

General Description

COOLING

• **Outside temperature: less than 35°C (95°F)**

Vehicle speed	A/C compressor load	Engine coolant temperature		
		Increase: less than 98°C (208°F) Decrease: less than 96°C (205°F)	Increase: 98 — 101°C (208 — 214°F) Decrease: 96 — 97°C (205 — 207°F)	Increase: more than 101°C (214°F) Decrease: more than 97°C (207°F)
		Radiator fan operation	Radiator fan operation	Radiator fan operation
Driving speed 19 km/h (12 MPH) or less Driving speed 10 km/h (6 MPH) or less	OFF	OFF	Low-Speed	High-Speed
	Low	Low-Speed	Low-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed
During acceleration: 20-69 km/h (12-43 MPH) During deceleration: 11-64 km/h (7-40 MPH)	OFF	OFF	Low-Speed	High-Speed
	Low	Low-Speed	Low-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed
During acceleration: 70-105 km/h (43-65 MPH) During deceleration: 65-103 km/h (40-64 MPH)	OFF	OFF	Low-Speed	High-Speed
	Low	OFF	Low-Speed	High-Speed
	High	Low-Speed	High-Speed	High-Speed
During acceleration: 106 km/h (66 MPH) or more During deceleration: 104 km/h (65 MPH) or more	OFF	OFF	Low-Speed	High-Speed
	Low	OFF	Low-Speed	High-Speed
	High	Low-Speed	Low-Speed	High-Speed

General Description

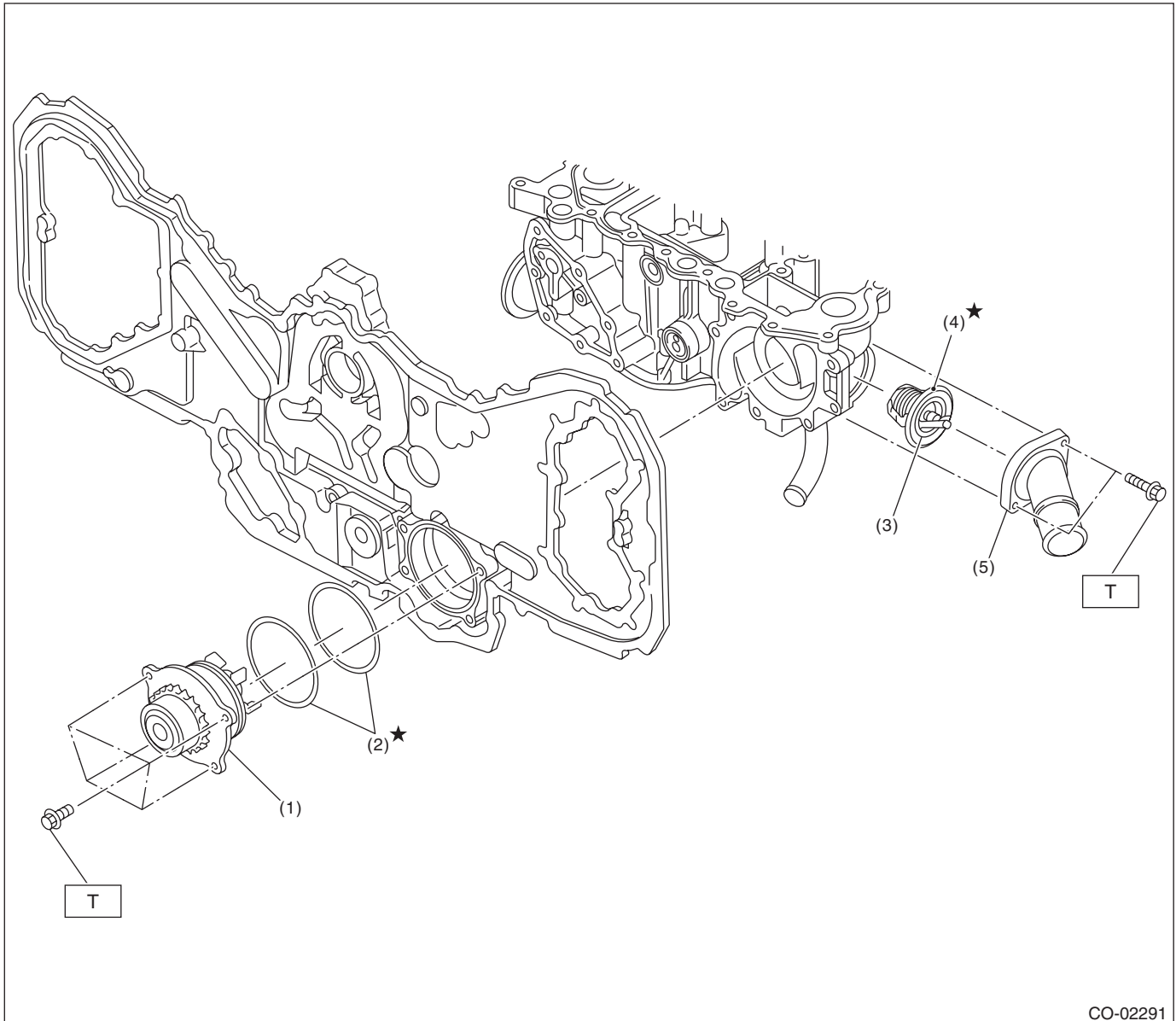
COOLING

- **Outside temperature: 35°C (95°F) or more.**

Vehicle speed	A/C compressor load	Engine coolant temperature		
		Increase: less than 98°C (208°F) Decrease: less than 96°C (205°F)	Increase: 98 — 101°C (208 — 214°F) Decrease: 96 — 97°C (205 — 207°F)	Increase: more than 101°C (214°F) Decrease: more than 97°C (207°F)
		Radiator fan operation	Radiator fan operation	Radiator fan operation
Driving speed 19 km/h (12 MPH) or less Driving speed 10 km/h (6 MPH) or less	OFF	OFF	Low-Speed	High-Speed
	Low	Low-Speed	Low-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed
During acceleration: 20-69 km/h (12-43 MPH) During deceleration: 11-64 km/h (7-40 MPH)	OFF	OFF	Low-Speed	High-Speed
	Low	High-Speed	High-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed
During acceleration: 70-105 km/h (43-65 MPH) During deceleration: 65-103 km/h (40-64 MPH)	OFF	OFF	Low-Speed	High-Speed
	Low	High-Speed	High-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed
During acceleration: 106 km/h (66 MPH) or more During deceleration: 104 km/h (65 MPH) or more	OFF	OFF	Low-Speed	High-Speed
	Low	OFF	Low-Speed	High-Speed
	High	Low-Speed	Low-Speed	High-Speed

B: COMPONENT

1. WATER PUMP



CO-02291

- | | |
|---------------------|----------------------|
| (1) Water pump ASSY | (4) Gasket |
| (2) O-ring | (5) Thermostat cover |
| (3) Thermostat | |

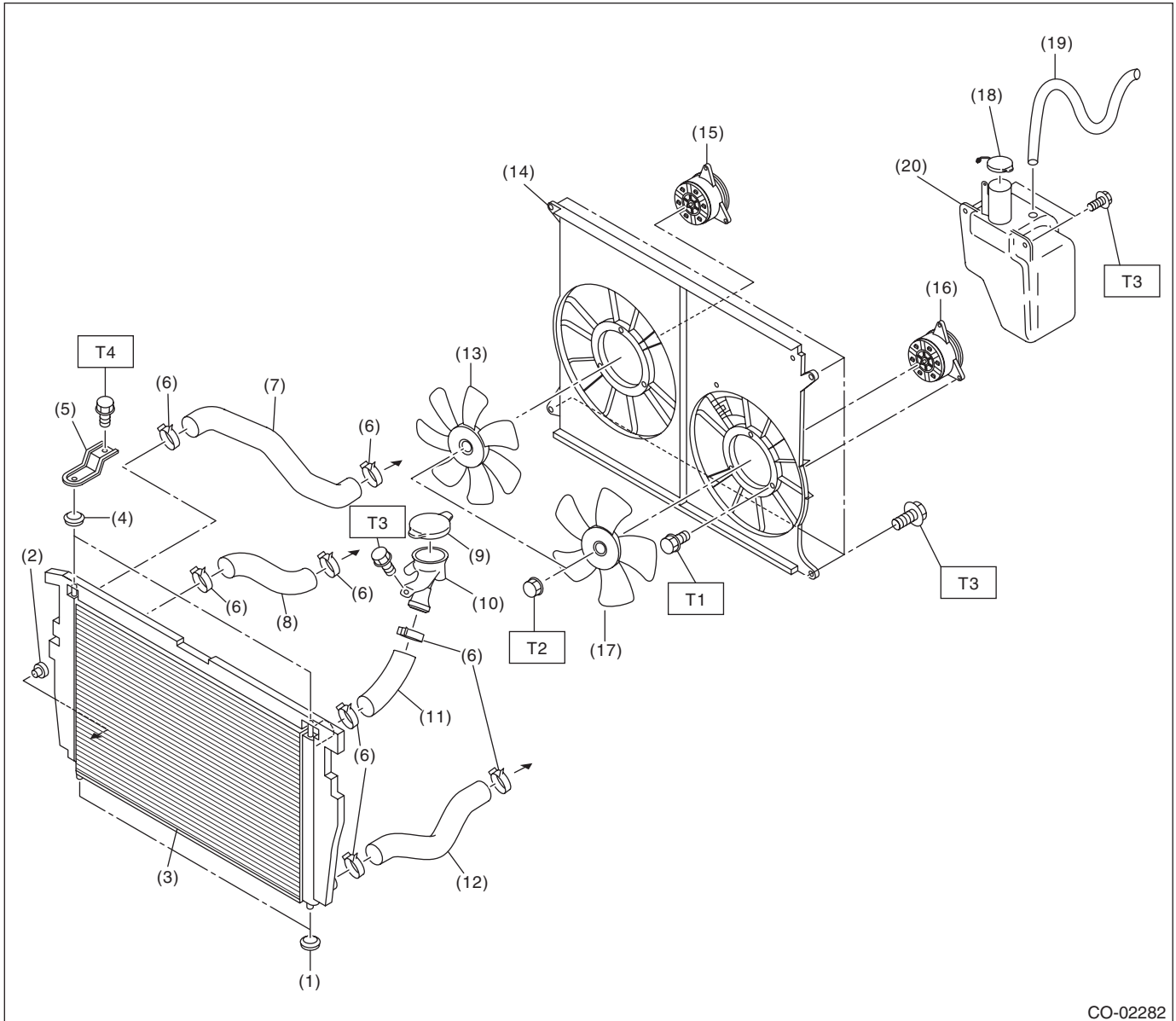
Tightening torque: N·m (kgf·m, ft·lb)

T: 6.4 (0.65, 4.7)

General Description

COOLING

2. RADIATOR AND RADIATOR FAN



CO-02282

- | | | |
|-------------------------------|--|------------------------------------|
| (1) Radiator lower cushion | (10) Radiator hose bracket | (19) Over flow hose |
| (2) Engine coolant drain cock | (11) Radiator hose C | (20) Engine coolant reservoir tank |
| (3) Radiator | (12) Radiator hose D | |
| (4) Radiator upper cushion | (13) Radiator sub fan | |
| (5) Radiator upper bracket | (14) Radiator fan shroud | |
| (6) Clamp | (15) Radiator sub fan motor | |
| (7) Radiator hose A | (16) Radiator main fan motor | |
| (8) Radiator hose B | (17) Radiator main fan | |
| (9) Radiator cap | (18) Engine coolant reservoir tank cap | |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 3.8 (0.39, 2.8)

T2: 6.3 (0.64, 4.6)

T3: 7.5 (0.76, 5.5)

T4: 12 (1.2, 8.9)

General Description

COOLING

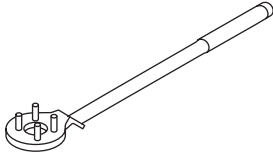
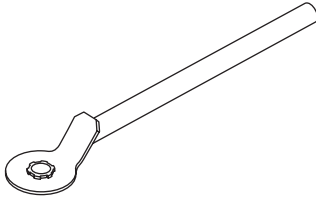
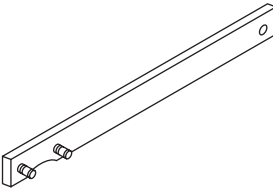
C: CAUTION

- 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 the battery.

D: PREPARATION TOOL

1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST-499977100</p>	499977100	CRANK PULLEY WRENCH	Used for stopping rotation of crank pulley when loosening and tightening crank pulley bolts.
 <p>ST-499977500</p>	499977500	CAM SPROCKET WRENCH	Used for removing and installing intake cam sprocket.
 <p>ST18231AA020</p>	18231AA020	CAM SPROCKET WRENCH	Used for removing and installing exhaust cam sprocket.

2. GENERAL TOOL

TOOL NAME	REMARKS
Radiator cap tester	Used for measuring pressure.