1. General Description

A: SPECIFICATION

Front disc brake	Type		Disc (Floating type, ventilated)
	Effective disc diameter	mm (in)	261 (10.28)
	Disc thickness × Diameter	mm (in)	30 × 316 (1.18 × 12.44)
	Effective cylinder diameter		42.8 (1.685) × 2
	Pad dimensions (Length × Width × Thickness)	mm (in)	130.0 × 53.5 × 11.0 (5.118 × 2.106 × 0.433)
	Clearance adjustment		Automatic adjustment
Rear disc brake	Type		Disc (Floating type, ventilated)
	Effective disc diameter	mm (in)	284.5 (11.2)
	Disc thickness × Diameter	mm (in)	18 × 320 (0.71 × 12.59)
	Effective cylinder diameter	mm (in)	40.46 (1.592)
	Pad dimensions (Length × Width × Thickness)	mm (in)	95.5 × 34.8 × 11.0 (3.759 × 1.370 × 0.433)
	Clearance adjustment		Automatic adjustment
Master cylinder	Type		Tandem
	Effective diameter	mm (in)	23.8 (15/16)
	Reservoir type		Sealed type
	Brake fluid reservoir capacity	cm^3 (cu in)	285 (17.39)
Brake booster	Type		Vacuum suspended
	Effective diameter	mm (in)	238 + 261 (9.37 + 10.28)
Brake line			Dual circuit system
Brake fluid **CAUTION:** **• Avoid mixing brake fluid of different brands to prevent fluid performance from degrading.** **• When filling with brake fluid, be careful not to allow any dust to enter the reservoir.** **• Use new SUBARU genuine brake fluid when replacing or refilling the fluid.**			FMVSS No. 116, DOT3, or DOT4

NOTE:
Refer to “PB” section for parking brake specifications. <Ref. to PB-2, SPECIFICATION, General Description.>

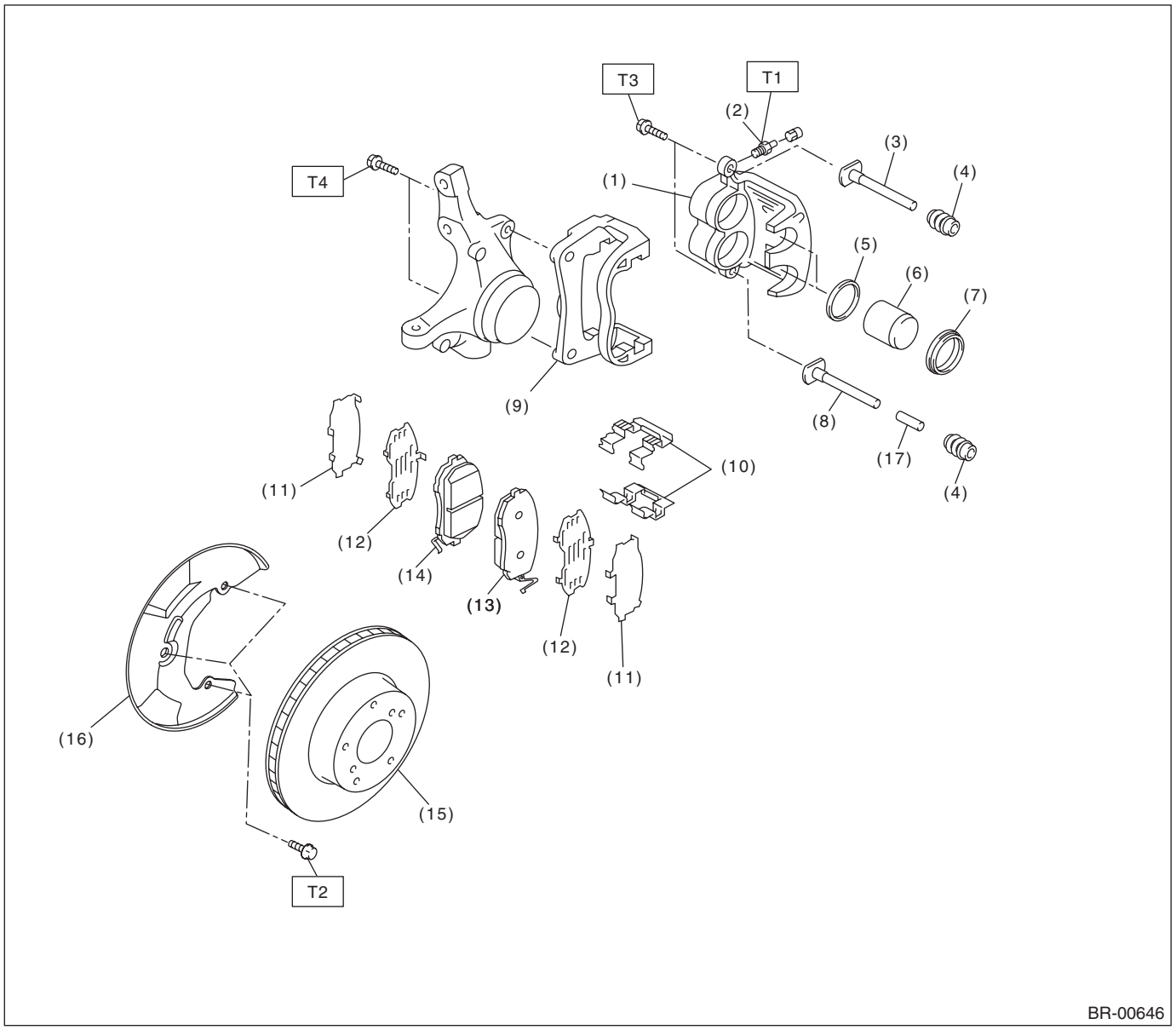
Item			Standard	Limit
Front brake	Pad thickness	mm (in)	11 (0.43)	1.5 (0.059)
	Disc thickness	mm (in)	30 (1.18)	28 (1.10)
	Disc runout	mm (in)	—	0.05 (0.0020)
Rear brake (disc type)	Pad thickness	mm (in)	11.0 (0.433)	1.5 (0.059)
	Disc thickness	mm (in)	18 (0.71)	16 (0.63)
	Disc runout	mm (in)	—	0.05 (0.0020)
Parking brake	Inside diameter	mm (in)	210 (8.27)	211 (8.31)
	Lining thickness	mm (in)	4.0 (0.157)	1.5 (0.059)
	Pedal stroke		5 to 6 notches/300 N (30 kgf, 67.5 lb)	

		Brake pedal force N (kgf, lb)	Fluid pressure kPa (kgf/cm^2, psi)
Brake booster	Brake fluid pressure with engine stopped	147 (15, 33)	590 (6, 86)
		294 (30, 66)	1,654 (17, 240)
	Brake fluid pressure with engine running and vacuum pressure at 66.7 kPa (500 mmHg, 19.69 inHg)	147 (15, 33)	8,539 (87, 1,238)
		294 (30, 66)	15,373 (157, 2,229)

Brake pedal	Free play mm (in)	0.5 — 2 (0.02 — 0.08) [When pulling the brake pedal upward with a force of less than 10 N (1 kgf, 2 lb)]

B: COMPONENT

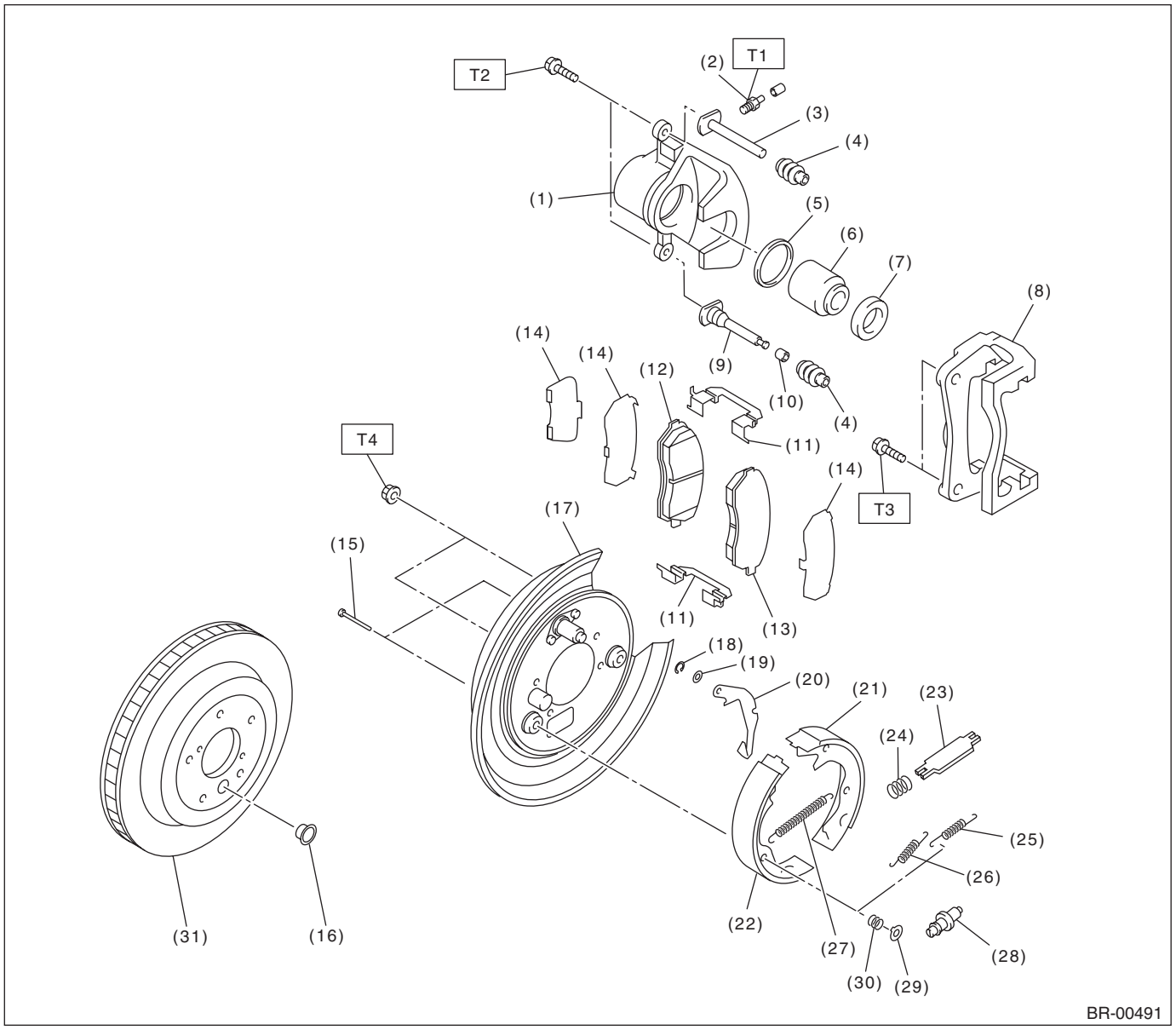
1. FRONT DISC BRAKE



(1) Caliper body
(2) Air bleeder screw
(3) Guide pin (Gray)
(4) Pin boot
(5) Piston seal
(6) Piston
(7) Piston boot
(8) Lock pin (silver)
(9) Support
(10) Pad clip
(11) Outer shim
(12) Inner shim
(13) Pad (Outside)
(14) Pad (Inside)
(15) Disc rotor
(16) Disc cover
(17) Bushing

Tightening torque:N·m (kgf-m, ft-lb)
T1: 8 (0.8, 5.8)
T2: 18 (1.8, 13.3)
T3: 27 (2.8, 19.9)
T4: 120 (12.2, 88.5)

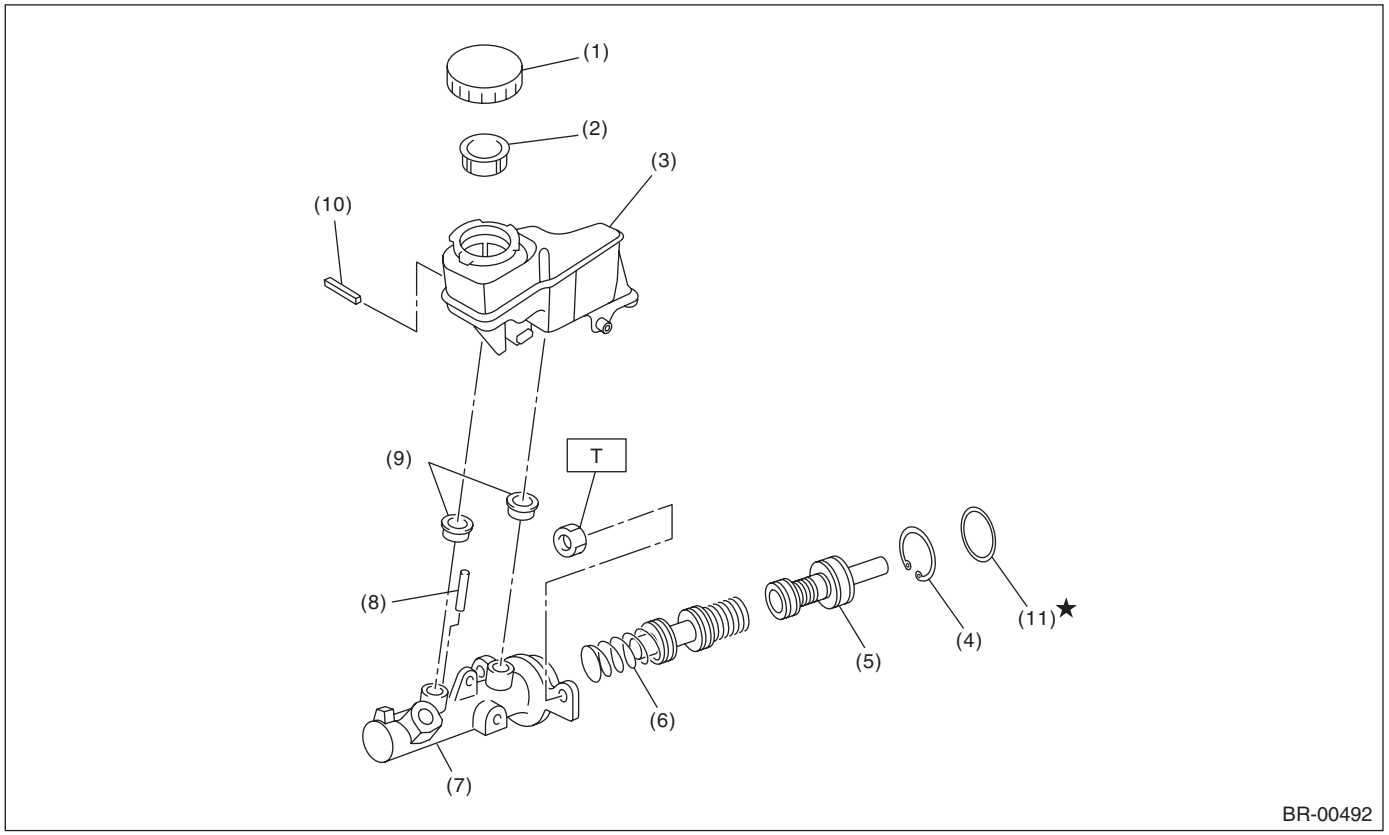
2. REAR DISC BRAKE



(1) Caliper body
(2) Air bleeder screw
(3) Guide pin (Gray)
(4) Pin boot
(5) Piston seal
(6) Piston
(7) Piston boot
(8) Support
(9) Lock pin (silver)
(10) Bushing
(11) Pad clip
(12) Inner pad
(13) Outer pad
(14) Shim
(15) Shoe hold pin
(16) Cover
(17) Back plate
(18) Retainer
(19) Spring washer
(20) Parking brake lever
(21) Parking brake shoe (Secondary)
(22) Parking brake shoe (Primary)
(23) Strut
(24) Strut shoe spring
(25) Secondary shoe return spring
(26) Primary shoe return spring
(27) Adjusting spring
(28) Adjuster
(29) Brake shoe cup
(30) Brake shoe spring
(31) Disc rotor

Tightening torque:N·m (kgf-m, ft-lb)
T1: 8 (0.8, 5.8)
T2: 27 (2.8, 19.9)
T3: 66 (6.7, 48.7)
T4: 75 (7.6, 55.3)

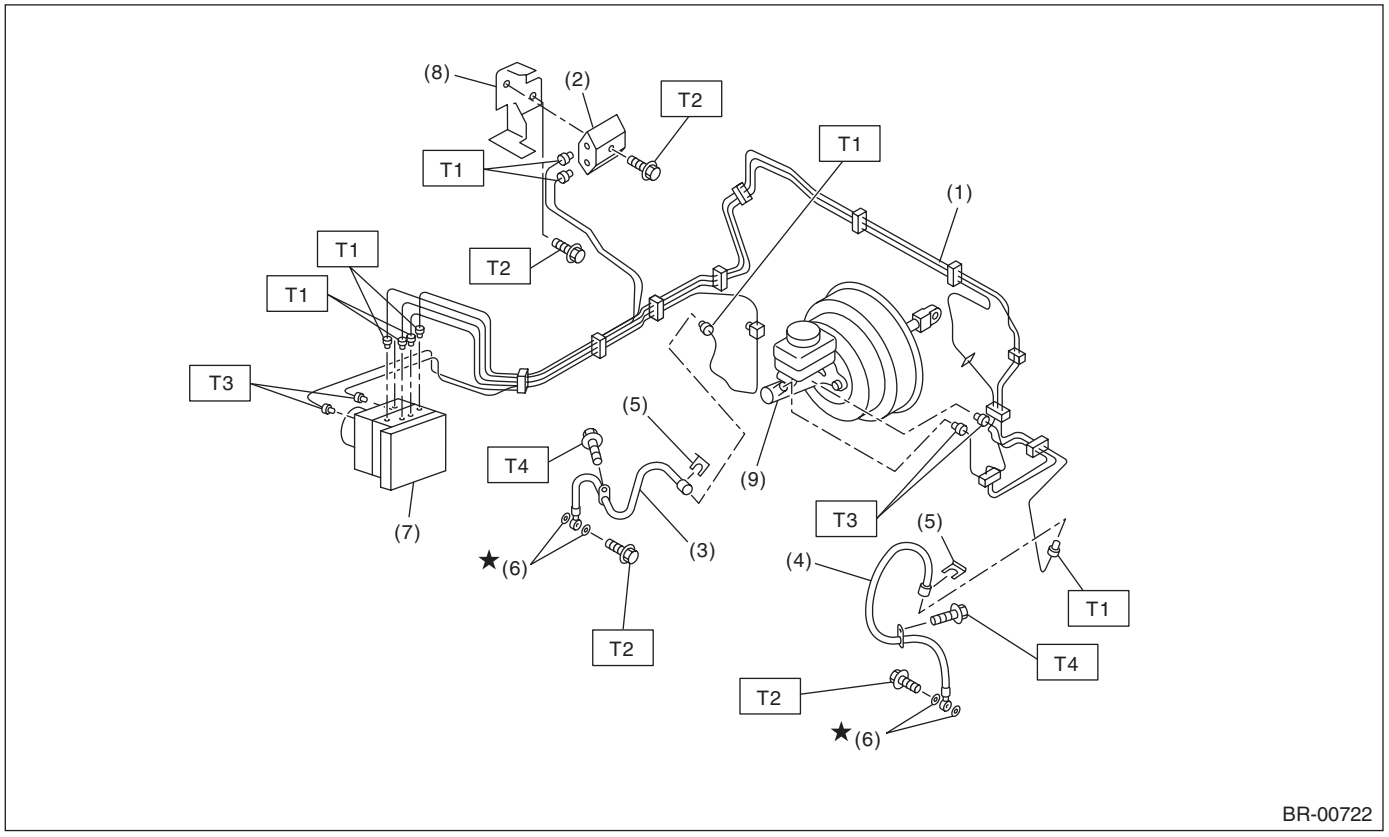
3. MASTER CYLINDER



(1) Cap
(2) Filter
(3) Reservoir tank
(4) C-ring
(5) Primary piston
(6) Secondary piston
(7) Cylinder body
(8) Cylinder pin
(9) Seal
(10) Pin
(11) O-ring

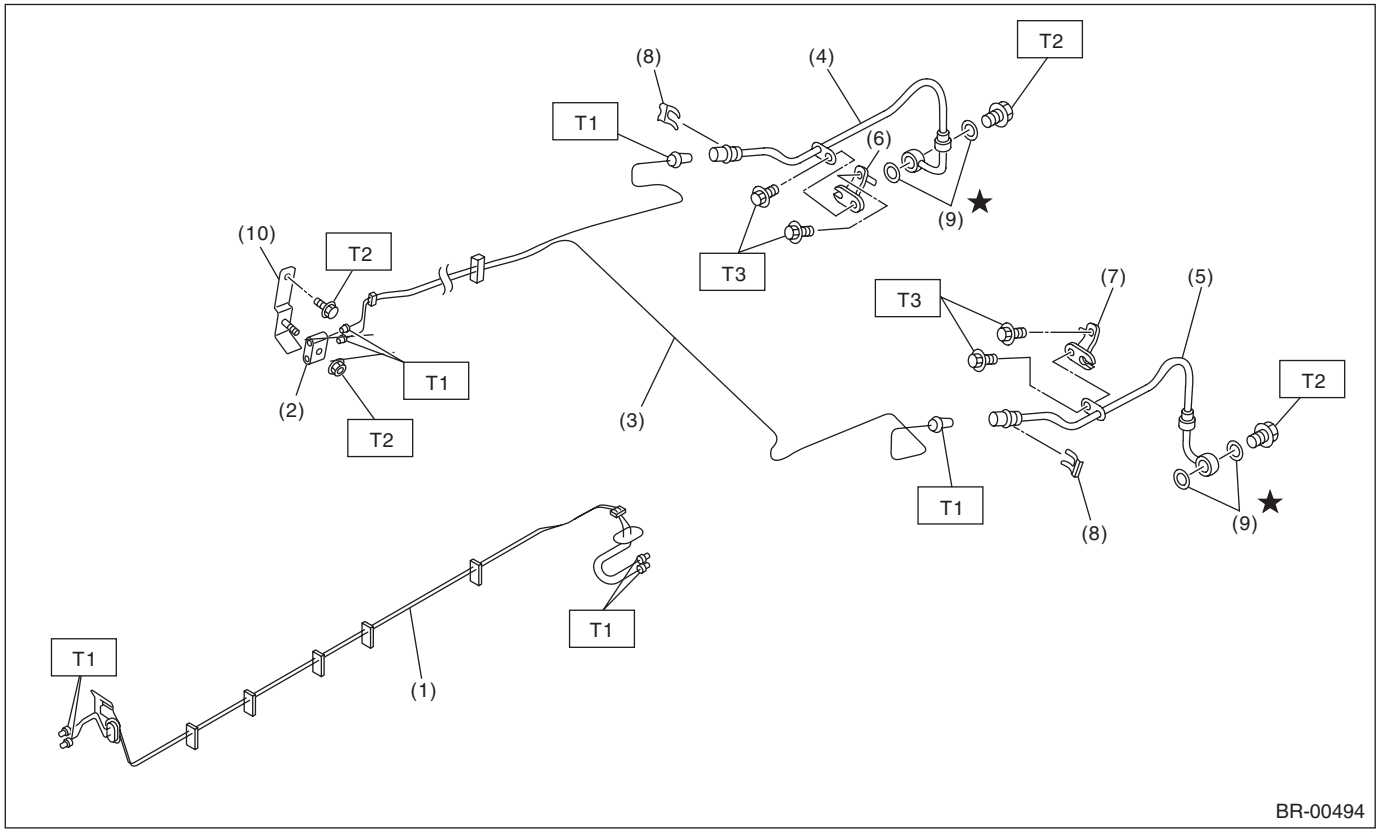
Tightening torque:N·m (kgf-m, ft-lb)
T: 25 (2.5, 18.4)

4. FRONT BRAKE PIPES AND HOSES



(1)	Front brake pipe ASSY	(6)	Gasket	***Tightening torque:N·m (kgf-m, ft-lb)***
(2)	Two-way connector	(7)	VDC control module & hydraulic control unit (VDCCM&H/U)	***T1: 15 (1.5, 10.8)***
(3)	Front brake hose RH	(8)	Bracket	***T2: 18 (1.8, 13.3)***
(4)	Front brake hose LH	(9)	Master cylinder	***T3: 19 (1.9, 14.0)***
(5)	Clamp			***T4: 33 (3.4, 24.3)***

5. CENTER AND REAR BRAKE PIPES AND HOSES

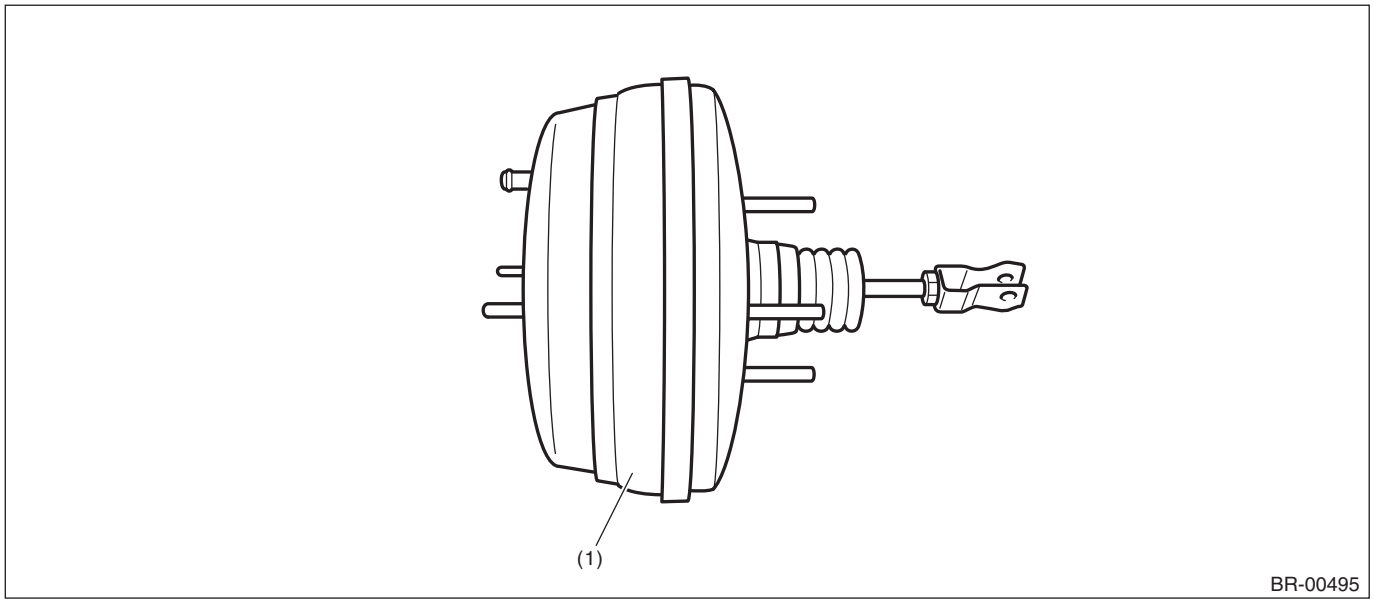


BR-00494

(1)	Center brake pipe ASSY	(6)	Rear brake hose bracket RH
(2)	Two-way connector	(7)	Rear brake hose bracket LH
(3)	Rear brake pipe ASSY	(8)	Clamp
(4)	Rear brake hose RH	(9)	Gasket
(5)	Rear brake hose LH	(10)	Bracket

Tightening torque:N·m (kgf-m, ft-lb)
T1: 15 (1.5, 10.8)
T2: 18 (1.8, 13.3)
T3: 33 (3.4, 24.3)

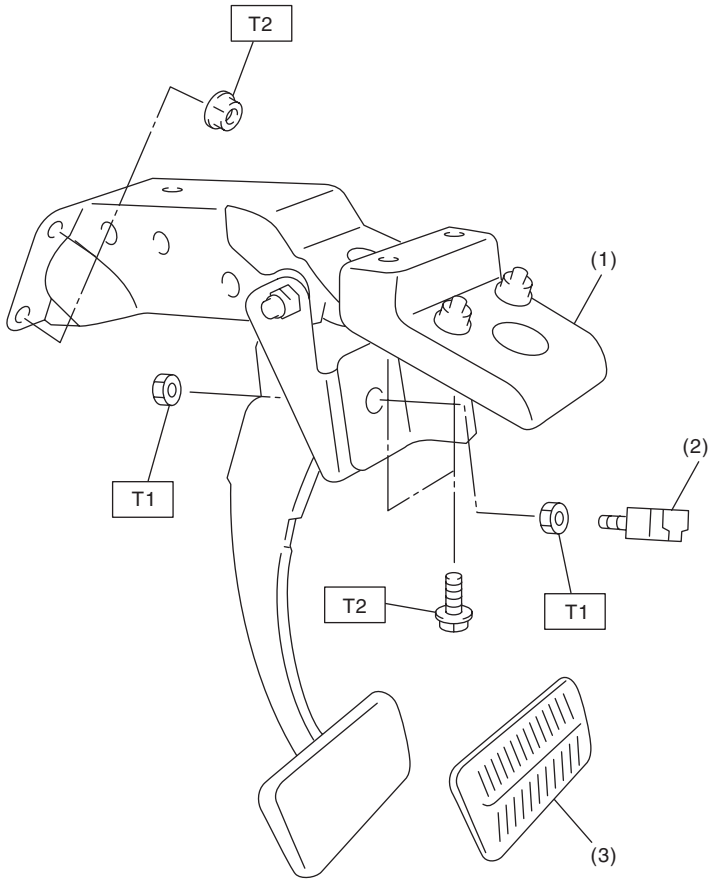
6. BRAKE BOOSTER



BR-00495

(1) Brake booster

7. BRAKE PEDAL

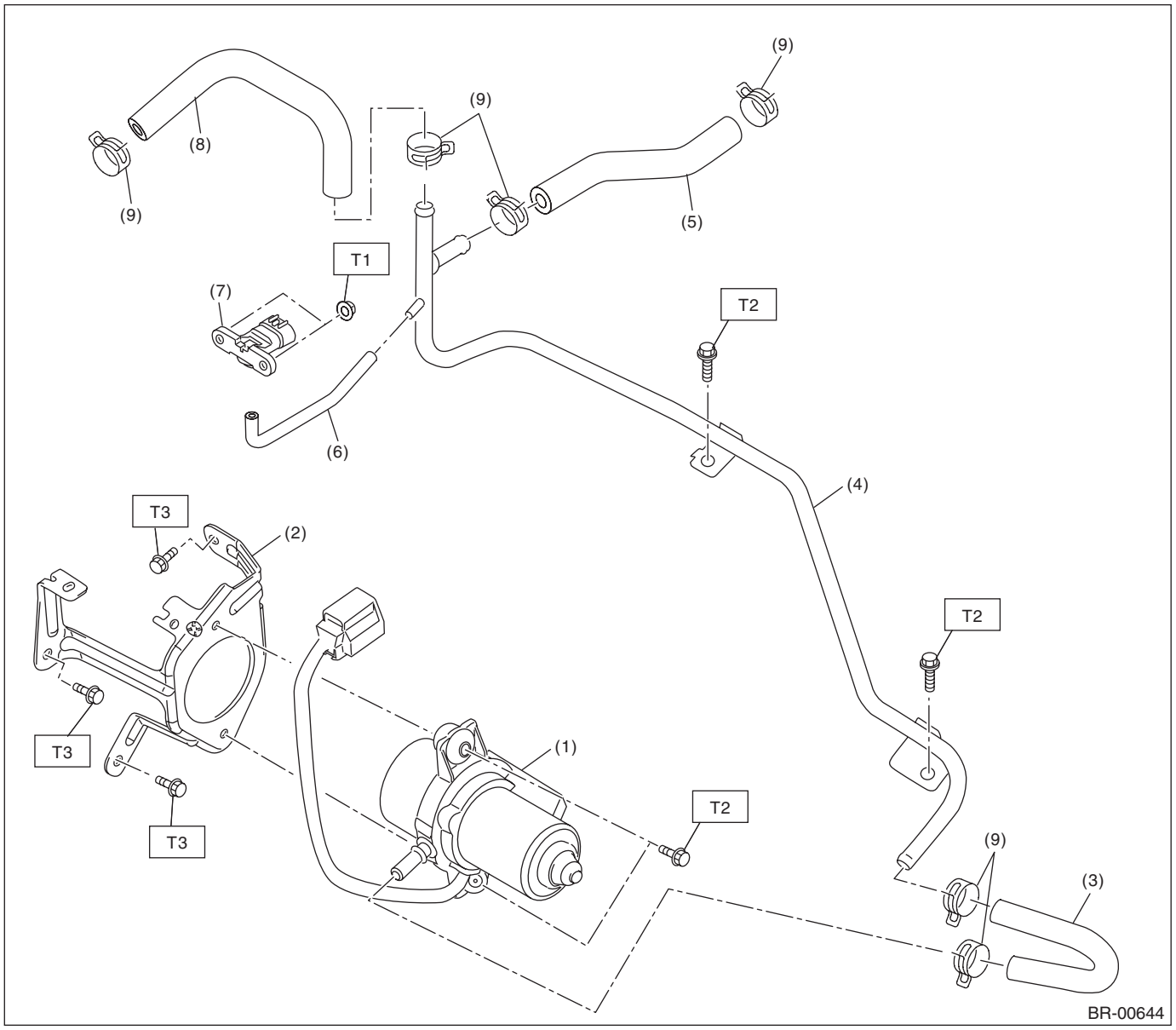


BR-00338

(1) Brake pedal ASSY
(2) Stop light switch
(3) Brake pedal pad

Tightening torque:N·m (kgf-m, ft-lb)
T1: 8 (0.8, 5.8)
T2: 18 (1.8, 13.3)

8. BRAKE VACUUM PUMP



(1) Vacuum pump
(2) Vacuum pump bracket
(3) Vacuum hose (Vacuum pump)
(4) Vacuum pipe
(5) Vacuum hose (Engine)
(6) Vacuum hose (Vacuum sensor)
(7) Vacuum sensor
(8) Vacuum hose (Brake booster)
(9) Hose clamp

Tightening torque:N·m (kgf-m, ft-lb)
T1: 5 (0.5, 3.7)
T2: 7.5 (0.76, 5.5)
T3: 25 (2.5, 18.4)

C: CAUTION

Please understand and adhere to the following general precautions. They must be strictly followed to avoid any injury to the person performing the work or persons in the area.

1. OPERATION

• Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
• Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
• Use SUBARU genuine grease etc. or equivalent. Do not mix grease etc. of different grades or manufacturers.
• Before securing a part in a vise, place cushioning material such as wood blocks, aluminum plate or cloth between the part and the vise.
• Be sure to tighten fasteners including bolts and nuts to the specified torque.
• Place shop jacks or rigid racks at the specified points.

2. OIL

When handling oil, follow the rules below to prevent unexpected accidents.
• Prepare container and waste cloths when performing work which oil could possibly spill. If oil spills, wipe it off immediately to prevent from penetrating into floor or flowing outside, for environmental protection.
• Follow all government and local regulations concerning waste disposal.

3. BRAKE FLUID

If brake fluid gets in your eyes or on your skin, do the following:
• Wash out your eyes and seek immediate medical attention.
• Wash your skin with soap and then rinse thoroughly with water.
Follow all government and local regulations concerning waste disposal.

D: PREPARATION TOOL

1. GENERAL TOOL

TOOL NAME	REMARKS
Snap ring pliers	Used for removing and installing snap rings.