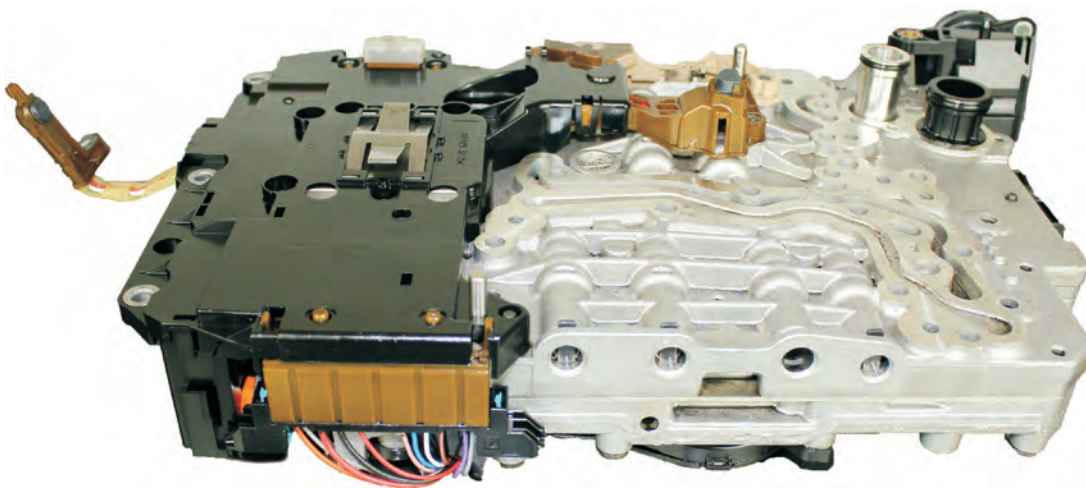
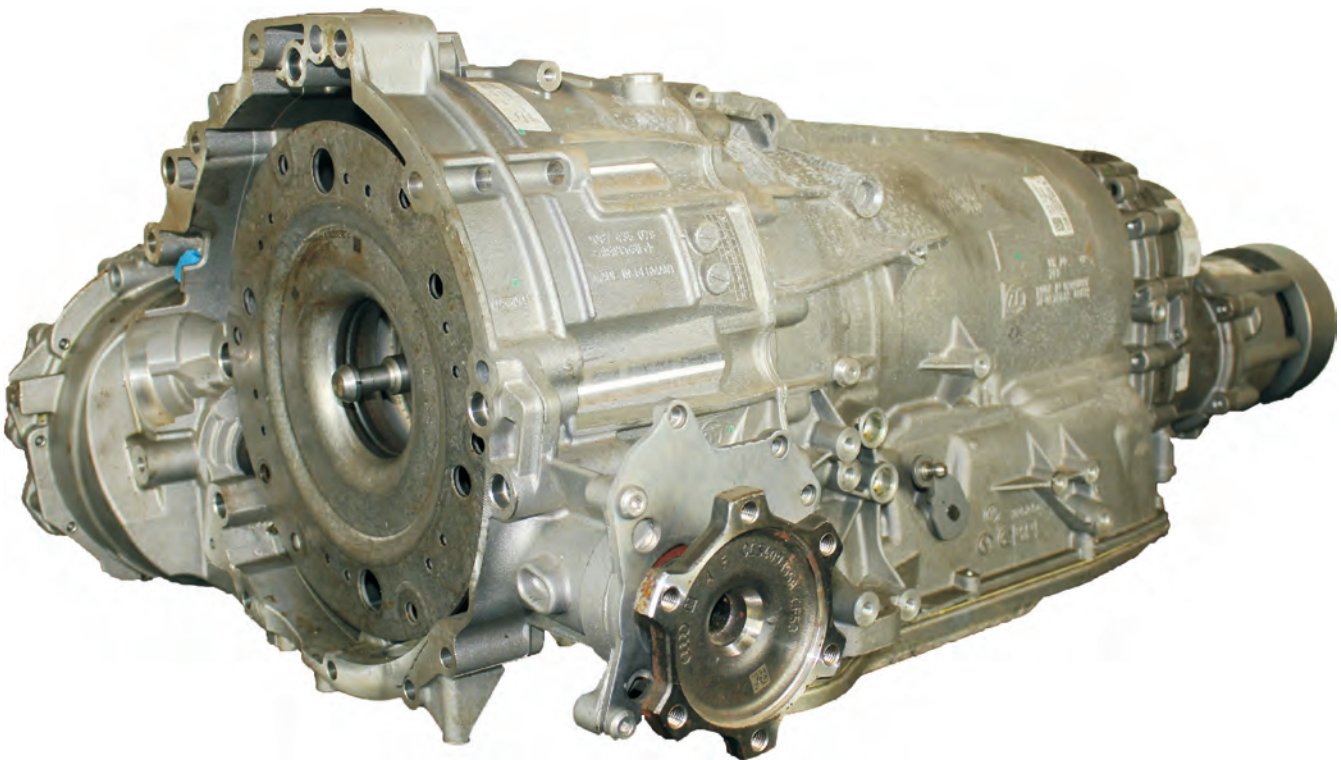




Technical Service Information

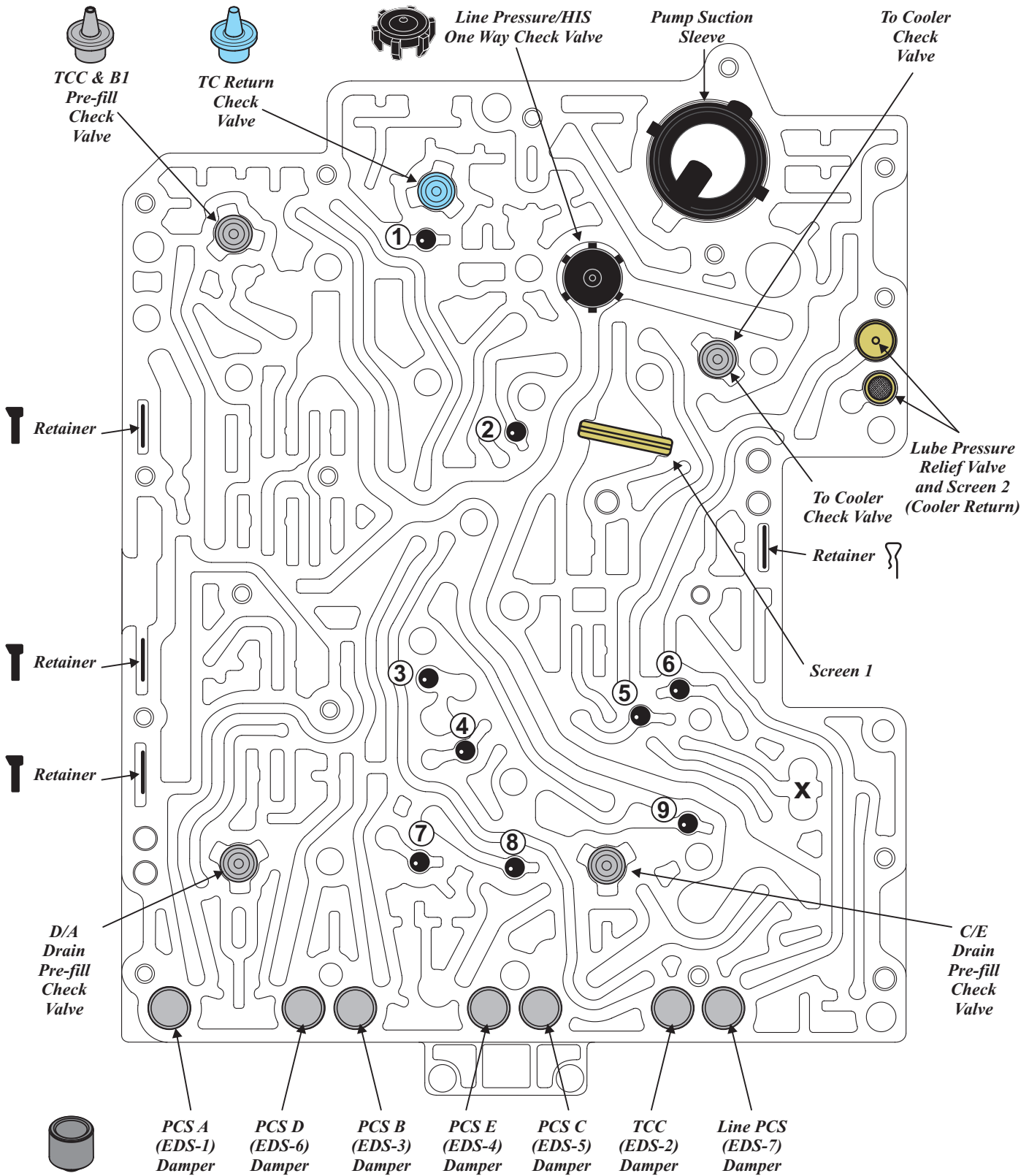
ZF8HP55

NON-HIS VALVE BODY INFORMATION



Many thanks to Worldwide Transmission Parts in Chicago for the use of this transmission

ZF8HP55 M-SHIFT UPPER VALVE BODY RETAINER AND SMALL PART LOCATIONS (non HIS)



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Figure 1

ZF8HP55

NON-HIS VALVE BODY INFORMATION

ZF8HP55 M-SHIFT UPPER VALVE BODY SMALL DETAILS

Check Ball ① TCC Pressure Orifice Ball

Check Ball ② TCC Apply Orifice Ball

Check Ball ③ Forward Reverse Shuttle Ball

Check Ball ④ Forward Feed to the E Holding Valve

Check Ball ⑤ Forward Feed to the E Regulator Valve

Check Ball ⑥ Forward Feed to the C Regulator Valve

Check Ball ⑦ D Clutch Apply/Release Circuit

Check Ball ⑧ E Clutch Apply/Release Circuit

Check Ball ⑨ C Clutch Apply/Release Circuit

Screen 1- Filters Line pressure from the Pressure Regulator
Valve to the TCC Pressure Valve
2- Filters Cooler Return



SPACER PLATE ID

054 = ZF8HP55 **HIS** "M" Shift - Part # on plate: 1087 327 189 ZFS

071 = ZF8HP55 **non-HIS** "M" Shift - Part # on plate: 1087 327 221 ZFS

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Figure 2

ZF8HP55 M-SHIFT LOWER VALVE BODY SOLENOID IDENTIFICATION AND RETAINER LOCATIONS (*non-HIS*)

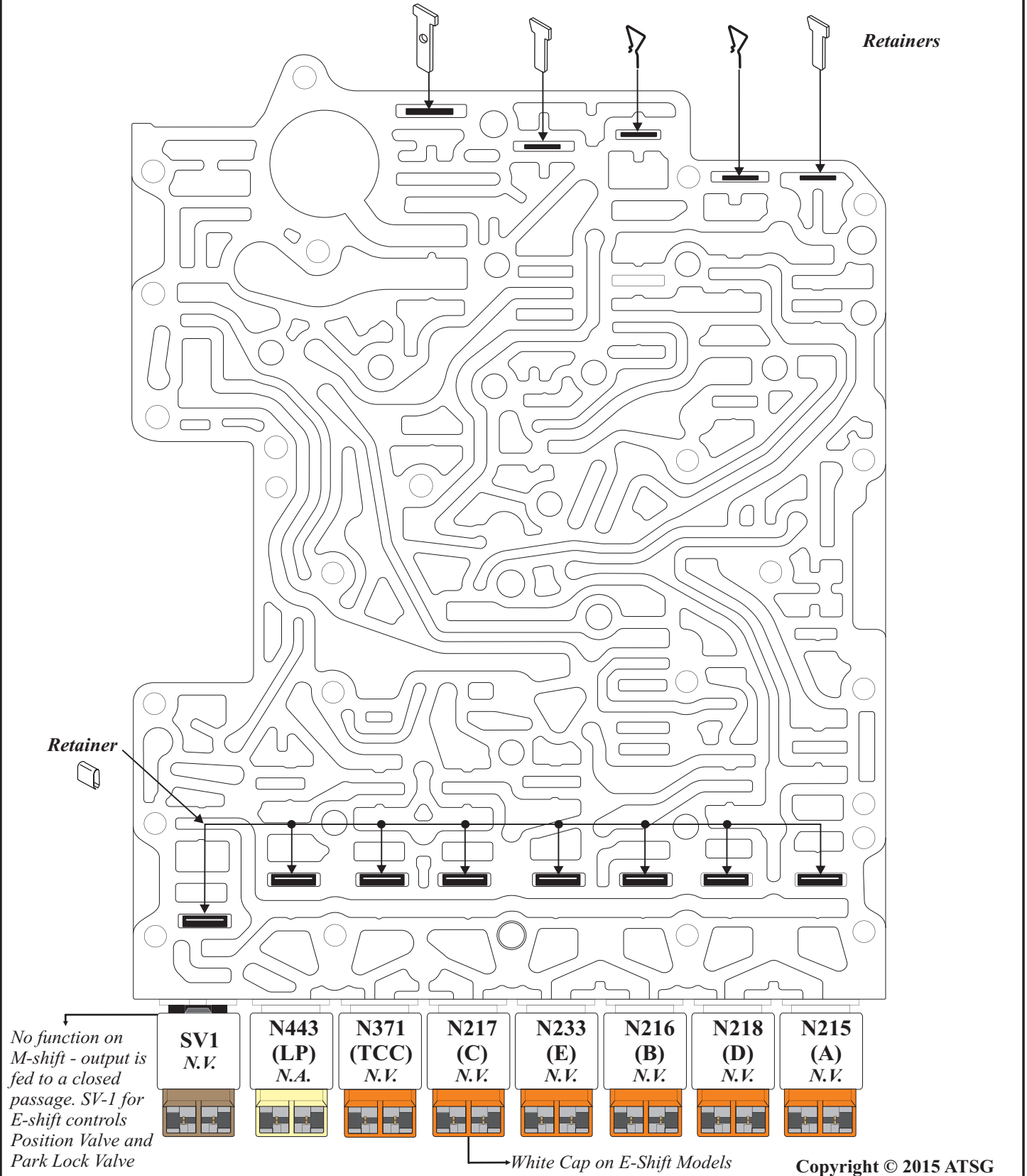
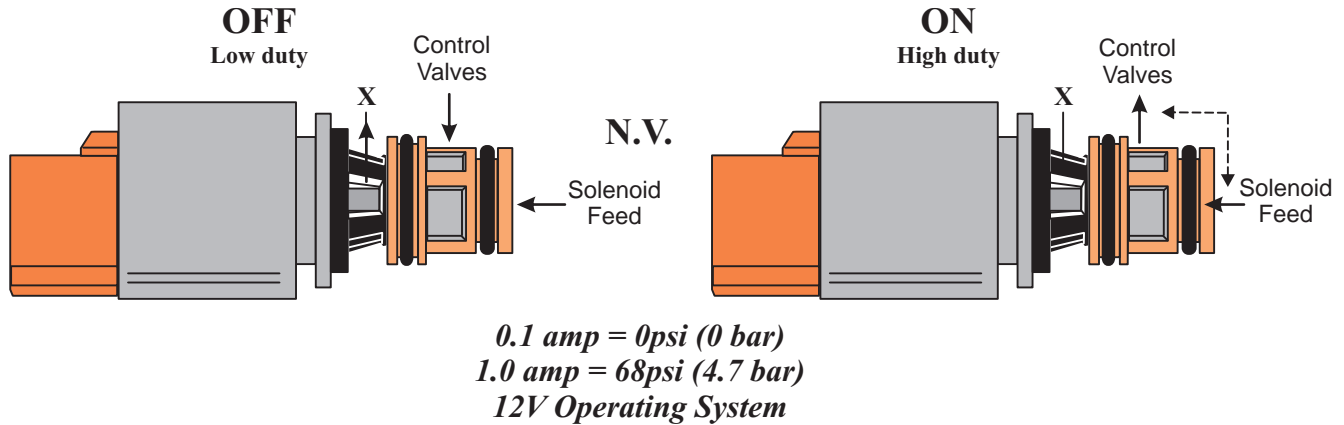


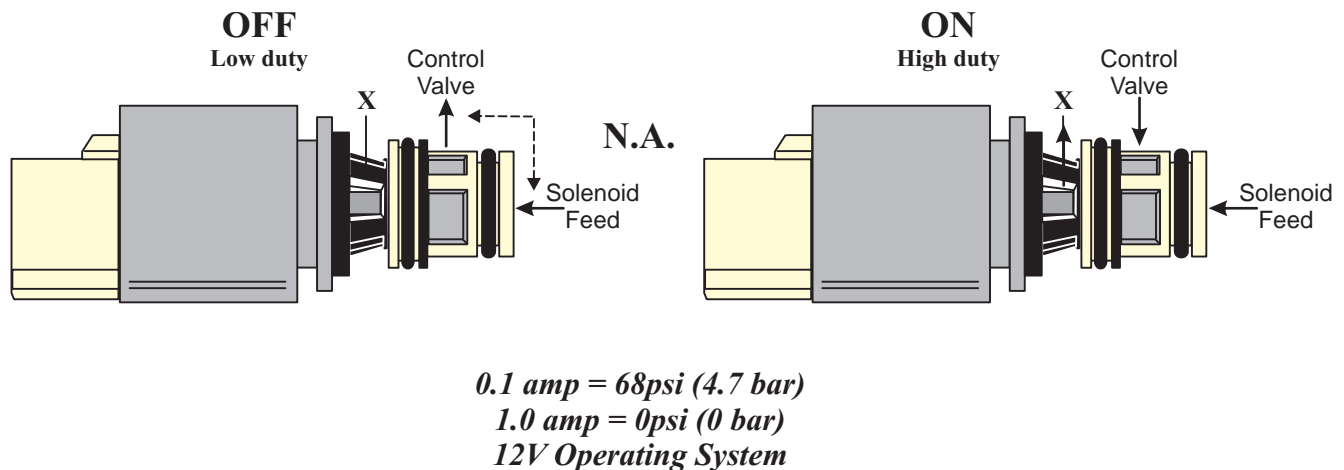
Figure 3

ZF8HP55 SHIFT SOLENOID CHECKS

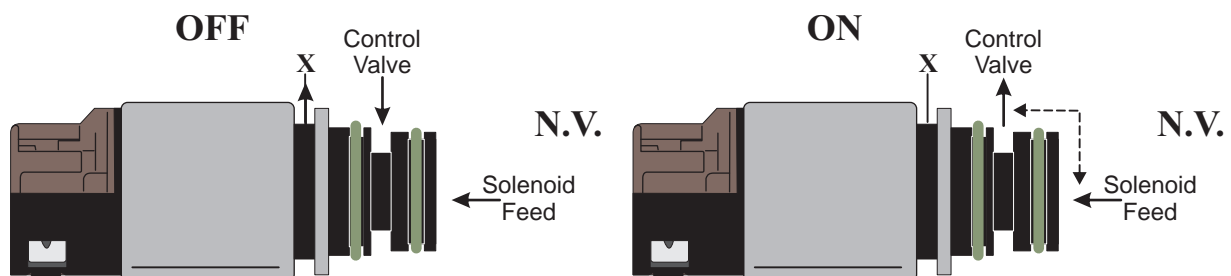
- (1) N215 - BRAKE A, (2) N216 - BRAKE B, (3) N217 - CLUTCH C (M-Shift)
(4) N218 - CLUTCH D, (5) N233 - CLUTCH E, (6) N371 - TCC



- (3) N217 - CLUTCH C (E-Shift), (7) N443 - PRESSURE CONTROL SOLENOID



N88 (Black/Brown) SOLENOID VALVE 1 (E-Shift)



N88 in the M-Shift is non-functional. E-Shift models this solenoid controls both the Position Valve and the Parking Lock Valve. It assists in the engagement and release of the parking rod. It uses a 16 volt operating system which becomes functional 6 volts and higher and drops out 5 volts and less.

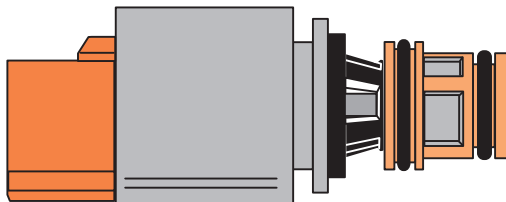
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Figure 4

ZF8HP55 SHIFT SOLENOID CHECKS

- (1) N215 - BRAKE A, (2) N216 - BRAKE B, (3) N217 - CLUTCH C (M-Shift)
(4) N218 - CLUTCH D, (5) N233 - CLUTCH E, (6) N371 - TCC

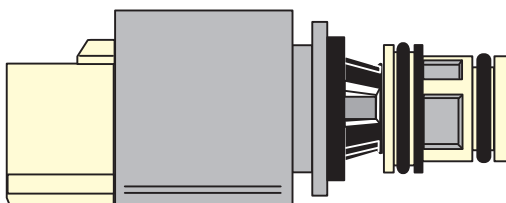
**Resistance
Value 5-6 Ohms**



**Solenoid Output
Pressure Specs.**
Off- 0psi/bar
On- 68.17psi
4.7 bars

- (3) N217 - CLUTCH C (E-Shift), (7) N443 - PRESSURE CONTROL SOLENOID

**Resistance
Value 5-6 Ohms**



**Solenoid Output
Pressure Specs.**
Off- 68.17psi
4.7 bars
On- 0psi/bar

N88 (Black/Brown) SOLENOID VALVE 1 (E-Shift)

**Resistance
Value 9-13 Ohms**



**Solenoid Output
Pressure Specs.**
Off- 0psi/bar
On- 68.17psi
4.7 bars

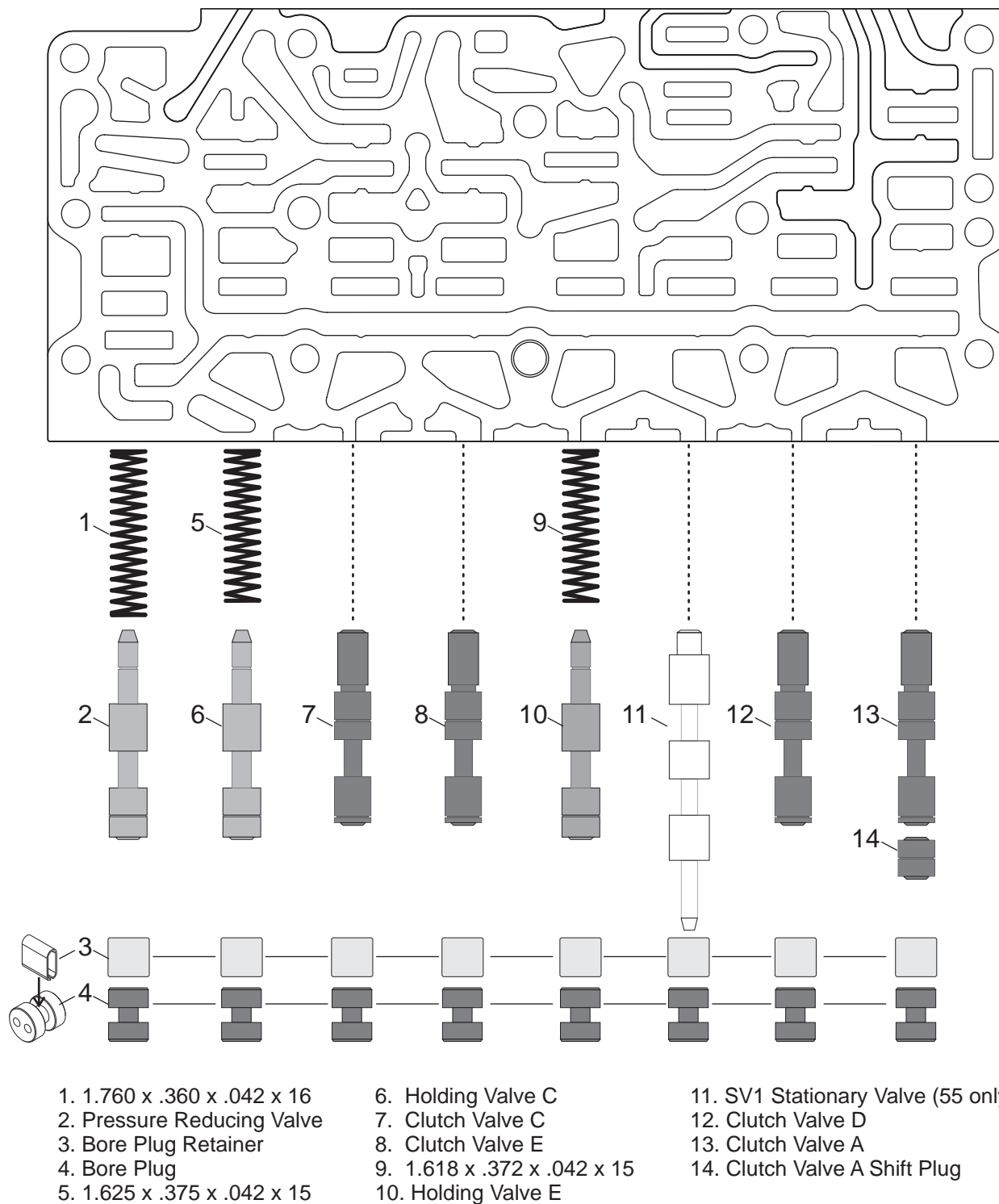
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Figure 5

ZF8HP55

NON-HIS VALVE BODY INFORMATION

ZF8HP55 M-SHIFT LOWER VALVE BODY VALVE IDENTIFICATION (*non-HIS*)



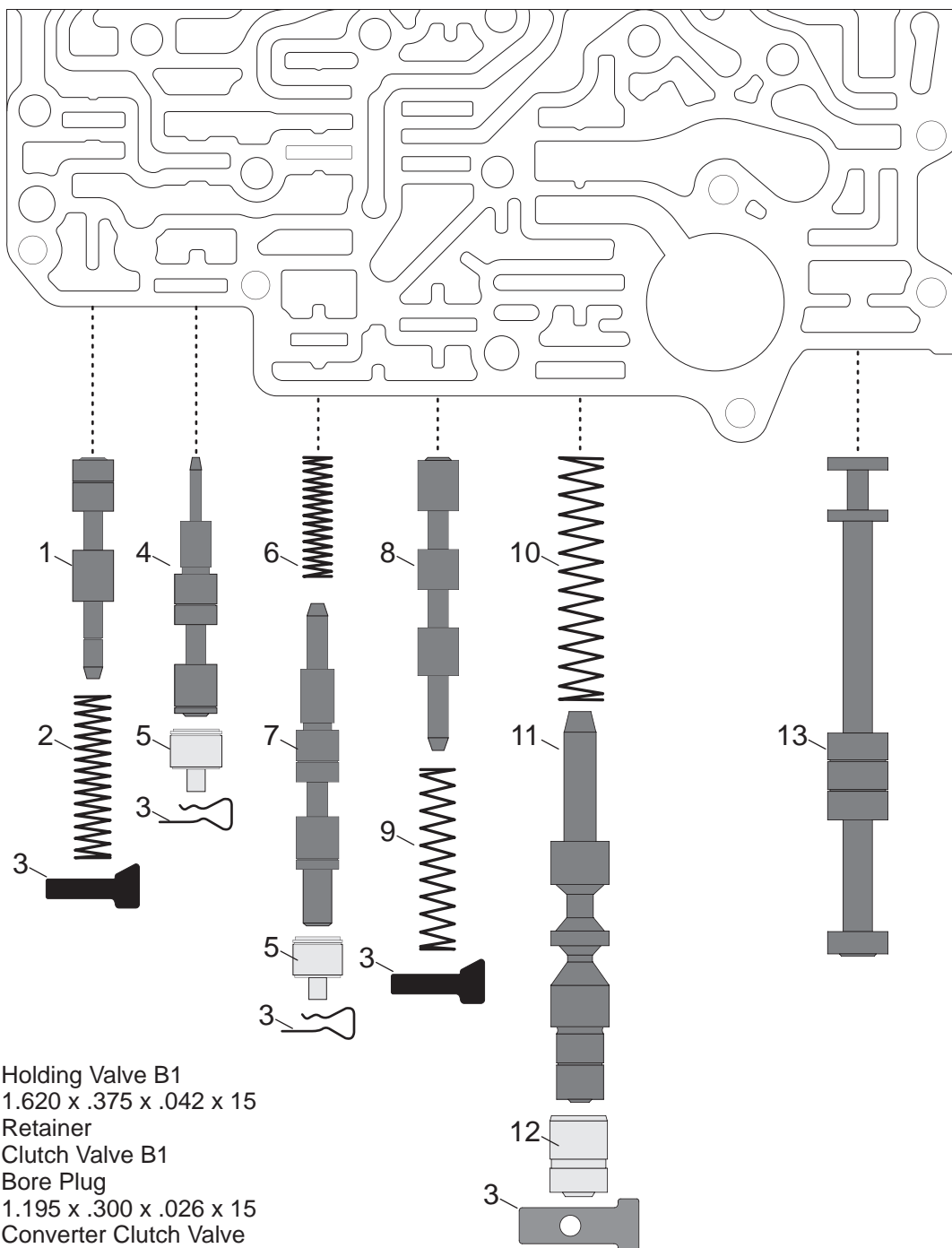
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Figure 6

ZF8HP55

NON-HIS VALVE BODY INFORMATION

ZF8HP55 M-SHIFT LOWER VALVE BODY VALVE IDENTIFICATION (*non HIS*)



1. Holding Valve B1
2. 1.620 x .375 x .042 x 15
3. Retainer
4. Clutch Valve B1
5. Bore Plug
6. 1.195 x .300 x .026 x 15
7. Converter Clutch Valve
8. Converter Clutch Shift Valve
9. 1.780 x .358 x .024 x 12
10. 2.417 x .557 x .051 x 14
11. Pressure Regulator Valve
12. PRV Sleeve
13. Manual Valve (M-Shift)

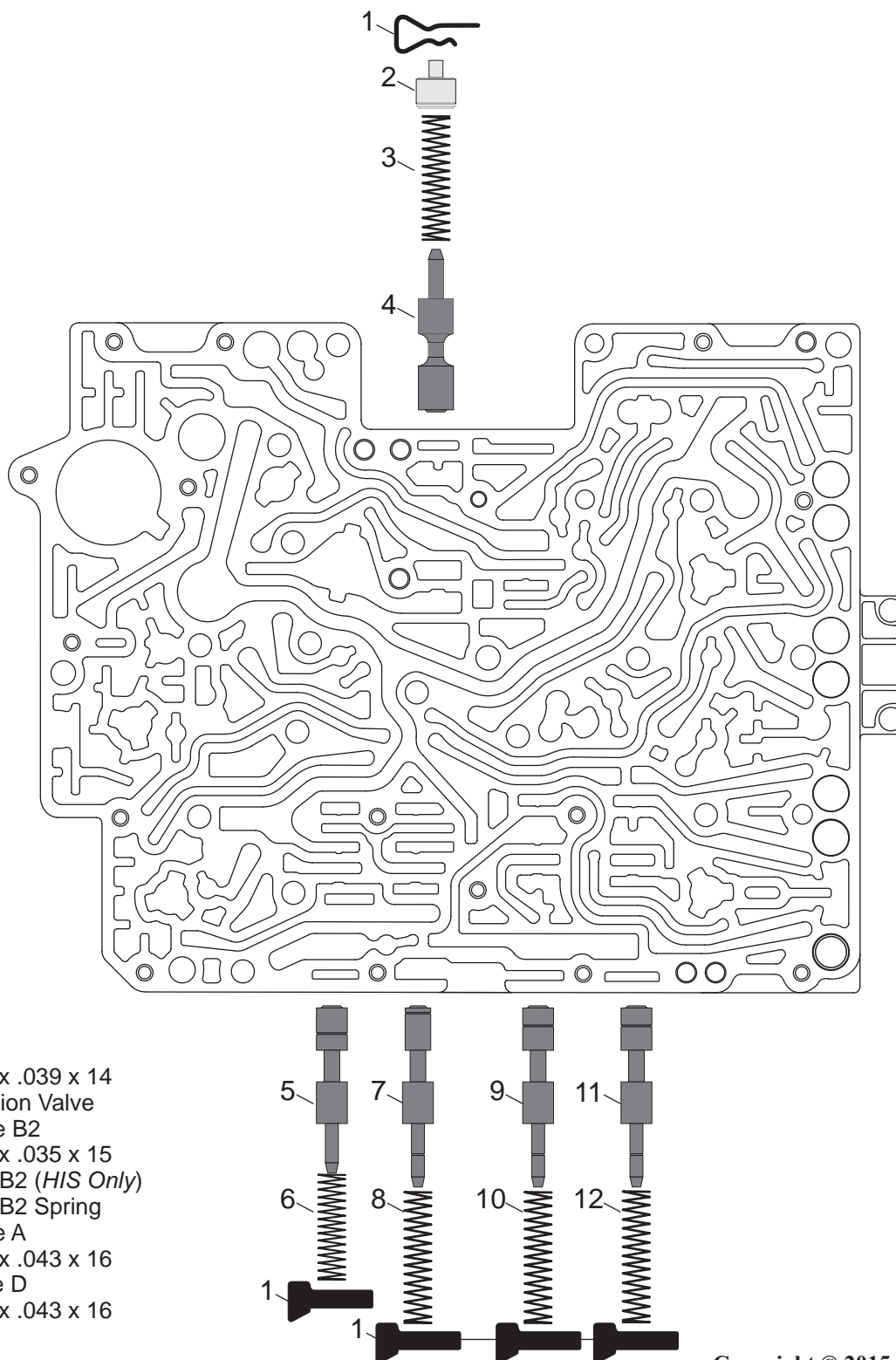
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Figure 7

ZF8HP55

NON-HIS VALVE BODY INFORMATION

ZF8HP55 M-SHIFT UPPER VALVE BODY VALVE IDENTIFICATION (*non-HIS*)



1. Retainer
2. Bore Plug
3. 1.438 x .368 x .039 x 14
4. TCC/Lubrication Valve
5. Holding Valve B2
6. 1.266 x .344 x .035 x 15
7. Clutch Valve B2 (*HIS Only*)
8. Clutch Valve B2 Spring
9. Holding Valve A
10. 1.596 x .372 x .043 x 16
11. Holding Valve D
12. 1.596 x .372 x .043 x 16

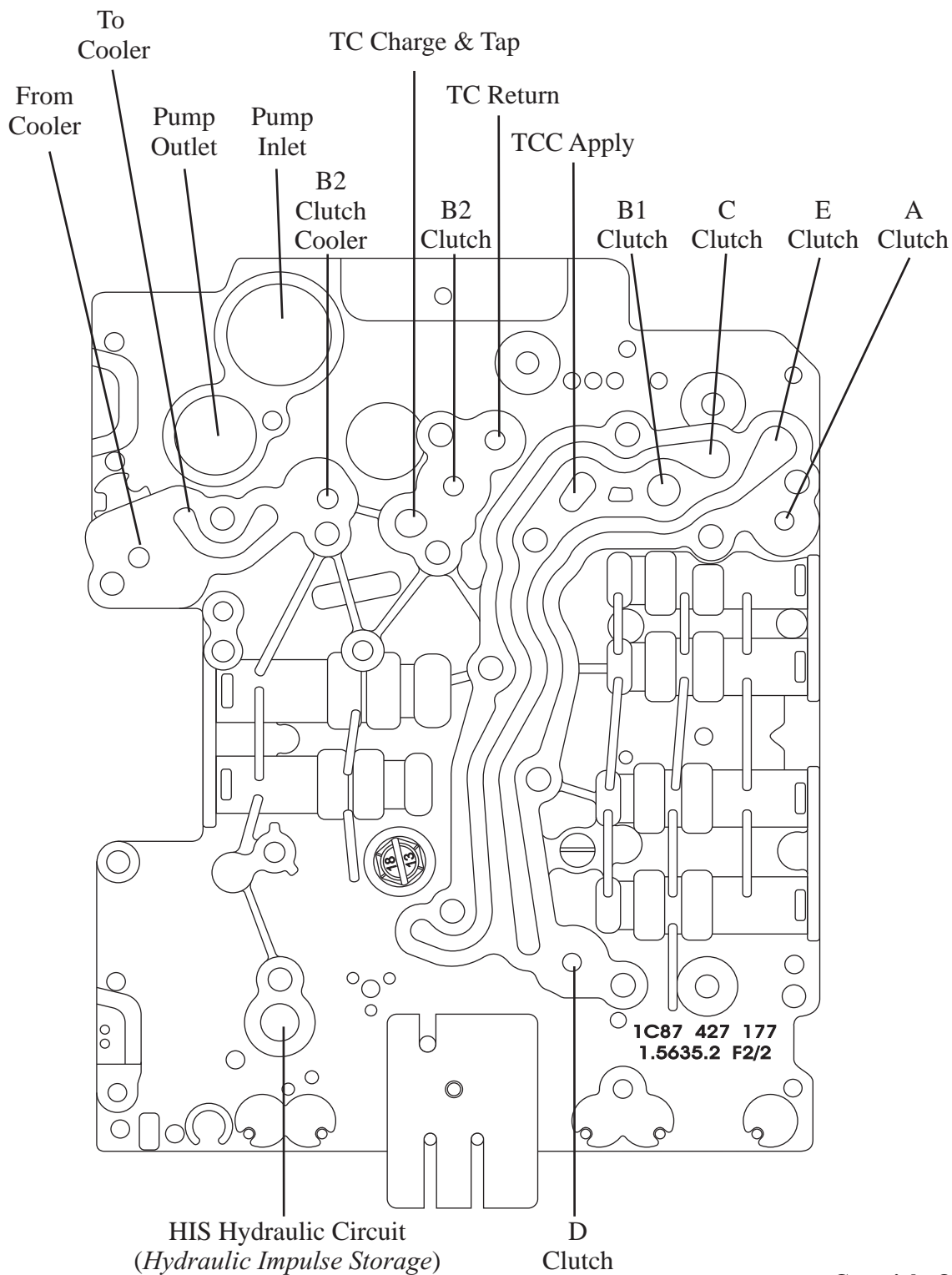
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Figure 8

ZF8HP55

NON-HIS VALVE BODY INFORMATION

LOWER VALVE BODY TO CASE PASSAGE IDENTIFICATION



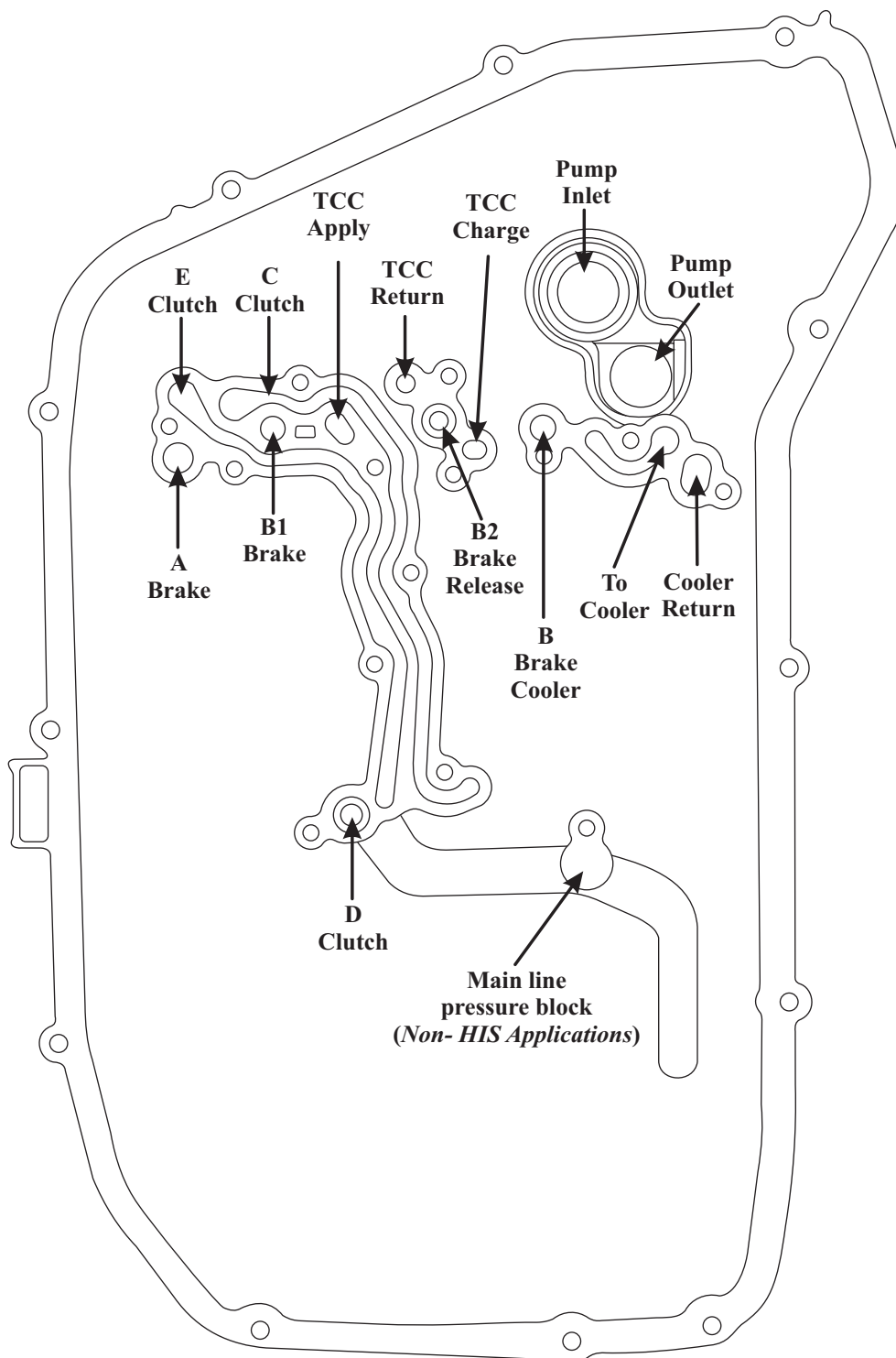
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Figure 9

ZF8HP55

NON-HIS VALVE BODY INFORMATION

CASE PASSAGE IDENTIFICATION



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Figure 10