

# GENERAL DESCRIPTION

## CLUTCH SYSTEM

### 1. General Description

#### A: SPECIFICATIONS

Model			2.0 L TURBO	2.5 L
Clutch cover	Type		Pull type	
	Diaphragm set load	kgf (lb)	800 (1,764)	
Clutch disc	Facing material		Woven (Non asbestos)	
	O.D. × I.D. × thickness	mm (in)	230 × 150 × 3.5 (9.06 × 5.91 × 0.138)	225 × 150 × 3.5 (8.86 × 5.91 × 0.138)
	Spline O.D.	mm (in)	25.2 (0.992), (No. of teeth: 24)	
Clutch release lever ratio			1.7	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)	
Release lever	Stroke	mm (in)	13.3 — 14.7 (0.524 — 0.579)	24 — 26 (0.94 — 1.02)
	Play at release lever center	mm (in)	—	3 — 4 (0.12 — 0.16)
Clutch disc	Depth of rivet head mm (in)	Standard	1.35 — 1.95 (0.053 — 0.076)	
		Limit of sinking	0.3 (0.012)	
	Limit for deflection	mm (in)	0.7 (0.028) at R = 110 (4.33)	

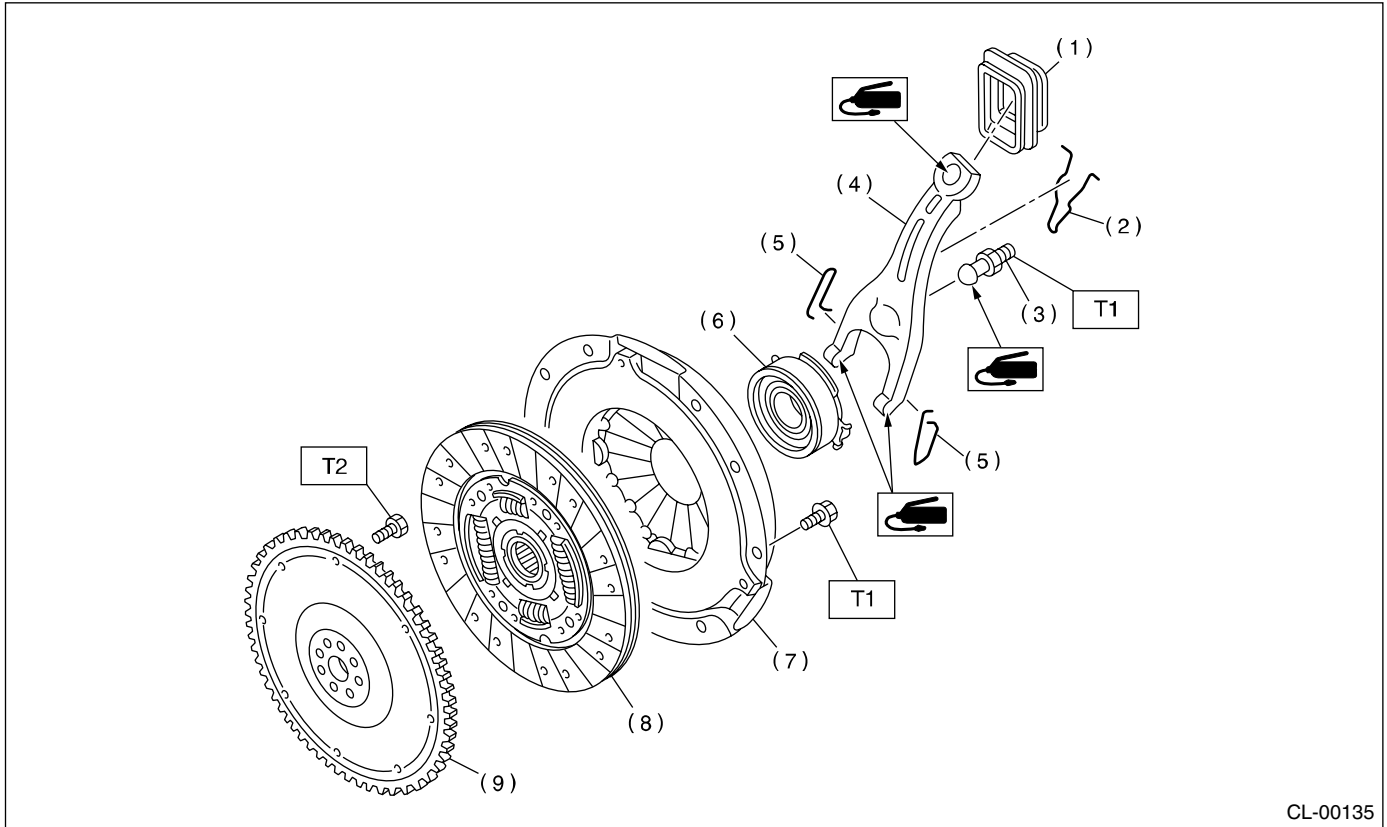
Model			2.5 L TURBO STi
Clutch cover	Type		Pull type
	Diaphragm set load	kgf (lb)	930 (2,050)
Clutch disc	Facing material		Woven (Non asbestos)
	O.D. × I.D. × thickness	mm (in)	Flywheel side: 240 × 160 × 3.2 (9.45 × 6.30 × 0.126) Clutch cover side: 240 × 160 × 3.5 (9.45 × 6.30 × 0.138)
	Spline O.D.	mm (in)	25.2 (0.992), (No. of teeth: 24)
Clutch release lever ratio			1.7
Release bearing			Grease-packed self-aligning
Clutch pedal	Full stroke	mm (in)	130 — 135 (5.12 — 5.31)
	Free play	mm (in)	3 — 13 (0.12 — 0.51)
Release lever	Stroke	mm (in)	13.3 — 14.7 (0.524 — 0.579)
	Play at release lever center	mm (in)	—
Clutch disc	Depth of rivet head mm (in)	Standard	Flywheel side: 1.35 — 1.95 (0.053 — 0.077) Clutch cover side: 1.65 — 2.25 (0.065 — 0.089)
		Limit of sinking	0.3 (0.012)
	Limit for deflection	mm (in)	0.7 (0.028) at R = 115 (4.53)

I.D.: Inner diameter O.D.: Outer diameter

## B: COMPONENT

### 1. CLUTCH ASSEMBLY

#### • NON-TURBO MODEL



- |                                  |                            |
|----------------------------------|----------------------------|
| (1) Clutch release lever sealing | (6) Clutch release bearing |
| (2) Retainer spring              | (7) Clutch cover           |
| (3) Pivot                        | (8) Clutch disc            |
| (4) Clutch release lever         | (9) Flywheel               |
| (5) Clip                         |                            |

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

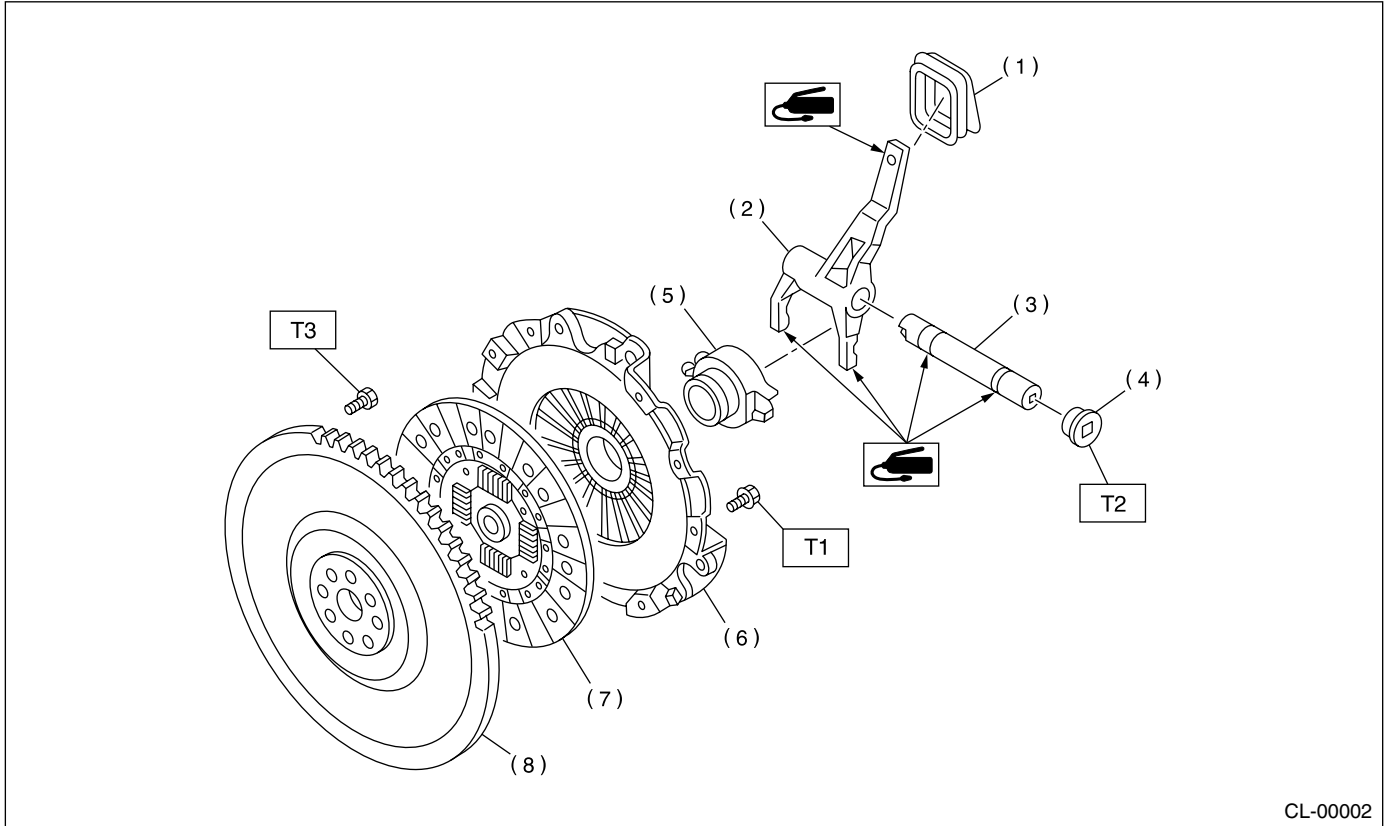
**T1: 16 (1.6, 11.8)**

**T2: 72 (7.3, 52.8)**

# GENERAL DESCRIPTION

## CLUTCH SYSTEM

### • TURBO MODEL



CL-00002

- |                                  |                            |
|----------------------------------|----------------------------|
| (1) Clutch release lever sealing | (5) Clutch release bearing |
| (2) Clutch release lever         | (6) Clutch cover           |
| (3) Clutch release lever shaft   | (7) Clutch disc            |
| (4) Plug                         | (8) Flywheel               |

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

**T1: 16 (1.6, 11.8)**

**T2: 44 (4.5, 32.5)**

**T3: Except STi model**

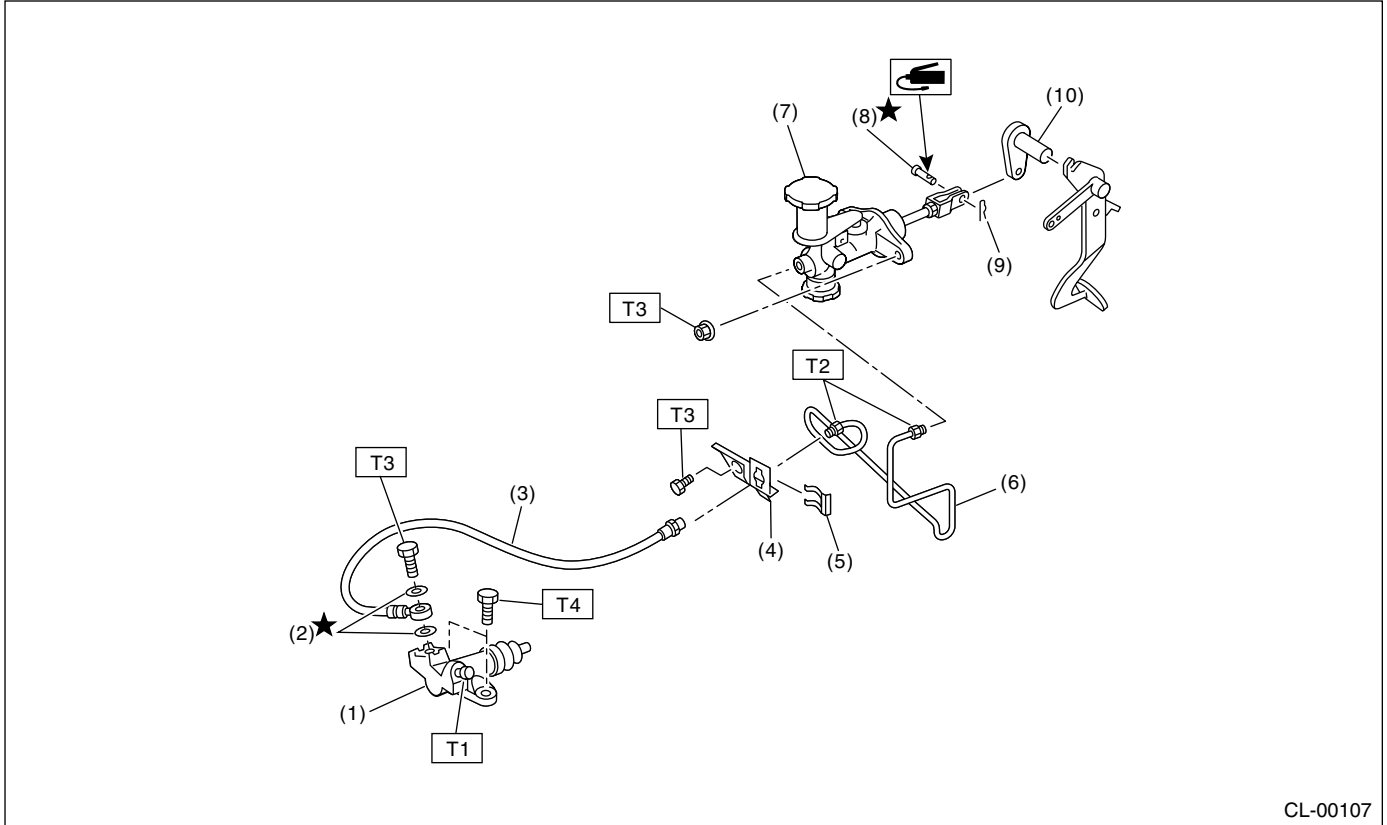
**72 (7.3, 52.8)**

**STi model**

**75 (7.6, 55.3)**

### 2. CLUTCH PIPE AND HOSE

#### • NON-TURBO MODEL



CL-00107

- |                        |                          |
|------------------------|--------------------------|
| (1) Operating cylinder | (6) Pipe                 |
| (2) Washer             | (7) Master cylinder ASSY |
| (3) Clutch hose        | (8) Clevis pin           |
| (4) Bracket            | (9) Snap pin             |
| (5) Clip               | (10) Lever               |

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

**T1: 8 (0.8, 5.8)**

**T2: 15 (1.5, 10.8)**

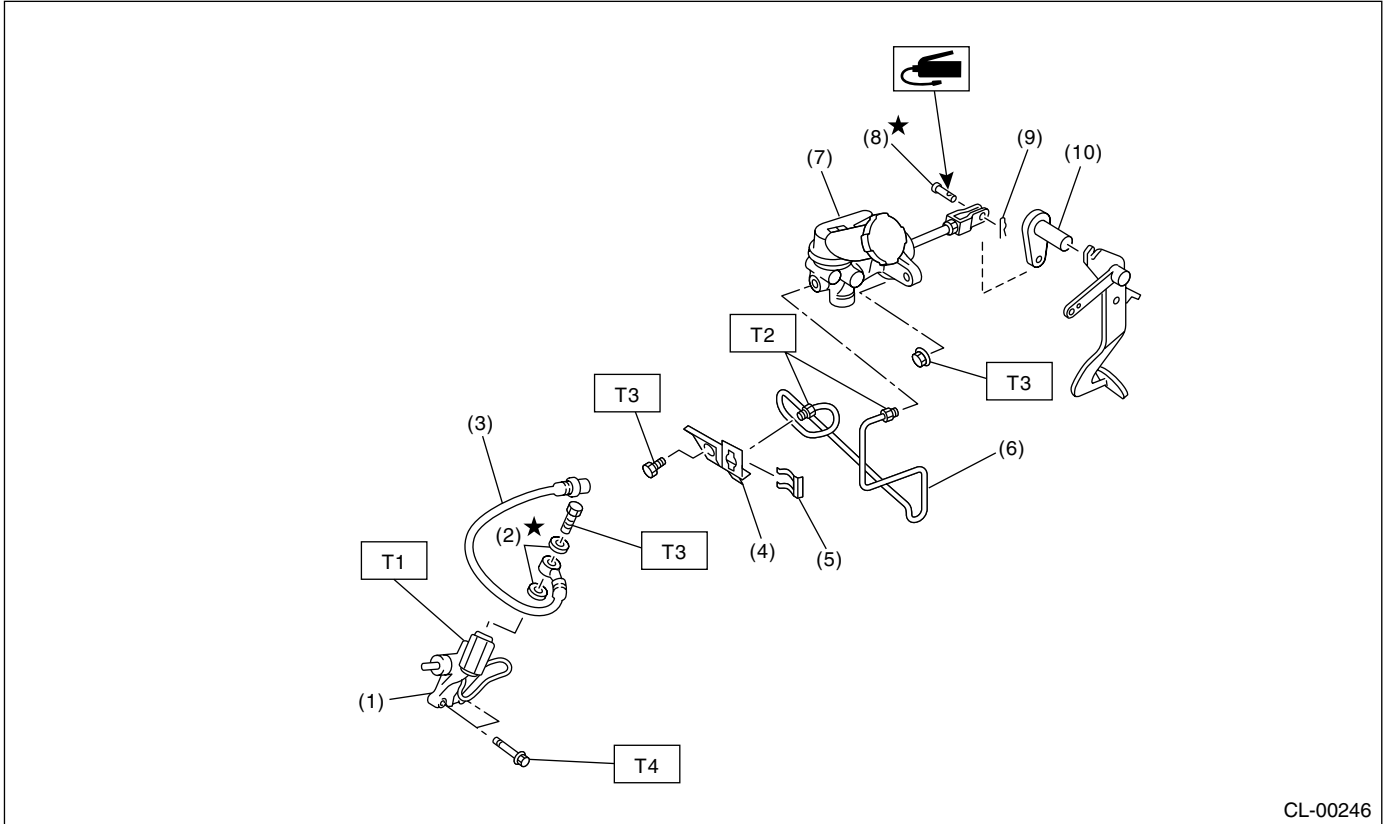
**T3: 18 (1.8, 13.0)**

**T4: 37 (3.8, 27.5)**

# GENERAL DESCRIPTION

## CLUTCH SYSTEM

### • TURBO MODEL



CL-00246

- |                        |                          |
|------------------------|--------------------------|
| (1) Operating cylinder | (6) Pipe                 |
| (2) Washer             | (7) Master cylinder ASSY |
| (3) Clutch hose        | (8) Clevis pin           |
| (4) Bracket            | (9) Snap pin             |
| (5) Clip               | (10) Lever               |

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

**T1: 8 (0.8, 5.8)**

**T2: 15 (1.5, 10.8)**

**T3: 18 (1.8, 13.0)**

**T4: Except STi model**

**37 (3.8, 27.5)**

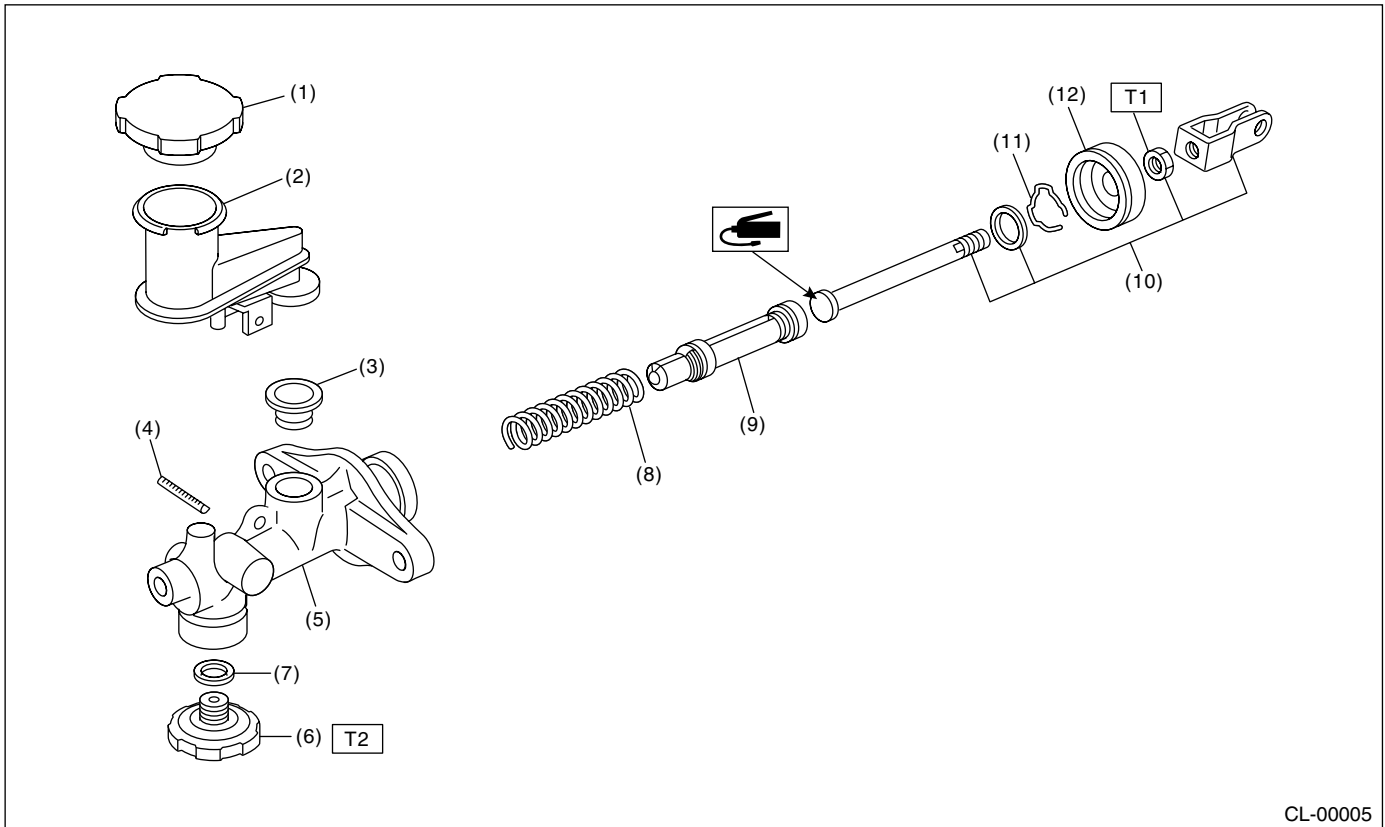
**STi model**

**41 (4.2, 30.2)**

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### 3. MASTER CYLINDER

#### • NON-TURBO MODEL



CL-00005

- |                     |                       |
|---------------------|-----------------------|
| (1) Reservoir cap   | (7) Gasket            |
| (2) Reservoir tank  | (8) Return spring     |
| (3) Oil seal        | (9) Piston            |
| (4) Straight pin    | (10) Push rod         |
| (5) Master cylinder | (11) Piston stop ring |
| (6) Clutch damper   | (12) Cylinder boot    |

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

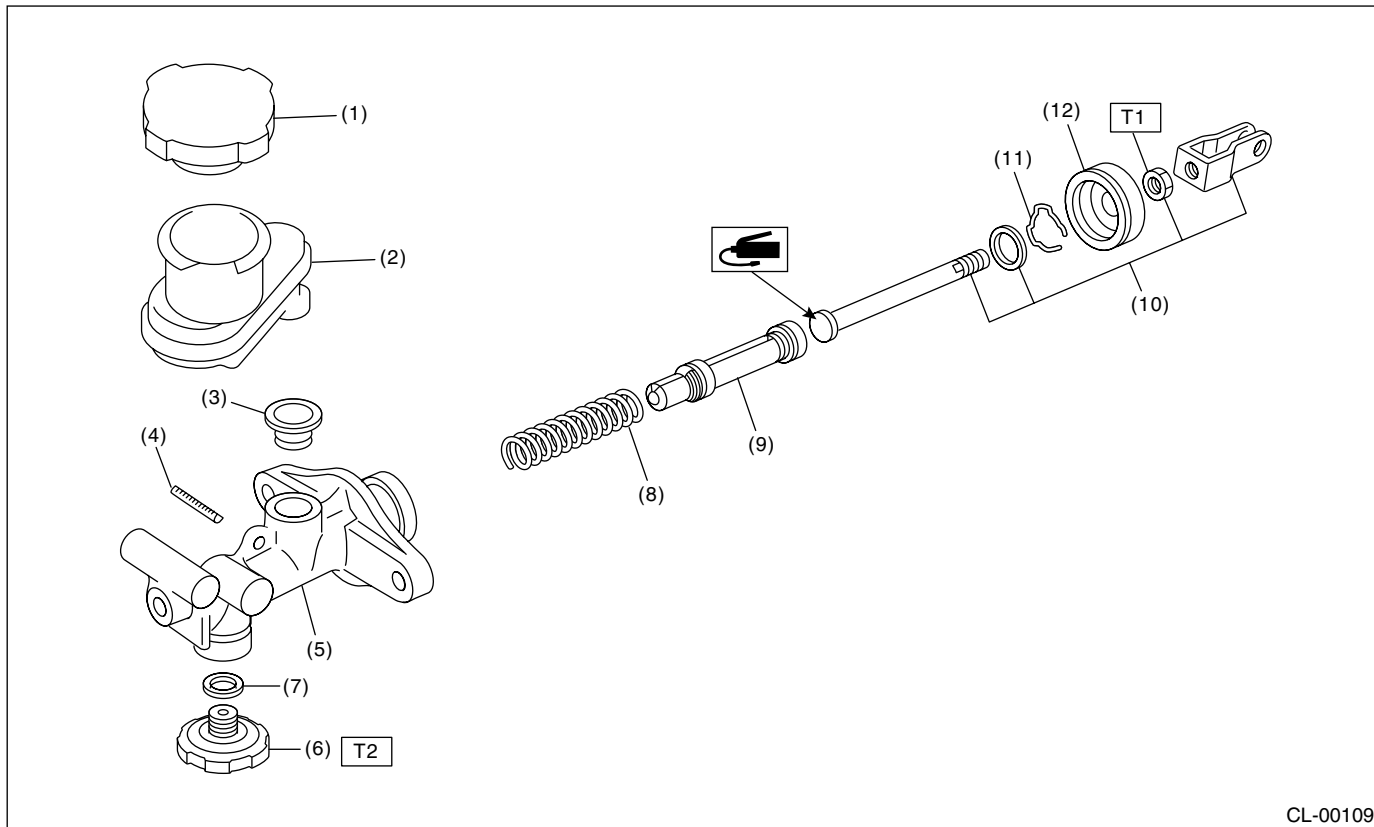
**T1: 10 (1.0, 7)**

**T2: 46.6 (4.75, 34.4)**

# GENERAL DESCRIPTION

## CLUTCH SYSTEM

### • TURBO MODEL



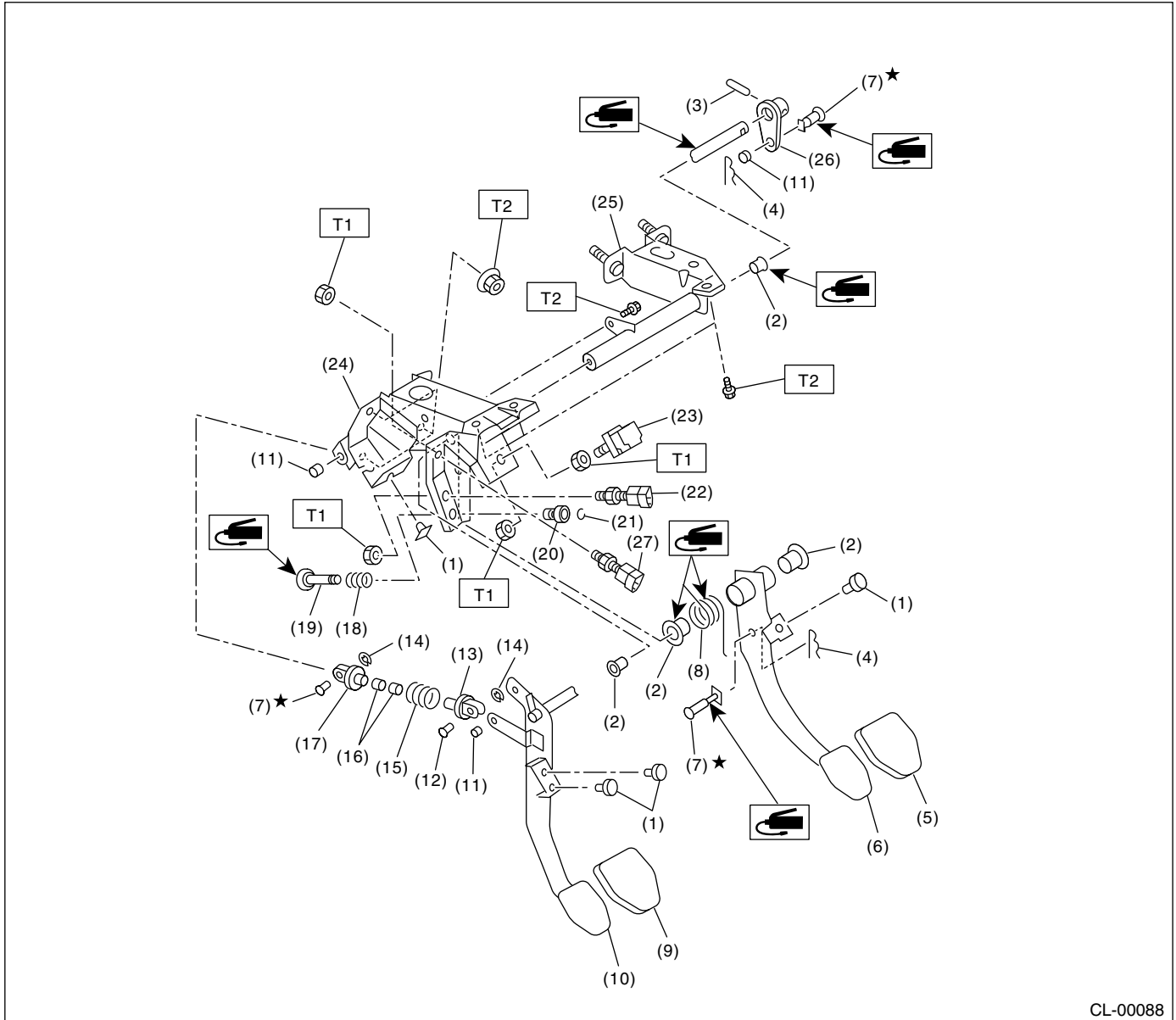
- |                     |                       |
|---------------------|-----------------------|
| (1) Reservoir cap   | (7) Gasket            |
| (2) Reservoir tank  | (8) Return spring     |
| (3) Oil seal        | (9) Piston            |
| (4) Straight pin    | (10) Push rod         |
| (5) Master cylinder | (11) Piston stop ring |
| (6) Clutch damper   | (12) Cylinder boot    |

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

**T1: 10 (1.0, 7)**

**T2: 46.6 (4.75, 34.4)**

### 4. CLUTCH PEDAL



CL-00088

- |                        |                                     |  |
|------------------------|-------------------------------------|--|
| (1) Stopper            | (12) Clutch clevis pin              | (23) Stop light switch                 |
| (2) Bushing            | (13) Assist rod A                   | (24) Pedal bracket                     |
| (3) Spring pin         | (14) Clip                           | (25) Clutch master cylinder bracket    |
| (4) Snap pin           | (15) Assist spring                  | (26) Lever                             |
| (5) Brake pedal pad    | (16) Assist bushing                 | (27) Clutch switch (Starter interlock) |
| (6) Brake pedal        | (17) Assist rod B                   |  |
| (7) Clevis pin         | (18) Spring S                       |  |
| (8) Brake pedal spring | (19) Rod S                          |  |
| (9) Clutch pedal pad   | (20) Bushing S                      |  |
| (10) Clutch pedal      | (21) Clip                           |  |
| (11) Bushing C         | (22) Clutch switch (Cruise control) |  |

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

**T1: 8 (0.8, 5.8)**

**T2: 18 (1.8, 13.0)**



# GENERAL DESCRIPTION

## CLUTCH SYSTEM

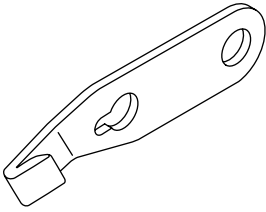
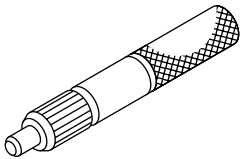
### C: CAUTION

- 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 on the vehicle is hot after running.
- Use Subaru genuine fluid, grease etc. or the equivalent. Do not mix fluid, grease etc. with that of another grade or from other manufacturers.

- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or safety stands at the specified points.
- Apply grease onto sliding or revolution surfaces before installation.
- Before installing O-rings or snap rings, apply sufficient amount of fluid to avoid damage and deformation.
- Before securing a part on a vise, place cushioning material such as wood blocks, aluminum plate, or shop cloth between the part and the vise.
- Keep fluid away from the vehicle body. If any fluid contacts the vehicle body, immediately flush the area with water.

### D: PREPARATION TOOL

#### 1. SPECIAL TOOLS

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
  ST-498497100	498497100	CRANKSHAFT STOPPER	Used for stopping rotation of flywheel when loosening tightening bolt, etc.
  ST-499747100	499747100	CLUTCH DISC GUIDE	Used when installing clutch disc to flywheel.

#### 2. GENERAL PURPOSE TOOLS

TOOL NAME	REMARKS
Circuit Tester	Used for measuring resistance, voltage and ampere.
Dial Gauge	Used for measuring clutch disk run-out.