1. EVALUATION

NOTE:

If part is faulty, its resistance value will be different from the standard value indicated.

Part name	Terminal	Resistance (Ω)
Vehicle speed sensor 1	17 — 18	450 — 650
Vehicle speed sensor 2	19 — 20	450 — 650
ATF temperature sensor	11 — 12	2,100 — 2,900/ 20°C (68°F) 275 — 375/ 80°C (176°F)
Torque converter turbine speed sensor	14 — 15	450 — 650
Shift solenoid 1	1 — 16	10 — 17
Shift solenoid 2	2 — 16	10 — 17
Duty solenoid A (Line pressure solenoid)	5 — 16	2.0 — 4.5
Duty solenoid B (Lock-up solenoid)	13 — 16	10 — 17
Duty solenoid D (2-4 brake solenoid)	9 — 16	2.0 — 4.5
Low clutch timing solenoid	3 — 16	10 — 16
2-4 brake timing solenoid	4 — 16	10 — 16
Duty solenoid C (Transfer clutch solenoid)	6 — 16	10 — 17

4. Shift Solenoid, Duty Solenoid and Valve

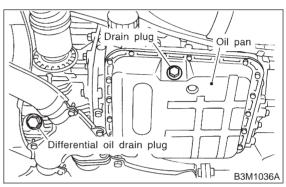
A: REMOVAL

- 1) Clean transmission exterior.
- 2) Drain ATF completely.

NOTE:

Tighten ATF drain plug after draining ATF.

Tightening torque: 25±2 N·m (2.5±0.2 kg-m, 18.1±1.4 ft-lb)

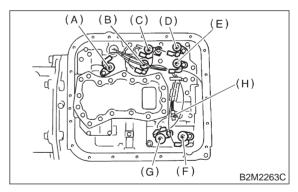


3) Remove oil pan.

NOTE:

Drain oil into a container.

4) Disconnect solenoid and sensor connectors. Remove connectors from clip and disconnect connectors at 8 places.



- (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) ATF temperature sensor

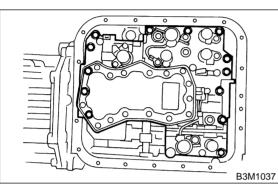
5) Remove control valve body.

CAUTION:

When removing control valve body, be careful not to interfere with transfer duty solenoid C wiring.

NOTE:

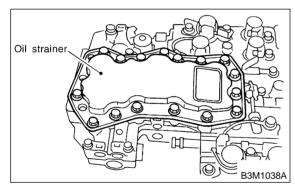
Be careful because oil flows from valve body.



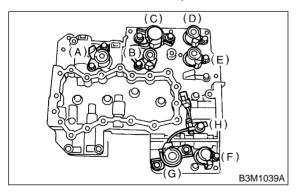
6) Remove oil strainer.

NOTE:

Be careful because oil flows from oil strainer.



7) Remove solenoids and duty solenoids.



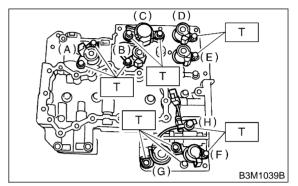
- (A) Lock-up duty solenoid (Blue)
- (B) Low clutch timing solenoid (Gray)
- (C) Line pressure duty solenoid (Red)
- (D) Shift solenoid 2 (Yellow)
- (E) Shift solenoid 1 (Green)
- (F) 2-4 brake timing solenoid (Black)
- (G) 2-4 brake duty solenoid (Red)
- (H) ATF temperature sensor

B: INSTALLATION

1) Install 7 solenoids and ATF temperature sensor.

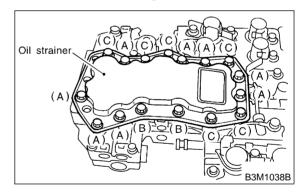
Tightening torque:

T: 8±1 N·m (0.8±0.1 kg-m, 5.8±0.7 ft-lb)



- (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) ATF temperature sensor
- 2) Install oil strainer.

Tightening torque: 8±1 *N*⋅*m* (0.8±0.1 kg-*m*, 5.8±0.7 ft-lb)



- (A) Short bolt
- (B) Middle bolt
- (C) Long bolt

- Install valve body to transmission case.
 (1) Temporarily tighten the valve body on the transmission case.

CAUTION:

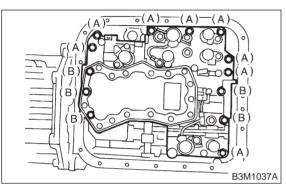
When installing control valve body, be careful not to interfere with transfer duty solenoid wiring (brown).

NOTE:

Align manual valve connections.

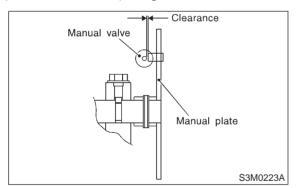
Tightening torque:

8±1 N·m (0.8±0.1 kg-m, 5.8±0.7 ft-lb)



- (A) Short bolts
- (B) Long bolts

(2) Adjust the clearance between the manual valve and manual plate in the 0.1 to 0.9 mm (0.004 to 0.035 in) range.

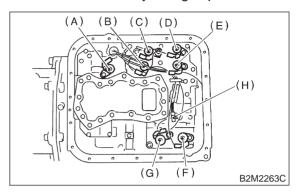


(3) Tighten the valve body to the specified torque.

Tightening torque:

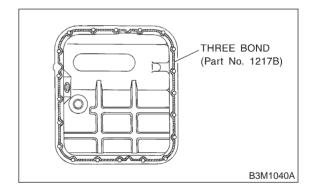
8±1 N·m (0.8±0.1 kg-m, 5.8±0.7 ft-lb)

4) Connect harness connectors at 8 places. Connect connectors of same color, and secure connectors to valve body using clips.



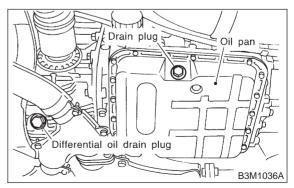
- (A) Lock-up duty solenoid (Blue)
- (B) Low clutch timing solenoid (Gray)
- (C) Line pressure duty solenoid (Red)
- (D) Shift solenoid 2 (Yellow)
- (E) Shift solenoid 1 (Green)
- (F) 2-4 brake timing solenoid (Black)
- (G) 2-4 brake duty solenoid (Red)
- (H) ATF temperature sensor

5) Apply proper amount of liquid gasket (THREE BOND Part No. 1217B) to the entire oil pan mating surface.

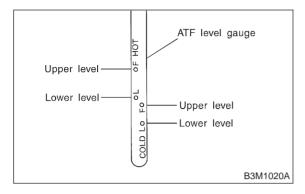


6) Install oil pan.

Tightening torque: 4.9±0.5 N⋅m (0.50±0.05 kg-m, 3.6±0.4 ft-lb)



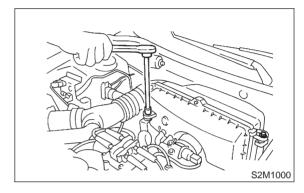
7) Add ATF and check level.



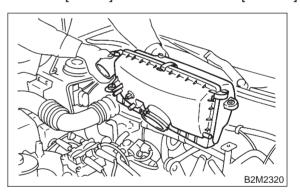
5. Duty Solenoid C and Transfer Valve Body

A: REMOVAL

1) Remove air intake duct and chamber. (Except 2200 cc California spec. vehicles) <Ref. to 2-7 [W1A0].>



2) Remove air intake duct and cleaner case. (2200 cc California spec. vehicles) <Ref. to 2-7 [W1A0].> and <Ref. to 2-7 [W18A0].>



3) Remove pitching stopper.

