

General Description

CLUTCH SYSTEM

1. General Description

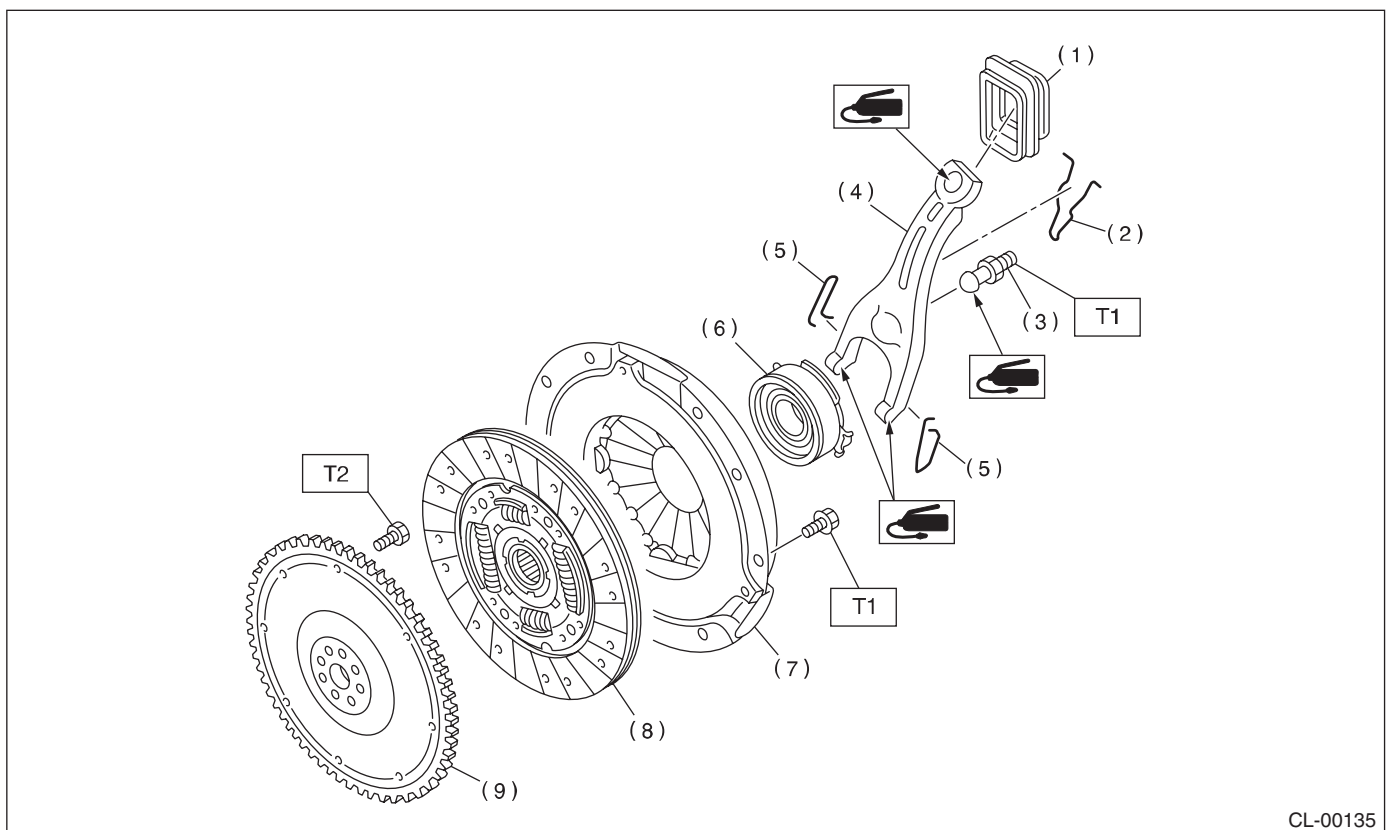
A: SPECIFICATION

| Model | | 2.5 L Non-turbo | 2.5 L Turbo | | |
|----------------------------|-------------------------|-------------------------------|--------------------------------------|--------------------------------------|--|
| Clutch cover | Diaphragm set load | N (kgf, lbf) | 5688 (580, 1,279) | 8150 (831, 1,832) | |
| Clutch disc | Facing material | Woven | | | |
| | O.D. × I.D. × thickness | mm (in) | 225 × 150 × 3.5 (8.86 × 5.91 × 0.14) | 240 × 155 × 3.2 (9.45 × 6.10 × 0.13) | |
| | Spline outer diameter | mm (in) | 25.2 (0.992) | | |
| | Depth of rivet head | mm (in) | Standard | 1.3 — 1.9 (0.051 — 0.075) | |
| | | | Limit of sinking | 0.3 (0.012) | |
| Deflection limit | mm (in) | 0.7 (0.027) at R = 110 (4.33) | 1.0 (0.039) 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 — 13 (0.16 — 0.51) | | |
| Flywheel | Type | Conventional | Dual mass | | |

B: COMPONENT

1. CLUTCH ASSEMBLY

- Non-turbo model



CL-00135

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

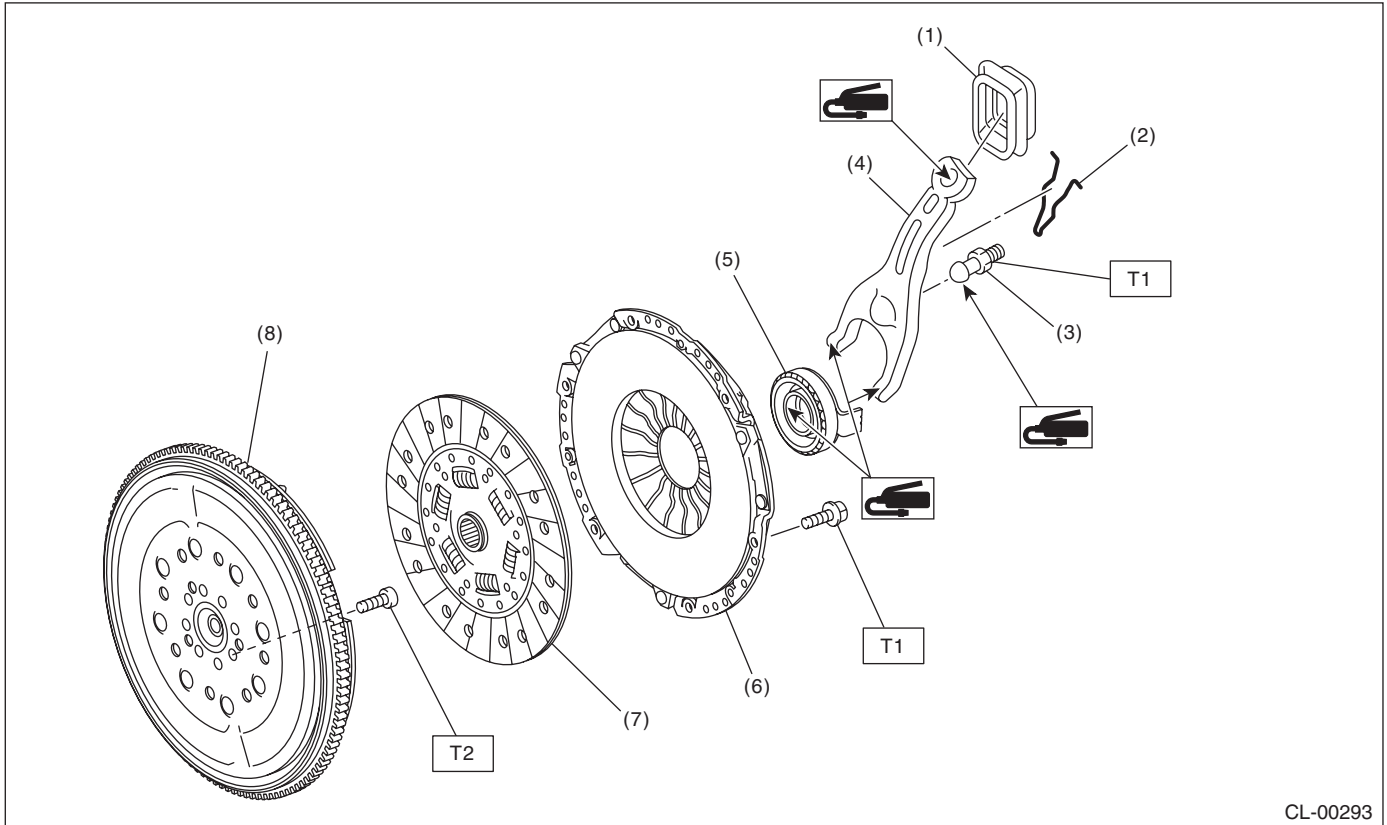
Tightening torque: N·m (kgf·m, ft·lb)

T1: 16 (1.6, 11.8)

T2: 72 (7.3, 52.8)

General Description

- Turbo model



CL-00293

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

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

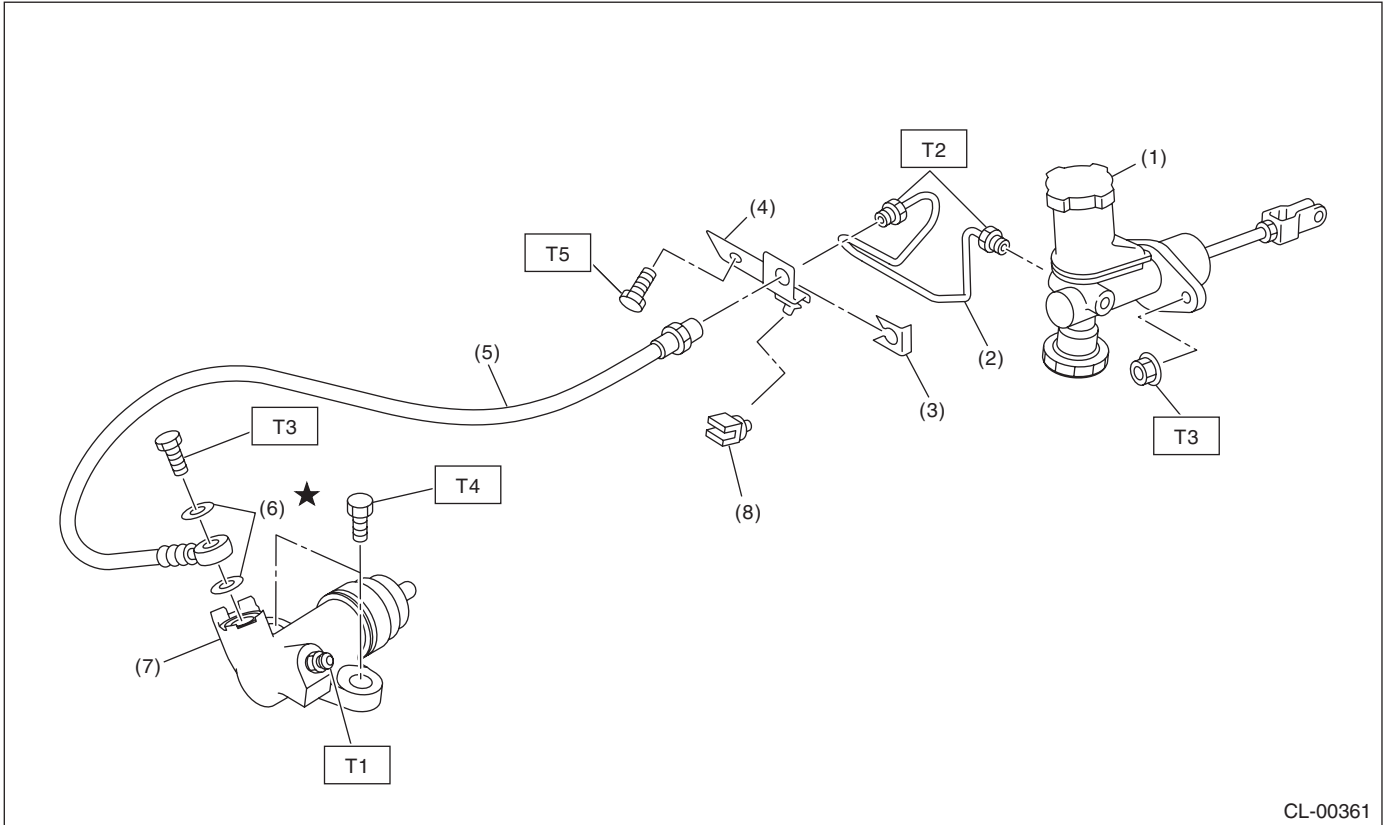
T1: 16 (1.6, 11.8)

T2: 72 (7.3, 52.8)

General Description

CLUTCH SYSTEM

2. CLUTCH PIPE AND HOSE

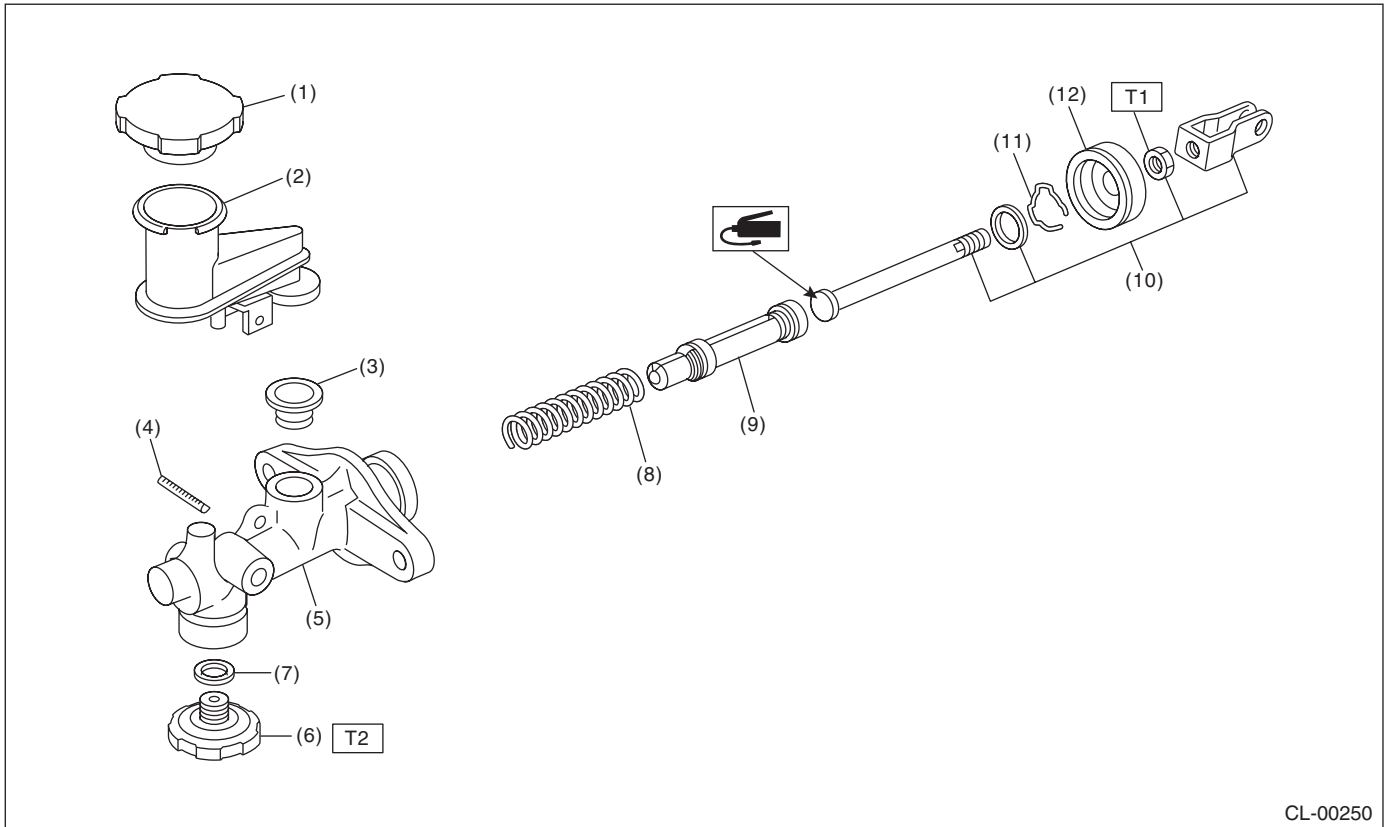


- | | |
|--------------------------|------------------------|
| (1) Master cylinder ASSY | (5) Clutch hose |
| (2) Clutch pipe | (6) Washer |
| (3) Clamp | (7) Operating cylinder |
| (4) Bracket | (8) Clip |

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)
T5: 25 (2.5, 18.4)

3. MASTER CYLINDER



CL-00250

- (1) Reservoir cap
- (2) Reservoir tank
- (3) Oil seal
- (4) Straight pin
- (5) Master cylinder
- (6) Clutch damper

- (7) Gasket
- (8) Return spring
- (9) Piston
- (10) Push rod ASSY
- (11) Piston stop ring

- (12) Cylinder boot

Tightening torque: N·m (kgf·m, ft·lb)

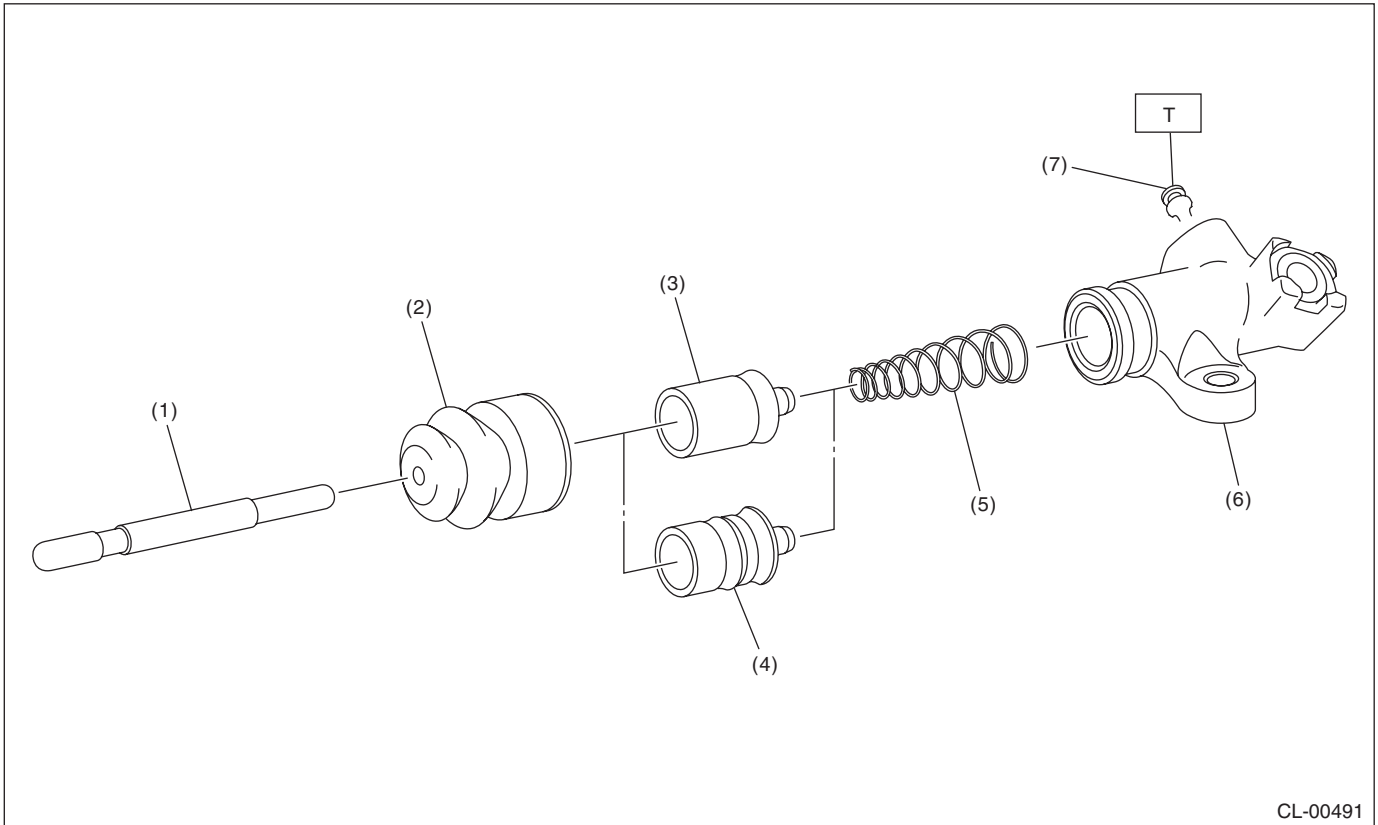
T1: 10 (1.0, 7)

T2: 46.6 (4.75, 34.4)

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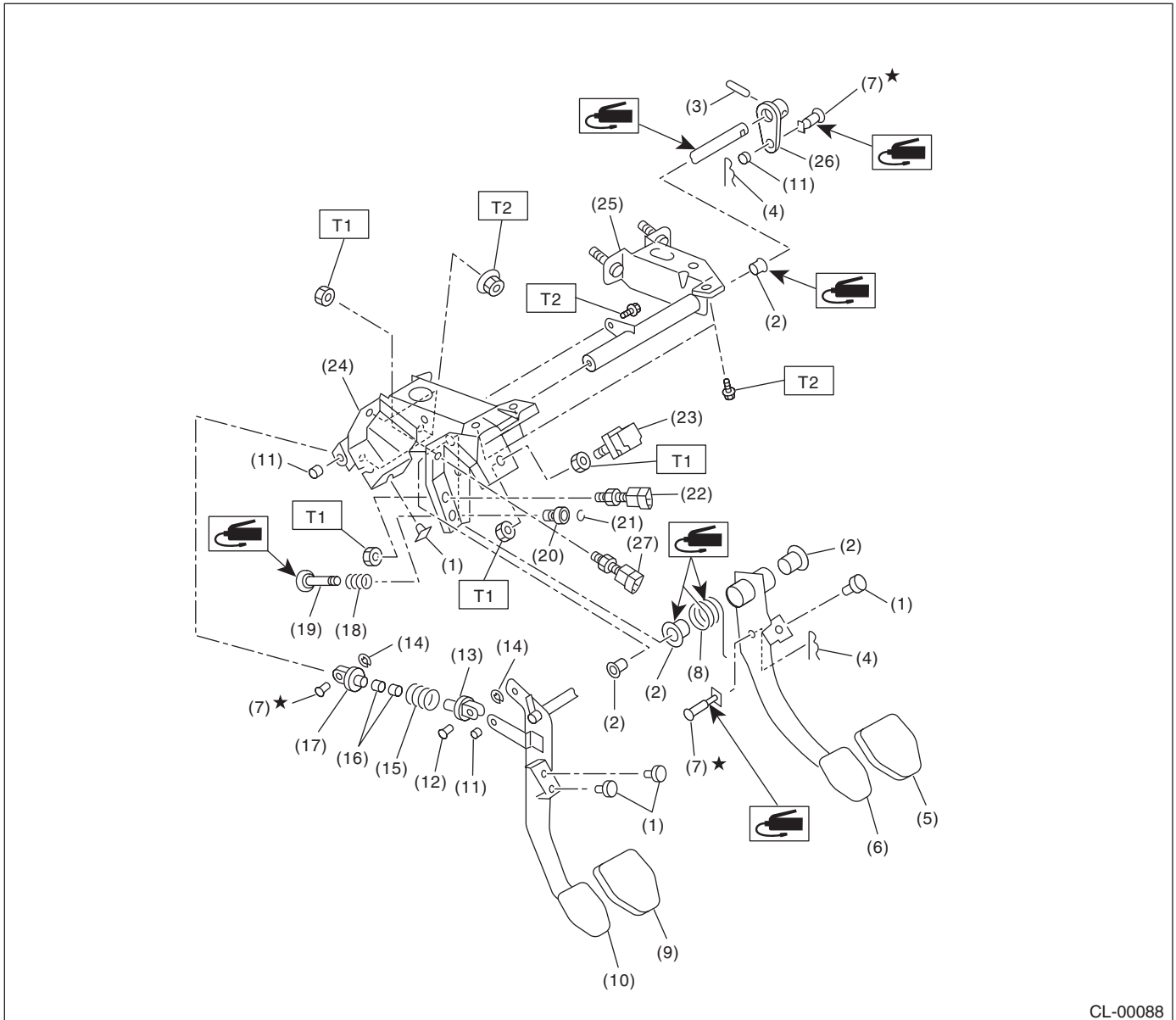
4. OPERATING CYLINDER



- | | |
|------------------------------|------------------------|
| (1) Push rod | (5) Piston spring |
| (2) Boot | (6) Operating cylinder |
| (3) Piston (Non-turbo model) | (7) Bleeder screw |
| (4) Piston (Turbo model) | |

Tightening torque: N·m (kgf·m, ft·lb)
T: 8 (0.8, 5.8)

5. CLUTCH PEDAL



CL-00088

- | | | |
|------------------------|------------------------|-------------------------------------|
| (1) Stopper | (12) Clutch clevis pin | (22) Clutch switch (Cruise control) |
| (2) Bushing | (13) Assist rod A | (23) Stop light switch |
| (3) Spring pin | (14) Clip | (24) Pedal bracket |
| (4) Snap pin | (15) Assist spring | (25) Clutch master cylinder bracket |
| (5) Brake pedal pad | (16) Assist bushing | (26) Lever |
| (6) Brake pedal | (17) Assist rod B | (27) Clutch switch (Clutch start) |
| (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 | | |

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

T1: 8 (0.8, 5.8)

T2: 18 (1.8, 13.0)

General Description

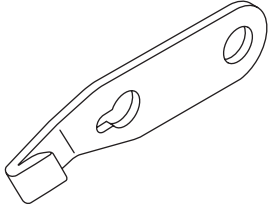
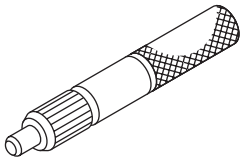
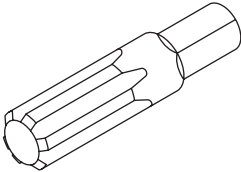
CLUTCH SYSTEM

C: CAUTION

- Wear 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 fluid 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 when loosening/tightening bolts, etc. |
|  ST-499747100 | 499747100 | CLUTCH DISC GUIDE | Used for installing the clutch disc to the flywheel. |
|  ST-499057000 | 499057000 | TORX [®] PLUS | Used for removing the flywheel (dual mass fly-wheel type). |

2. GENERAL TOOL

| TOOL NAME | REMARKS |
|----------------|--|
| Circuit tester | Used for measuring resistance, voltage and ampere. |
| Dial gauge | Used for measuring clutch disc run-out. |
| Depth gauge | Used for measuring clutch disc wear. |