

## GENERAL DESCRIPTION

### FUEL INJECTION (FUEL SYSTEMS)

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## 1. General Description

### A: SPECIFICATIONS

Fuel tank	Capacity	60 ℓ (15.9 US gal, 13.2 Imp gal)
	Location	Under rear seat
Fuel pump	Type	Impeller
	Shutoff discharge pressure	450 — 677 kPa (4.59 — 6.9 kg/cm <sup>2</sup> , 65.27 — 98.2 psi)
	Discharge flow	More than 130 ℓ (34.3 US gal, 28.6 Imp gal)/h [12 V at 300 kPa (3.06 kg/cm <sup>2</sup> , 43.5 psi)]
Fuel filter		Cartridge type

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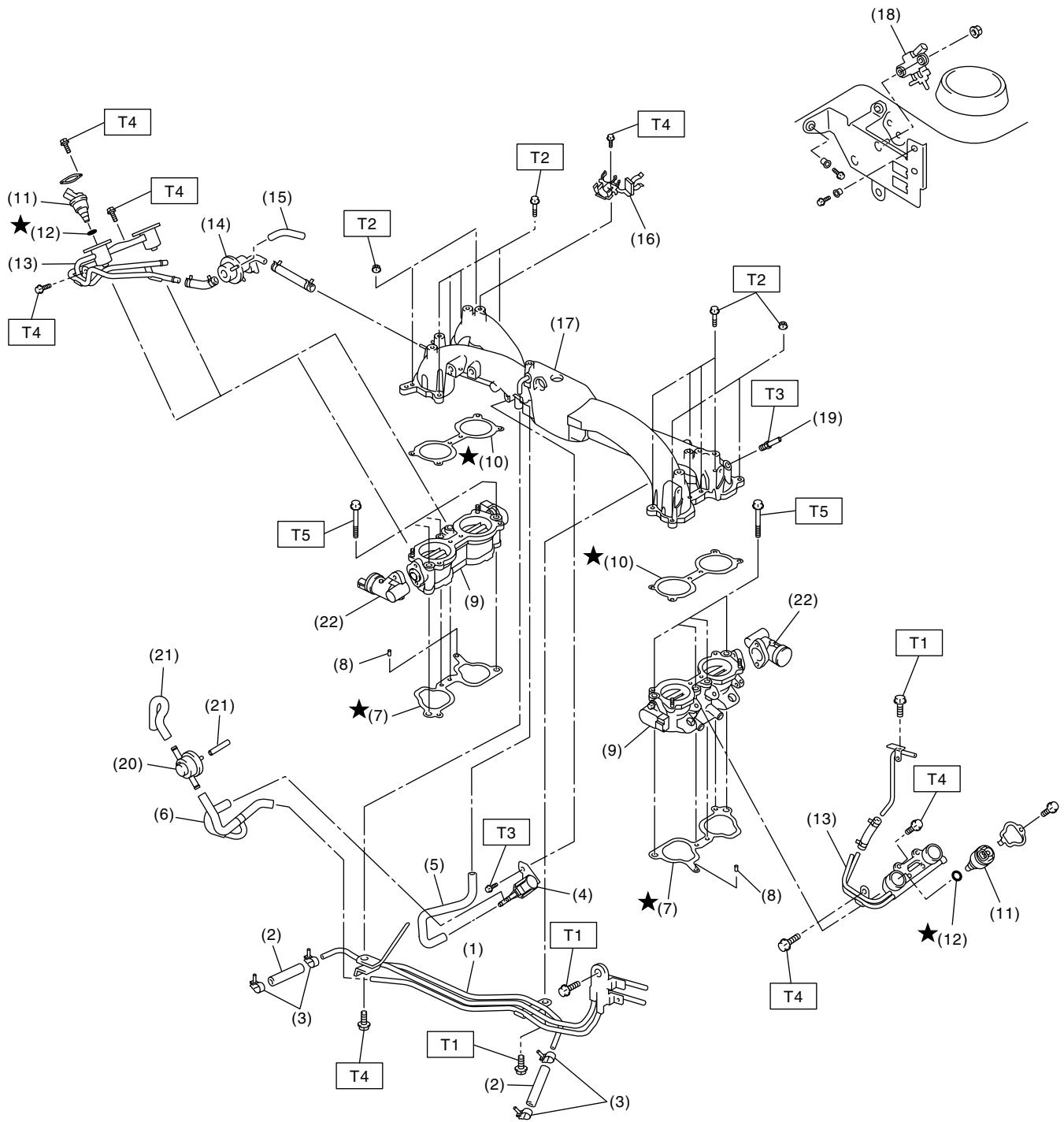
**MEMO:**

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## **B: COMPONENT**

## 1. INTAKE MANIFOLD



FU-02037

## GENERAL DESCRIPTION

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(1) Fuel pipe ASSY	(13) Fuel injector pipe
(2) Fuel hose	(14) Pressure regulator
(3) Clip	(15) Pressure regulator hose
(4) Purge control solenoid valve	(16) Blow-by hose stay
(5) Vacuum hose	(17) Intake manifold
(6) Vacuum control hose	(18) Wastegate control solenoid valve ASSY
(7) Intake manifold gasket	(19) Nipple
(8) Guide pin	(20) Purge valve
(9) Tumble generator valve ASSY	(21) Purge hose
(10) Tumble generator valve gasket	(22) Tumble generator valve actuator
(11) Fuel injector	
(12) O-ring	

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***Tightening torque: N·m (kgf·m, ft·lb)***

***T1: 5 (0.5, 3.6)***

***T3: 8.25 (0.84, 6.1)***

***T5: 17 (1.73, 12.5)***

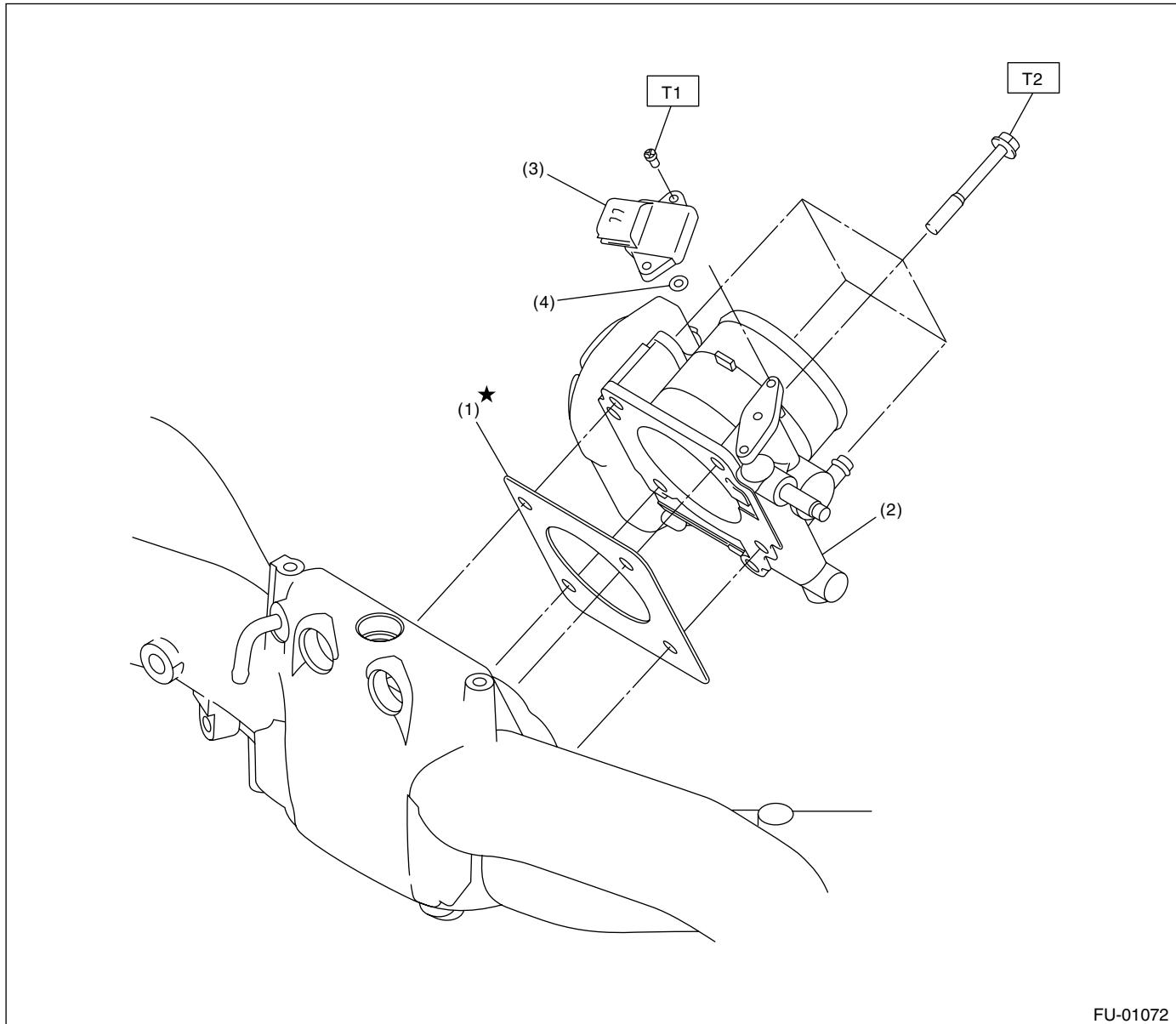
***T6: 19 (1.94, 13.7)***

***T7: 25 (2.5, 18.1)***

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### 2. AIR INTAKE SYSTEM



FU-01072

- (1) Gasket
- (2) Throttle body

- (3) Manifold absolute pressure sensor
- (4) O-ring

**Tightening torque: N·m (kgf·m, ft-lb)**

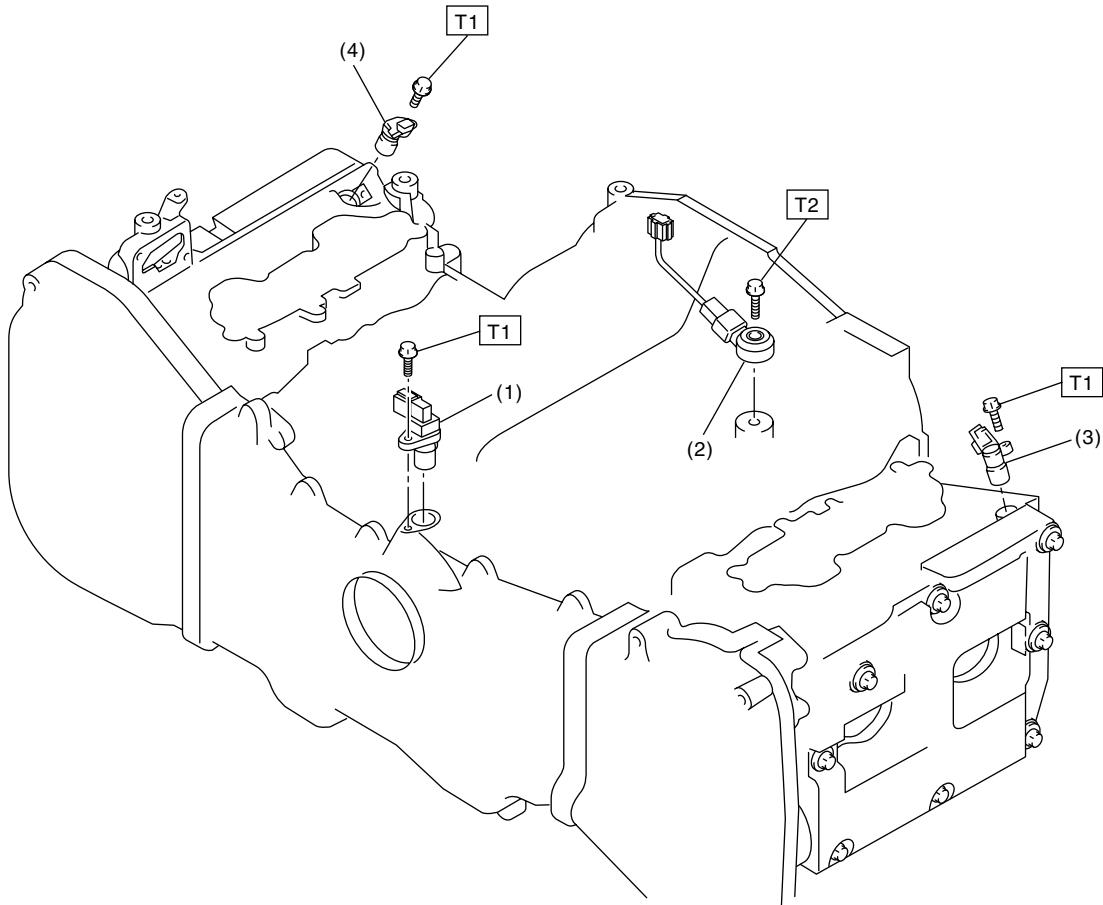
**T1: 1.6 (0.16, 1.2)**

**T2: 8 (0.8, 5.8)**

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### 3. CRANKSHAFT POSITION, CAMSHAFT POSITION AND KNOCK SENSORS



FU-01036

- (1) Crankshaft position sensor
- (2) Knock sensor

- (3) Camshaft position sensor LH
- (4) Camshaft position sensor RH

**Tightening torque: N·m (kgf·m, ft·lb)**

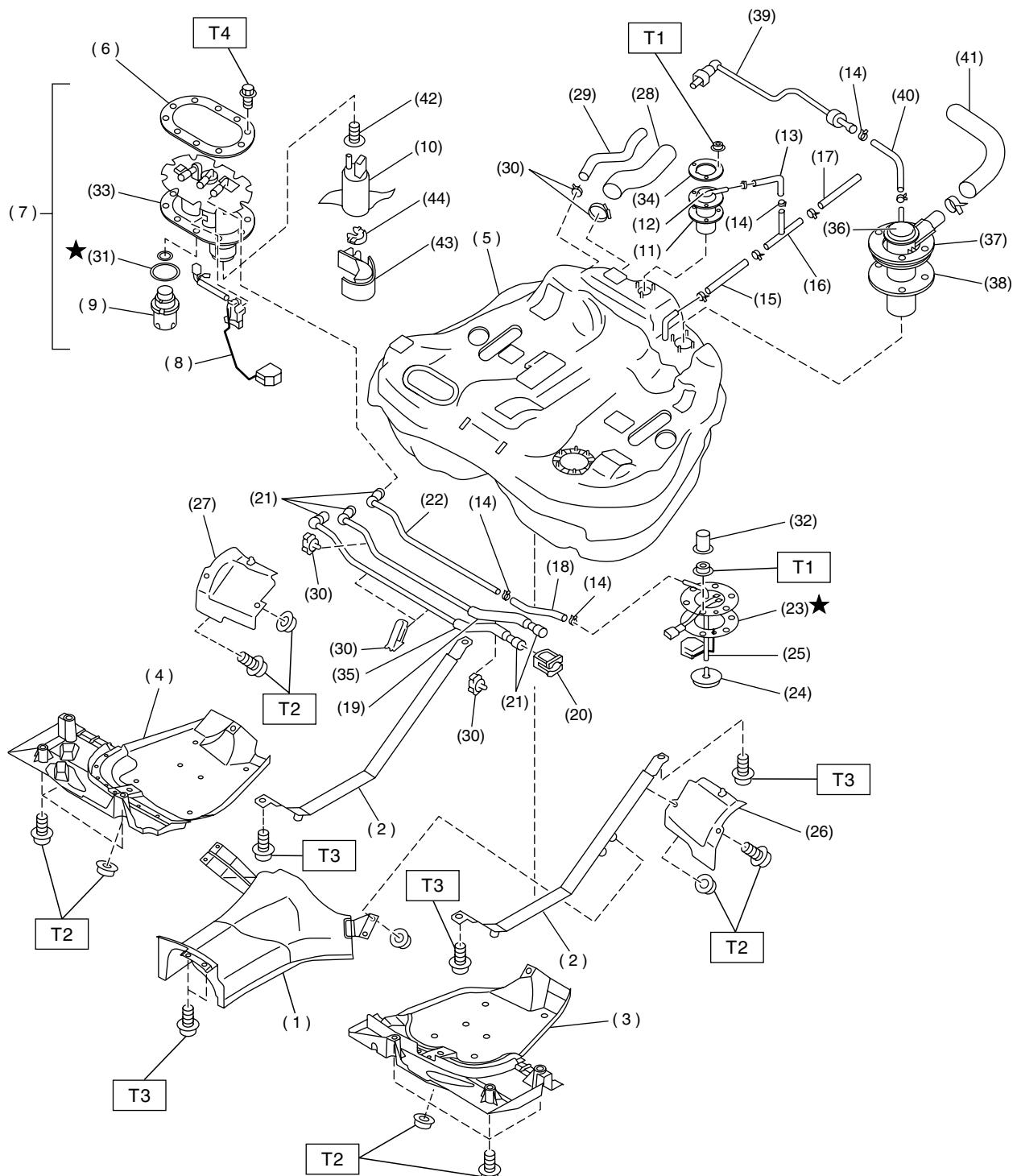
**T1: 6.4 (0.65, 4.7)**

**T2: 24 (2.4, 17.4)**

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### 4. FUEL TANK



FU-02002

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(1) Heat sealed cover	(18) Jet pump hose	(35) Fuel delivery tube
(2) Fuel tank band	(19) Fuel return tube	(36) Vent valve
(3) Protector LH (Front)	(20) Retainer	(37) Vent valve plate
(4) Protector RH (Front)	(21) Quick connector	(38) Vent valve gasket
(5) Fuel tank	(22) Jet pump tube	(39) Evaporation tube
(6) Fuel pump plate	(23) Fuel sub level sensor gasket	(40) Evaporation hose D
(7) Fuel pump ASSY	(24) Jet pump filter	(41) Air vent hose
(8) Fuel level sensor	(25) Fuel sub level sensor	(42) Seal
(9) Fuel filter	(26) Protector LH (Rear)	(43) Fuel pump holder
(10) Fuel pump	(27) Protector RH (Rear)	(44) Grommet
(11) Fuel cut valve gasket	(28) Fuel filler hose	
(12) Fuel cut valve	(29) Fuel tank pressure sensor hose	
(13) Evaporation hose A	(30) Clamp	
(14) Clip	(31) Gasket	
(15) Evaporation hose C	(32) Cap	
(16) Joint pipe	(33) Gasket	
(17) Evaporation hose B	(34) Fuel cut valve plate	

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#### ***Tightening torque: N·m (kgf·m, ft·lb)***

***T1: 4.4 (0.45, 3.3)***

***T2: 18 (1.8, 13.0)***

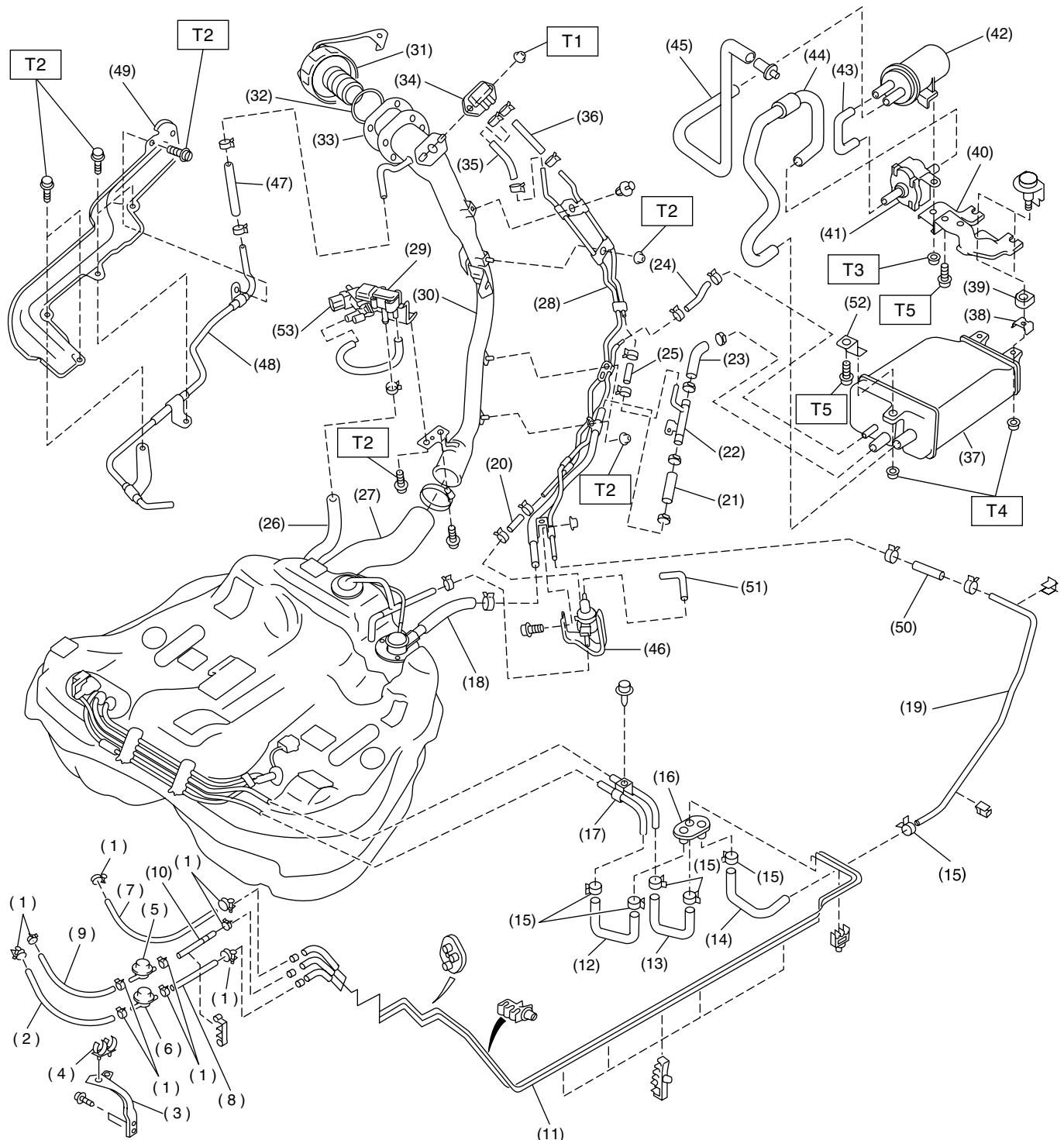
***T3: 33 (3.4, 25)***

***T4: 5.9 (0.6, 4.3)***

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## 5. Fuel Line



FU-02003

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(1) Clamp	(23) Evaporation hose I	(45) Drain filter hose B
(2) Fuel delivery hose A	(24) Evaporation hose J	(46) Pressure control solenoid valve
(3) Bracket	(25) Evaporation hose K	(47) Evaporation hose N
(4) Clamp	(26) Fuel tank pressure sensor hose	(48) Evaporation pipe C
(5) Fuel damper (return)	(27) Fuel filler hose	(49) Pipe protector
(6) Fuel damper (delivery)	(28) Evaporation pipe B	(50) Evaporation hose O
(7) Evaporation hose F	(29) Fuel tank pressure sensor	(51) Pressure control solenoid valve
(8) Fuel delivery hose B	(30) Fuel filler pipe	hose
(9) Fuel return hose A	(31) Fuel filler cap	(52) Canister bracket (front)
(10) Fuel return hose B	(32) Ring B	(53) Fuel tank sensor control valve
(11) Fuel pipe ASSY	(33) Packing	
(12) Fuel delivery hose C	(34) Shut valve	
(13) Fuel return hose C	(35) Evaporation hose L	
(14) Evaporation hose G	(36) Evaporation hose M	
(15) Clamp	(37) Canister	
(16) Grommet	(38) Canister lower bracket	
(17) Fuel pipe ASSY	(39) Cushion rubber	
(18) Air vent hose A	(40) Canister upper bracket	
(19) Evaporation pipe A	(41) Drain valve	
(20) Evaporation hose H	(42) Drain filter	
(21) Air vent hose B	(43) Drain filter hose A	
(22) Air vent pipe	(44) Drain valve hose	

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#### ***Tightening torque: N·m (kgf·m, ft-lb)***

***T1: 4.5 (0.46, 3.3)***

***T2: 7.5 (0.76, 5.5)***

***T3: 18 (1.8, 13.0)***

***T4: 23 (2.3, 16.6)***

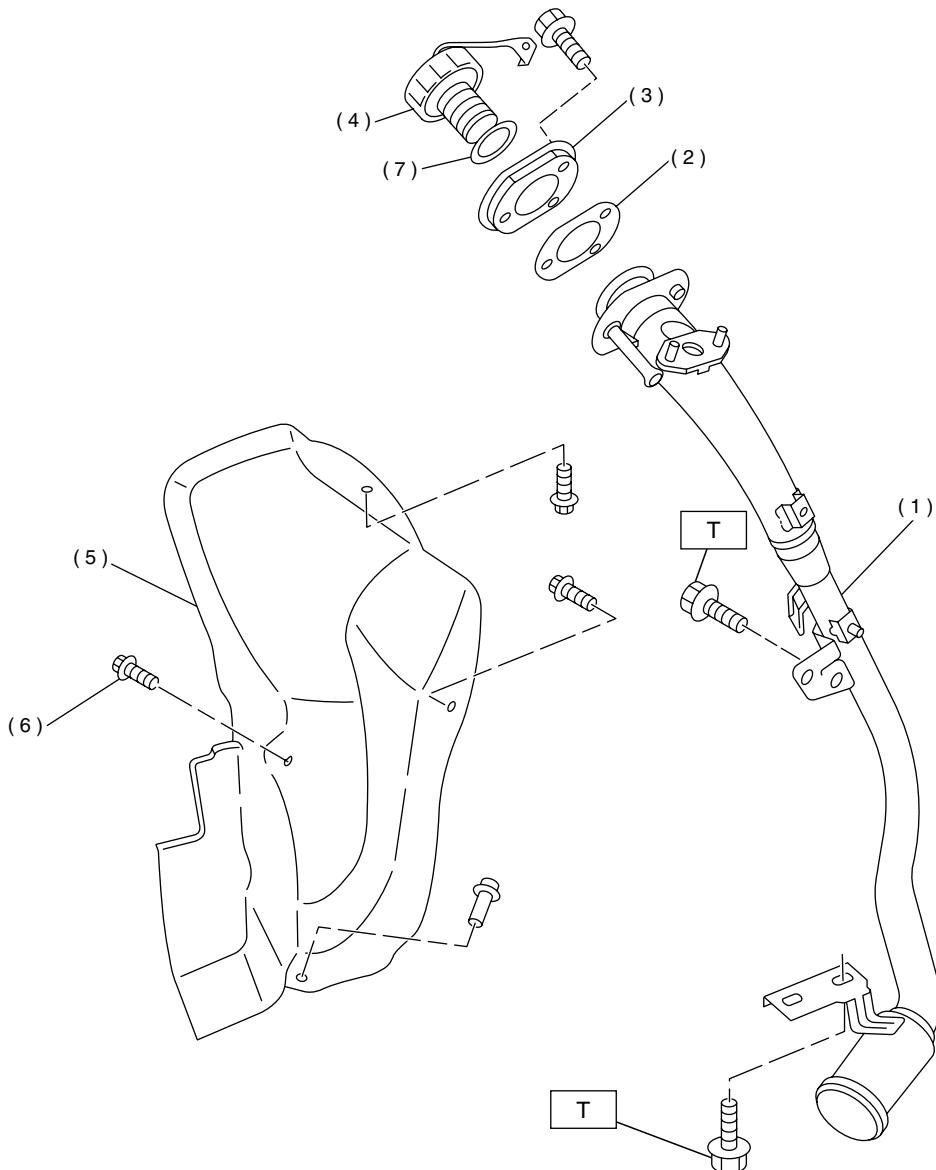
***T5: 33 (3.4, 25)***

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## GENERAL DESCRIPTION

### FUEL INJECTION (FUEL SYSTEMS)

#### 6. Fuel Filler Pipe



- (1) Fuel filler pipe ASSY
- (2) Filler pipe packing
- (3) Filler ring
- (4) Filler cap

- (5) Filler pipe protector
- (6) Clip
- (7) Ring B

**Tightening torque: N·m (kgf·m, ft-lb)**  
**T: 7.5 (0.75, 5.4)**

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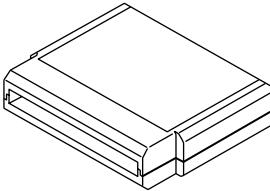
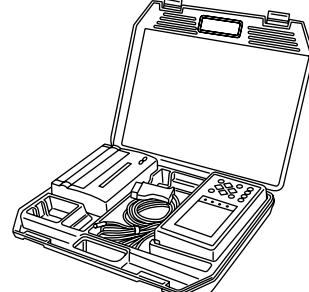
### FUEL INJECTION (FUEL SYSTEMS)

#### C: CAUTION

- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust or dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly, and replacement.

- Be careful not to burn your hands, because each part on the vehicle is hot after running.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or safety stands at the specified points.
- Before disconnecting electrical connectors of sensors or units, be sure to disconnect negative terminal from battery.
- Place "NO FIRE" signs near the working area.
- Be careful not to spill fuel on the floor.

#### D: PREPARATION TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST24082AA230	24082AA230 (New adopted tool)	CARTRIDGE	Troubleshooting for electrical system.
 ST22771AA030	22771AA030	SELECT MONITOR KIT	Troubleshooting for electrical systems.