

# General Description

## CLUTCH SYSTEM

### 1. General Description

#### A: SPECIFICATION

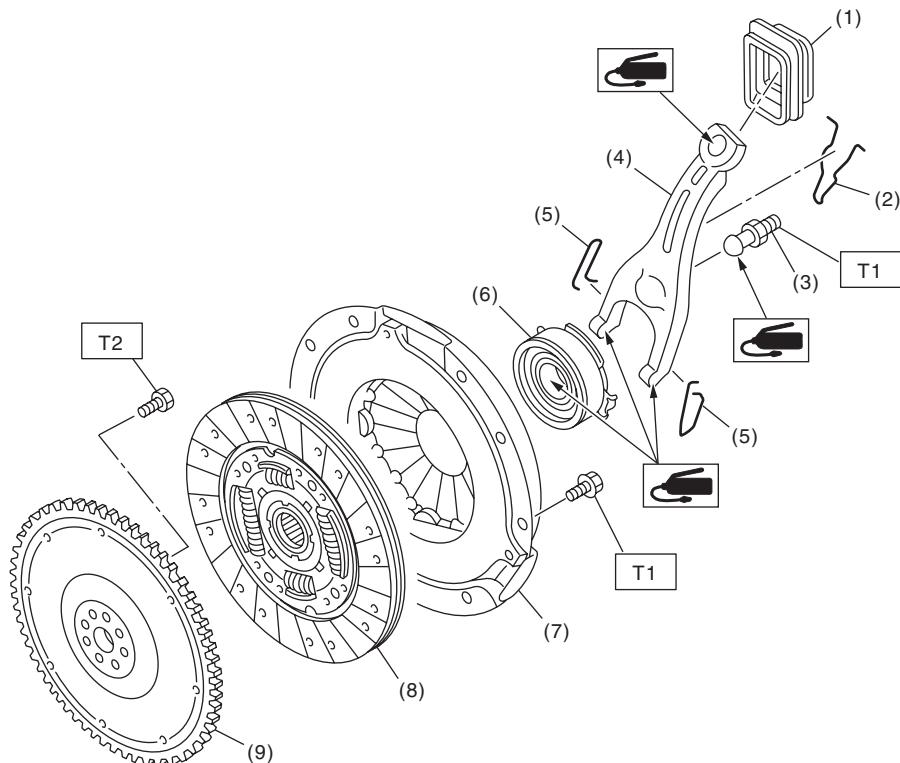
Model		2.5 L non-turbo	2.5 L Turbo
Transmission type		5MT	
Clutch cover	Type	Push type	
	Diaphragm set load N (kgf, lbf)	5,688 (580, 1,279)	7,850 (800, 1,764)
Facing material		Woven	
O.D. × I.D. × thickness mm (in)		225 × 150 × 3.5 (8.86 × 5.91 × 0.138)	230 × 155 × 3.2 (9.06 × 6.10 × 0.126)
Clutch disc	Spline outer diameter mm (in)	25.2 (0.992)	
	Depth of rivet head mm (in)	Standard value	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)	135 — 140 (5.31 — 5.51)
	Free play mm (in)	4 — 13 (0.16 — 0.51)	
Flywheel	Type	Flexible	

Model		2.5 L Turbo
Transmission type		6MT
Clutch cover	Type	Pull type
	Diaphragm set load N (kgf, lbf)	7,160 (730, 1,610)
Facing material		Woven
Clutch disc	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 outer diameter mm (in)		25.2 (0.992)
Clutch disc	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 0.3 (0.012)
Deflection limit mm (in)		1.0 (0.039) at R = 110 (4.33)
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)	4 — 13 (0.16 — 0.51)
Flywheel	Type	Conventional

## B: COMPONENT

### 1. CLUTCH ASSEMBLY

- 5MT non-turbo model



CL-00496

(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)***

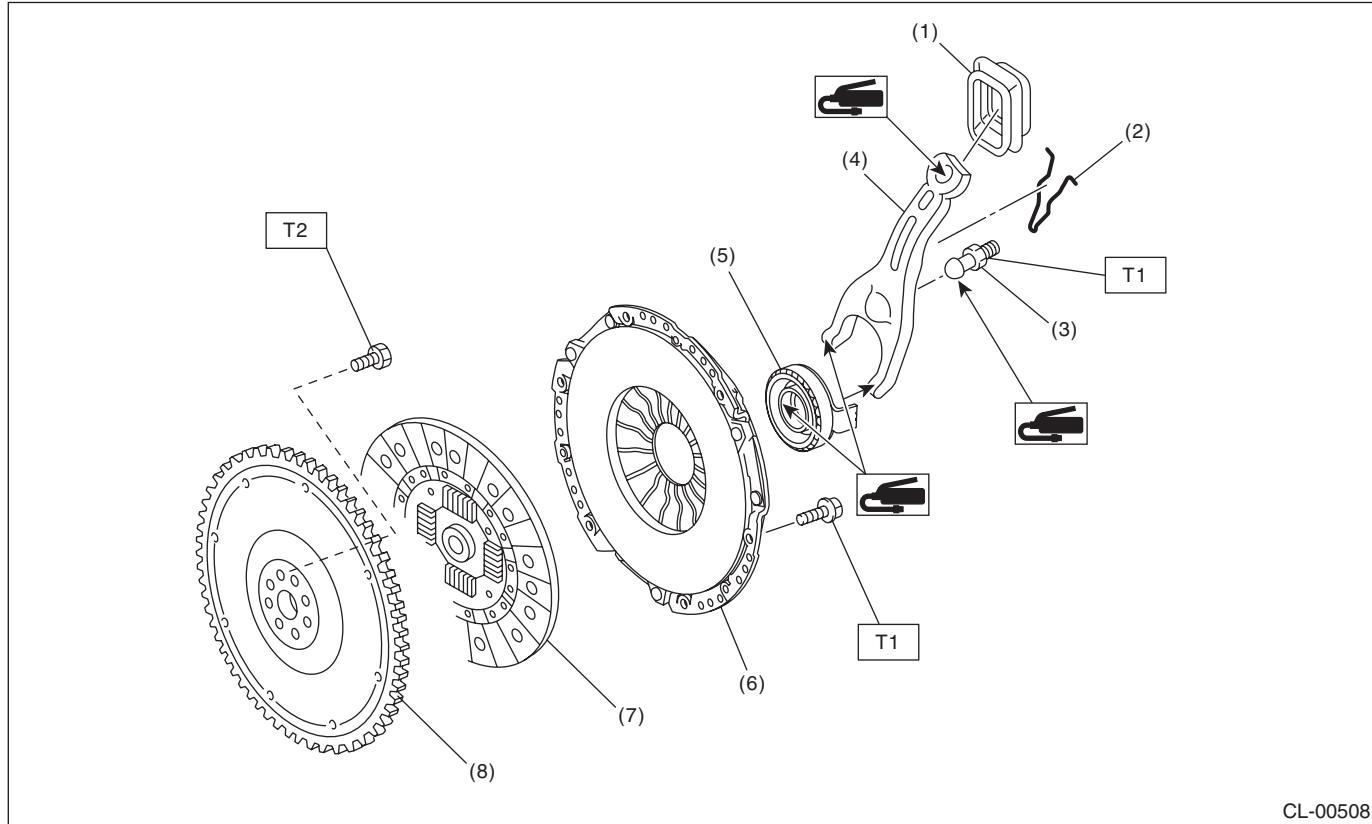
**T1: 16 (1.6, 11.8)**

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

# General Description

## CLUTCH SYSTEM

- 5MT turbo model



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

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

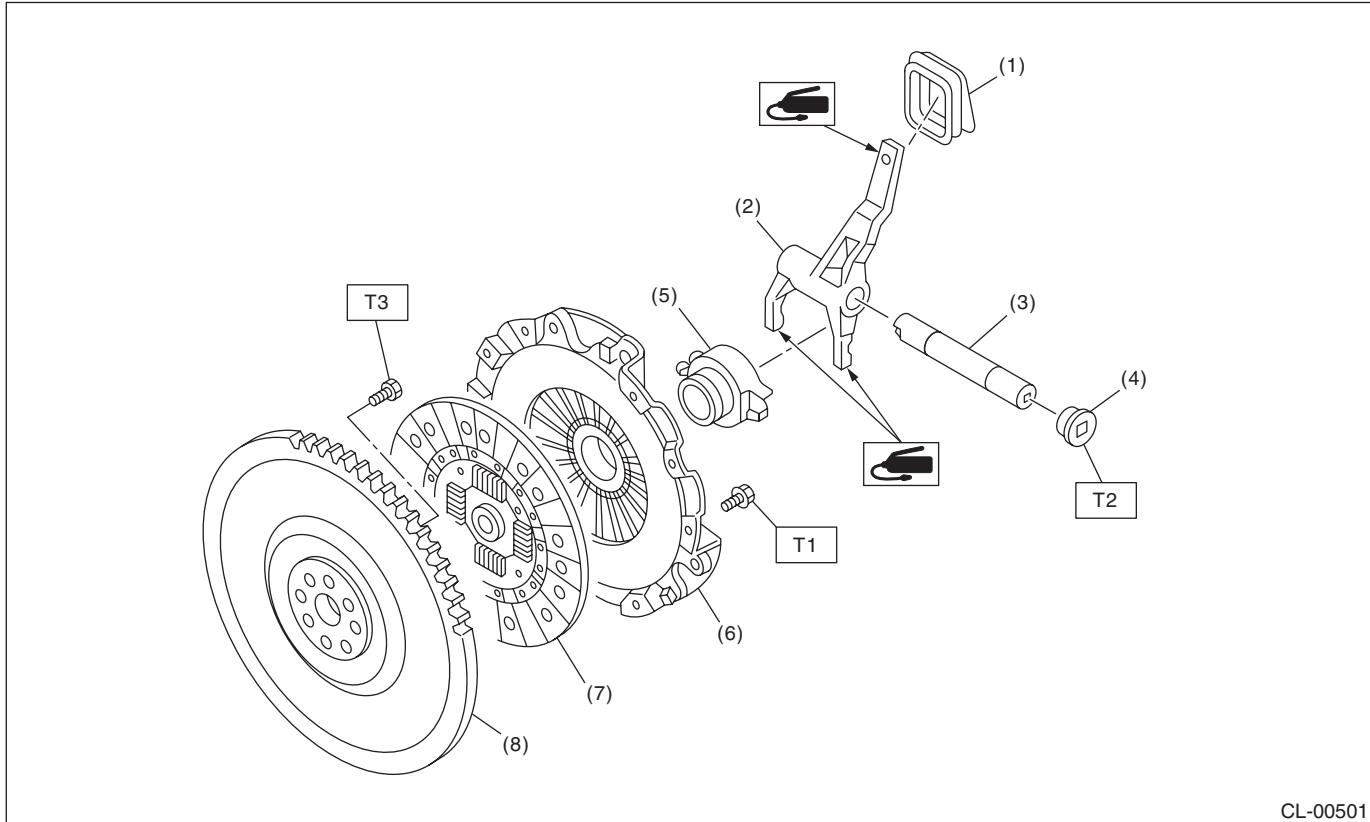
**T1: 16 (1.6, 11.8)**

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

# General Description

## CLUTCH SYSTEM

- 6MT model



(1) Dust cover	(5) Release bearing
(2) Release lever	(6) Clutch cover
(3) Release shaft	(7) Clutch disc
(4) Plug	(8) Conventional flywheel

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

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

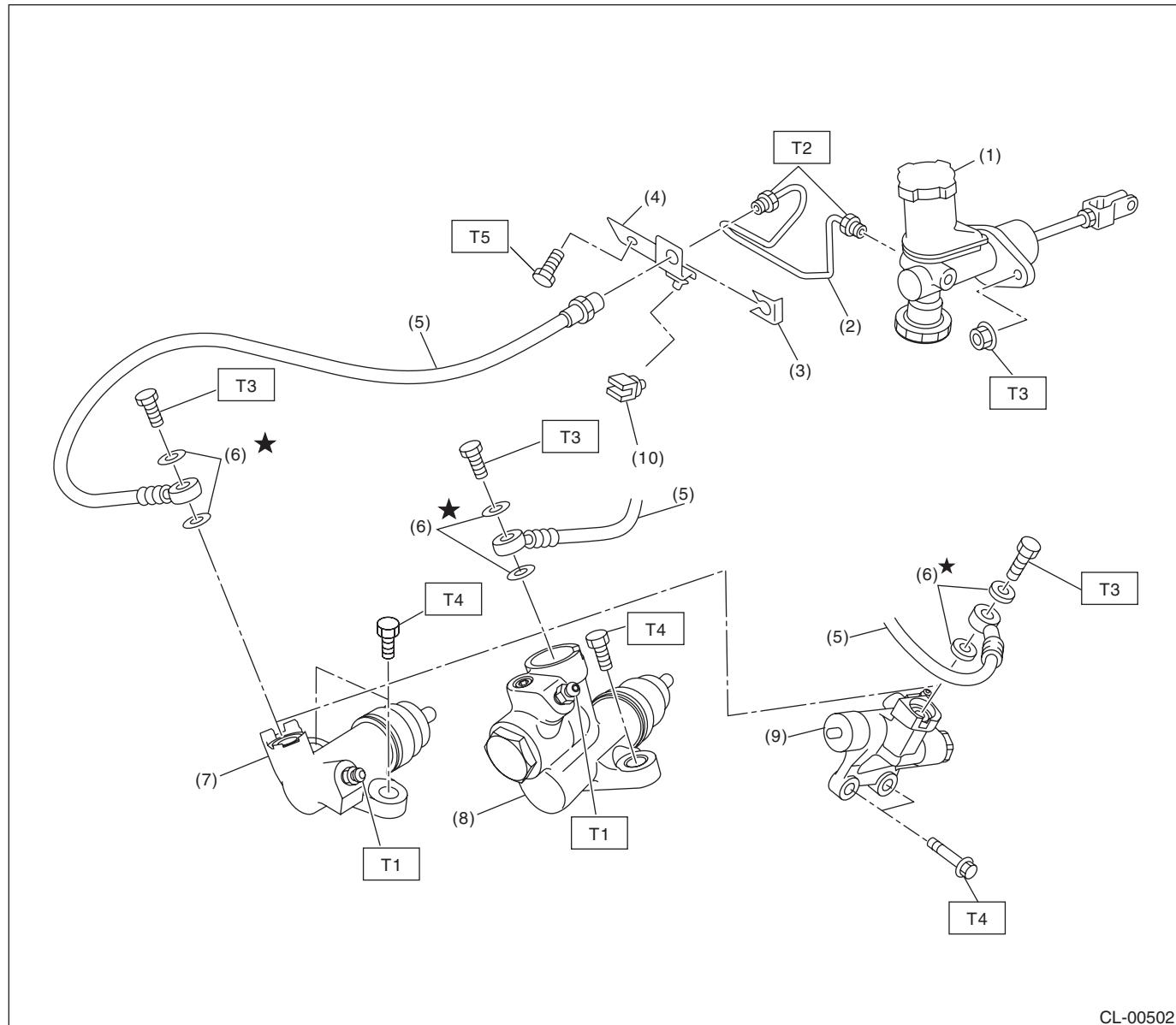
**T2: 44 (4.5, 32.5)**

**T3: 81 (8.2, 59.4)**

# General Description

## CLUTCH SYSTEM

### 2. CLUTCH PIPE AND HOSE



CL-00502

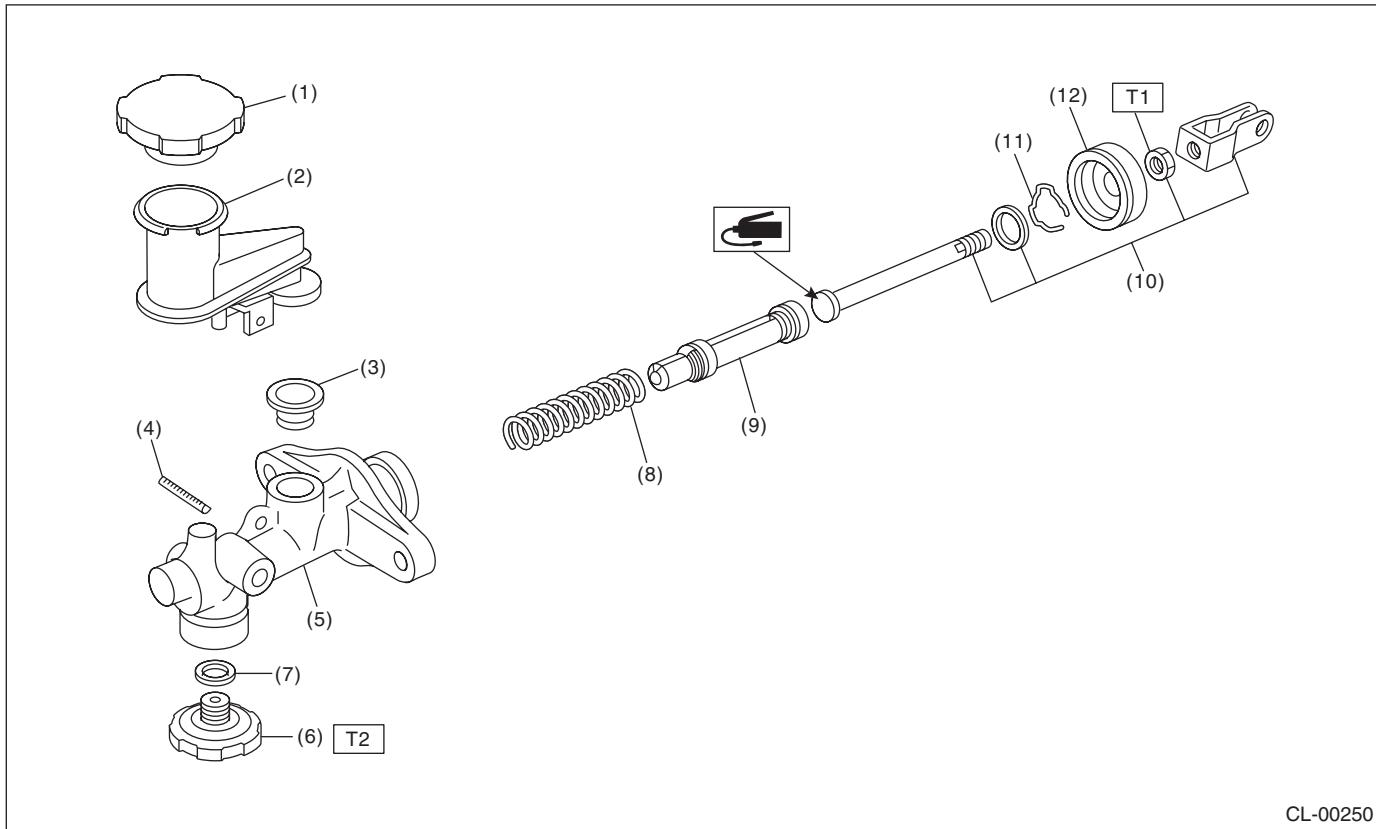
- (1) Master cylinder ASSY
- (2) Clutch pipe
- (3) Clamp
- (4) Bracket
- (5) Clutch hose
- (6) Washer
- (7) Operating cylinder  
(5MT non-turbo model)

- (8) Operating cylinder  
(5MT turbo model)
- (9) Operating cylinder  
(6MT turbo model)
- (10) 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	(7) Gasket
(2) Reservoir tank	(8) Return spring
(3) Oil seal	(9) Piston
(4) Straight pin	(10) Push rod ASSY
(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)**

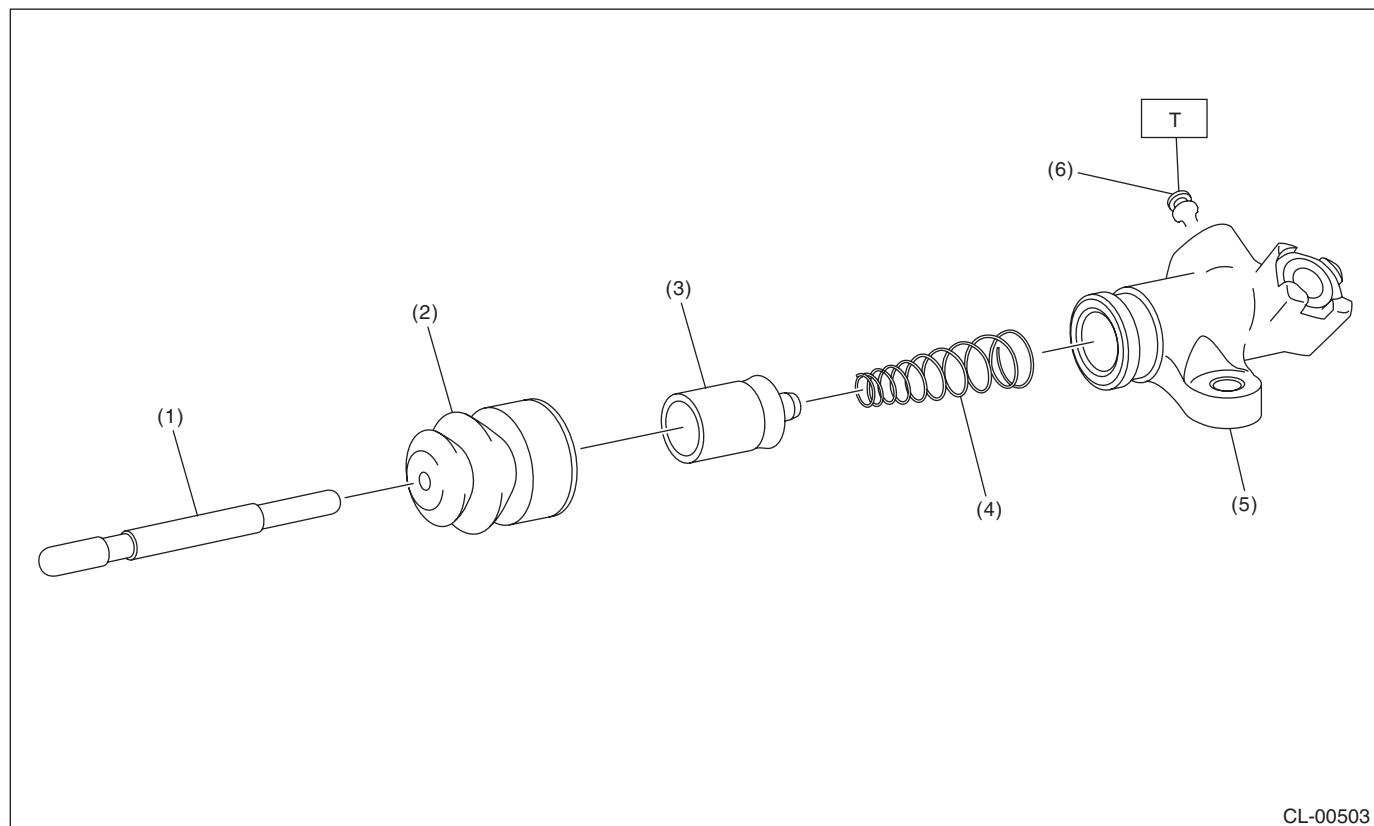
**T2: 46.6 (4.75, 34.4)**

# General Description

## CLUTCH SYSTEM

### 4. OPERATING CYLINDER

- 5MT non-turbo model



CL-00503

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

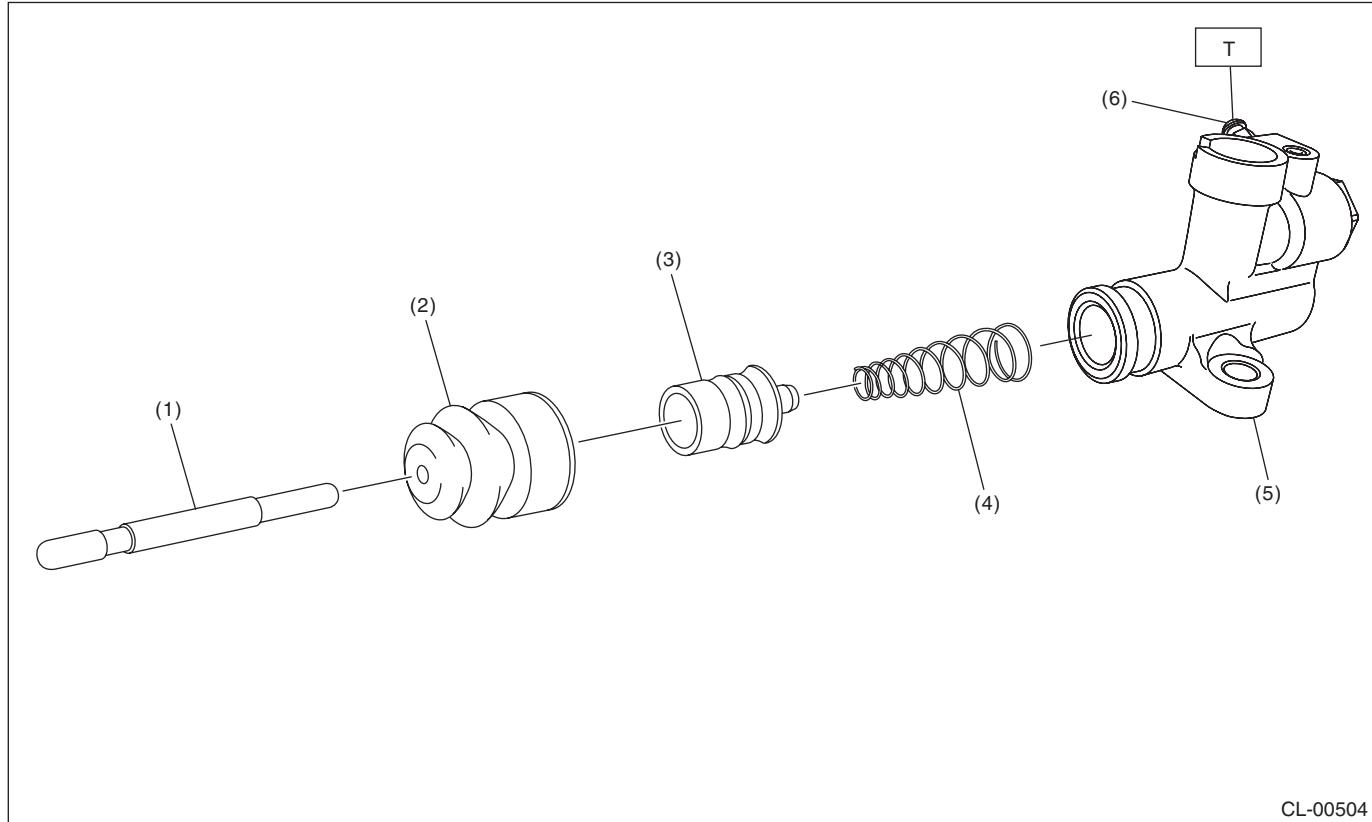
***Tightening torque:N·m (kgf·m, ft-lb)***

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

# General Description

## CLUTCH SYSTEM

- 5MT turbo model



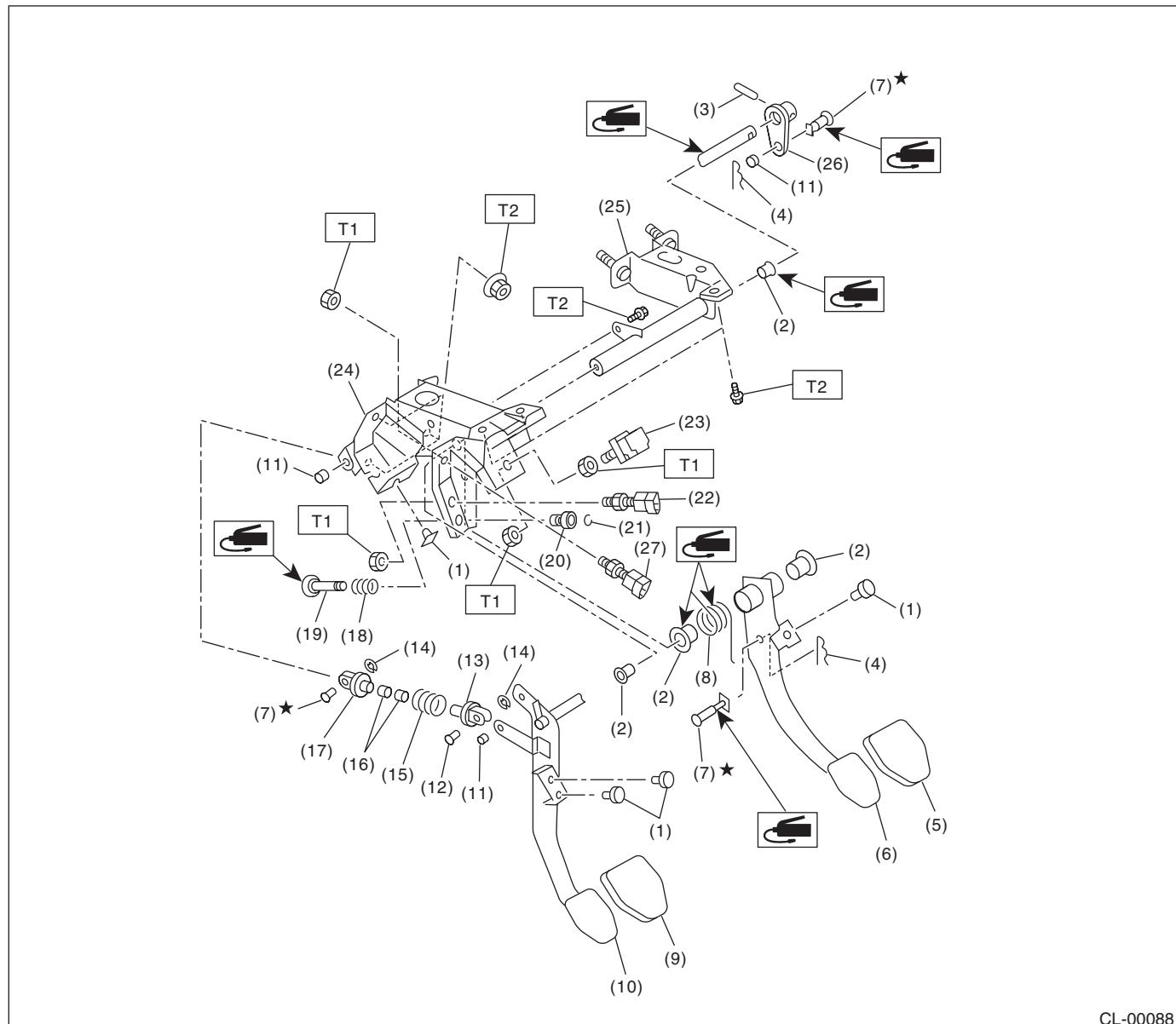
(1) Push rod	(4) Piston spring
(2) Boot	(5) Operating cylinder
(3) Piston	(6) Bleeder screw

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

# General Description

## CLUTCH SYSTEM

### 5. 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 (Clutch start)
(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)***

## C: CAUTION

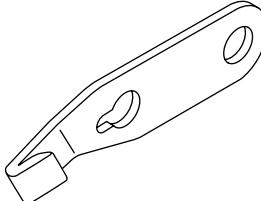
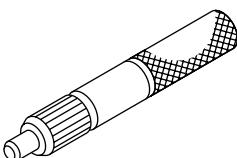
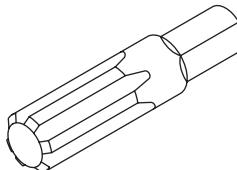
- Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust and dirt.
- Before removal, 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.

# General Description

## CLUTCH SYSTEM

### 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 flywheel 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.