

GENERAL DESCRIPTION

Cooling

1. General Description

S106001

A: SPECIFICATIONS

S106001E49

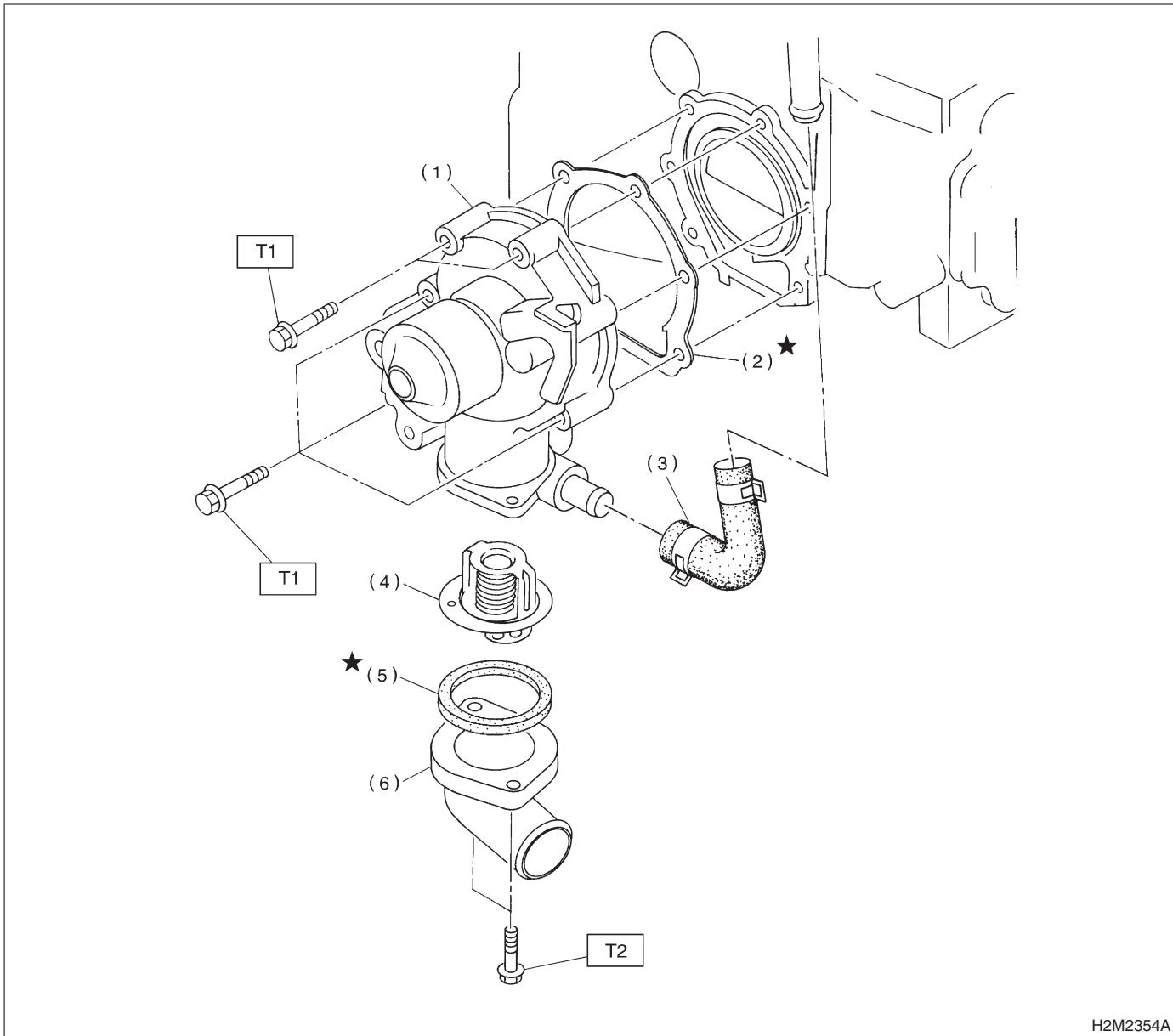
Cooling system		Electric fan + Forced engine coolant circulation system
Total engine coolant capacity		6.2 (6.6, 5.5)
Water pump	Type	Centrifugal impeller type
	Discharge	20 ℓ (5.3 US gal, 4.4 Imp gal)/min.
	Discharge performance I	Pump speed—total engine coolant head 760 rpm — 0.3 mAq (1.0 ftAq)
	Discharge	Engine coolant temperature 85°C (185°F)
	Discharge performance II	Discharge 200 ℓ (52.8 US gal, 44.0 Imp gal)/min.
	Discharge	Pump speed—total engine coolant head 3,000 rpm — 5.0 mAq (16.4 ftAq)
	Discharge	Engine coolant temperature 85°C (185°F)
	Discharge	200 ℓ (52.8 US gal, 44.0 Imp gal)/min.
	Discharge	Pump speed—total engine coolant head 6,000 rpm — 23.0 mAq (75.5 ftAq)
	Discharge	Engine coolant temperature 85°C (185°F)
	Impeller diameter	76 mm (2.99 in)
	Number of impeller vanes	8
	Pump pulley diameter	60 mm (2.36 in)
	Clearance between impeller and case	Standard 0.5 — 0.7 mm (0.020 — 0.028 in)
		Limit 1.0 mm (0.039 in)
	“Thrust” runout of impeller end	0.5 mm (0.020 in)
Thermostat	Type	Wax pellet type
	Starts to open	76 — 80°C (169 — 176°F)
	Fully opened	91°C (196°F)
	Valve lift	9.0 mm (0.354 in) or more
	Valve bore	35 mm (1.38 in)
Radiator fan	Motor	70 W (main fan) 70 W (sub fan)
	Fan diameter \times Blade	320 mm (12.60 in) \times 5 (main fan) 320 mm (12.60 in) \times 7 (sub fan)
Radiator	Type	Down flow, pressure type
	Core dimensions	691 \times 340 \times 16 mm (27.20 \times 13.39 \times 0.63 in)
	Pressure range in which cap valve is open	Above: 108 \pm 15 kPa (1.1 \pm 0.15 kg/cm ² , 15.6 \pm 2.1 psi) Below: -9.8 to -4.9 kPa (-0.1 to -0.05 kg/cm ² , -1.4 to -0.7 psi)
	Fins	Corrugated fin type
Reservoir tank	Capacity	0.45 ℓ (0.5 US qt, 0.4 Imp qt)

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B: COMPONENT S106001A05

1. WATER PUMP S106001A0501



- (1) Water pump ASSY
- (2) Gasket
- (3) Heater hose
- (4) Thermostat
- (5) Gasket

- (6) Thermostat cover

Tightening torque: N·m (kgf·m, ft·lb)

T1:

First:
12 (1.2, 8.7)

Second:

12 (1.2, 8.7)

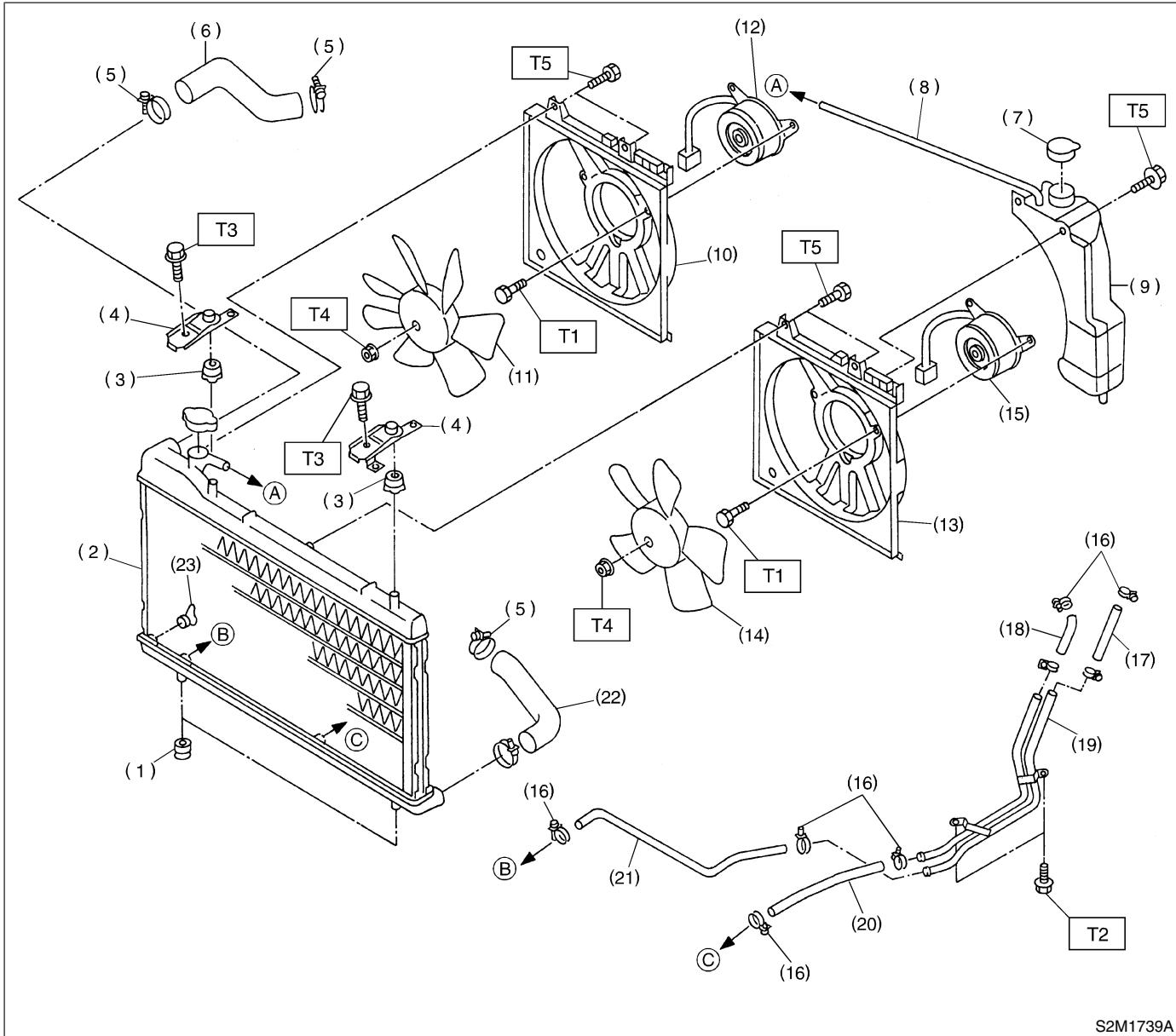
T2: 6.4 (0.65, 4.7)

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2. RADIATOR AND RADIATOR FAN

S106001A0502



S2M1739A

(1) Radiator lower cushion	(13) Radiator main fan shroud	(21) ATF inlet hose B (AT vehicles only)
(2) Radiator	(14) Radiator main fan	(22) Radiator outlet hose
(3) Radiator upper cushion	(15) Radiator main fan motor	(23) Radiator drain plug
(4) Radiator upper bracket	(16) ATF hose clamp (AT vehicles only)	
(5) Clamp	(17) ATF inlet hose A (AT vehicles only)	
(6) Radiator inlet hose	(18) ATF outlet hose A (AT vehicles only)	
(7) Engine coolant reservoir tank cap	(19) ATF pipe (AT vehicles only)	
(8) Over flow hose	(20) ATF outlet hose B (AT vehicles only)	
(9) Engine coolant reservoir tank		
(10) Radiator sub fan shroud		
(11) Radiator sub fan		
(12) Radiator sub fan motor		

Tightening torque: N·m (kgf·m, ft·lb)

T1: 4.4 (0.45, 3.3)

T2: 12 (1.2, 8.7)

T3: 18 (1.8, 13.0)

T4: 3.4 (0.35, 2.5)

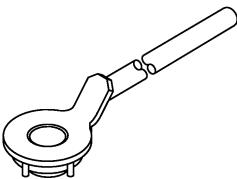
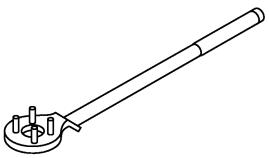
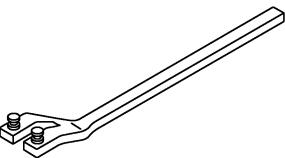
T5: 4.9 (0.50, 3.6)

C: CAUTION S106001A03

- 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 in 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.

D: PREPARATION TOOL S106001A17**1. SPECIAL TOOL** S106001A1701

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 H5M0977	499977300	CRANK PULLEY WRENCH	<ul style="list-style-type: none"> ● Used for stopping crankshaft pulley when loosening and tightening crankshaft pulley bolts. ● For 2200 cc engine.
 B2M3870	499977100	CRANK PULLEY WRENCH	<ul style="list-style-type: none"> ● Used for stopping crankshaft pulley when loosening and tightening crankshaft pulley bolts. ● For 2500 cc engine.
 B2M3859	499207100	CAMSHAFT SPROCKET WRENCH	Used for removing and installing camshaft sprocket.