

General Description

CLUTCH SYSTEM

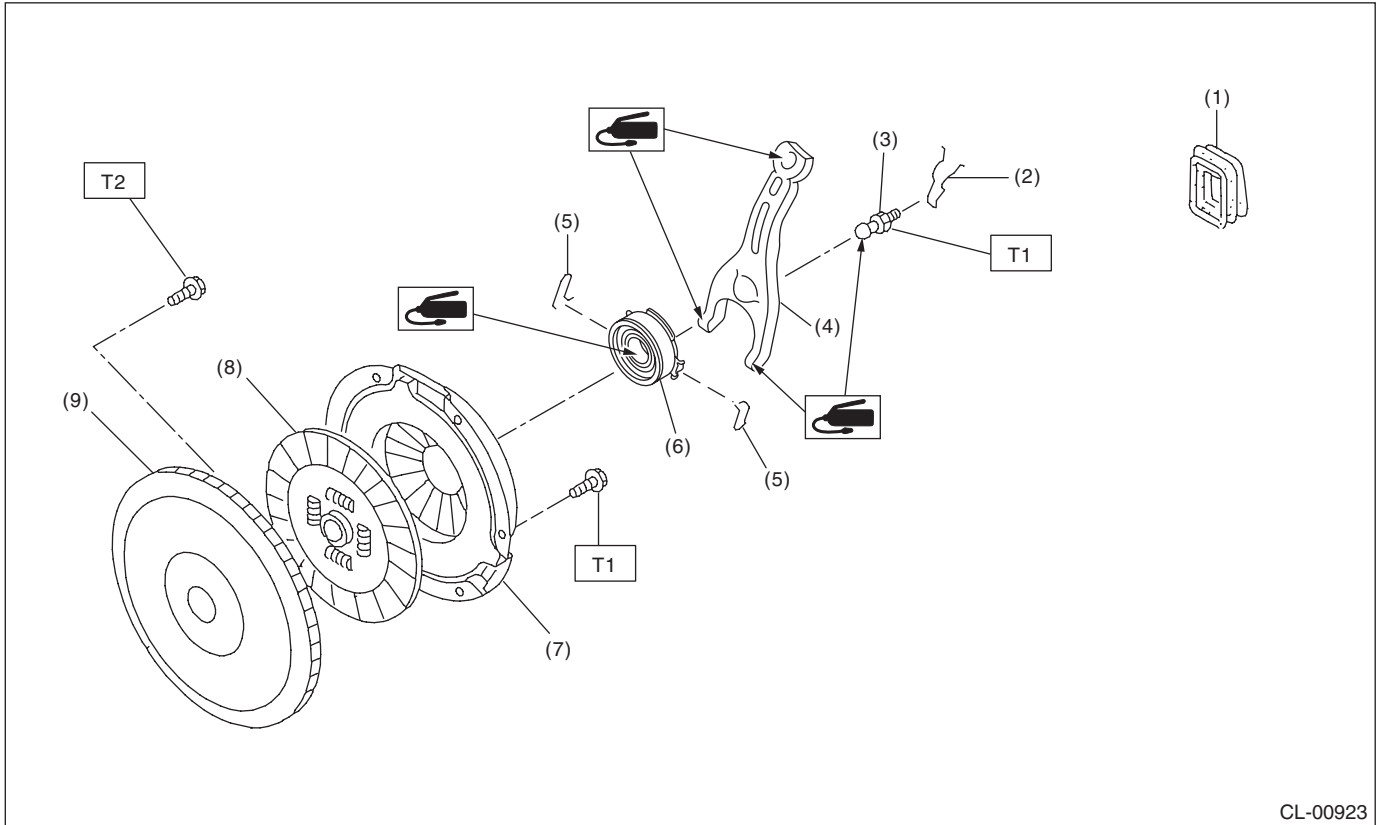
1. General Description

A: SPECIFICATION

Model			2.5 L non-turbo		
Transmission type			6MT		
Clutch cover	Type		Push type		
	Diaphragm set load N (kgf, lbf)		5,688 (580, 1,279)		
Clutch disc	Facing material		Woven (Non-asbestos)		
	O.D. × I.D. × thickness mm (in)	Flywheel side	230 × 155 × 3.2 (9.06 × 6.10 × 0.126)		
		Clutch cover side	230 × 155 × 3.5 (9.06 × 6.10 × 0.138)		
	Spline outer diameter mm (in)		25.2 (0.992), (Number of teeth: 24)		
	Depth of rivet head mm (in)	Flywheel side	1.35 — 1.95 (0.053 — 0.077)		
		Clutch cover side	1.65 — 2.25 (0.065 — 0.089)		
		Limit of sinking	0.8 (0.031)		
Deflection limit mm (in)		0.7 (0.028) at R = 110 (4.33)			
Clutch release lever ratio			1.6		
Release bearing			Grease-packed self-aligning		
Clutch pedal	Full stroke	mm (in)	130 — 135 (5.12 — 5.31)		
	Free play	mm (in)	4 — 11 (0.16 — 0.43)		
Flywheel	Type		Flexible		

B: COMPONENT

1. CLUTCH ASSEMBLY



CL-00923

- | | |
|-------------------|-----------------------|
| (1) Dust cover | (6) Release bearing |
| (2) Lever spring | (7) Clutch cover |
| (3) Pivot | (8) Clutch disc |
| (4) Release lever | (9) Flexible flywheel |
| (5) Clip | |

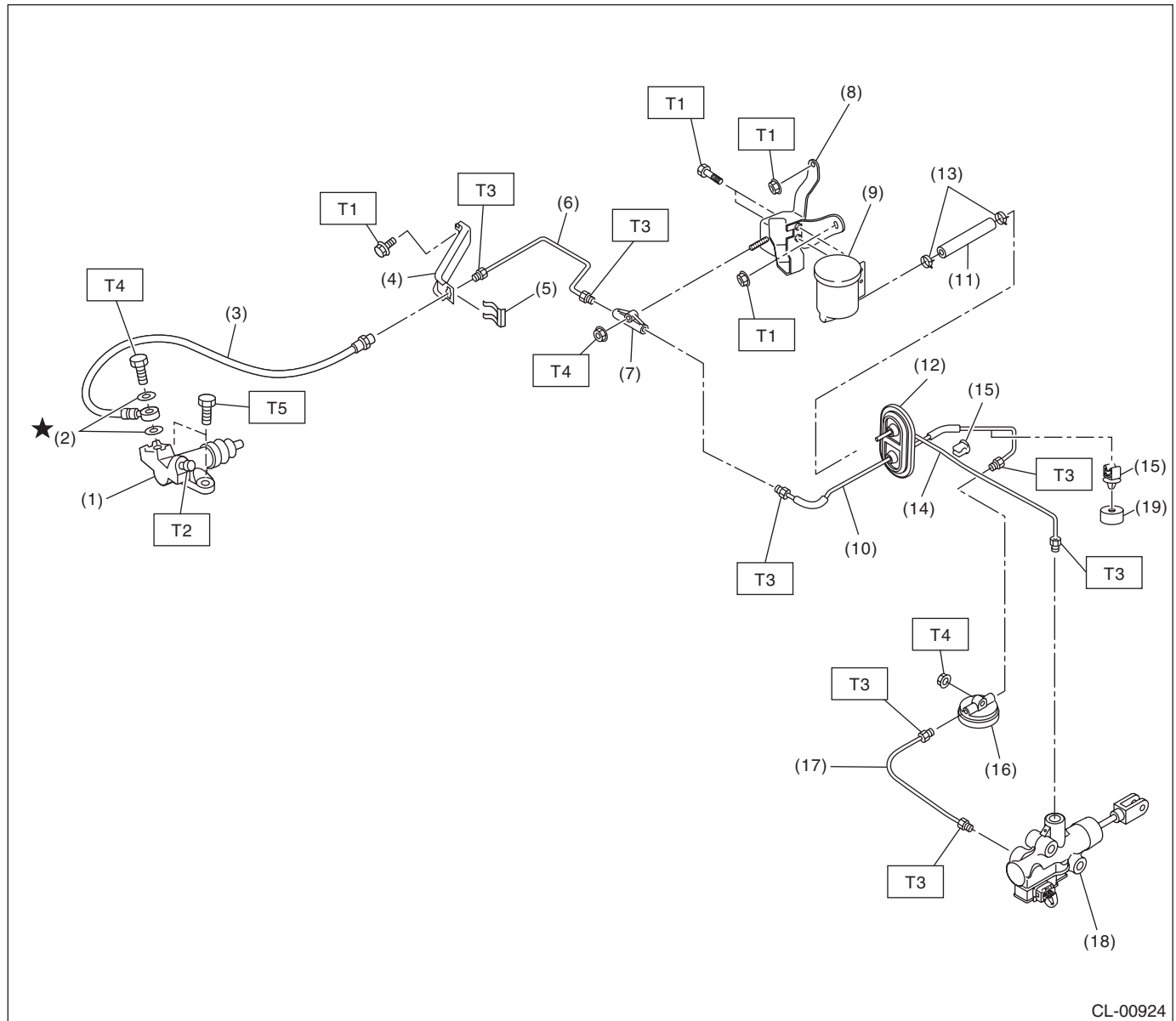
Tightening torque: N·m (kgf-m, ft-lb)

T1: 16 (1.6, 11.8)

T2: <Ref. to CL-13, INSTALLATION, Flywheel.>

CLUTCH SYSTEM

2. CLUTCH PIPE AND HOSE



- | | |
|----------------------------|---------------------------|
| (1) Operating cylinder | (10) Clutch pipe |
| (2) Washer | (11) Reservoir tank hose |
| (3) Clutch hose | (12) Clutch pipe grommet |
| (4) Clutch hose bracket | (13) Clamp |
| (5) Clamp | (14) Clutch pipe |
| (6) Clutch pipe | (15) Clamp |
| (7) Connector | (16) Clutch damper |
| (8) Reservoir tank bracket | (17) Clutch pipe |
| (9) Reservoir tank | (18) Master cylinder ASSY |

- (19) Mass damper

Tightening torque: N·m (kgf-m, ft-lb)

T1: 7.5 (0.8, 5.5)

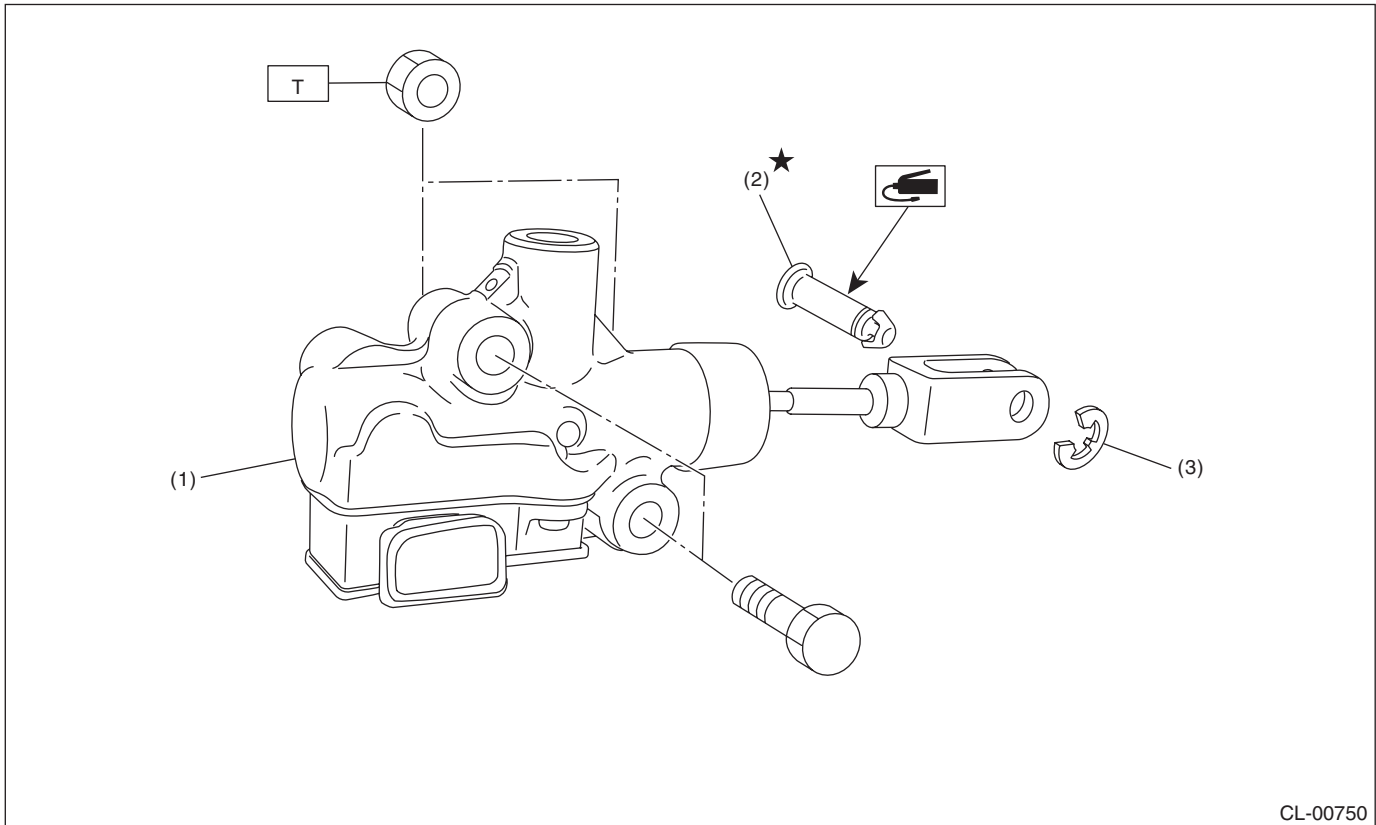
T2: 7.8 (0.8, 5.8)

T3: 15 (1.5, 11.1)

T4: 18 (1.8, 13.3)

T5: 37 (3.8, 27.3)

3. MASTER CYLINDER



(1) Master cylinder ASSY

(2) Clevis pin

(3) Clip

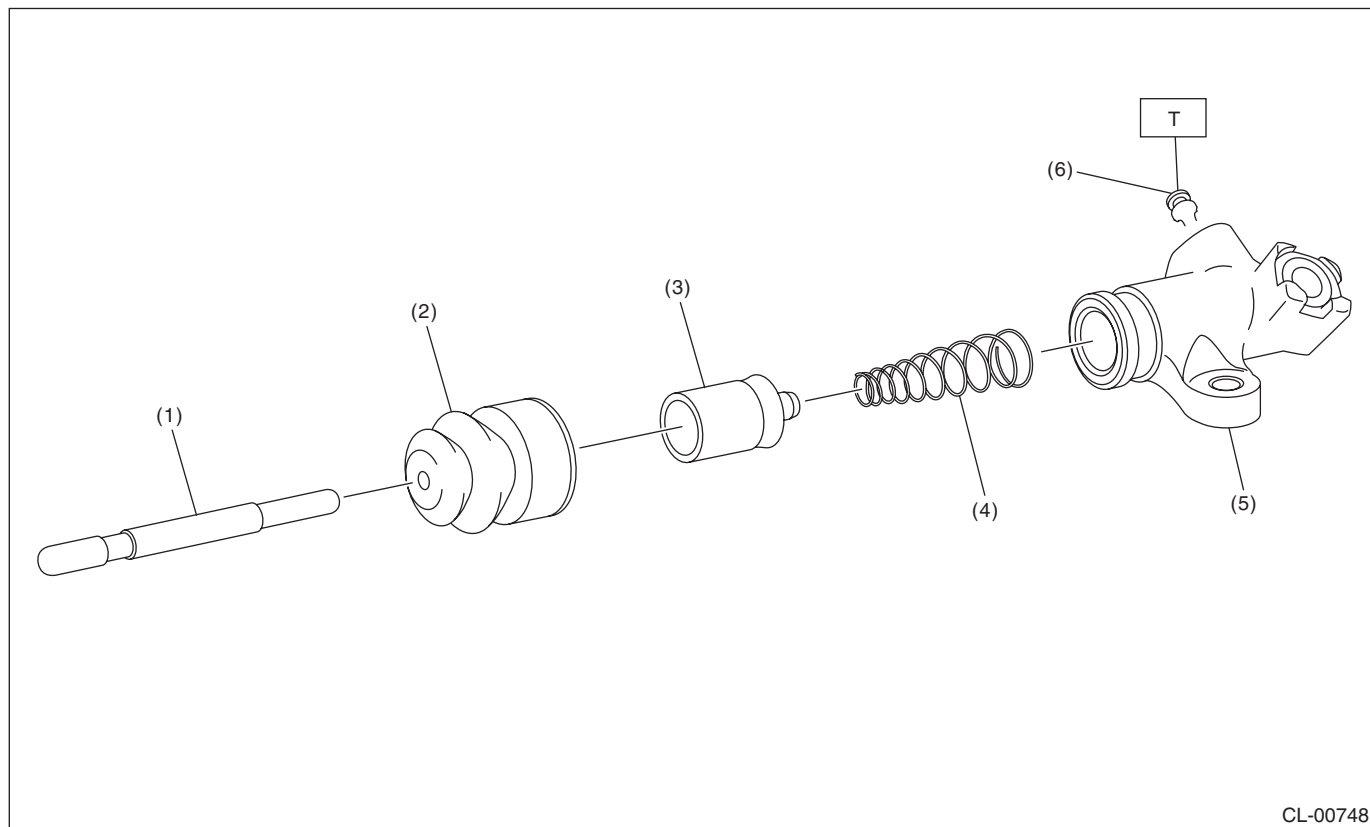
Tightening torque: N·m (kgf-m, ft-lb)

T: 18 (1.8, 13.3)

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4. OPERATING CYLINDER



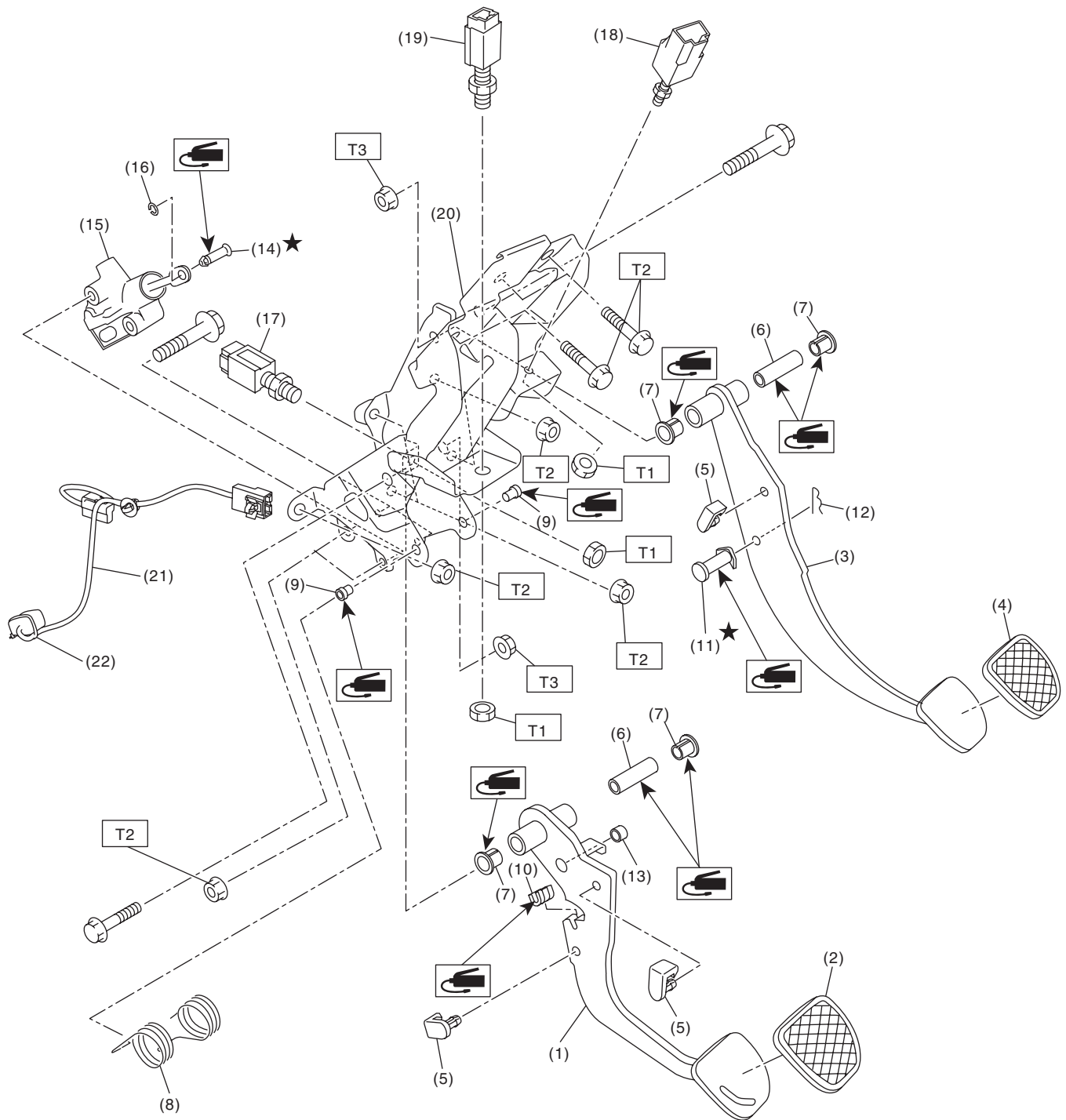
CL-00748

- | | |
|--------------|------------------------|
| (1) Push rod | (4) Piston spring |
| (2) Boot | (5) Operating cylinder |
| (3) Piston | (6) Breather screw |

Tightening torque: N·m (kgf-m, ft-lb)

T: 7.8 (0.8, 5.8)

5. CLUTCH PEDAL ASSEMBLY



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(1) Clutch pedal	(10) Torsion spring bushing	(19) Clutch switch
(2) Clutch pedal pad	(11) Clevis pin	(20) Pedal bracket
(3) Brake pedal	(12) Snap pin	(21) Sensor harness
(4) Brake pedal pad	(13) Bushing A	(22) Band
(5) Stopper	(14) Clevis pin	
(6) Spacer	(15) Master cylinder ASSY	
(7) Bushing	(16) Clip	
(8) Torsion spring	(17) Clutch start switch	
(9) Assist bushing	(18) Stop & brake switch	

Tightening torque: N·m (kgf-m, ft-lb)

T1: 8 (0.8, 5.9)

T2: 18 (1.8, 13.3)

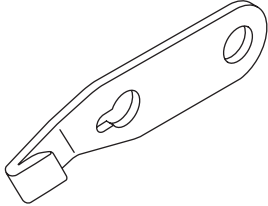
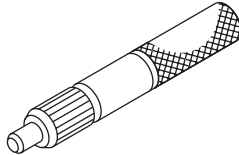
T3: 30 (3.1, 22.1)

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.
- Use SUBARU genuine fluid, grease etc. or equivalent. Do not mix fluid, grease, etc. of different grades or manufacturers.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or rigid racks at the specified points.
- Apply grease onto sliding or revolving surfaces before installation.
- Before installing O-rings or snap rings, apply sufficient amount of fluid to avoid damage and deformation.
- Before securing a part in a vise, place cushioning material such as wood blocks, aluminum plate or cloth between the part and the vise.
- Keep fluids away from the vehicle body. If any fluid contacts the vehicle body, immediately flush the area with water.

D: PREPARATION TOOL

1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST-498497100	498497100	CRANKSHAFT STOPPER	Used for stopping rotation of the flywheel.
 ST-499747100	499747100	CLUTCH DISC GUIDE	Used for installing the clutch disc to the flywheel.

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2. GENERAL TOOL

TOOL NAME	REMARKS
Circuit tester	Used for measuring resistance, voltage and current.
Dial gauge	Used for measuring clutch disc run-out.
Depth gauge	Used for measuring clutch disc wear.
Angle gauge	Used for tightening the flywheel.