

17. Shift Solenoids, Duty Solenoids and ATF Temperature Sensor

A: REMOVAL

1. SHIFT SOLENOIDS AND DUTY SOLENOIDS

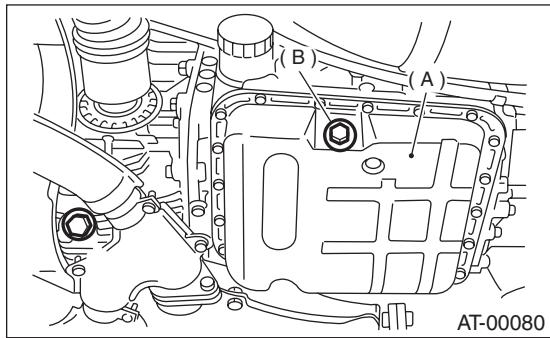
- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from battery.
- 3) Lift up the vehicle.
- 4) Clean the transmission exterior.
- 5) Drain the ATF completely.

NOTE:

Tighten the ATF drain plug after draining the ATF.

Tightening torque:

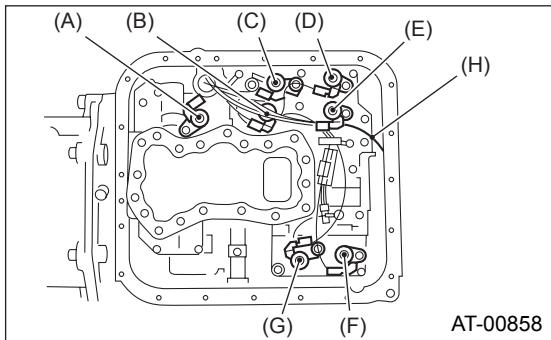
25 N·m (2.5 kgf·m, 18.1 ft-lb)



(A) Oil pan
(B) Drain plug

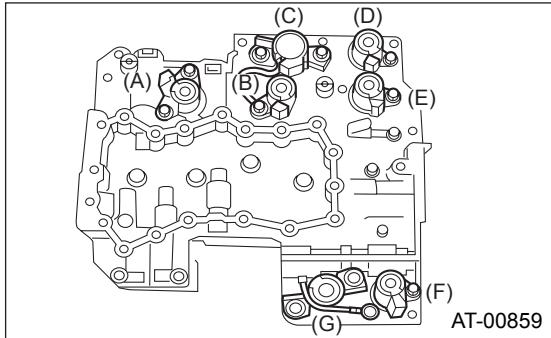
- 6) Remove the oil pan.

- 7) Disconnect each solenoid connectors.
Remove the connectors from clip and disconnect the connectors.



(A) Lock-up duty solenoid (blue)
(B) Low clutch timing solenoid (gray)
(C) Line pressure duty solenoid (red)
(D) Shift solenoid 2 (yellow)
(E) Shift solenoid 1 (green)
(F) 2-4 brake timing solenoid (black)
(G) 2-4 brake duty solenoid (red)
(H) Transfer duty solenoid (brown)

- 8) Remove the solenoids and duty solenoids.



(A) Lock-up duty solenoid (blue)
(B) Low clutch timing solenoid (gray)
(C) Line pressure duty solenoid (red)
(D) Shift solenoid 2 (yellow)
(E) Shift solenoid 1 (green)
(F) 2-4 brake timing solenoid (black)
(G) 2-4 brake duty solenoid (red)

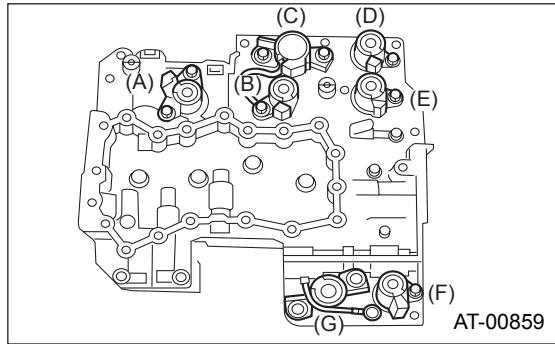
2. ATF TEMPERATURE SENSOR

When removing the ATF temperature sensor, refer to Front Vehicle Speed Sensor. <Ref. to AT-52, REMOVAL, Front Vehicle Speed Sensor.>

B: INSTALLATION

1. SHIFT SOLENOIDS AND DUTY SOLENOIDS

1) Install the solenoids and duty solenoids to specified positions.

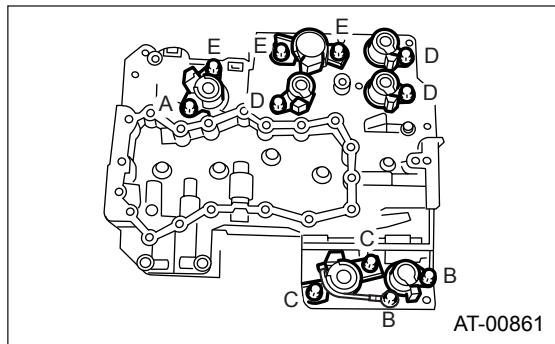


- (A) Lock-up duty solenoid (blue)
- (B) Low clutch timing solenoid (gray)
- (C) Line pressure duty solenoid (red)
- (D) Shift solenoid 2 (yellow)
- (E) Shift solenoid 1 (green)
- (F) 2-4 brake timing solenoid (black)
- (G) 2-4 brake duty solenoid (red)

2) Tighten bolts.

Tightening torque:

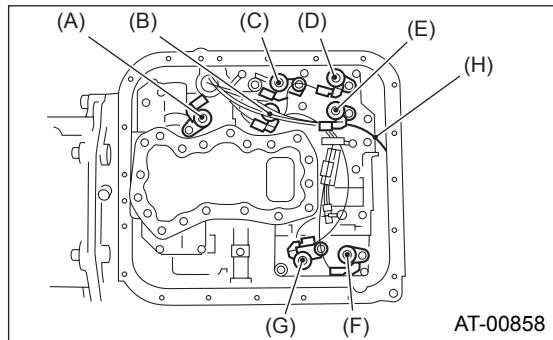
8 N·m (0.8 kgf-m, 5.8 ft-lb)



Bolt length mm (in)

- (A) 12 (0.47)
- (B) 40 (1.57)
- (C) 45 (1.77)
- (D) 62 (2.44)
- (E) 73 (2.87)

3) Connect the harness connectors.
Connect the connectors of same color, and secure the connectors to valve body using clips.

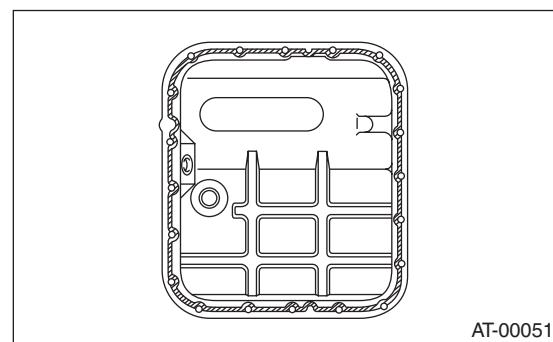


- (A) Lock-up duty solenoid (blue)
- (B) Low clutch timing solenoid (gray)
- (C) Line pressure duty solenoid (red)
- (D) Shift solenoid 2 (yellow)
- (E) Shift solenoid 1 (green)
- (F) 2-4 brake timing solenoid (black)
- (G) 2-4 brake duty solenoid (red)
- (H) Transfer duty solenoid (brown)

4) Apply proper amount of liquid gasket to the entire oil pan mating surface.

Liquid gasket:

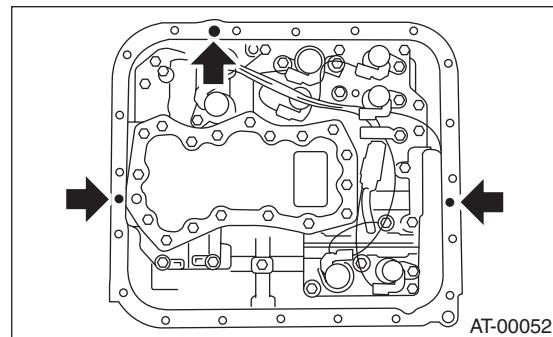
ThreeBond 1217B (Part No. K0877YA020)



5) Apply a plenty amount of liquid gasket to three holes other than screw holes on transmission case.

Liquid gasket:

ThreeBond 1217B (Part No. K0877YA020)



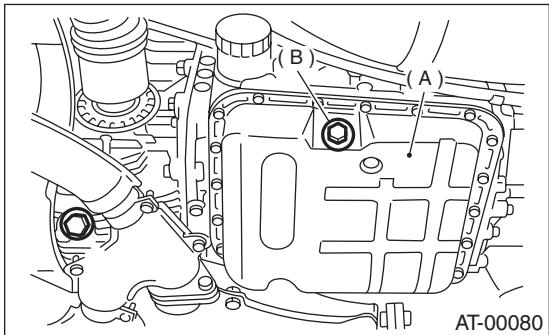
SHIFT SOLENOIDS, DUTY SOLENOIDS AND ATF TEMPERATURE SENSOR

AUTOMATIC TRANSMISSION

6) Install the oil pan.

Tightening torque:

5 N·m (0.50 kgf-m, 3.6 ft-lb)



(A) Oil pan

(B) Drain plug

7) Fill ATF up to the middle of the "COLD" side on level gauge by using the gauge hole. <Ref. to AT-30, ATF.>

8) Check the ATF level. <Ref. to AT-30, ATF.>

2. ATF TEMPERATURE SENSOR

When installing the ATF temperature sensor, refer to Front Vehicle Speed Sensor. <Ref. to AT-54, INSTALLATION, Front Vehicle Speed Sensor.>