

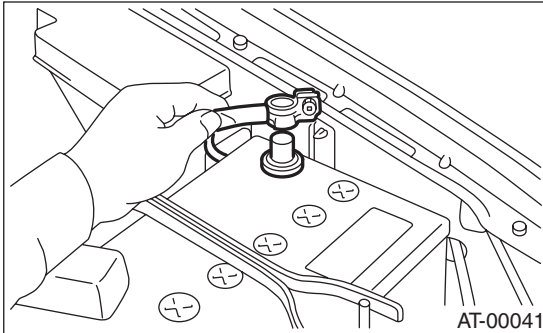
TRANSMISSION CONTROL MODULE (TCM)

AUTOMATIC TRANSMISSION

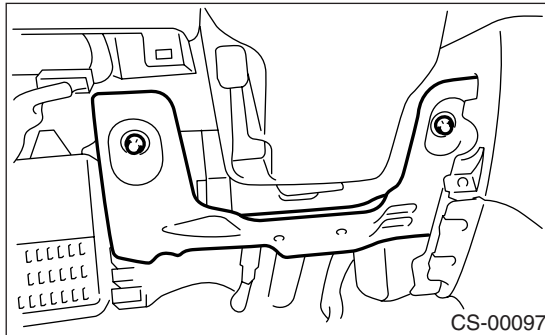
22. Transmission Control Module (TCM)

A: REMOVAL

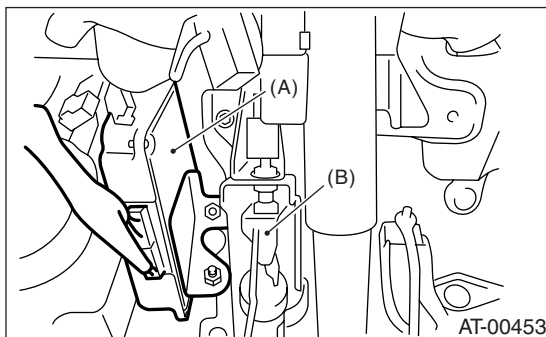
- 1) Disconnect the ground cable from battery.



- 2) Remove the lower cover and then disconnect the connector.
- 3) Remove the knee bolster.



- 4) Disconnect the connectors from TCM.



- (A) Transmission control module (TCM)
(B) Brake pedal

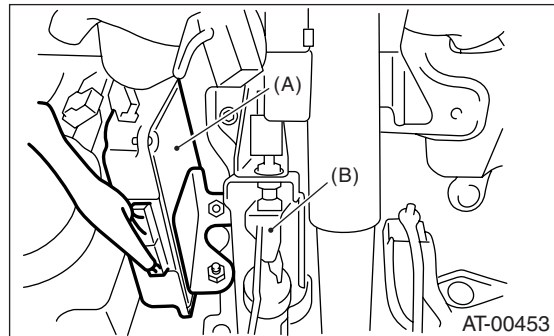
- 5) Remove the TCM.

B: INSTALLATION

- 1) Install the TCM.

Tightening torque:

7.5 N·m (0.76 kgf-m, 5.5 ft-lb)



- (A) Transmission control module (TCM)
(B) Brake pedal

- 2) Connect the connectors to TCM.
- 3) Install in the reverse order of removal.
- 4) Perform learning control promotion task. (TURBO model)

(1) Set select lever to "P" range and apply parking brake, then lift up the vehicle.

(2) Connect Subaru Select Monitor to vehicle and turn on the switch.

(3) Select "Clear Memory — 2" on the SUBARU Select Monitor. <Ref. to 4AT(D)-16, CLEAR MEMORY MODE, OPERATION, Subaru Select Monitor.>

(4) Using Subaru Select Monitor, check that the DTC is not output. <Ref. to 4AT(D)-14, READ DIAGNOSTIC TROUBLE CODE, OPERATION, Subaru Select Monitor.>

(5) Using Subaru Select Monitor, warm up the engine until the ATF temperature becomes within 60 to 90°C (140 to 194°F). <Ref. to 4AT(D)-15, READ CURRENT DATA, OPERATION, Subaru Select Monitor.>

(6) Shift the select lever to the "R" range.

(7) Set the switches for headlights, air conditioner, rear defogger, etc. to OFF.

(8) Turn the ignition switch OFF and then wait for more than 30 seconds.

(9) If the message "communication impossible" is displayed on SUBARU Select Monitor, depress the brake pedal deeply with left foot until the learning promotion task is completed, and then turn the ignition switch to ON.

(10) Check that Subaru Select Monitor is operating properly now.

(11) Set the select lever to "P" range, and then wait for more than three seconds.

(12) Set the select lever to "R" range, and then wait for more than three seconds.

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(13) Set the select lever to “N” range, and then wait for more than three seconds.

(14) Set the select lever to “D” range, and then wait for more than three seconds.

(15) Set the select lever to “N” range, and then wait for more than three seconds.

(16) Slowly depress the accelerator pedal to the fully open position.

(17) Slowly release the accelerator pedal to the fully closed position.

(18) Start and idle the engine.

(19) Set the select lever to “D” range.

(20) Learning promotion task starts. ATF temperature warning light in the combination meter blinks at 2 Hz. If ATF temperature does not blink, turn the ignition switch OFF and repeat the procedure from step (4).

Learning promotion task is completed when blinking of ATF temperature warning light in the combination meter changes from 2 to 0.5 Hz.

NOTE:

Repeat the procedure from step (4) if blinking of ATF temperature warning light changes from 2 to 4 Hz.

(21) Set the select lever to “N” range, and turn the ignition switch to OFF.