1. General Description

A: SPECIFICATION

Model			2.5 i	OUTBACK	WRX
Front disc brake	Size		15-inch type		16-inch type
	Type		Disc (Floating type, ventilated)		
	Effective disc diameter	mm (in)	228 (8.98)		244 (9.61)
	Disc thickness × Diameter	mm (in)	24 × 277 (0.94 × 10.91)		24 × 294 (0.94 × 11.57)
	Effective cylinder diameter	mm (in)	42.8 (1.685) × 2		
	Pad dimensions (Length × Width × Thickness)	mm (in)	117.8 × 50.5 × 11.0 (4.638 × 1.988 × 0.433)		
	Clearance adjustment		Automatic adjustment		
Rear disc brake	Size		—	15-inch type	
	Type		—	Disc (Floating type, solid)	
	Effective disc diameter	mm (in)	—	250 (9.84)	
	Disc thickness × Diameter	mm (in)	—	10 × 286 (0.39 × 11.26)	
	Effective cylinder diameter	mm (in)	—	38.1 (1.500)	
	Pad dimensions (Length × Width × Thickness)	mm (in)	—	92.0 × 33.0 × 9.0 (3.622 × 1.299 × 0.354)	
	Clearance adjustment		—	Automatic adjustment	
Rear drum brake	Type		Drum (Leading/Trailing type)	—	—
	Effective drum inner diameter	mm (in)	254 (10)	—	—
	Effective cylinder diameter	mm (in)	19 (0.75)	—	—
	Lining dimensions (Length × Width × Thickness)	mm (in)	243.8 × 40.0 × 4.5 (9.6 × 1.575 × 0.177)	—	—
	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)	205 (12.51)		
Brake booster	Type		Vacuum suspended		
	Effective diameter	mm (in)	208 + 229 (8.19 + 9.02)		
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.>

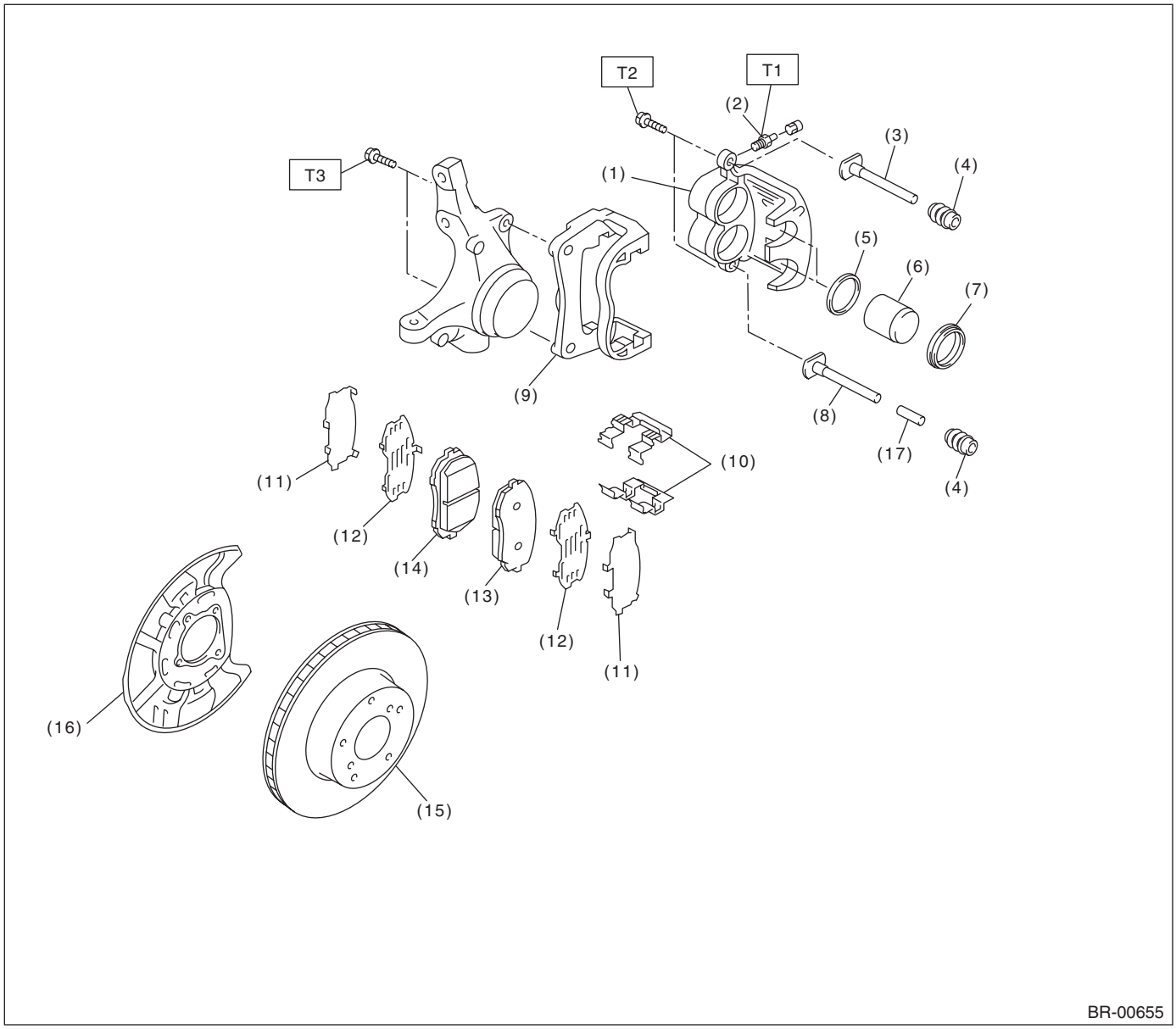
Item			Specification	Service limit
Front brake	Pad thickness	mm (in)	11 (0.43)	1.5 (0.059)
	Disc thickness	mm (in)	24 (0.94)	22 (0.87)
	Disc runout	mm (in)	—	0.05 (0.0020)
Rear brake (disc type)	Pad thickness	mm (in)	9.0 (0.354)	1.5 (0.059)
	Disc thickness	mm (in)	10 (0.39)	8.5 (0.335)
	Disc runout	mm (in)	—	0.05 (0.0020)
Rear brake (drum type)	Inside diameter	mm (in)	254 (10)	256 (10.08)
	Lining thickness	mm (in)	4.5 (0.177)	1.5 (0.059)
Rear brake (disc type)	Inside diameter	mm (in)	190 (7.48)	191 (7.52)
	Lining thickness	mm (in)	2.8 (0.11)	1.5 (0.059)
Parking brake	Lever stroke		7 — 8 notches/200 N (20 kgf, 45 lbf)	

		Brake pedal force N (kgf, lbf)	Fluid pressure kPa (kgf/cm^2, psi)
			All models
Brake booster	Brake fluid pressure with engine stopped	147 (15, 33)	545 (6, 79)
		294 (30, 66)	1,564 (16, 227)
	Brake fluid pressure with engine running and vacuum pressure at 66.7 kPa (500 mmHg, 19.69 inHg)	147 (15, 33)	6,003 (61, 871)
		294 (30, 66)	11,273 (115, 1,635)

Brake pedal	Free play	mm (in)	0.5 — 2 (0.020 — 0.079) [When pulling the brake pedal upward with a force of less than 10 N (1 kgf, 2 lbf)]

B: COMPONENT

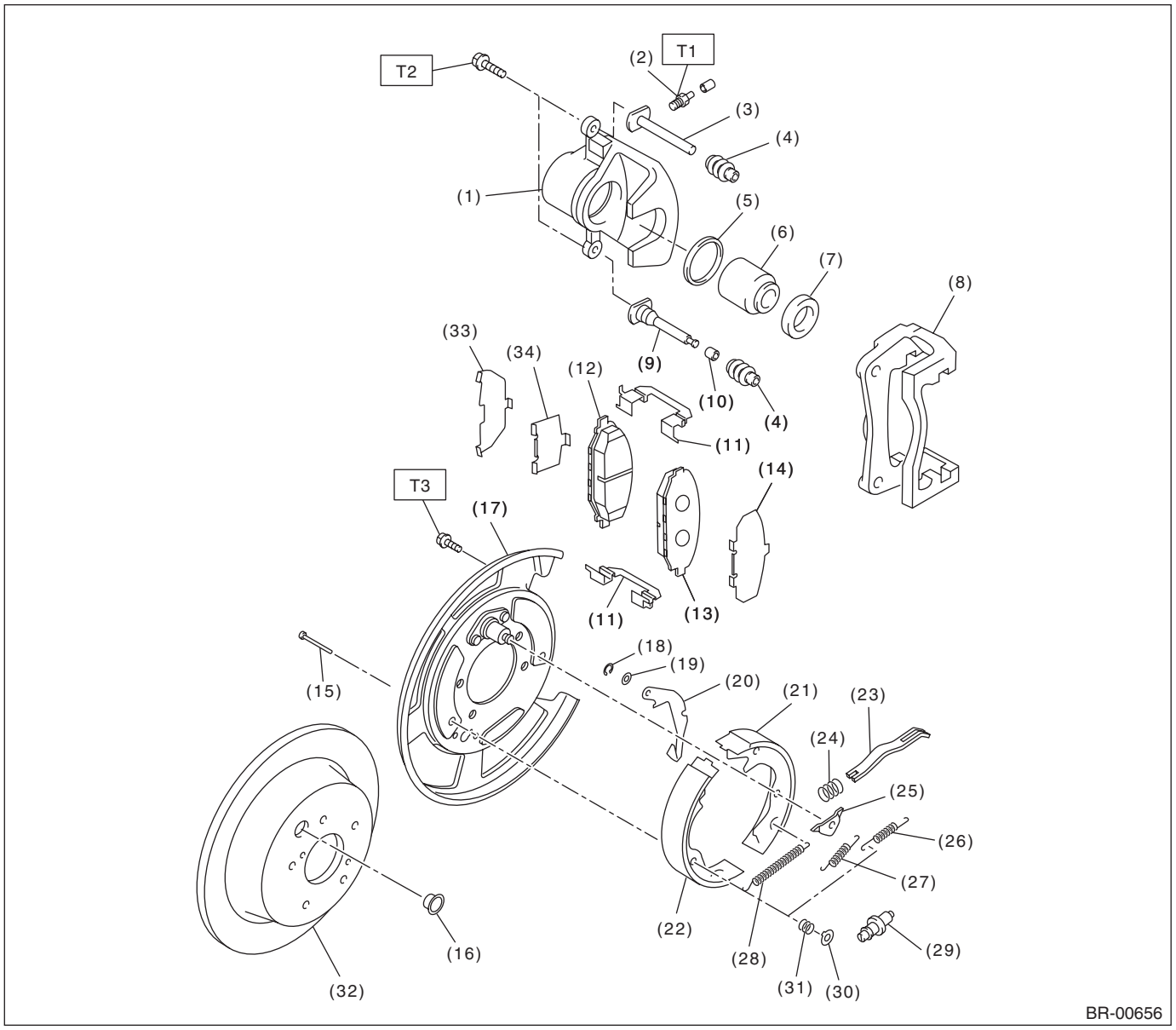
1. FRONT DISC BRAKE



(1) Caliper body
(2) Air bleeder screw
(3) Guide pin
(4) Pin boot
(5) Piston seal
(6) Piston
(7) Piston boot
(8) Lock pin
(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, 5.9)
T2: 27 (2.8, 19.9)
T3: 80 (8.2, 59)

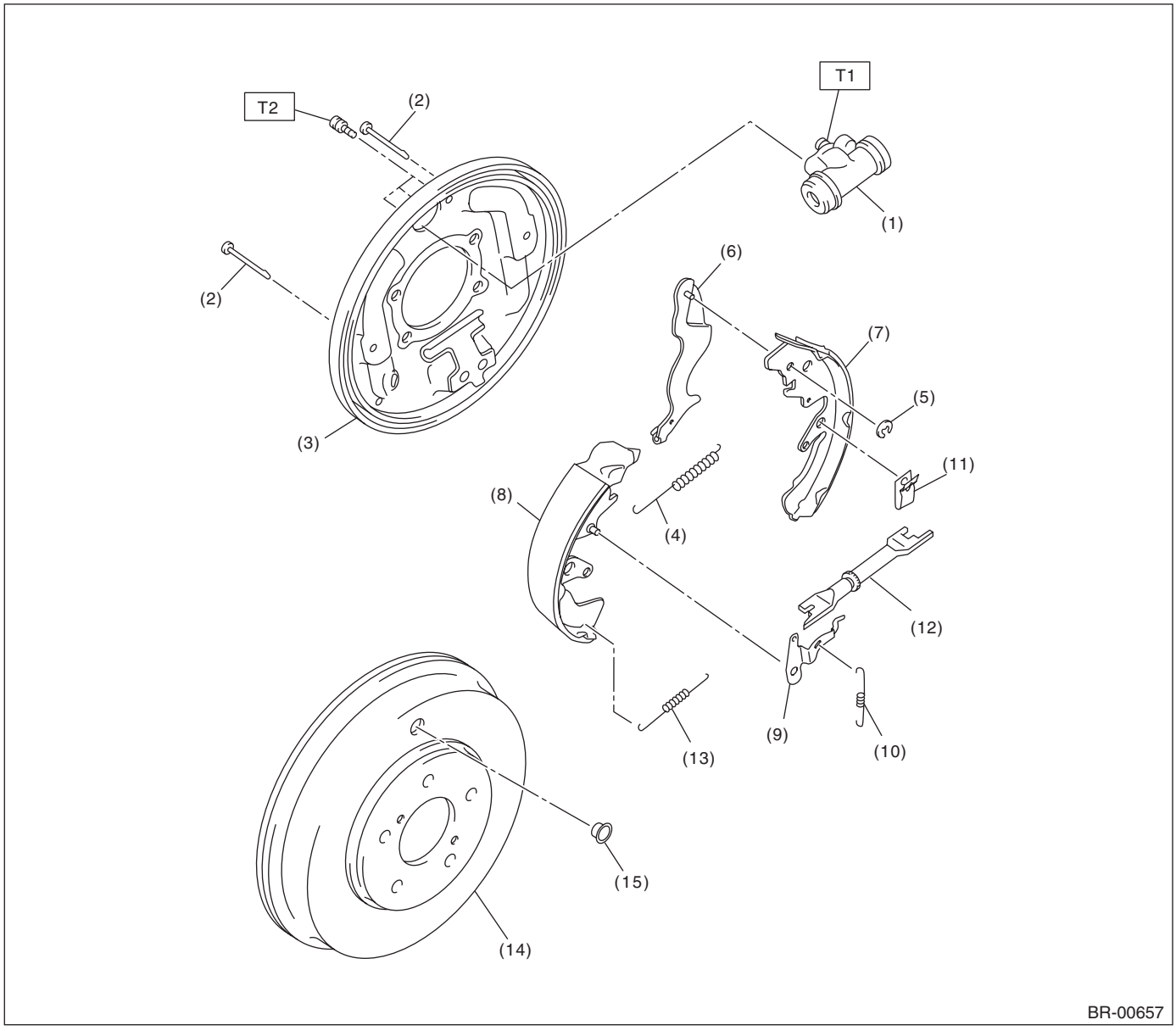
2. REAR DISC BRAKE



(1) Caliper body
(2) Air bleeder screw
(3) Guide pin (black)
(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) Outer shim
(15) Shoe hold-down pin
(16) Adjusting hole cover
(17) Back plate
(18) Retainer
(19) Wave washer
(20) Lever
(21) Parking brake shoe (Secondary)
(22) Parking brake shoe (Primary)
(23) Strut
(24) Strut spring
(25) Shoe guide plate
(26) Secondary shoe return spring
(27) Primary shoe return spring
(28) Adjusting spring
(29) Adjuster
(30) Shoe hold-down cup
(31) Shoe hold-down spring
(32) Disc rotor
(33) Outer shim (SUS)
(34) Inner shim

Tightening torque: N·m (kgf-m, ft-lb)
T1: 8 (0.8, 5.9)
T2: 27 (2.8, 19.9)
T3: 66 (6.7, 48.7)

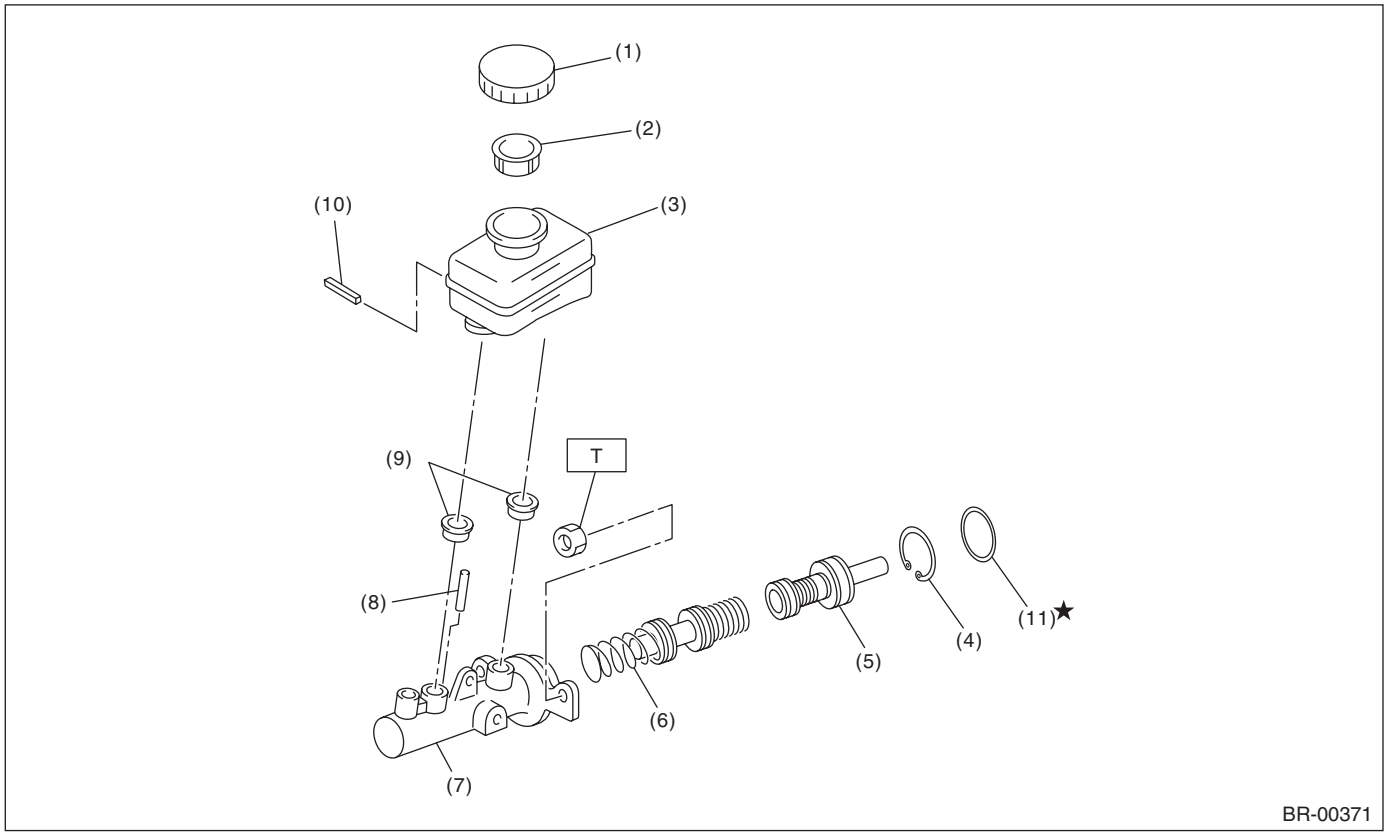
3. REAR DRUM BRAKE



(1) Wheel cylinder ASSY
(2) Pin
(3) Back plate
(4) Upper shoe return spring
(5) Retainer
(6) Parking brake lever
(7) Brake shoe (Trailing)
(8) Brake shoe (Leading)
(9) Adjusting lever
(10) Adjusting spring
(11) Shoe hold-down spring
(12) Adjuster
(13) Lower shoe return spring
(14) Drum
(15) Adjusting hole cover

Tightening torque: N·m (kgf-m, ft-lb)
T1: 8 (0.8, 5.9)
T2: 9 (0.9, 6.6)

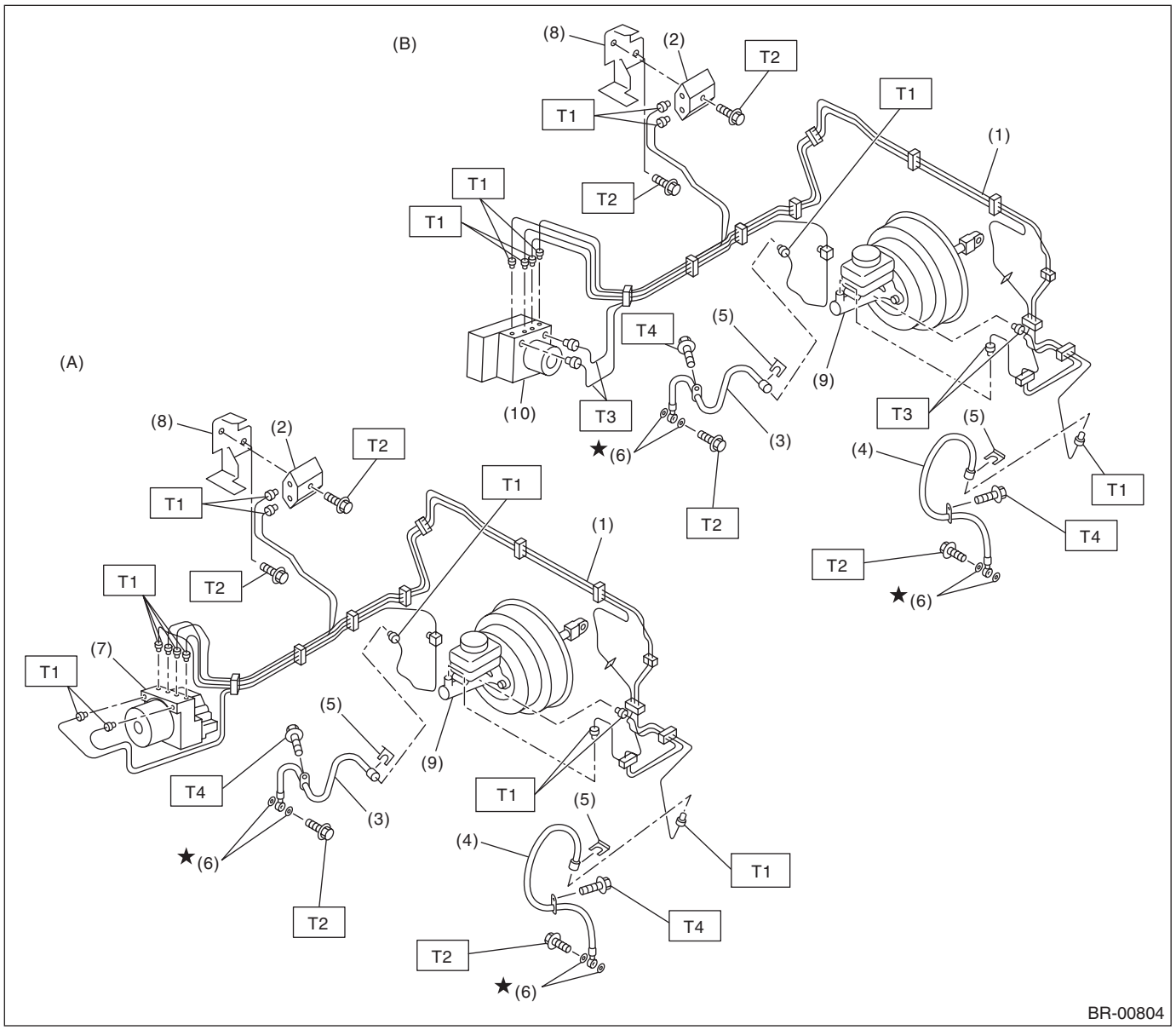
4. MASTER CYLINDER



(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: 13 (1.3, 9.6)

5. FRONT BRAKE PIPES AND HOSES



(A)	Model without vehicle dynamics control (VDC)	(B)	Model with vehicle dynamics control (VDC)
(1)	Front brake pipe ASSY	(6)	Gasket
(2)	Two-way connector	(7)	ABS control module and hydraulic control unit (ABSCM&H/U)
(3)	Front brake hose RH	(8)	Bracket
(4)	Front brake hose LH	(9)	Master cylinder
(5)	Clamp	(10)	VDC control module and hydraulic control unit (VDCCM&H/U)

Tightening torque: N·m (kgf-m, ft-lb)

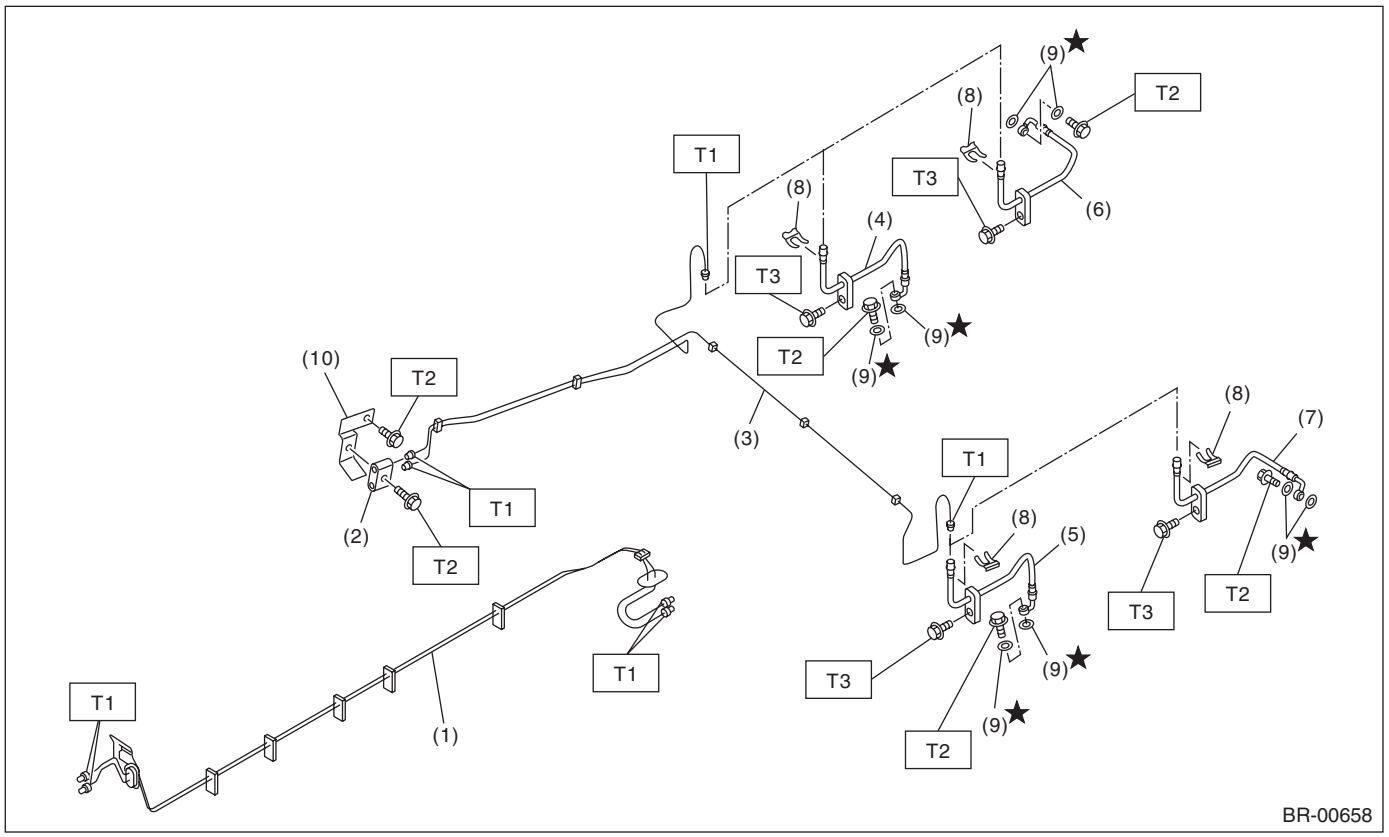
T1: 15 (1.5, 11.1)

T2: 18 (1.8, 13.3)

T3: 19 (1.9, 14)

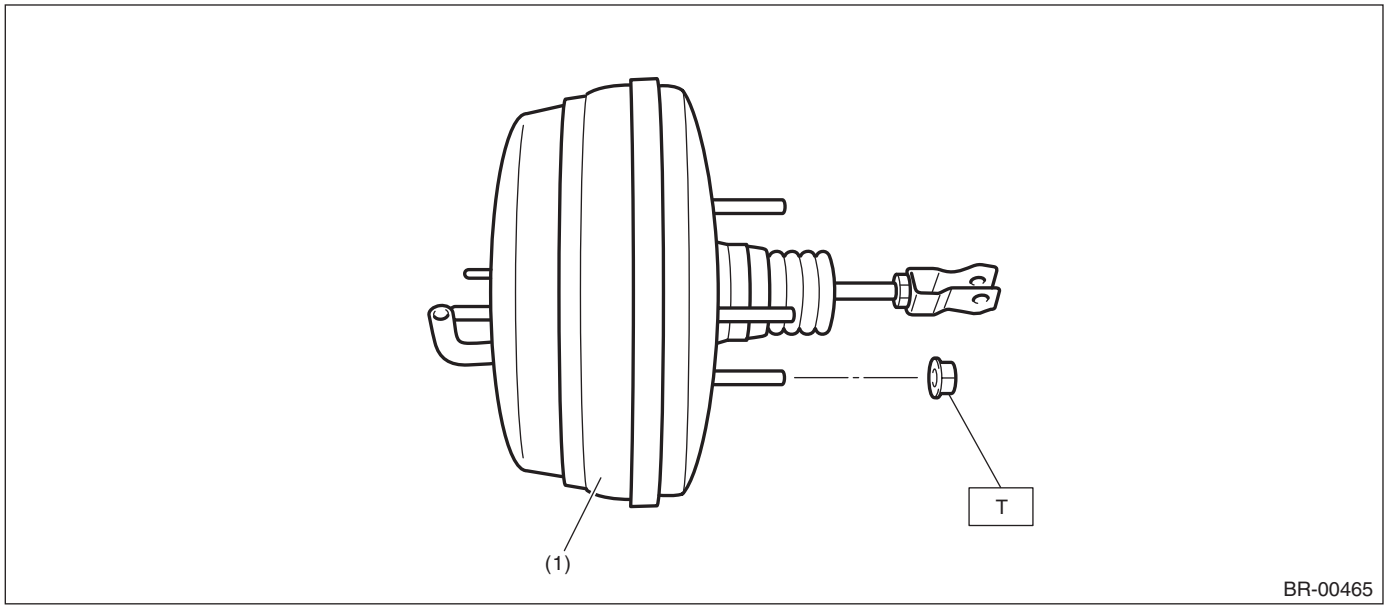
T4: 33 (3.4, 24.3)

6. CENTER AND REAR BRAKE PIPES AND HOSES



(1)	Center brake pipe ASSY	(6)	Rear brake hose RH (Drum brake model)	***Tightening torque: N·m (kgf-m, ft-lb)***
(2)	Two-way connector	(7)	Rear brake hose LH (Drum brake model)	***T1: 15 (1.5, 11.1)***
(3)	Rear brake pipe ASSY	(8)	Clamp	***T2: 18 (1.8, 13.3)***
(4)	Rear brake hose RH (Disc brake model)	(9)	Gasket	***T3: 33 (3.4, 24.3)***
(5)	Rear brake hose LH (Disc brake model)	(10)	Bracket	

7. BRAKE BOOSTER

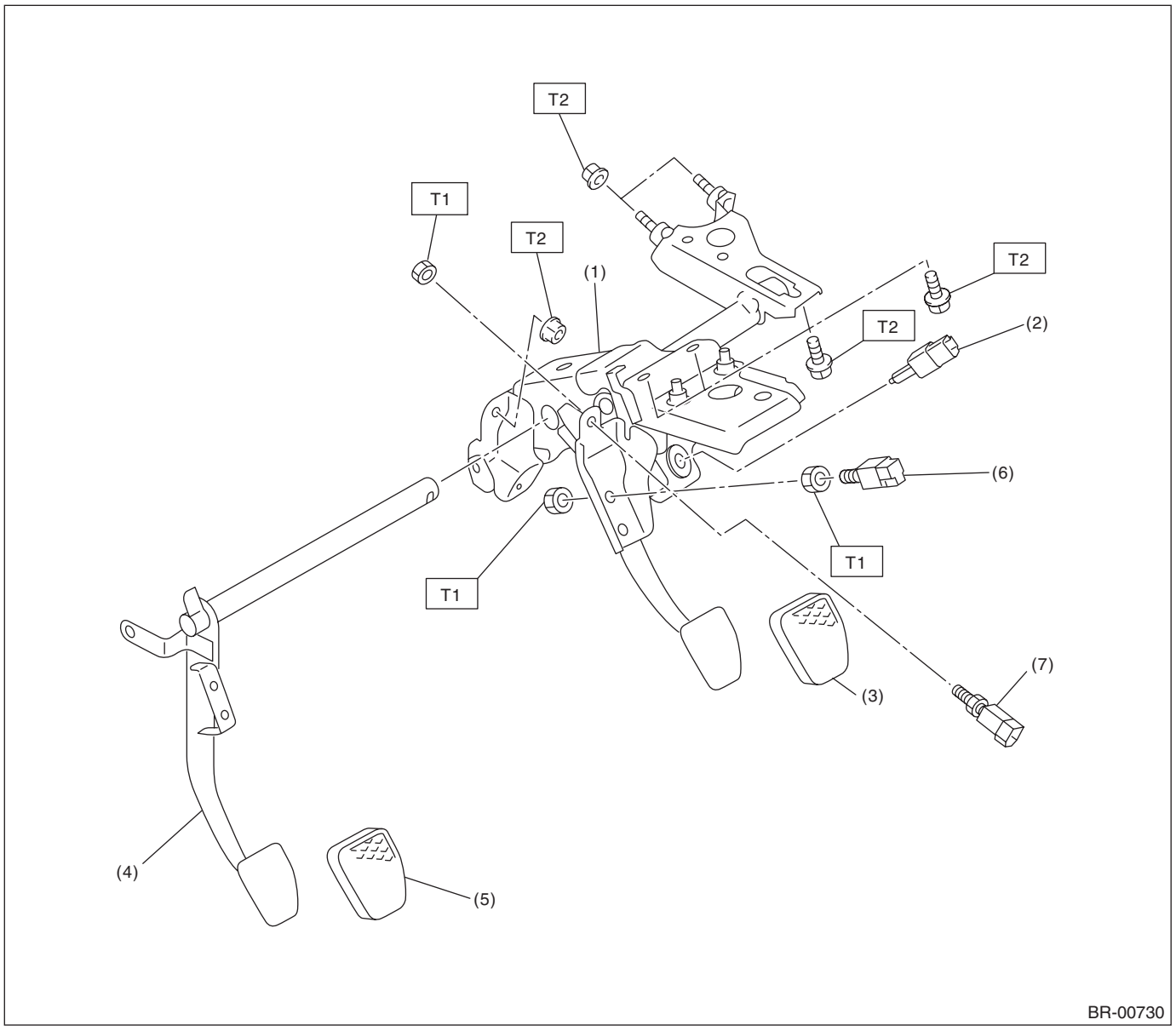


(1) Brake booster

Tightening torque: N·m (kgf-m, ft-lb)
T: 18 (1.8, 13.3)

8. BRAKE PEDAL

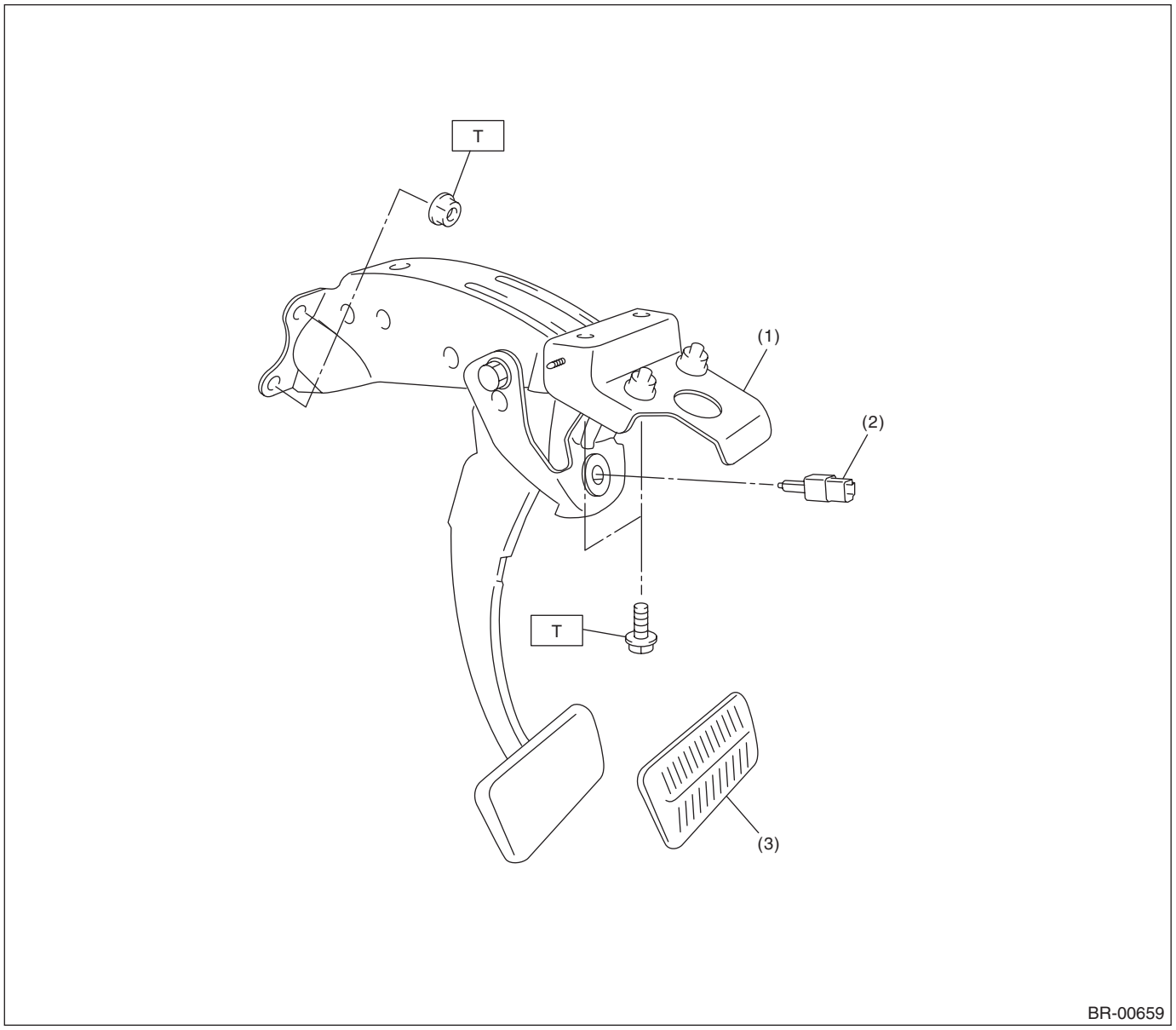
- MT model



(1)	Brake pedal ASSY	(5)	Clutch pedal pad
(2)	Stop light switch	(6)	Clutch switch (cruise control)
(3)	Brake pedal pad	(7)	Clutch switch (clutch start)
(4)	Clutch pedal		

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

- AT model



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

Tightening torque: N·m (kgf-m, ft-lb)
T: 18 (1.8, 13.3)

C: CAUTION

• 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.

D: PREPARATION TOOL

1. GENERAL TOOL

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