

### 5. Operating Cylinder

#### A: REMOVAL

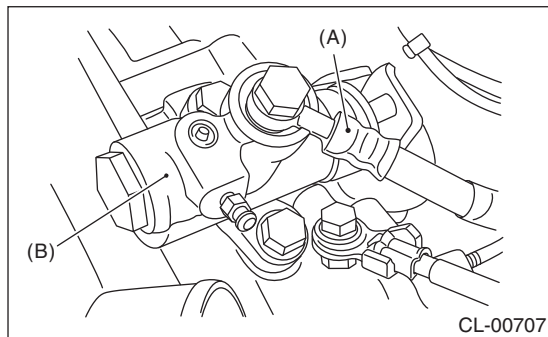
##### NOTE:

The illustration shows a representing model. Perform the same procedures for the other models.

- 1) Remove the collector cover.
- 2) Remove the air intake boot assembly. (non-turbo model) <Ref. to IN(H4SO)-8, REMOVAL, Air Intake Boot.>
- 3) Remove the intercooler. (turbo model) <Ref. to IN(H4DOTC)-17, REMOVAL, Intercooler.>
- 4) Disconnect the clutch hose from the operating cylinder.

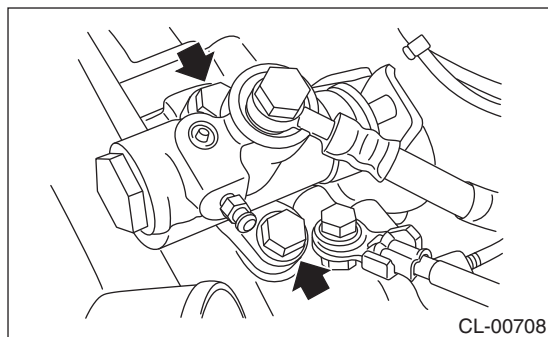
##### CAUTION:

- Cover the hose joint to prevent the clutch fluid from flowing out.
- Do not loosen or remove the cap bolts.



- (A) Clutch hose  
(B) Operating cylinder

- 5) Remove the operating cylinder from the transmission.



#### B: INSTALLATION

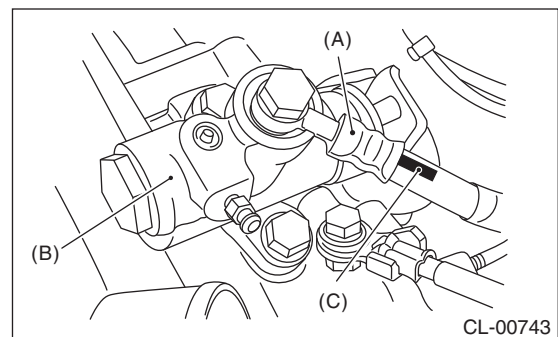
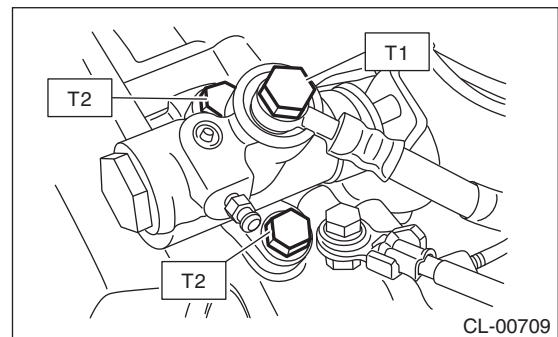
##### NOTE:

- The illustration shows a representing model. Perform the same procedures for the other models.
- Be sure to install the clutch hose with the mark side facing upward.
- Be careful not to twist the clutch hose during installation.
- Before installing the operating cylinder, apply grease (NICHIMOLY N-130) to the contact point of the release lever and operating cylinder.
- 1) Install in the reverse order of removal.

##### Tightening torque:

**T1: 18 N·m (1.8 kgf-m, 13.3 ft-lb)**

**T2: 37 N·m (3.8 kgf-m, 27.3 ft-lb)**



- (A) Clutch hose  
(B) Operating cylinder  
(C) Mark

- 2) After bleeding air from the operating cylinder, ensure that the clutch operates properly. <Ref. to CL-25, PROCEDURE, Clutch Fluid Air Bleeding.>
- 3) When the operating cylinder has been replaced or removed, perform the clutch sensor calibration mode. <Ref. to PB(diag)-19, CLUTCH SENSOR CALIBRATION MODE, OPERATION, Subaru Select Monitor.>

##### NOTE:

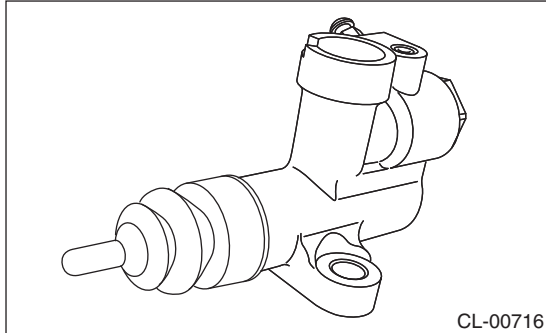
If necessary, perform the clutch meet position setting. <Ref. to PB(diag)-19, CLUTCH ENGAGEMENT POSITION SETTING, OPERATION, Subaru Select Monitor.>

### C: DISASSEMBLY

#### NOTE:

The illustration shows a representing model. Perform the same procedures for the other models.

1) Remove the boot and push rod.

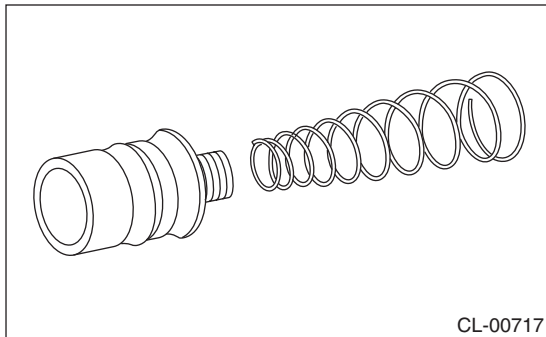


2) Apply compressed air through clutch hose attachment hole.

#### NOTE:

Face the piston hole down and place a piece of wood underneath to prevent the piston from popping out.

3) Separate the piston and piston spring.



### D: ASSEMBLY

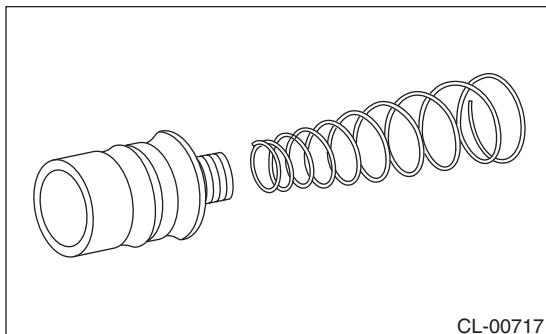
#### NOTE:

- The illustration shows a representing model. Perform the same procedures for the other models.
- During assembly, apply hydraulic oil to all parts.

#### **Recommended clutch fluid:**

**New FMVSS No. 116 DOT3**

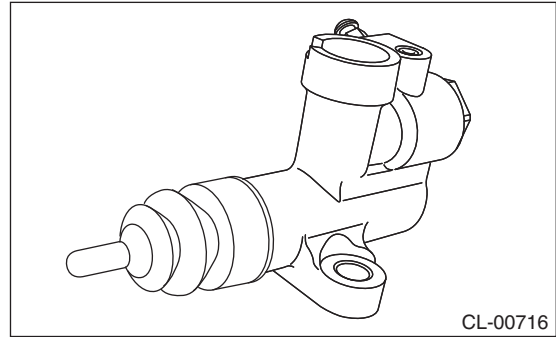
1) Install the piston spring onto the piston.



2) Insert piston to the operating cylinder.

3) Install push rod to the boot.

4) Install boot and push rod to the operating cylinder.



### E: INSPECTION

1) Check that the operating cylinder is not damaged. Replace the operating cylinder if it is damaged.

2) Check the clutch fluid leakage on the operating cylinder or the boot for damage. Replace the operating cylinder if clutch fluid leaks or boot damages are noted.