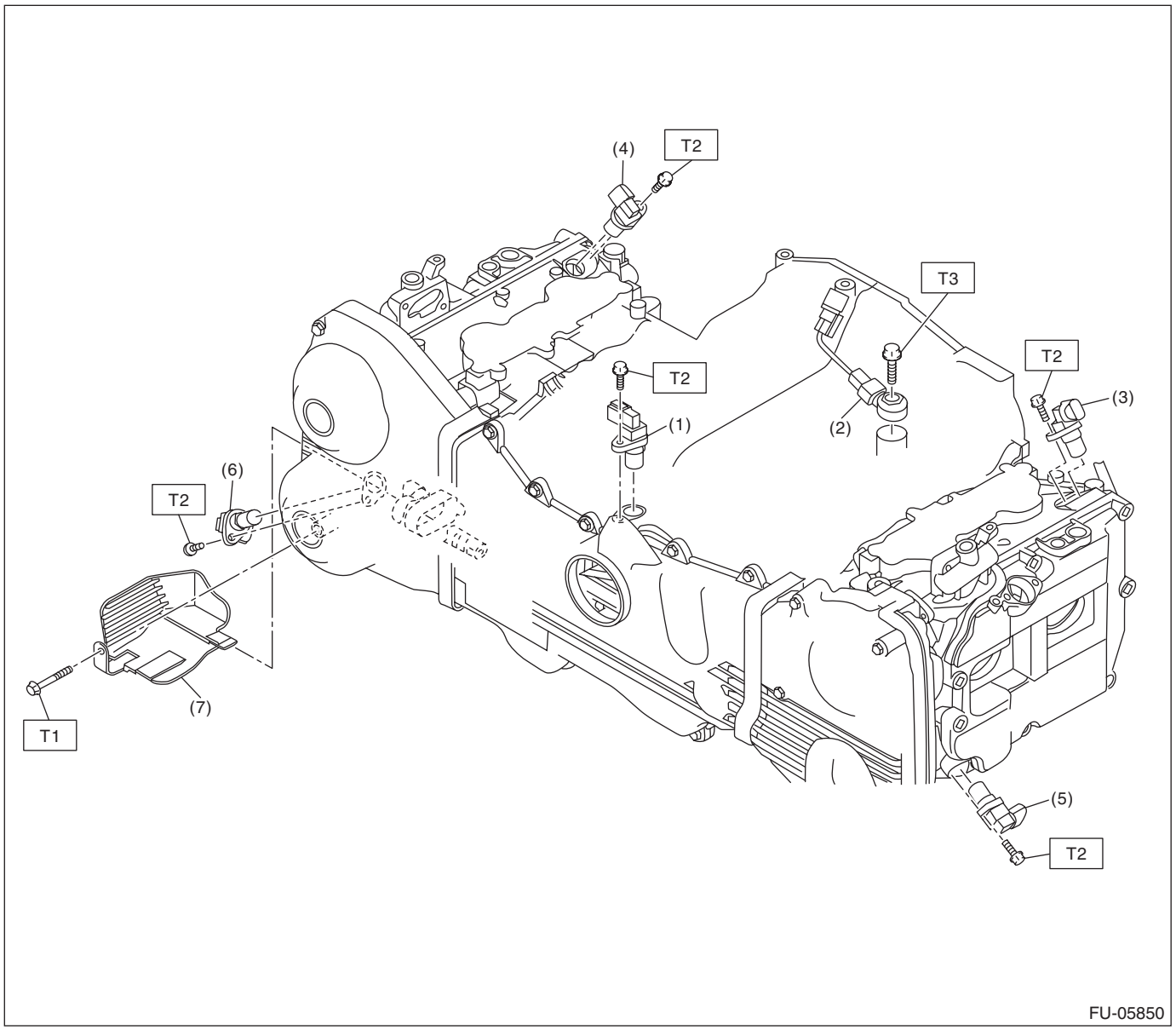
Tightening torque: N·m (kgf-m, ft-lb)
T1: 1.25 (0.1, 0.9)
T2: 6.4 (0.7, 4.7)
T3: 8.3 (0.8, 6.1)
T4: 17 (1.7, 12.5)
T5: 19 (1.9, 14.0)
T6: 25 (2.5, 18.4)

2. AIR INTAKE SYSTEM



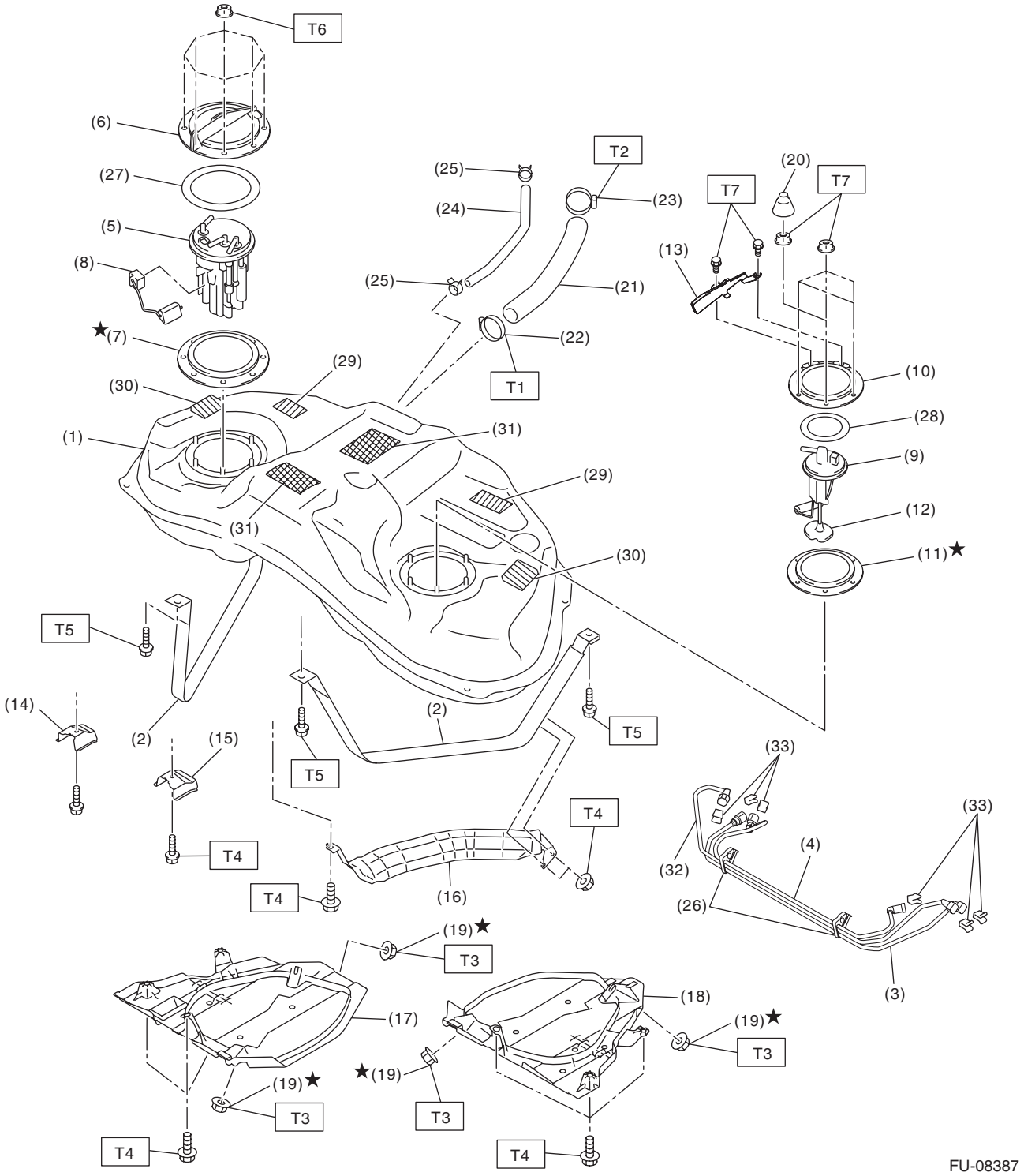
(1)	Gasket	(3)	Manifold absolute pressure sensor	***Tightening torque: N·m (kgf-m, ft-lb)***
(2)	Throttle body	(4)	O-ring	***T1: 2 (0.2, 1.5)***
				T2: 8 (0.8, 5.9)

3. CRANKSHAFT POSITION, CAMSHAFT POSITION AND KNOCK SENSORS



(1)	Crankshaft position sensor	(5)	Exhaust camshaft position sensor LH	***Tightening torque: N·m (kgf-m, ft-lb)***
(2)	Knock sensor	(6)	Exhaust camshaft position sensor RH	***T1: 5 (0.5, 3.7)***
(3)	Intake camshaft position sensor LH	(7)	Engine harness cover	***T2: 6.4 (0.7, 4.7)***
(4)	Intake camshaft position sensor RH			***T3: 24 (2.4, 17.7)***

4. FUEL TANK


T6
(6)
(27)
(5)
(8)
★(7)
(30)
(1)
(29)
(31)
(25)
(24)
(25)
T2
(23)
(21)
(22)
T1
(20)
T7
T7
(13)
(10)
(28)
(9)
(12)
(11)★
T5
(14)
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(15)
T5
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(29)
(31)
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T4
T4
T4
(16)
(33)
(33)
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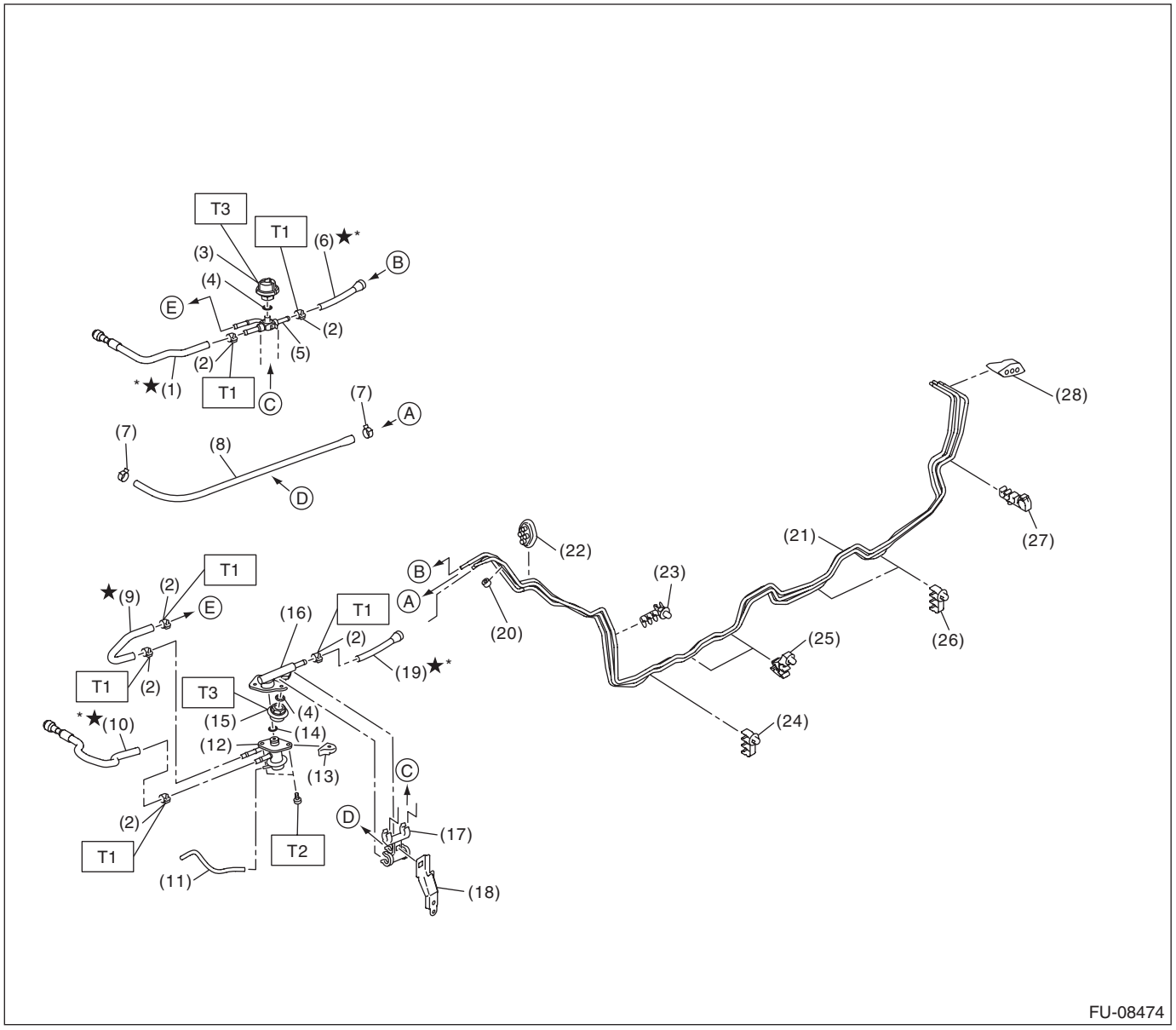
(32)
(26)
(3)
(19)★
T3
(17)
(18)
(19)★
T3
★(19)
T3
(19)★
T3
T4
T4
FU-08387

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

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: <Ref. to FU(w/o STI)-157, INSTALLATION, Fuel Tank.>
T6: <Ref. to FU(w/o STI)-171, INSTALLATION, Fuel Pump.>
T7: <Ref. to FU(w/o STI)-180, INSTALLATION, Fuel Sub Level Sensor.>

5. FUEL LINE

- Fuel line 1



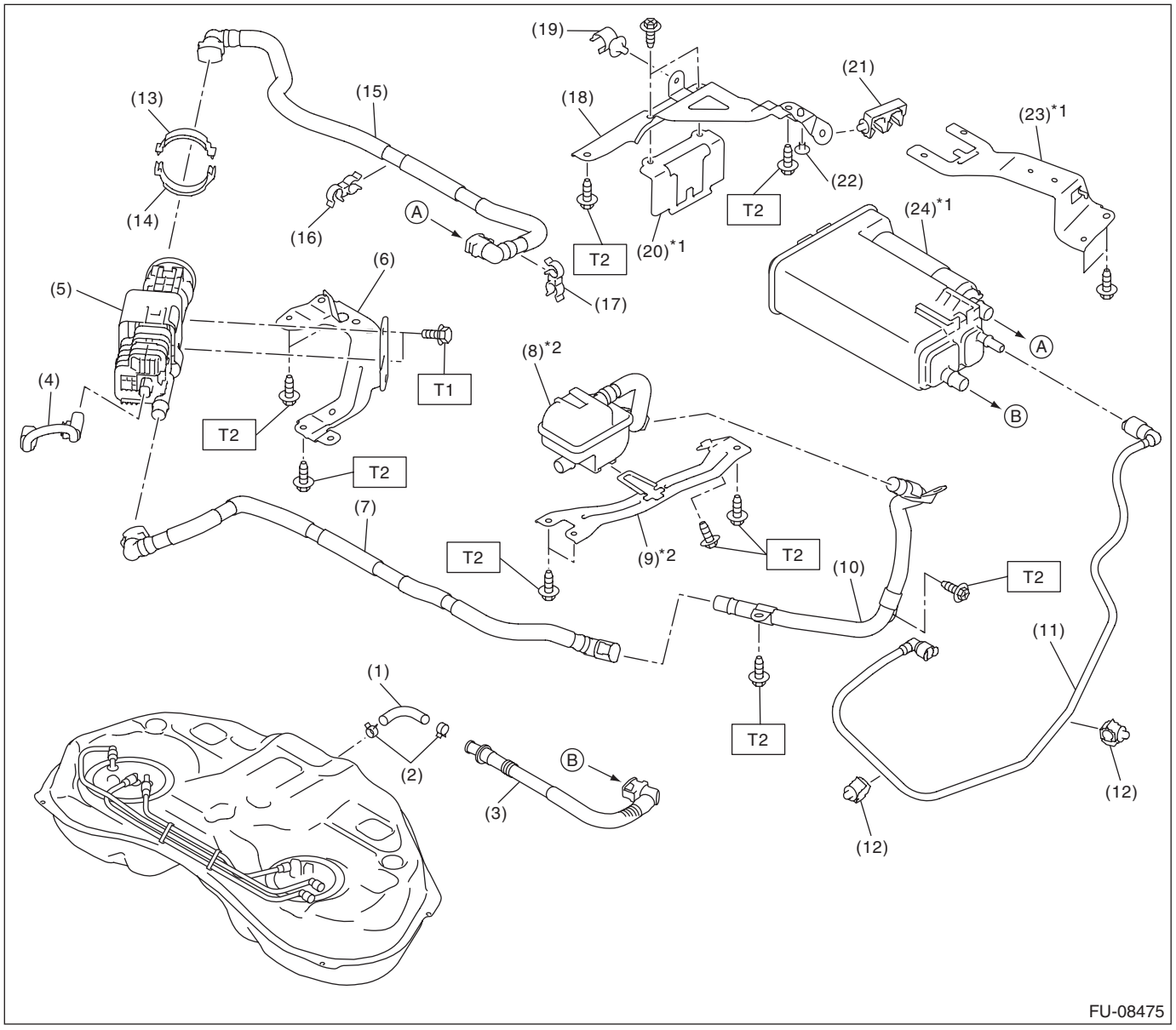
FU-08474

(1)	Fuel delivery hose A	(12)	Pressure regulator	(23)	Pipe clamp
(2)	Clamp	(13)	Fuel pipe protector	(24)	Pipe clamp
(3)	Pulsation damper A	(14)	O-ring	(25)	Pipe clamp
(4)	Fuel pipe gasket	(15)	Pulsation damper B	(26)	Pipe clamp
(5)	Fuel by-pass pipe	(16)	Fuel holder ASSY	(27)	Pipe clamp
(6)	Fuel delivery hose B	(17)	Hose clamp	(28)	Fuel pipe rear grommet
(7)	Clip	(18)	Hose clamp bracket		
(8)	Evaporation hose	(19)	Fuel return hose B		
(9)	Fuel hose	(20)	Bushing		
(10)	Fuel return hose A	(21)	Fuel pipe ASSY		
(11)	Vacuum hose	(22)	Fuel pipe front grommet		

Tightening torque: N·m (kgf-m, ft-lb)	
T1:	*1.25 (0.1, 0.9)*
T2:	*6.4 (0.7, 4.7)*
T3:	*21.6 (2.2, 15.9)*

* It can be reused if the quick connector side is disconnected.

- Fuel line 2



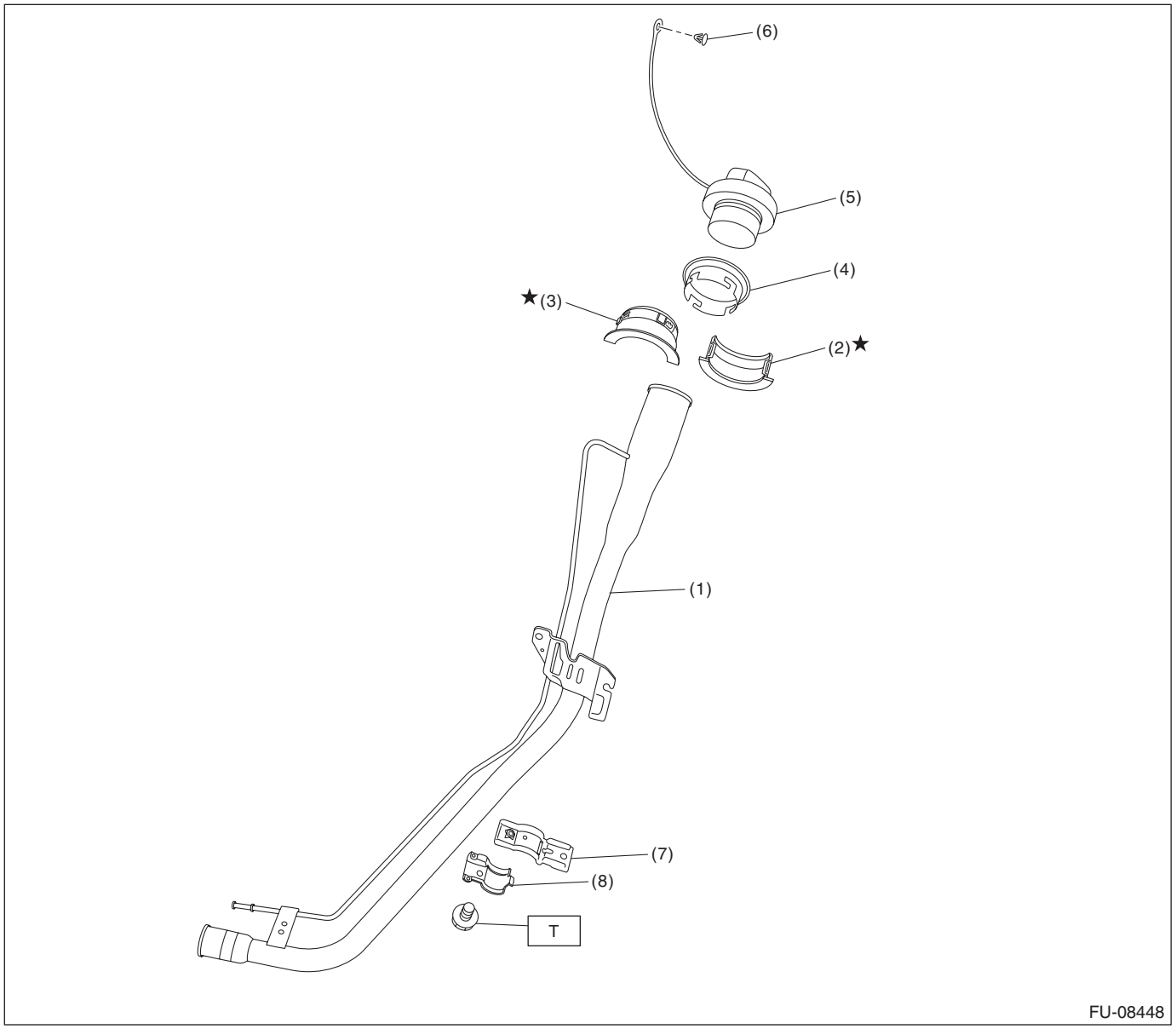
(1) Vent hose
(2) Clip
(3) Vent tube
(4) Harness
(5) Leak check valve ASSY
(6) Leak check valve bracket
(7) Drain tube A
(8) Drain filter
(9) Drain bracket
(10) Drain pipe
(11) Purge tube
(12) Tube clamp
(13) Clamp B
(14) Clamp A
(15) Drain tube B
(16) Tube clamp
(17) Tube clamp
(18) Canister bracket A
(19) Tube clamp
(20) Canister bracket B
(21) Tube clamp
(22) Clip
(23) Canister bracket C
(24) Canister

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

*1 The canister bracket cannot be separated from the canister. Therefore, be sure to replace both of them with new ones when replacing the canister or canister bracket.

*2 The drain filter cannot be separated from the drain bracket. Therefore, be sure to replace both of them with new ones when replacing the drain bracket or drain filter.

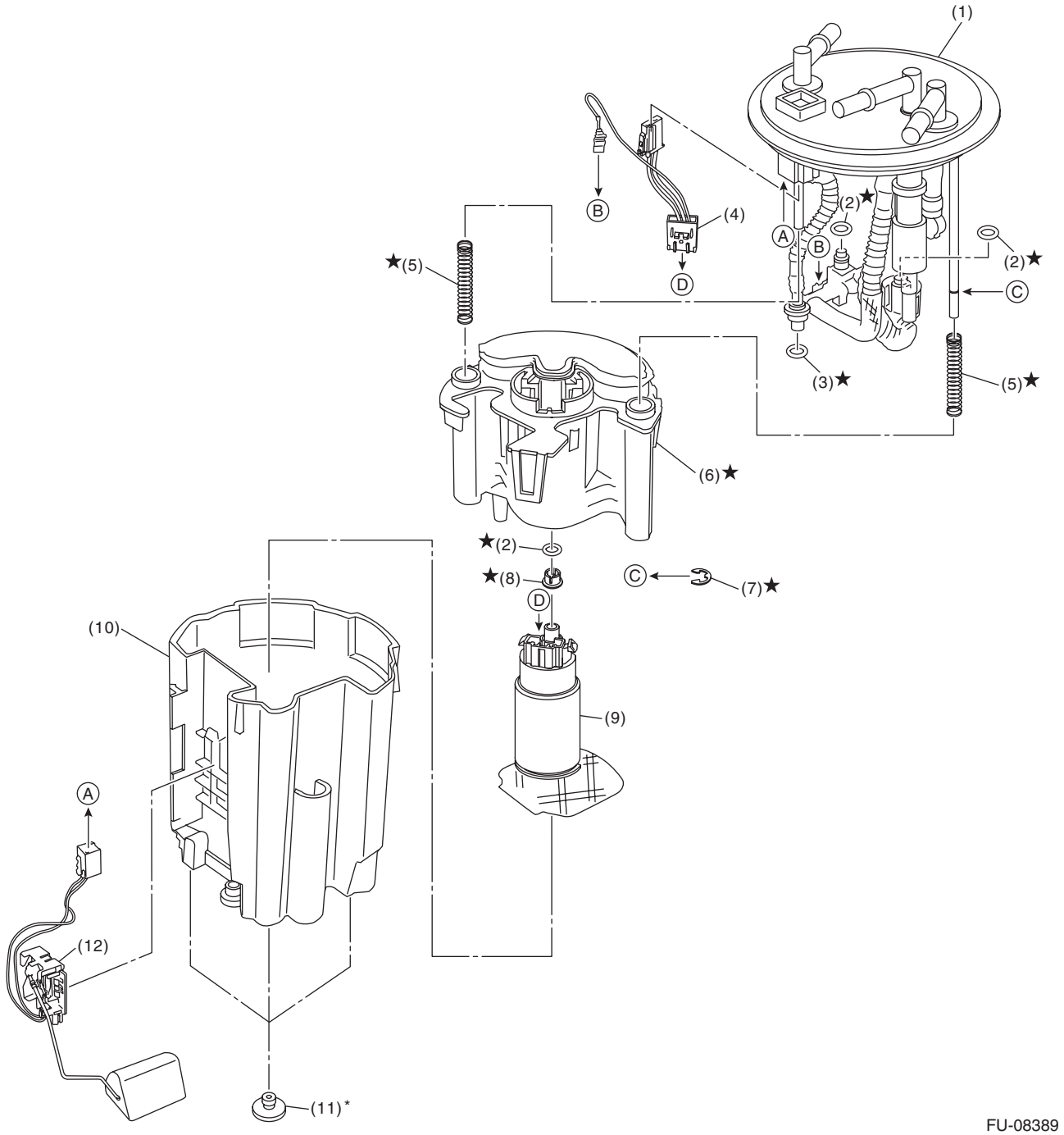
6. FUEL FILLER PIPE



(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: 7.35 (0.7, 5.4)

7. FUEL PUMP



FU-08389

(1)	Sub tank bracket ASSY	(5)	Spring	(9)	Pump ASSY
(2)	O-ring	(6)	Fuel filter	(10)	Sub tank
(3)	O-ring	(7)	Clip	(11)	Cushion
(4)	Fuel pump harness	(8)	Spacer	(12)	Fuel level sensor

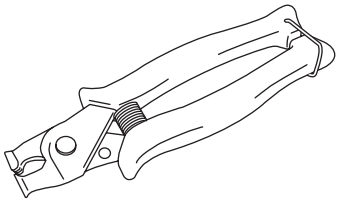
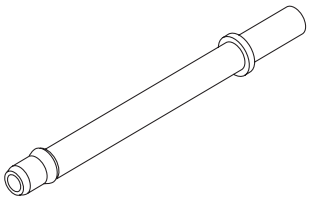
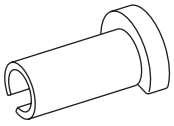
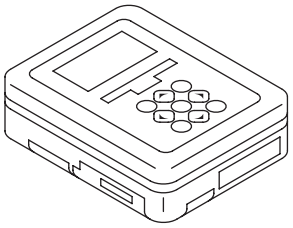
* When removing the cushion from the fuel chamber assembly, replace it with a new part.

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
 ST18353AA000	18353AA000	CLAMP PLIERS	• Used for removing and installing the PCV hose. • This tool is made by the French company CAILLAU. (code) 54.0.000.205 To make it easier to obtain, it has been provided with a tool number.
 ST18471AA000	18471AA000	FUEL PIPE ADAPTER	Used for draining fuel.
 ST42099AE000	42099AE000	QUICK CONNECTOR RELEASE	Used for removing the quick connector.
 ST1B022XU0	1B022XU0	SUBARU SELECT MONITOR III KIT	Used for draining fuel and each inspection.

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.