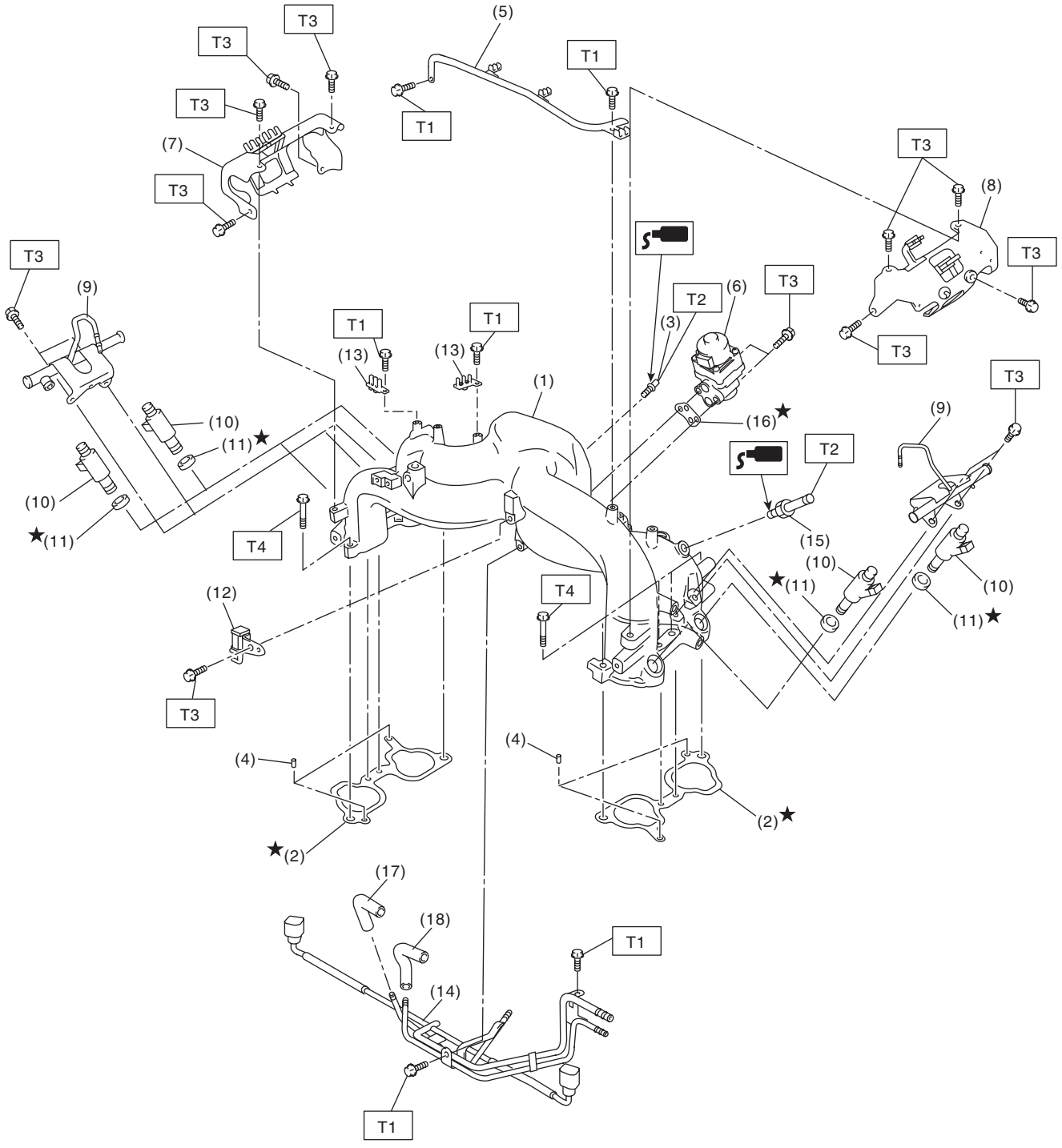
1. General Description

A: SPECIFICATION

Fuel tank	Capacity	64 ℓ (16.9 US gal, 14.1 Imp gal)
	Location	Under rear seat
Fuel pump	Type	Impeller
	Shutoff discharge pressure	550 — 850 kPa (5.6 — 8.7 kg/cm^2, 79.7 — 123.2 psi)
	Discharge rate	125 ℓ (33 US gal, 27.5 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

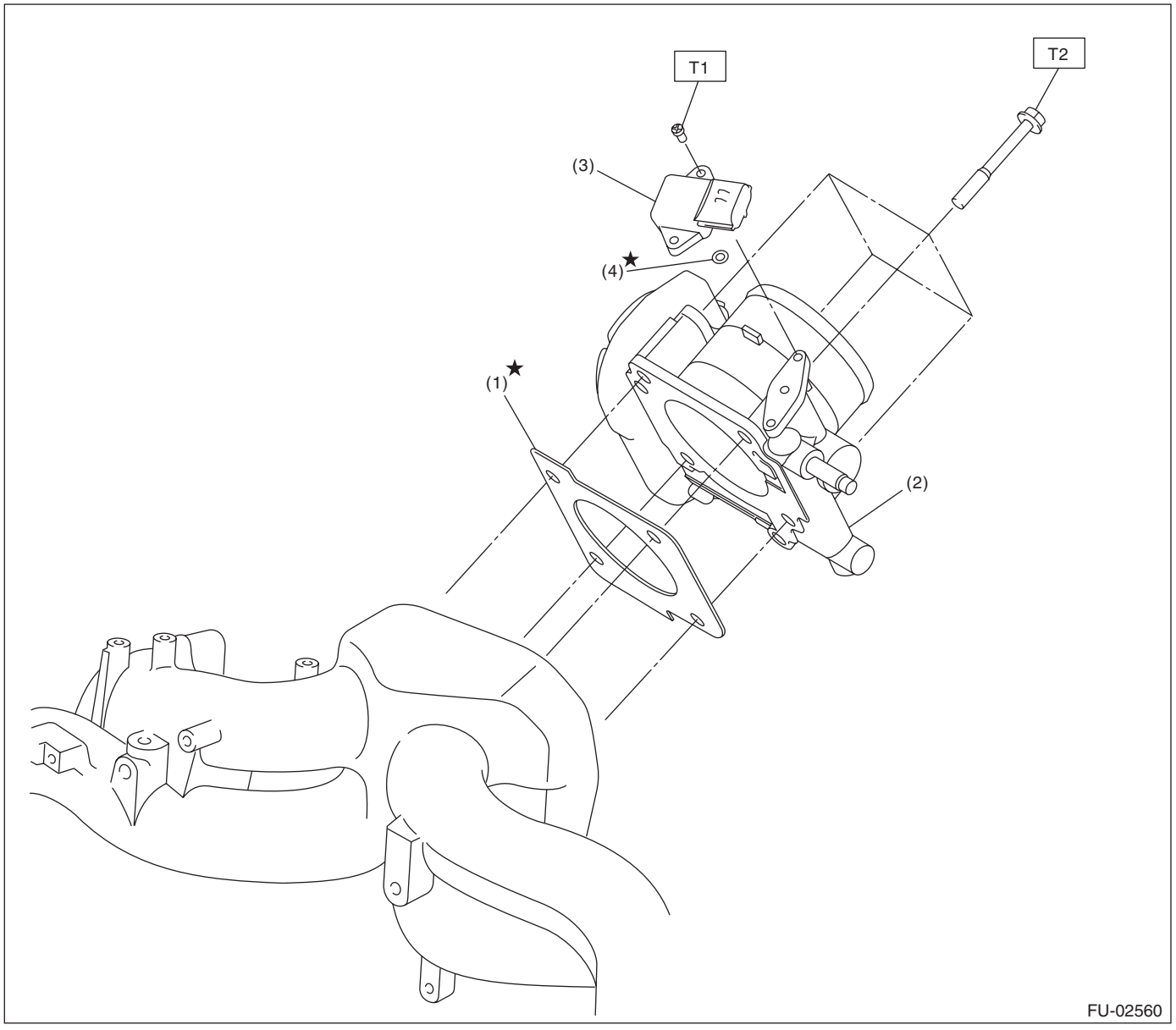


FU-04391

(1) Intake manifold
(2) Gasket
(3) Nipple
(4) Guide pin
(5) Plug cord stay
(6) EGR valve
(7) Fuel pipe protector RH
(8) Fuel pipe protector LH
(9) Fuel injector pipe
(10) Fuel injector
(11) O-ring
(12) Purge control solenoid valve
(13) Plug cord holder
(14) Fuel pipe ASSY
(15) Nipple
(16) Gasket
(17) Evaporation hose (A)
(18) Evaporation hose (B)

Tightening torque: N·m (kgf-m, ft-lb)
T1: 6.4 (0.7, 4.7)
T2: 17 (1.7, 12.5)
T3: 19 (1.9, 14.0)
T4: 25 (2.5, 18.4)

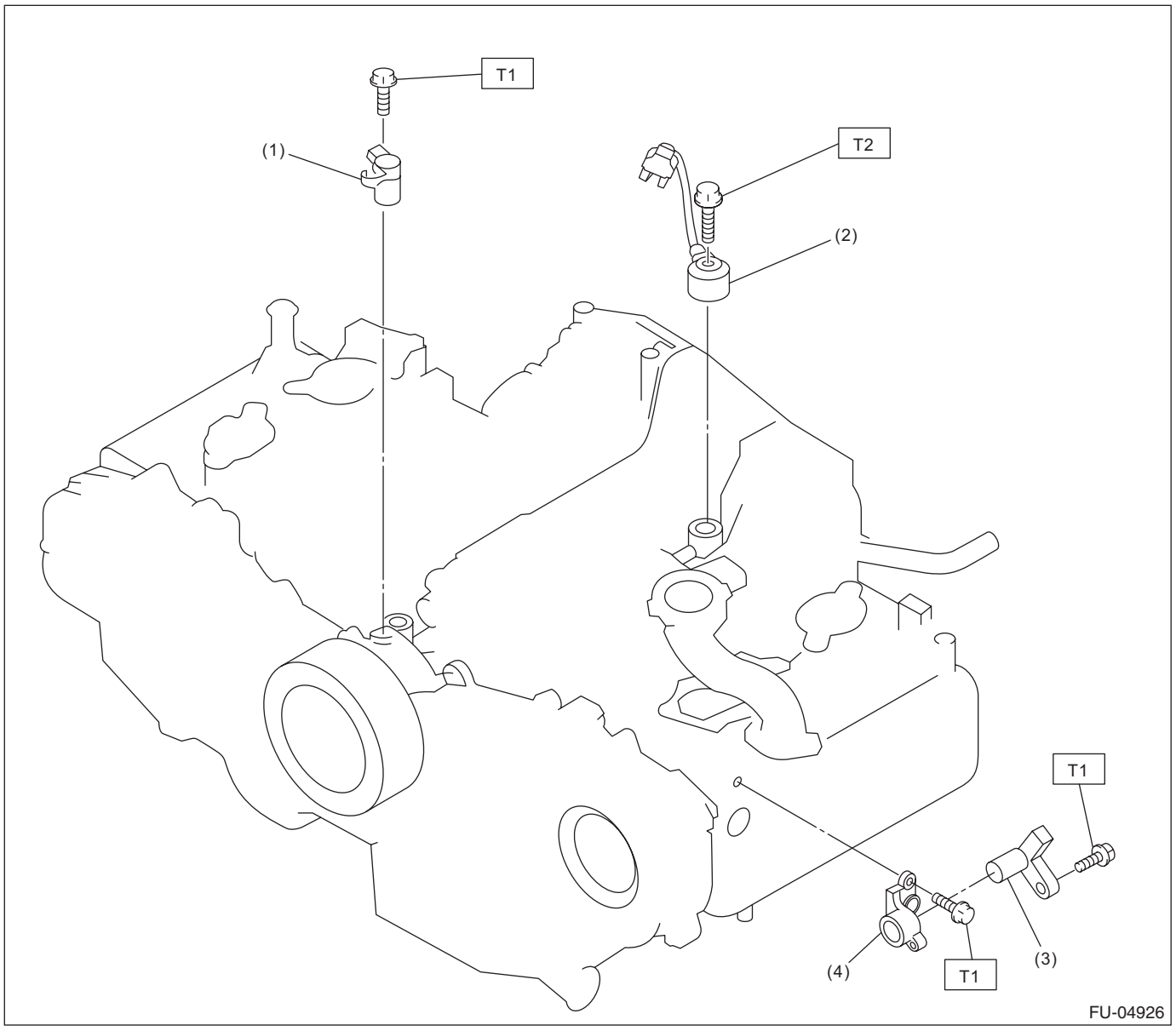
2. AIR INTAKE SYSTEM



(1) Gasket
(2) Throttle body
(3) Manifold absolute pressure sensor
(4) O-ring

Tightening torque: N·m (kgf-m, ft-lb)
T1: 2 (0.2, 1.5)
T2: 8 (0.8, 5.9)

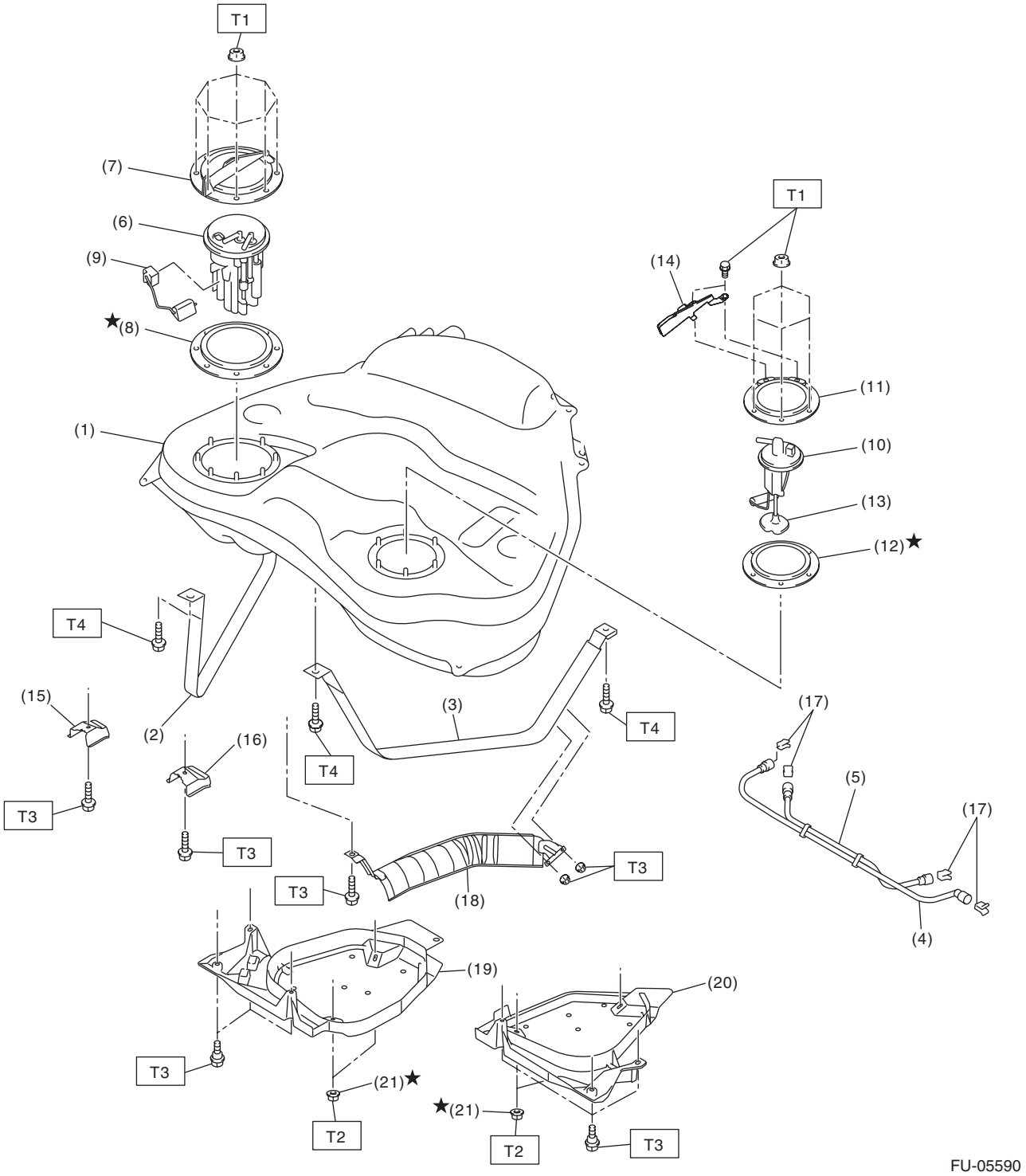
3. CRANKSHAFT POSITION, CAMSHAFT POSITION AND KNOCK SENSORS



(1) Crankshaft position sensor
(2) Knock sensor
(3) Camshaft position sensor
(4) Camshaft position sensor support

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

4. FUEL TANK

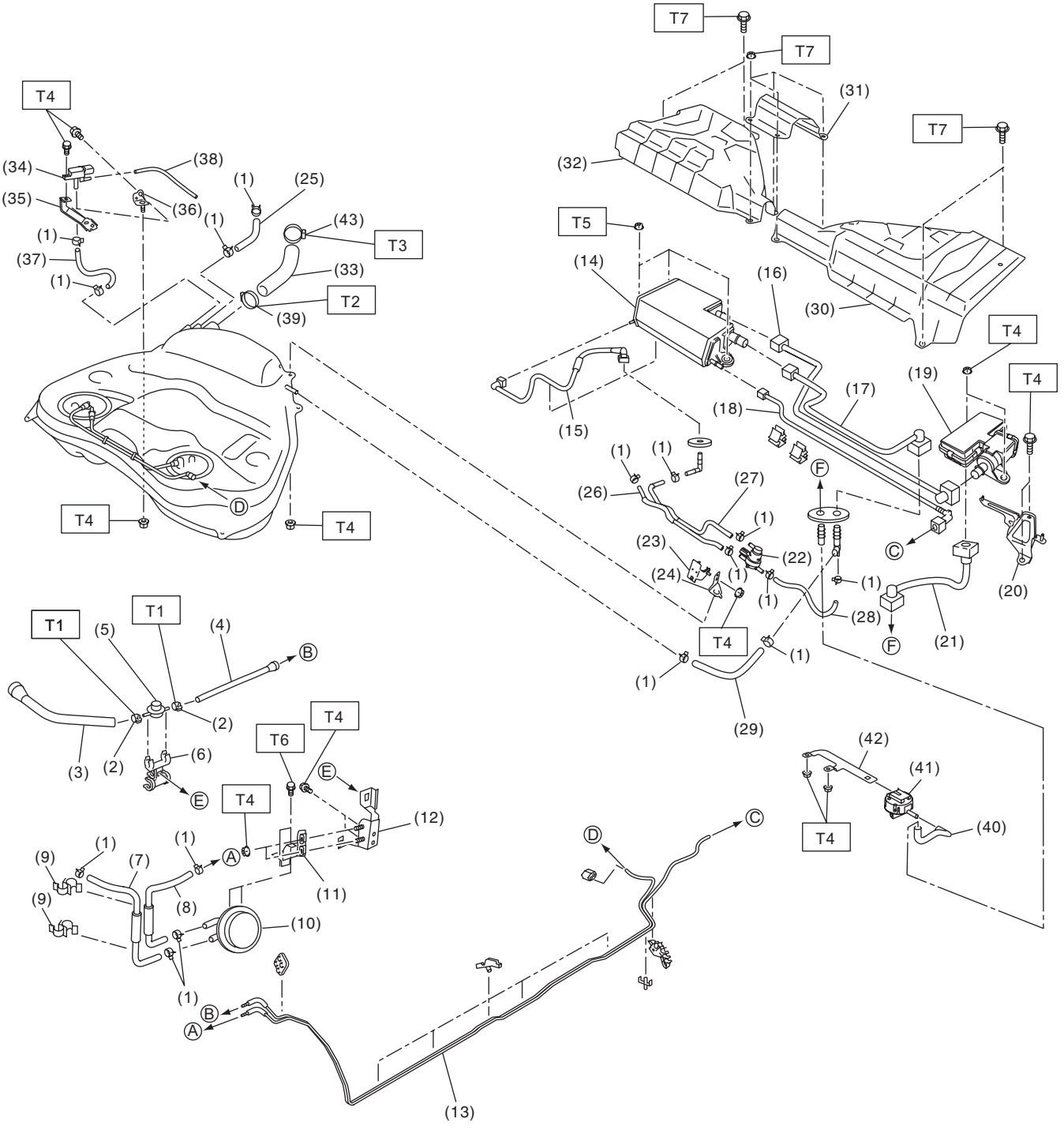

T1
(7)
(6)
(9)
★(8)
(1)
T1
(14)
(11)
(10)
(13)
(12)★
T4
(15)
(2)
(16)
T4
(3)
T4
(17)
(5)
(17)
T3
T3
T3
T3
(18)
(4)
(19)
(20)
T3
(21)★
T2
★(21)
T2
T3
FU-05590

(1) Fuel tank
(2) Fuel tank band RH
(3) Fuel tank band LH
(4) Delivery tube
(5) Jet pump tube
(6) Fuel pump ASSY
(7) Fuel pump upper plate
(8) Fuel pump gasket
(9) Fuel level sensor
(10) Fuel sub level sensor
(11) Fuel sub level sensor upper plate
(12) Fuel sub level sensor gasket
(13) Fuel sub level sensor filter
(14) Fuel sub level sensor protector
(15) Stopper RH
(16) Stopper LH
(17) Retainer
(18) Heat shield cover
(19) Fuel tank protector RH
(20) Fuel tank protector LH
(21) Self-locking nut

Tightening torque:N·m (kgf-m, ft-lb)

T1: 4.4 (0.4, 3.2)
T2: 9 (0.9, 6.6)
T3: 18 (1.8, 13.3)
T4: 33 (3.4, 24.3)

5. FUEL LINE



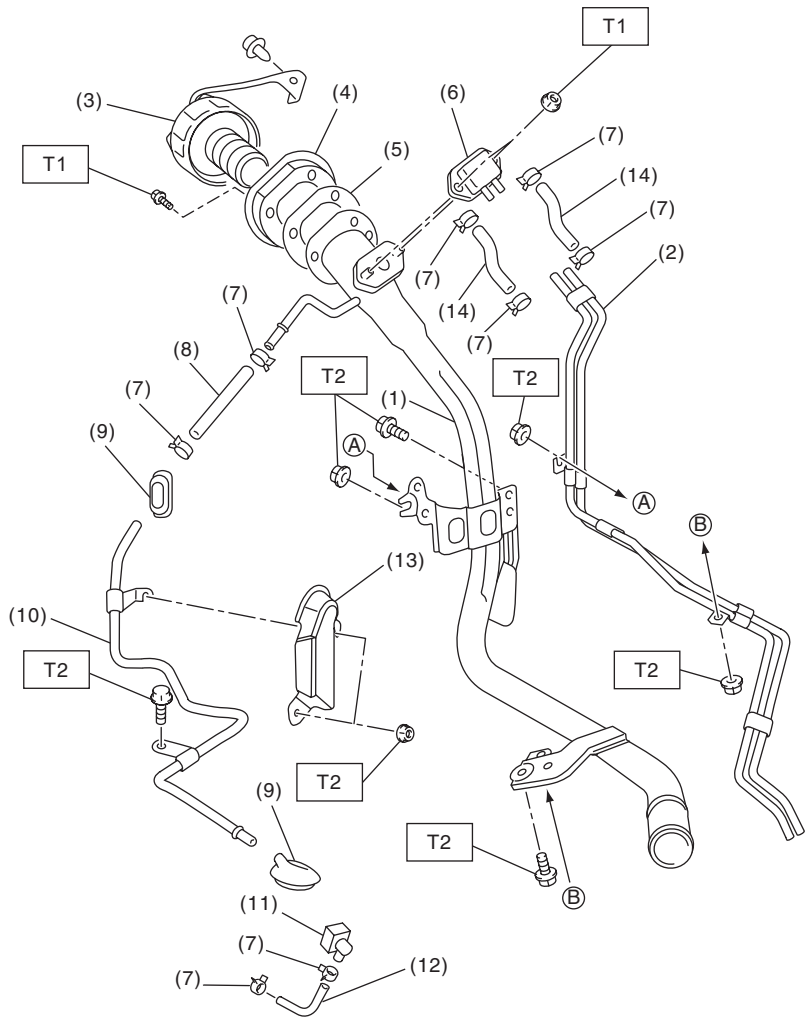
FU-05599

(1) Clip
(2) Clamp
(3) Fuel delivery hose A
(4) Fuel delivery hose B
(5) Fuel damper
(6) Fuel damper holder
(7) Evaporation hose A
(8) Evaporation hose B
(9) Clamp
(10) Purge damper
(11) Purge damper bracket
(12) Damper bracket
(13) Fuel pipe ASSY
(14) Canister
(15) PCV drain tube
(16) Drain tube A
(17) Vent tube
(18) Purge tube
(19) Drain valve
(20) Drain valve bracket
(21) Drain tube B
(22) Pressure control solenoid valve
(23) Pressure control solenoid valve bracket A
(24) Pressure control solenoid valve bracket B
(25) Evaporation hose A
(26) Evaporation hose B
(27) Evaporation hose C
(28) Evaporation hose D
(29) Evaporation hose E
(30) Canister cover LH
(31) Center canister cover
(32) Canister cover RH
(33) Fuel filler hose
(34) Fuel tank pressure sensor
(35) Fuel tank pressure sensor bracket A
(36) Fuel tank pressure sensor bracket B
(37) Pressure hose
(38) Vacuum hose
(39) Clamp
(40) Canister drain hose ASSY
(41) Drain separator
(42) Drain separator bracket
(43) Clamp

Tightening torque:N·m (kgf-m, ft-lb)

T1:	***1.25 (0.1, 0.9)***
T2:	***2 (0.2, 1.5)***
T3:	***2.5 (0.3, 1.8)***
T4:	***7.5 (0.8, 5.5)***
T5:	***8 (0.8, 5.9)***
T6:	***13 (1.3, 9.6)***
T7:	***18 (1.8, 13.3)***

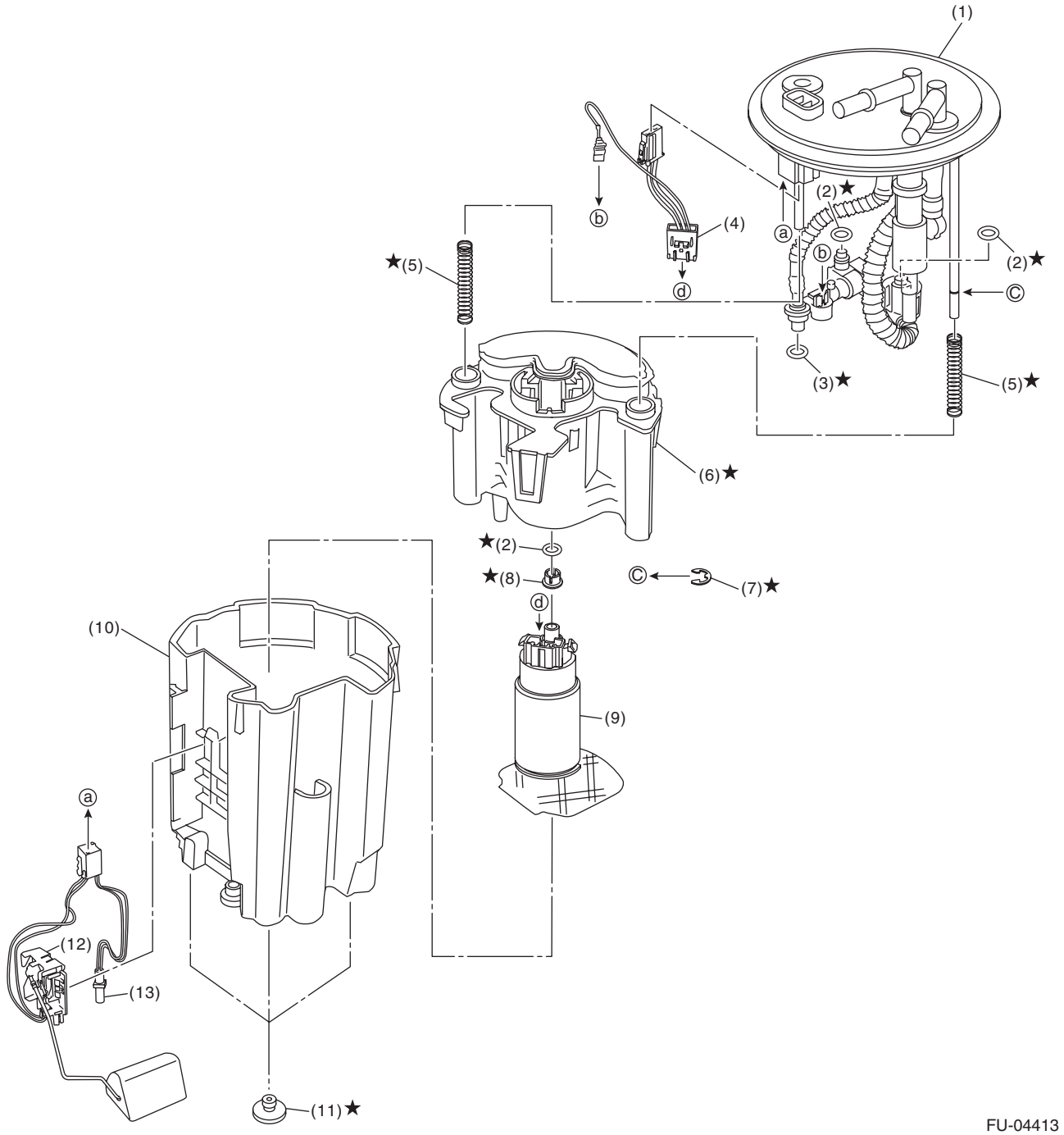
6. FUEL FILLER PIPE



(1) Fuel filler pipe ASSY
(2) Evaporation pipe A
(3) Fuel filler cap
(4) Filler ring
(5) Filler pipe gasket
(6) Shut valve
(7) Clip
(8) Evaporation hose A
(9) Grommet
(10) Evaporation pipe B
(11) Quick connector
(12) Evaporation hose B
(13) Evaporation pipe protector
(14) Evaporation hose C

Tightening torque: N·m (kgf-m, ft-lb)
T1: 4.4 (0.4, 3.2)
T2: 7.5 (0.8, 5.5)

7. FUEL PUMP



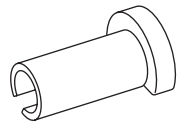
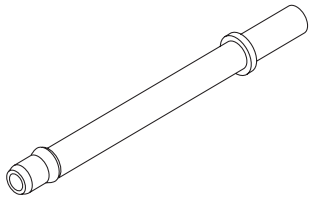
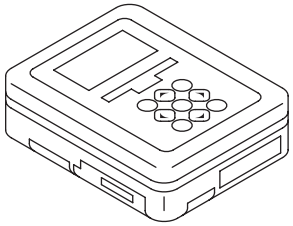
(1)	Sub tank bracket ASSY	(6)	Fuel filter	(11)	Cushion
(2)	O-ring	(7)	Clip	(12)	Fuel level sensor
(3)	O-ring	(8)	Spacer	(13)	Fuel temperature sensor
(4)	Fuel pump harness	(9)	Pump ASSY		
(5)	Spring	(10)	Sub tank		

C: CAUTION

- Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust and dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
- Vehicle components are extremely hot after driving. Be wary of receiving burns from heated parts.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or rigid racks at the specified points.
- Before disconnecting connectors of sensors or units, be sure to disconnect the ground cable from battery.
- 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.
- Follow all government and local regulations concerning disposal of refuse when disposing fuel.

D: PREPARATION TOOL

1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST42099AE000	42099AE000	QUICK CONNECTOR RELEASE	Used for removing the quick connector.
 ST18471AA000	18471AA000	FUEL PIPE ADAPTER	Used for draining fuel.
 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.