A6MF1
HYUNDAI / KIA SIX SPEED TRANSMISSION

Both Hyundai and Kia vehicles have a front wheel drive six speed transmission on the road as far back as 2009 here in the United States. The various versions used and their application and designation as follows:

The A6GF1 is fitted with a 1.2L, 1.6L, 1.8L or a 2.0L engine. Most are behind the 1.6L.
The A6MF1 is fitted with a 2.0L/2.4L engine with a maximum torque capacity of 230 Nm (376.4mm length).
The A6MF2 is fitted with a 2.4L engine with a maximum torque capacity of 280 Nm (386.4 mm length).
The A6LF1 is fitted with a 3.3L engine with a maximum torque capacity of 329 Nm (386 mm length).
The A6LF2 is fitted with a 3.5L/3.8L engine with a maximum torque capacity of 358 Nm (389 mm length).
The A6LF3 is fitted with a 4.0L engine with a maximum torque capacity of 392 Nm (402 mm length).

On the transmission there is a tag riveted to the case with the vehicle identification number on it. Along side this tag, etched into the case is a transmission number. This many times is very difficult to see. If it is readable, and the identification number begins with the letters NA, it is the A6GF1, BA, it is the A6LFx transmission. EA or FA will be the A6MFx. With all these different names, when it comes to Hyundai and Kia, this transmission is simply referred to as the A6 transmission.

A variation of this little 6 speed can also be found in late model Dodge Dart 2.0L and 2.4L vehicles (2012 and up), which in this application is called the 6F24.

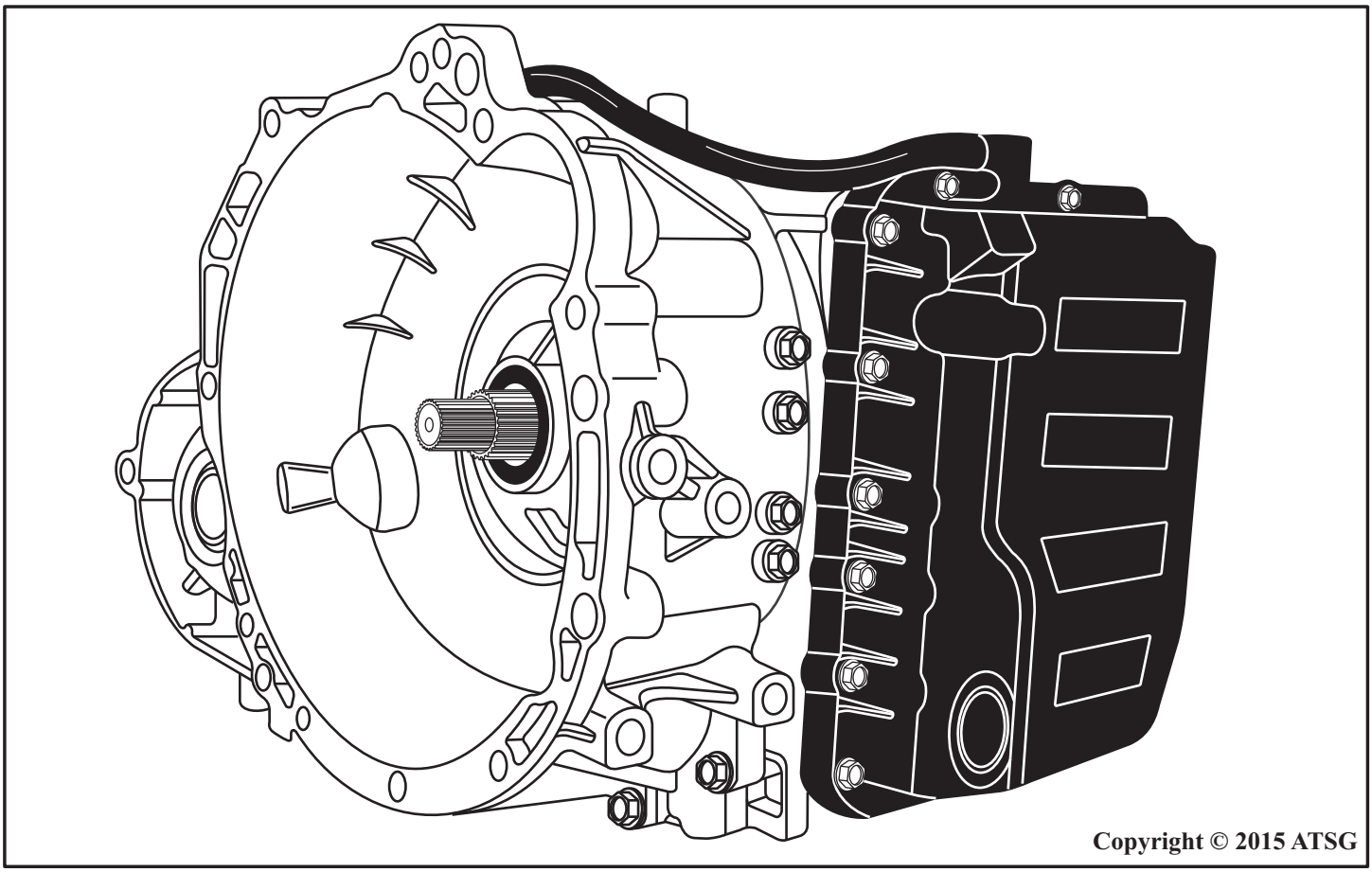
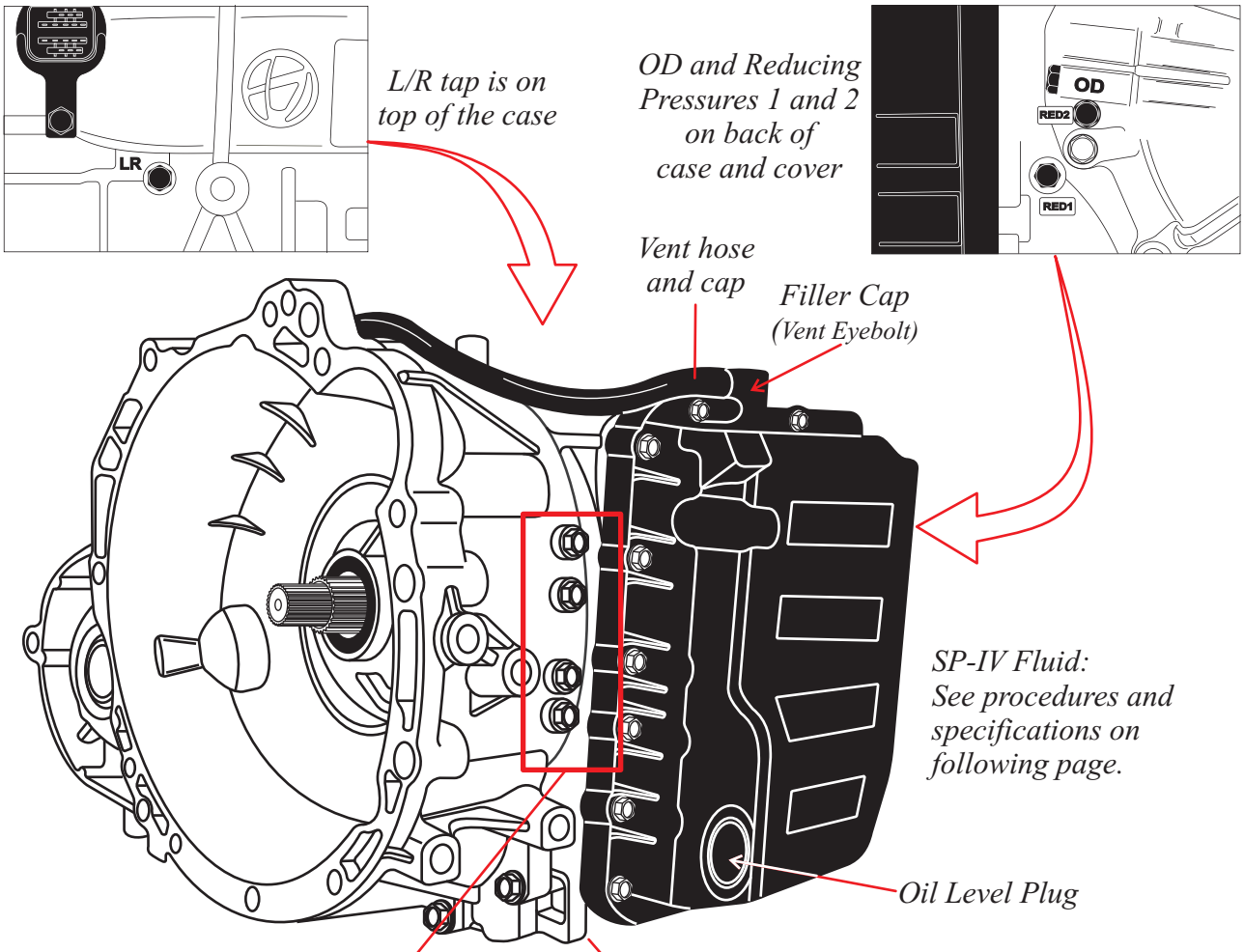
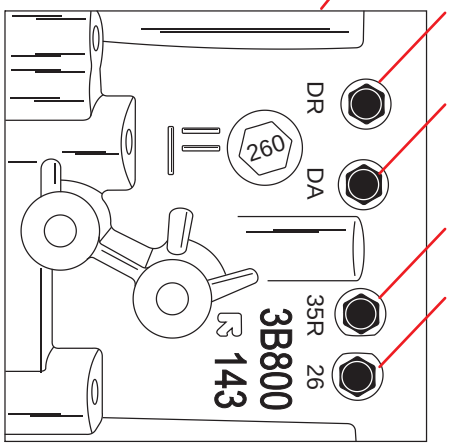


Figure 1

A6MF1

FLUID AND PRESSURE TAP INFORMATION





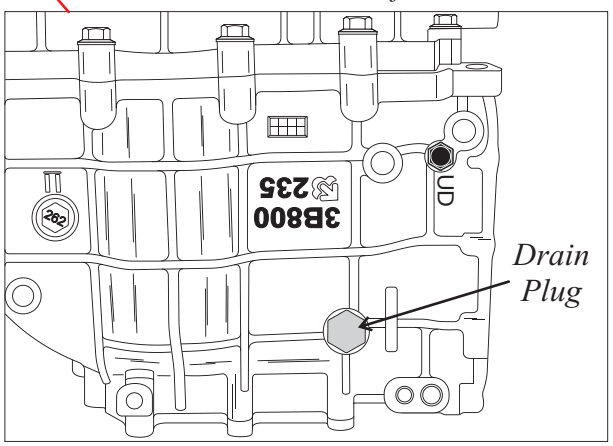


Figure 2

A6MF1

O.E. FLUID CHECK PROCEDURES

ATF Level inspection:

1. If the ATF has been drained, add approximately 5-qts of Kia Type-4 ATF.

2. After attaching GDS, select vehicle; then A/T menu; then Current Data, and then Oil Temperature Sensor.

3. Drive vehicle long enough to warm up ATF to approximately 122-140°F (50-60°C).

4. Depress the brake pedal and move the shift lever into "R", "N" and "Drive" and then back, pausing 2 to 3 seconds in each gear range.

Repeat this procedure two times.

5. Move shift lever to "Park", leave the engine running, and then lift up vehicle on hoist.

6. Remove the splash shield under the automatic transaxle.

7. Remove the oil level plug. ATF level is correct if the ATF flows out in a thin steady stream. If no ATF flows out, go to step 8.

8. If ATF flow does not occur, add Kia Type-4 ATF via the oil level hole until ATF flows out in a thin steady stream.

Adding ATF: Use a suction gun or equivalent tool to add ATF. Suction guns are available from various tool suppliers.

9. Reinstall the oil level plug and torque to 25-32 lb-ft (34-43 Nm).

Alternate ATF Filling Procedure:
If a suction gun or equivalent tool is not readily available, locate the Vent Eyebolt on the top of the automatic transaxle oil pan near the battery. Remove the Vent Eyebolt and add Kia Type-4 ATF via the opening. Reinstall the Vent Eyebolt (verify that the gasket is okay and torque to 29-32 lb-ft (39-43Nm).

NOTE: There is an O.E. technical service bulletin (#043 [Rev 2] 02/25/2013) that speaks about defective oil temperature sensors producing TFT codes P0711 (Rationality), P0712 (Circuit Low) and/or P0713 (Circuit High). The replacement part # is 466386 3B000. Be sure the TFT sensor is working properly when filling the transmission with fluid to prevent an incorrect fill.

Use only Kia approved ATF meeting Type-4 specification. Using the wrong ATF type may result in degradation of shift quality, or may cause durability issues. Full fill typically is 8.24 qts (7.8L). 1 quart of ATF-SP-IV (part # UM090 CH042) list for about $15.00 dollars.

Figure 3

A6MF1

O.E. RELEARN PROCEDURES

TCM Learning

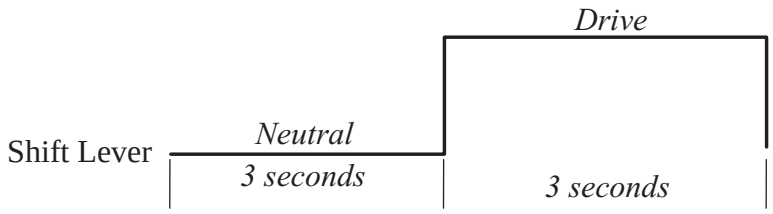
When shift shock is occurred or parts related with the transaxle are replaced, TCM learning should be performed.

In the following case, TCM learning is required.

•Transaxle assembly replacement
•TCM replacement
•TCM upgrading
1.TCM learning condition - ATF temperature: 60 - 115°C (140 - 239°F)
2.TCM learning procedure

A. Stop (*stationary*) learning

Repeat the below shift pattern four times or more with stepping on the brake.



- Brake ON
- Throttle open: 0%

B.Driving learning

1.Drive the vehicle through all gears at D range. Drive from stop to 1st to 2nd to 3rd to 4th to 5th to 6th with keeping fixed throttle open.

2.Down shift from 6th to 5th, 5th to 4th, 4th to 3rd, 3rd to 2nd, 2nd to 1st.

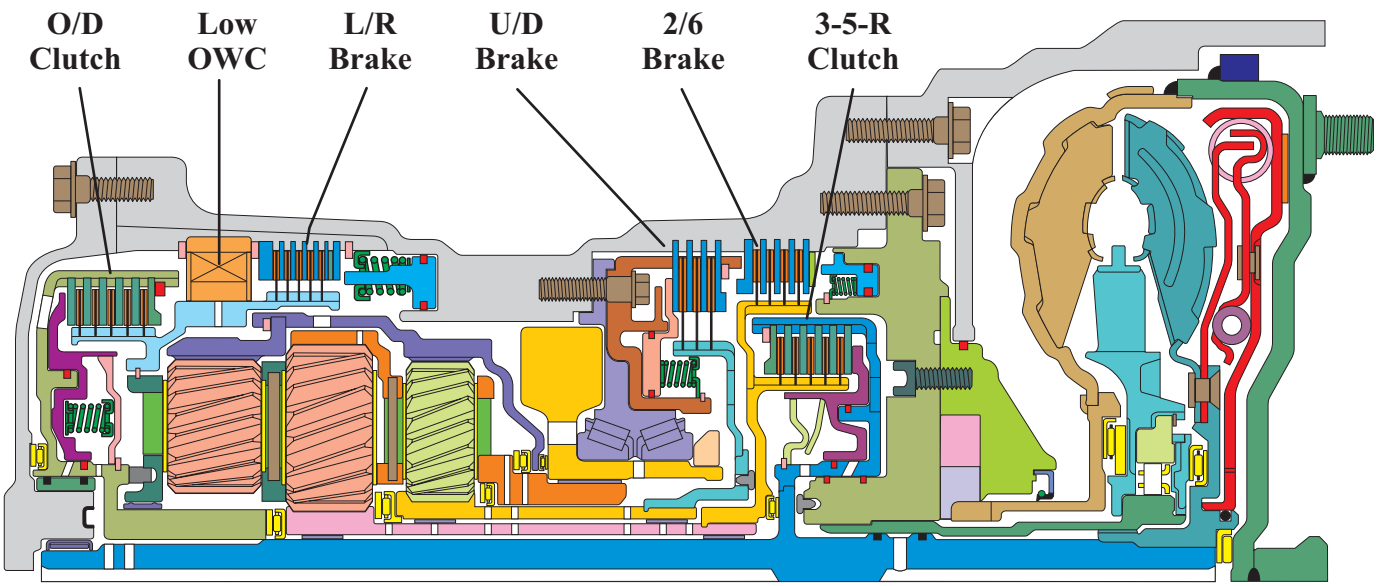
3.Repeat the above driving pattern four times or more.

NOTE:
Up-shift throttle open : 15 - 30%

Figure 4

A6MF1

COMPONENT APPLICATION CHART



CLUTCH & BRAKE APPLICATION CHART

RANGE		BRAKE			CLUTCH		LOW OWC
		L/R	U/D	2/6	O/D	3-5-R	
P/N		*					
NC		*	*				
R		ON				ON	
S	1ST	ON	ON				
D	1ST	ON→OFF	ON				OFF→ON
D/S	2ND		ON	ON			
	3RD		ON			ON	
	4TH		ON		ON		
	5TH				ON	ON	
	6TH			ON	ON		

ON - Hydraulic pressure is applied or OWC holding

* - Hydraulic pressure is applied but no power is transmitted

Figure 5

A6MF1

SOLENOID ON/OFF CHART

SOLENOID APPLICATION CHART							
RANGE		VFS				ON-OFF	
		U/D	O/D	3-5-R	2/6	SSA	SSB
		N.H.			N.L.		
P/N		ON		ON		ON	
NC		F		ON		ON	
R		ON				ON	ON
S	1ST			ON		ON	
D	1ST		*	ON		ON	
D/S	2ND		ON	ON	ON		
	3RD		ON				ON
	4TH			ON			
	5TH	ON					ON
	6TH	ON		ON	ON		

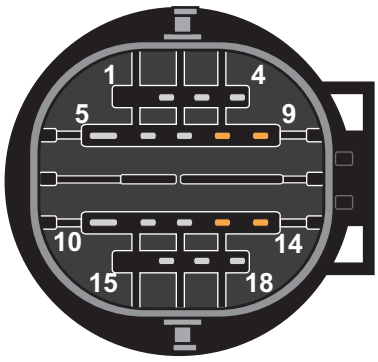
ON - Solenoid is energized

* - On (8kph), Off (6kph)

F - Feedback Control

N.H. - Normally High

N.H. Normally Low



5. Solenoid Power (2/6, SSB, U/D, LP)

11. 2/6 Variable Force Solenoid
12. Shift Solenoid B
16. U/D Variable Force Solenoid
17. Line Pressure Control Solenoid

10. Solenoid Power (TCC, 3-5-R, O/D, SSA)

2. TCC Control Solenoid
6. 3-5-R Variable Force Solenoid
7. O/D Variable Force Solenoid
18. Shift Solenoid A

Figure 6

A6MF1

SOLENOID ON/OFF AND PRESSURE CHART

	Solenoid								Clutch/Brake				
Gear	**OD (LR with SS-A)**	**UD**	**2/6**	**3/5/R with SS-B)**	**TCC**	**LPS**	**SS-A**	**SS-B**	**OD**	**3/5/R**	**2/6**	**L/R**	**UD**
	Normal Open	Normal Open	Normal Closed	Normal Open	Normal Closed	Normal Open	Normal Closed	Normal Closed					
P	7%	42%	7%	41%	7%	45%	82%	OL (13.6V)				50 psi	50 psi
R	7%	42%	7%	6.80%	7%	8%	82%	82% (3)		230 psi		230 psi	
N	7%	42%	7%	42%		45% 45%@ idle min pres. 8%@ max pres. 36%@ 90 psi	82%	OL				50 psi	50 psi
D1	7%	7%	13%	42%			82%	OL				50 psi until-5 mph	50 psi
AS1	40%	7%	13%	42%			82%	82%				50 psi	50 psi
AS2	40%	7%	39%	42%			OL	OL			50 psi		50 psi
AS3	40%	7%	7%	6.70%			OL	OL		50 psi			50 psi
AS4	7%	7%	7%	40%			OL	OL	51 psi				50 psi
AS5	7%	42%	7.60%	6.70%			OL	82%	51 psi	50 psi			
AS6	7%	42%	39%	41%			OL	OL	51 psi		50 psi		

General Line Pressure Readings - *LPS Duty Cycle %:*

8% - 230 psi
34% - 97 psi
36% - 90 psi
45% - 47-60 psi

Solenoid Reducing Circuit Feeds:
RED 1 (SS-A/SS-B) - 73-75 psi max
RED 2 (all other solenoids) - 79-81 psi max

Data provided by 2013 Dodge Dart 2.4L using the 6F24 Transmission

Dodge refers to Normally High Solenoids as Normally Open and Normally Low as Normally Closed

Figure 7

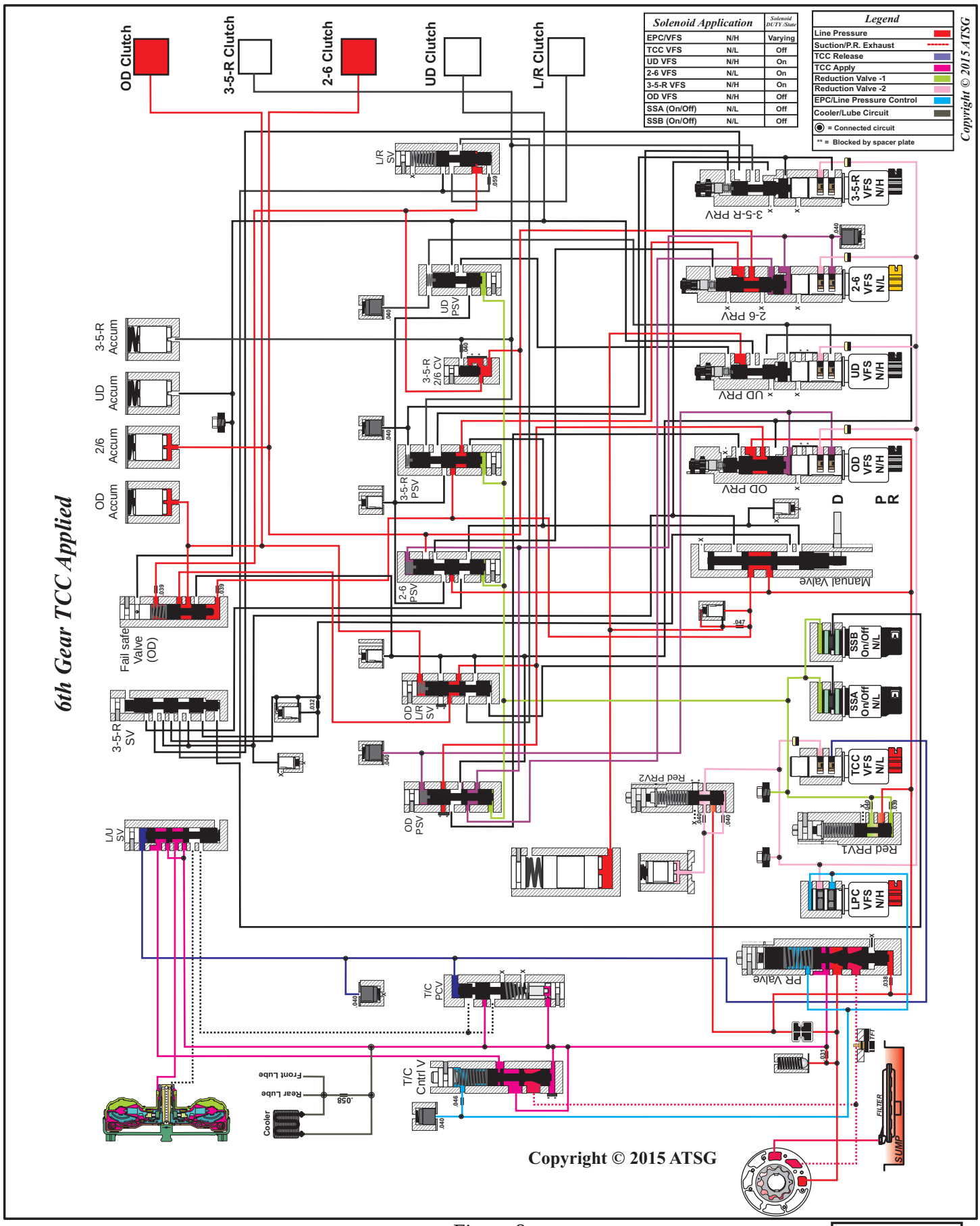
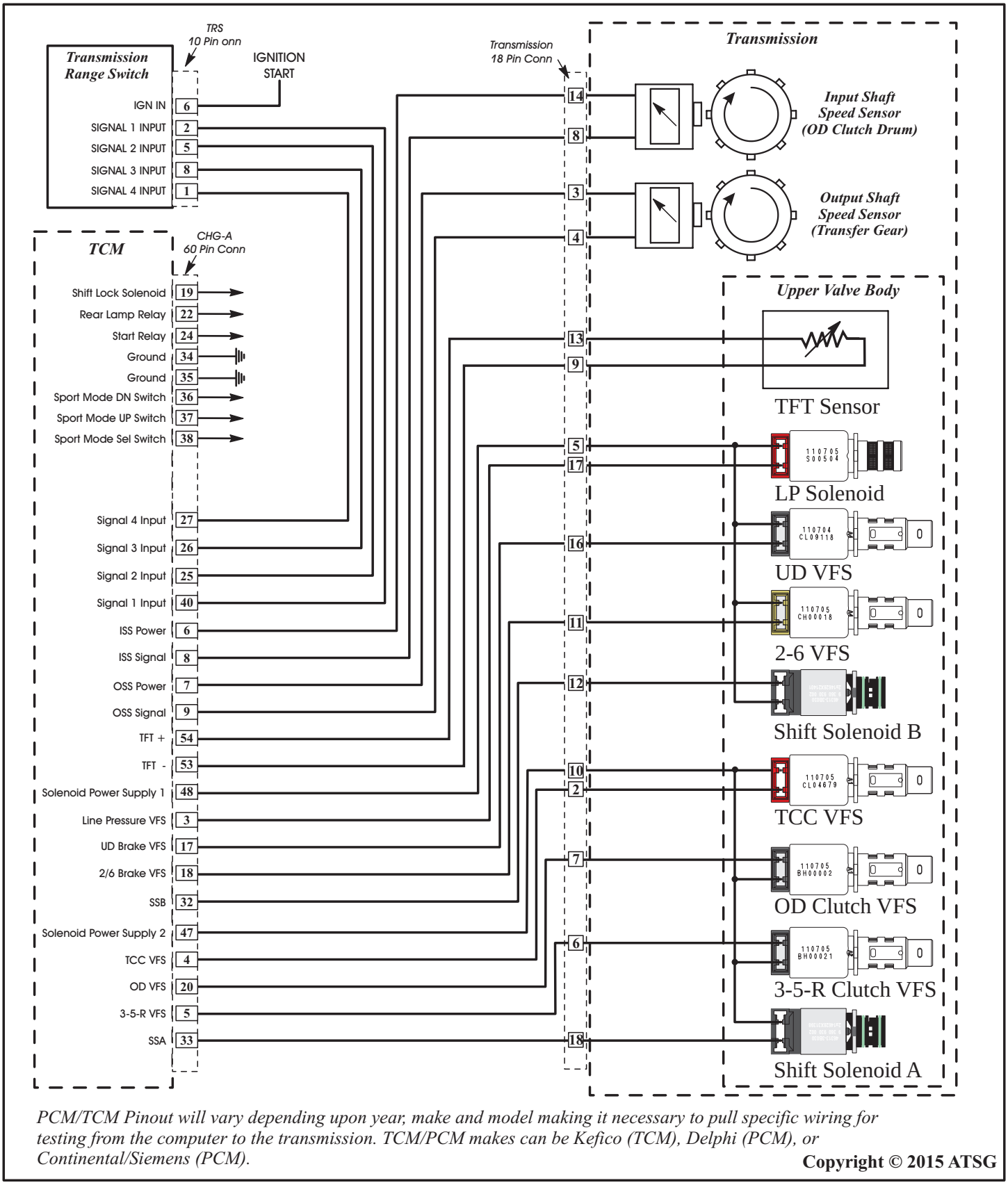

6th Gear TCC Applied
OD Clutch
3-5-R Clutch
2-6 Clutch
UD Clutch
L/R Clutch
Solenoid Application
Solenoid DUTY State
EPC/VFS N/H Varying
TCC VFS N/L Off
UD VFS N/H On
2-6 VFS N/L On
3-5-R VFS N/H On
OD VFS N/H Off
SSA (On/Off) N/L Off
SSB (On/Off) N/L Off
Legend
Line Pressure
Suction/P.R. Exhaust
TCC Release
TCC Apply
Reduction Valve -1
Reduction Valve -2
EPC/Line Pressure Control
Cooler/Lube Circuit
= Connected circuit
** = Blocked by spacer plate
Copyright © 2015 ATSG
3-5-R Accum
UD Accum
2/6 Accum
OD Accum
Fail safe Valve (OD)
3-5-R SV
L/U SV
L/R SV
UD PSV
3-5-R 2/6 CV
3-5-R PSV
2-6 PSV
OD L/R SV
OD PSV
T/C PCV
T/C Cntrl V
3-5-R PRV
2-6 PRV
UD PRV
OD PRV
Manual Valve
Red PRV2
Red PRV1
PR Valve
3-5-R VFS N/H
2-6 VFS N/L
UD VFS N/H
OD VFS N/H
SSB On/Off N/L
SSA On/Off N/L
TCC VFS N/L
LPC VFS N/H
Front Lube
Rear Lube
Cooler
FILTER
SUMP
Copyright © 2015 ATSG

Figure 8

A6MF1

TYPICAL WIRING DIAGRAM

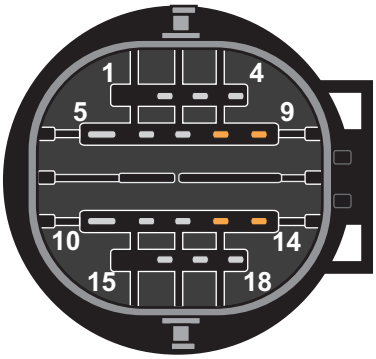


PCM/TCM Pinout will vary depending upon year, make and model making it necessary to pull specific wiring for testing from the computer to the transmission. TCM/PCM makes can be Kefico (TCM), Delphi (PCM), or Continental/Siemens (PCM).

Figure 9

A6MF1

TRANSMISSION CASE CONNECTOR



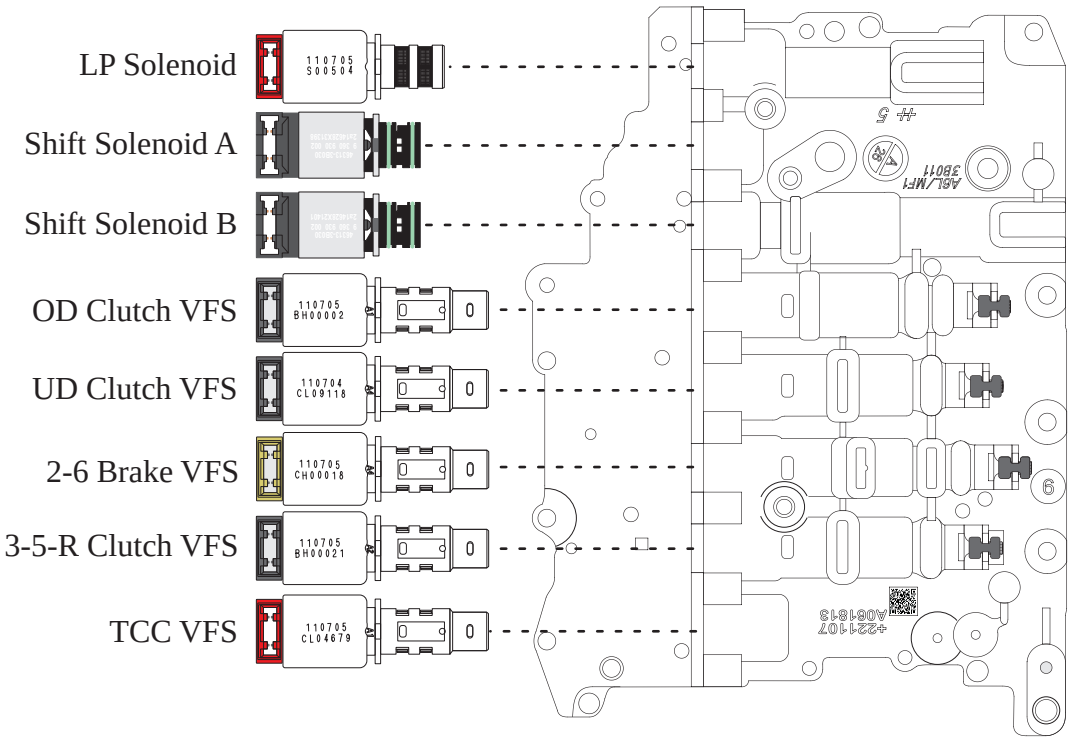
Pin Assignments

1. Not used	10. Power Supply (TCC, OD, 35R, SSA)
2. TCC Control Solenoid	11. 2/6 Variable Force Solenoid
3. OSS Power	12. Shift Solenoid B
4.OSS Signal	13. TFT +
5. Power Supply (LP, U/D, 2/6, SSB)	14. ISS Power
6. 3-5-R Variable Force Solenoid	15. Empty
7. OD Variable Force Solenoid	16. UD Variable Force Solenoid
8. ISS Signal	17. Line Pressure Solenoid
9. TFT -	18. Shift Solenoid A

Figure 10

A6MF1

SOLENOID SPECIFICATIONS



O.E. Solenoid Specifications

Normally High (N/H) Variable Force Solenoids (VFS)

Line Pressure OD VFS UD VFS 3-5-R VFS	Control Pressure kpa (kgf/cm^2, psi)	500.14~9.81 (5.1~0.1, 72.54~1.42)
	Current (mA)	50~850
	Internal Resistance (Ù)	5.1

Normally Low (N/L) Variable Force Solenoids (VFS)

TCC 2/6	Control Pressure kpa (kgf/cm^2, psi)	9.81~500.14 (0.1~5.1, 1.42~72.54)
	Current (mA)	850~50
	Internal Resistance (Ù)	5.1

On/Off Shift Solenoids

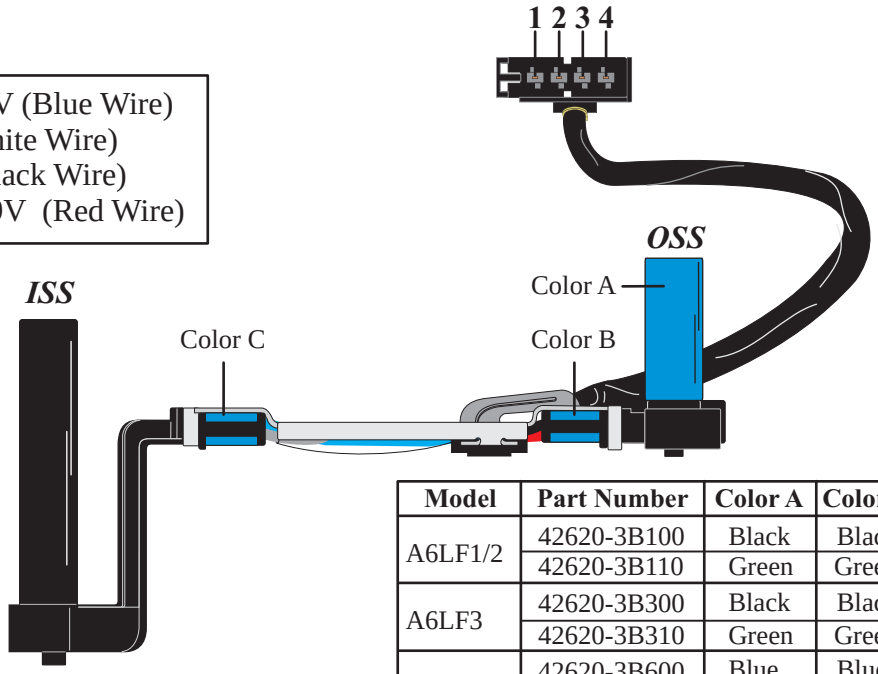
SSA SSB	Control Pressure kpa (kgf/cm^2, psi)	490.33 (5.0, 71.12)
	Internal Resistance (Ù)	10~11

Figure 11

A6MF1

SPEED SENSORS AND TFT SENSOR SPECIFICATIONS

1. ISS Power 8-9V (Blue Wire)
2. ISS Signal (White Wire)
3. OSS Signal (Black Wire)
4. OSS Power 8-9V (Red Wire)



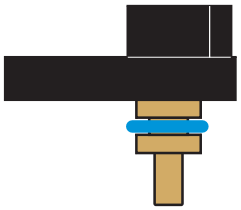
Model	Part Number	Color A	Color B	Color C
A6LF1/2	42620-3B100	Black	Black	Black
	42620-3B110	Green	Green	Green
A6LF3	42620-3B300	Black	Black	Green
	42620-3B310	Green	Green	Black
A6MF1/2	42620-3B600	Blue	Blue	Blue
	42620-3B610	Brown	Brown	Brown
	42620-3B620	Gray	Gray	Gray

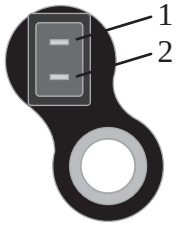
O.E. Speed Sensor Specifications

Input and Output Speed Sensor Hall Effect Type

ISS OSS	Operation Condition (°C) °F	(- 40°C to150°C) -40°F to 302°F
	Air gap (mm) in.	(.095~1.65) 0.037~0.065
	Output Voltage (V)	High: 1.18~1.68 Low: 0.59~0.84

O.E. TFT Sensor Specifications





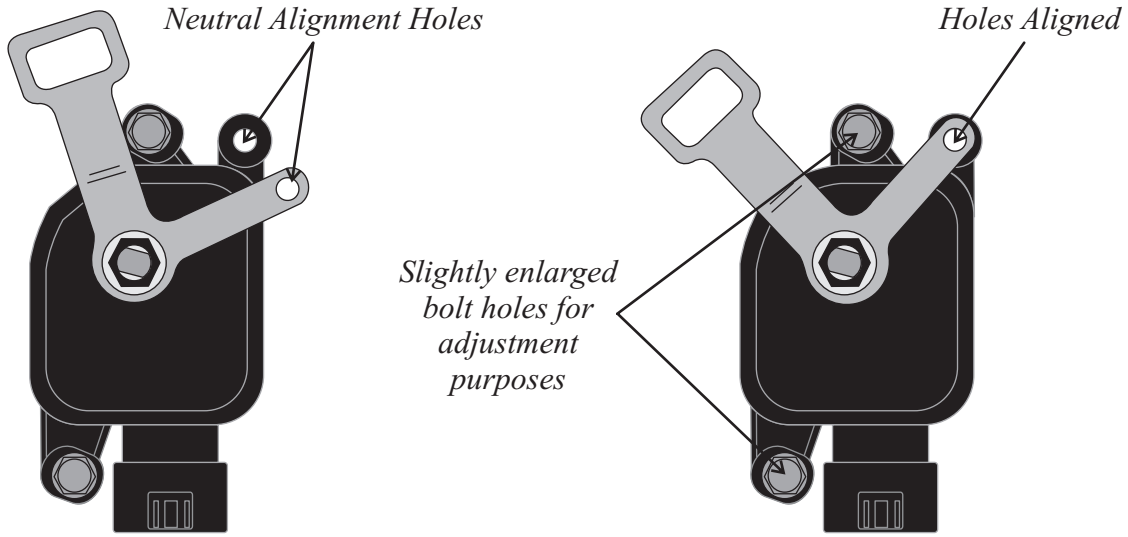
1. TFT+
2. TFT-

TFT Negative Thermal Coefficient Type

Temp [(°C) °F]	Resistance (kO)
(-40) -40	48.1
(-20) -4.0	15.6
(0) 32.0	5.88
(20) 68.0	2.51
(40) 104.0	1.11
(60) 140.0	0.61
(80) 176	0.32
(100) 212.0	0.18
(120) 248.0	0.10
(140) 284.0	0.06
(150) 302	0.05

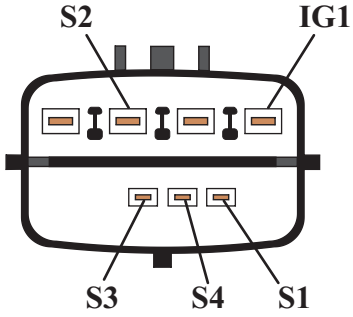
Figure 12

A6MF1
TRANSMISSION RANGE SENSOR



Lightly tighten TRS attaching bolts. Place the transmission into neutral. Position the lever alignment hole with the range sensor alignment hole using a suitable pin punch or equivalent (5mm bolt). Once aligned, tighten the attaching bolts to 9.4-10.9 lb-ft (13-15N.m/1.3-1.5Kgf.m). There is an Inhibitor Switch Bracket part # 42700 3B900QQK and 42700 3B900FFF available for Sorento XMa vehicles that experience a no start condition, uneven engagement when shifting gears and/or P0705 stored in the PCM, bulletin # 045 [Rev 1], 11/13/12.

View looking into the Transmission Range Sensor Connector



The range sensor is designed to have the potential to be fitted for 7 position Range detection. The one shown here is a 4 position range detection, P, R, N and D.

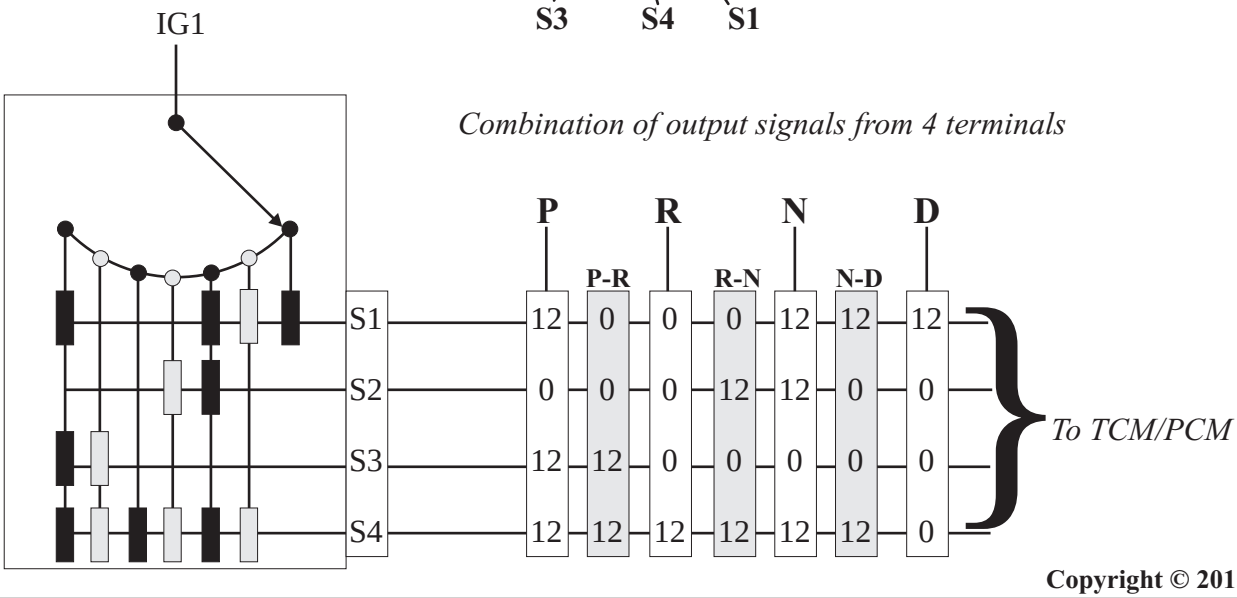
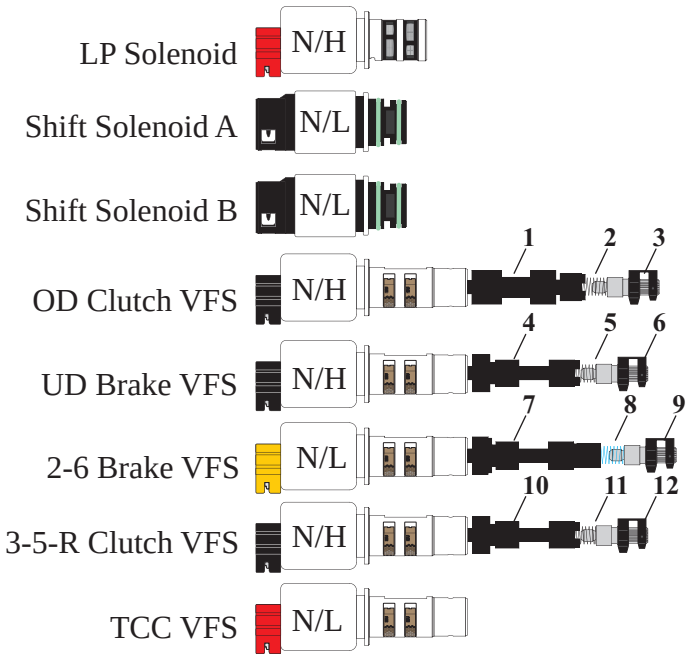


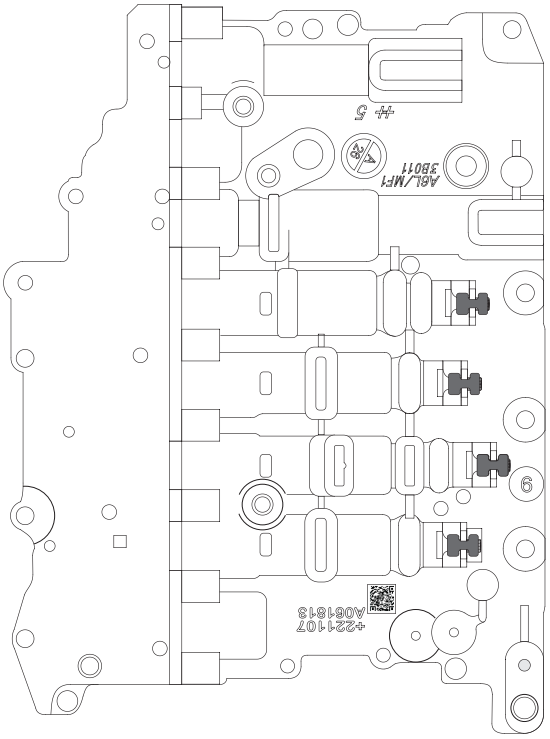
Figure 13

A6MF1

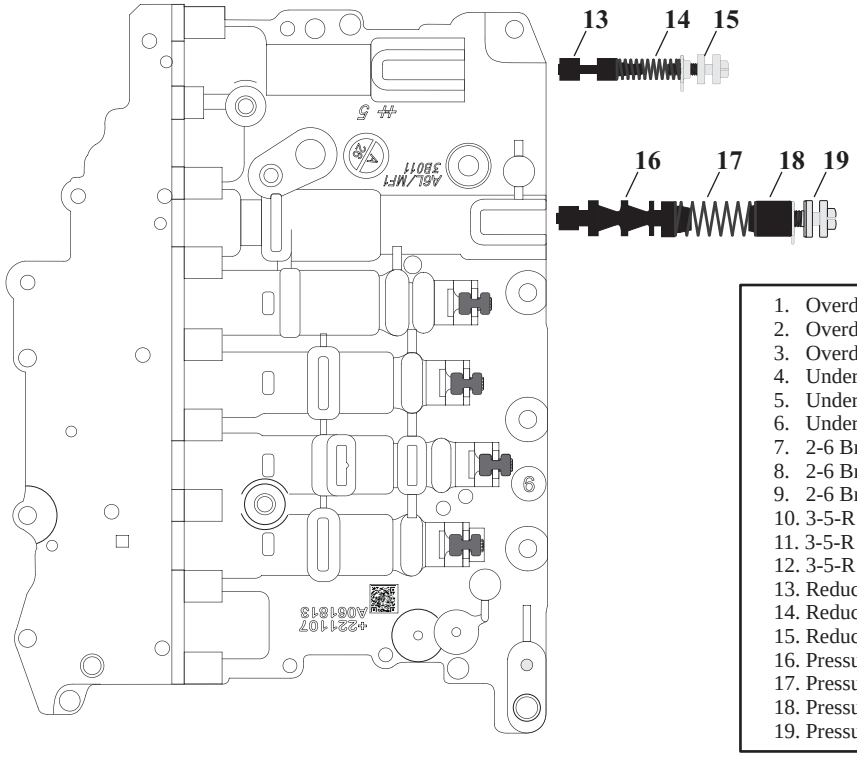
VALVE LOCATION AND IDENTIFICATION

Upper valve body housing upper side





* N/H - Normally High
* N/L - Normally Low
* VFS - Variable Force Solenoid



1. Overdrive Pressure Control Valve
2. Overdrive Pressure Control Valve Spring
3. Overdrive Pressure Control Adjusting Screw
4. Underdrive Pressure Control Valve
5. Underdrive Pressure Control Adjusting Spring
6. Underdrive Pressure Control Valve Screw
7. 2-6 Brake Pressure Control Valve
8. 2-6 Brake Pressure Control Valve Spring
9. 2-6 Brake Pressure Control Adjusting Screw
10. 3-5-R Pressure Control Valve
11. 3-5-R Pressure Control Valve Spring
12. 3-5-R Pressure Control Adjusting Screw
13. Reducing Valve - 1
14. Reducing Valve - 1 Spring
15. Reducing Valve - 1 Adjusting Screw
16. Pressure Regulator Valve
17. Pressure Regulator Valve Spring
18. Pressure Regulator Valve Sleeve
19. Pressure Regulator Valve Adjusting Screw

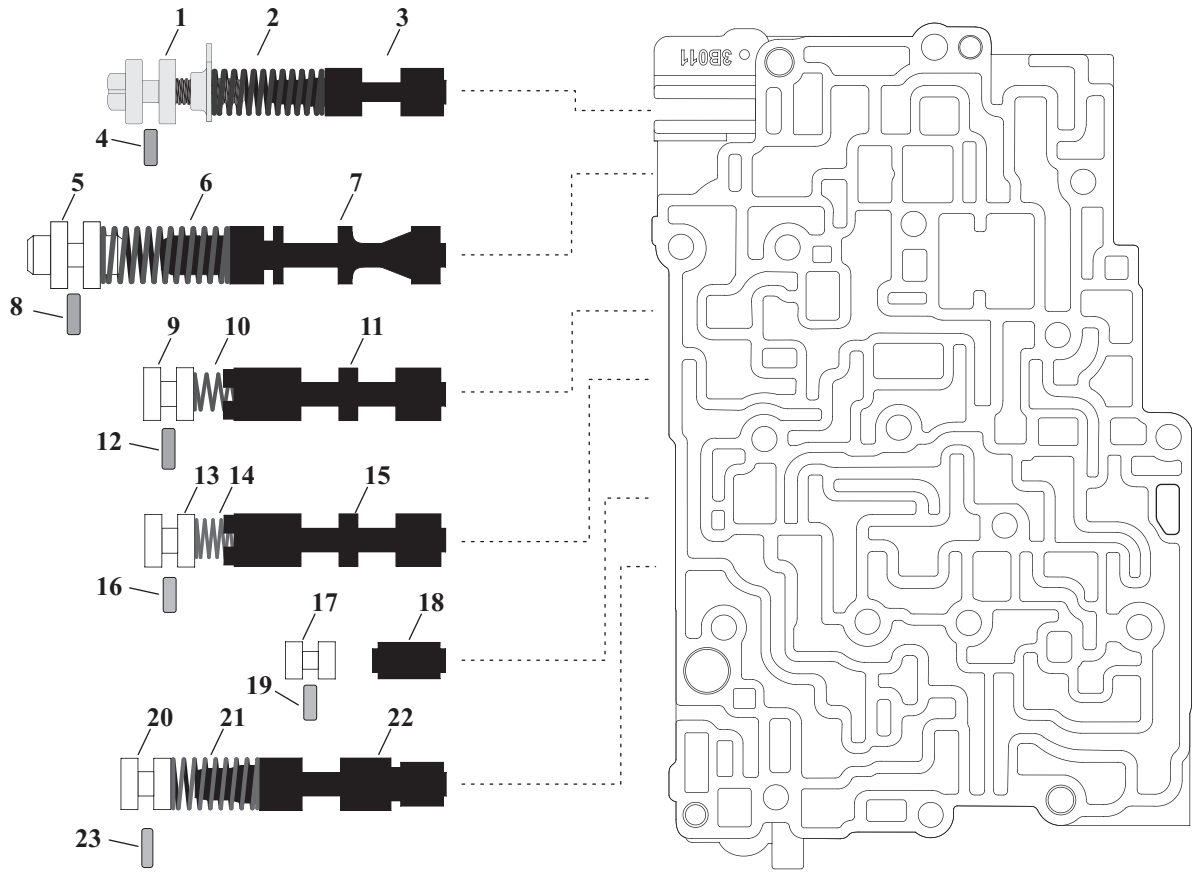
See Figure 19 for spring specifications

Figure 14

A6MF1

VALVE LOCATION AND IDENTIFICATION

Middle valve body housing upper side



1. Reduction Valve- 2 Adjusting Screw
2. Reduction Valve- 2 Adjusting Screw Spring
3. Reduction Valve- 2
4. Reduction Valve- 2 Stopper Plate (Keeper)
5. T/C Control Valve Stopper Plug (Bore Plug)
6. T/C Control Valve Spring
7. T/C Control Valve
8. T/C Control Valve Stopper Plate (Keeper)
9. Overdrive & L/R Switch Valve Stopper Plug (Bore Plug)
10. Overdrive & L/R Switch Valve Spring
11. Overdrive & L/R Switch Valve
12. Overdrive & L/R Switch Valve Stopper Plate (Keeper)
13. Overdrive Pressure Switch Valve Stopper Plug (Bore Plug)
14. Overdrive Pressure Switch Valve Spring
15. Overdrive Pressure Switch Valve
16. Overdrive Pressure Switch Valve Stopper Plate (Keeper)
17. 3-5-R & 2/6 Brake Check Valve Stopper Plug (Bore Plug)
18. 3-5-R & 2/6 Brake Check Valve
19. 3-5-R & 2/6 Brake Check Valve Stopper Plate (Keeper)
20. L/R Switch Valve Stopper Plug (Bore Plug)
21. L/R Switch Valve Spring
22. L/R Switch Valve
23. L/R Switch Valve Stopper Plate (Keeper)

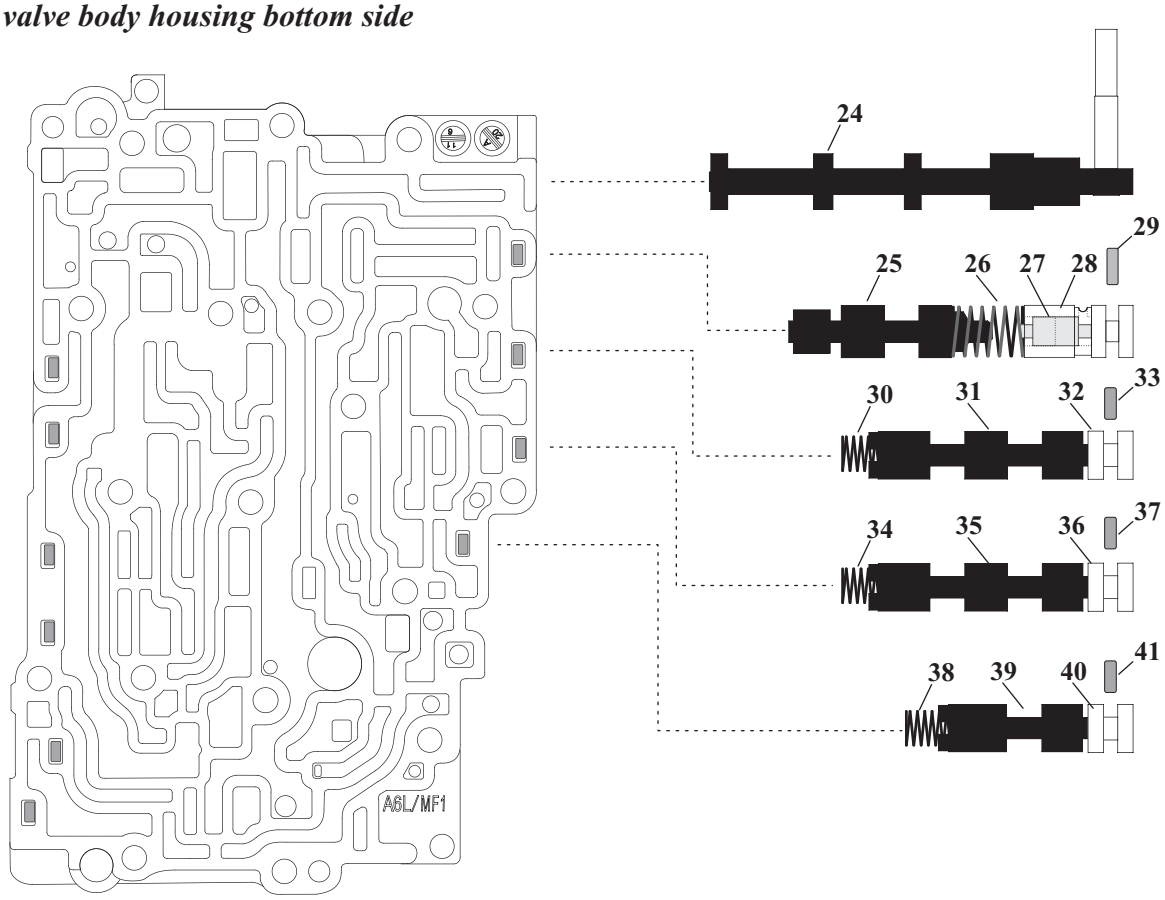
See Figure 19 for spring specifications

Figure 15

A6MF1

VALVE LOCATION AND IDENTIFICATION

Middle valve body housing bottom side



24. Manual Valve
25. TCC Pressure Control Valve
26. TCC Pressure Control Valve Spring
27. TCC Pressure Control Plug
28. TCC Pressure Control Sleeve
29. TCC Pressure Control Valve Stopper Plate (Keeper)
30. 3-5-R Pressure Switch Valve Spring
31. 3-5-R Pressure Switch Valve
32. 3-5-R Pressure Switch Valve Stopper Plug (Bore Plug)
33. 3-5-R Pressure Switch Valve Stopper Plate (Keeper)
34. 2/6 Brake Pressure Switch Valve Spring
35. 2/6 Brake Pressure Switch Valve
36. 2/6 Brake Pressure Switch Valve Stopper Plug (Bore Plug)
37. 2/6 Brake Pressure Switch Valve Stopper Plate (Keeper)
38. Underdrive Pressure Switch Valve Spring
39. Underdrive Pressure Switch Valve
40. Underdrive Pressure Switch Valve Stopper Plug (Bore Plug)
41. Underdrive Pressure Switch Valve Stopper Plate (Keeper)

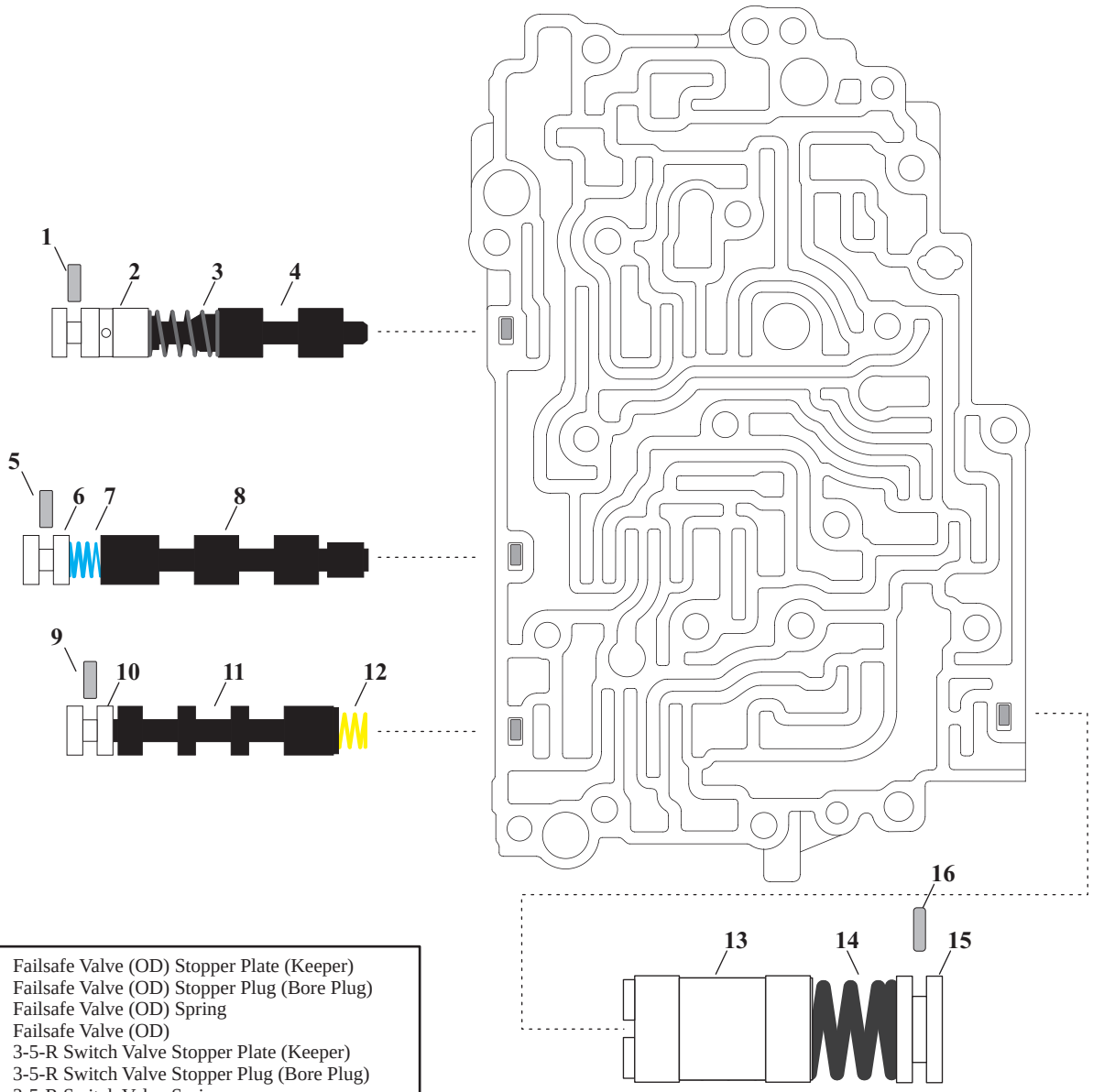
See Figure 19 for spring specifications

Figure 16

A6MF1

VALVE LOCATION AND IDENTIFICATION

Lower valve body housing upper side



1. Failsafe Valve (OD) Stopper Plate (Keeper)
2. Failsafe Valve (OD) Stopper Plug (Bore Plug)
3. Failsafe Valve (OD) Spring
4. Failsafe Valve (OD)
5. 3-5-R Switch Valve Stopper Plate (Keeper)
6. 3-5-R Switch Valve Stopper Plug (Bore Plug)
7. 3-5-R Switch Valve Spring
8. 3-5-R Switch Valve
9. L/U Switch Valve Stopper Plate (Keeper)
10. L/U Switch Valve Stopper Plug (Bore Plug)
11. L/U Switch Valve
12. L/U Switch Valve Spring
13. Accumulator Piston (DN)
14. Accumulator Piston (DN) Spring
15. Accumulator Piston (DN) Stopper Plug (Bore Plug)
16. Accumulator Piston (DN) Stopper Plate (Keeper)

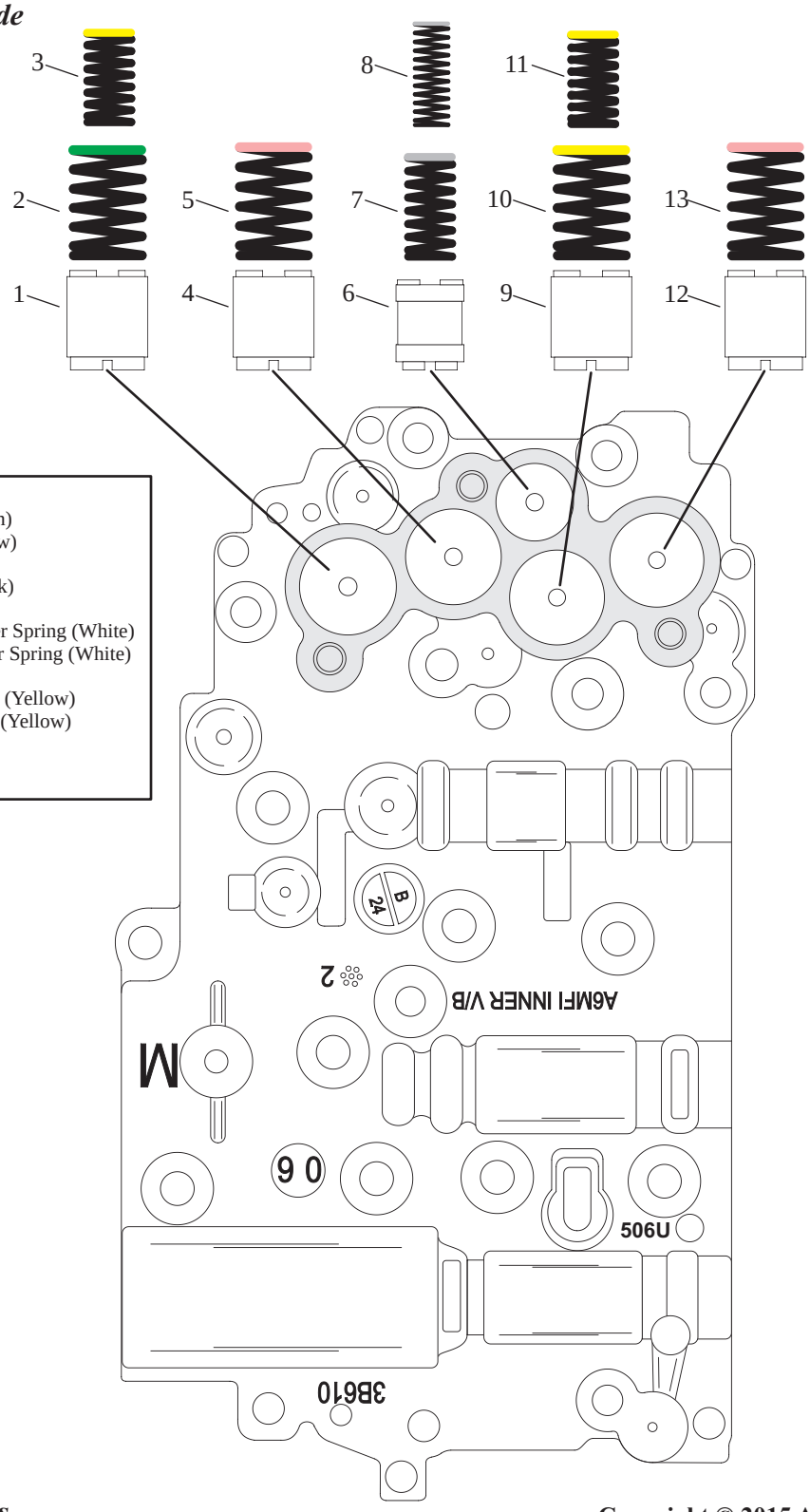
See Figure 19 for spring specifications

Figure 17

A6MF1

ACCUMULATOR LOCATION AND IDENTIFICATION

Lower valve body housing bottom side



1. 2-6 Accumulator Piston
2. 2-6 Accumulator Piston Outer Spring (Green)
3. 2-6 Accumulator Piston Inner Spring (Yellow)
4. Underdrive Accumulator Piston
5. Underdrive Accumulator Piston Spring (Pink)
6. Reduction Valve 2 Accumulator Piston
7. Reduction Valve 2 Accumulator Piston Outer Spring (White)
8. Reduction Valve 2 Accumulator Piston Inner Spring (White)
9. Overdrive Accumulator Piston
10. Overdrive Accumulator Piston Outer Spring (Yellow)
11. Overdrive Accumulator Piston Inner Spring (Yellow)
12. 3-5-R Accumulator Piston
13. 3-5-R Accumulator Piston Spring (Pink)

See Figure 19 for spring specifications

Figure 18

A6MF1

SPRING SPECIFICATIONS

VALVE BODY SPRING SPECIFICATIONS

UPPER VB SPRING SPECIFICATIONS

SPRING NUMBER 2
Free Length = 0.760"
Spring Diameter = .257"
Wire Diameter = .025"
Approx Coils = 11 (None)

SPRING NUMBER 5
Free Length = 0.760"
Spring Diameter = .257"
Wire Diameter = .025"
Approx Coils = 11 (None)

SPRING NUMBER 8
Free Length = 0.735"
Spring Diameter = .245"
Wire Diameter = .025"
Approx Coils = 11 (Lt. Blue)

SPRING NUMBER 11
Free Length = 0.760"
Spring Diameter = .257"
Wire Diameter = .025"
Approx Coils = 11 (None)

SPRING NUMBER 14
Free Length = 1.185"
Spring Diameter = .345"
Wire Diameter = .047"
Approx Coils = 12 (None)

SPRING NUMBER 17
Free Length = 1.435"
Spring Diameter = .590"
Wire Diameter = .050"
Approx Coils = 9 (None)

LOWER VB SPRING SPECIFICATIONS

SPRING NUMBER 3
Free Length = 0.878"
Spring Diameter = .410"
Wire Diameter = .030"
Approx Coils = 6 (None)

SPRING NUMBER 7
Free Length = 0.985"
Spring Diameter = .290"
Wire Diameter = .025"
Approx Coils = 11 (Blue)

SPRING NUMBER 12
Free Length = 1.030"
Spring Diameter = .290"
Wire Diameter = .022"
Approx Coils = 9 (Yellow)

SPRING NUMBER 14
Free Length = 2.915"
Spring Diameter = .785"
Wire Diameter = .078"
Approx Coils = 11 (None)

LOWER VB ACCUM SPRING SPECIFICATIONS

SPRING NUMBER 2
Free Length = 1.145"
Spring Diameter = .645"
Wire Diameter = .090"
Approx Coils = 7 (Green)

SPRING NUMBER 3
Free Length = 0.840"
Spring Diameter = .415"
Wire Diameter = .075"
Approx Coils = 9 (Yellow)

SPRING NUMBER 5
Free Length = 1.060"
Spring Diameter = .640"
Wire Diameter = .090"
Approx Coils = 7 (Pink)

SPRING NUMBER 7
Free Length = 1.040"
Spring Diameter = .480"
Wire Diameter = .075"
Approx Coils = 9 (White)

SPRING NUMBER 8
Free Length = 1.060"
Spring Diameter = .314"
Wire Diameter = .040"
Approx Coils = 13 (White)

SPRING NUMBER 11
Free Length = .840"
Spring Diameter = .415"
Wire Diameter = .075"
Approx Coils = 9 (Yellow)

SPRING NUMBER 10
Free Length = 1.082"
Spring Diameter = .645"
Wire Diameter = .090"
Approx Coils = 7 (Yellow)

SPRING NUMBER 13
Free Length = 1.060"
Spring Diameter = .640"
Wire Diameter = .090"
Approx Coils = 7 (Pink)

MIDDLE VB SPRING SPECIFICATIONS

SPRING NUMBER 2
Free Length = 1.173"
Spring Diameter = .342"
Wire Diameter = .045"
Approx Coils = 13 (None)

SPRING NUMBER 6
Free Length = 1.650"
Spring Diameter = .432"
Wire Diameter = .045"
Approx Coils = 13 (None)

SPRING NUMBER 10
Free Length = 0.768"
Spring Diameter = .290"
Wire Diameter = .032"
Approx Coils = 10 (None)

SPRING NUMBER 14
Free Length = 1.025"
Spring Diameter = .308"
Wire Diameter = .028"
Approx Coils = 10 (None)

SPRING NUMBER 21
Free Length = 1.325"
Spring Diameter = .400"
Wire Diameter = .036"
Approx Coils = 10 (None)

SPRING NUMBER 26
Free Length = 1.025"
Spring Diameter = .442"
Wire Diameter = .030"
Approx Coils = 8 (None)

SPRING NUMBER 30
Free Length = 1.020"
Spring Diameter = .308"
Wire Diameter = .025"
Approx Coils = 11 (None)

SPRING NUMBER 34
Free Length = 1.020"
Spring Diameter = .308"
Wire Diameter = .025"
Approx Coils = 11 (None)

SPRING NUMBER 38
Free Length = 1.020"
Spring Diameter = .308"
Wire Diameter = .025"
Approx Coils = 11 (None)

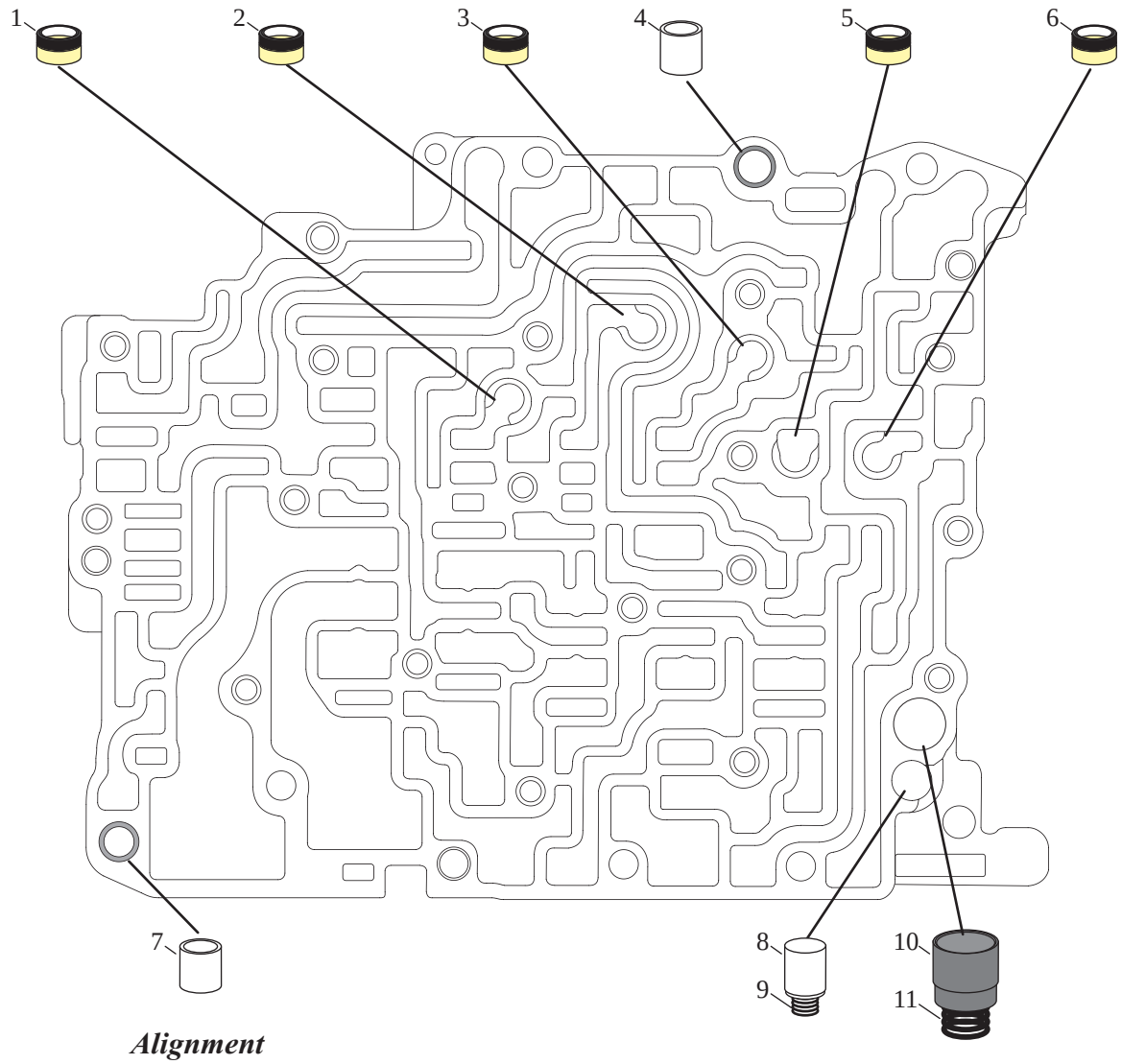
NONE = No Color

Figure 19

A6MF1

SMALL PART LOCATION AND IDENTIFICATION

UPPER VALVE BODY HOUSING INNER SIDE



1. OD VFS Feed Filter
2. UD VFS Feed Filter
3. 2-6 Brake VFS Feed Filter
4. Alignment Sleeve
5. 3-5-R VFS Feed Filter
6. TCC VFS Feed Filter
7. Alignment Sleeve
8. Reverse Check Valve
9. Reverse Check Valve Spring*
10. TCC VFS Dampner Piston
11. TCC VFS Dampner Piston Spring**

* .535x.175x.020x16
** .445x.294x.051x6

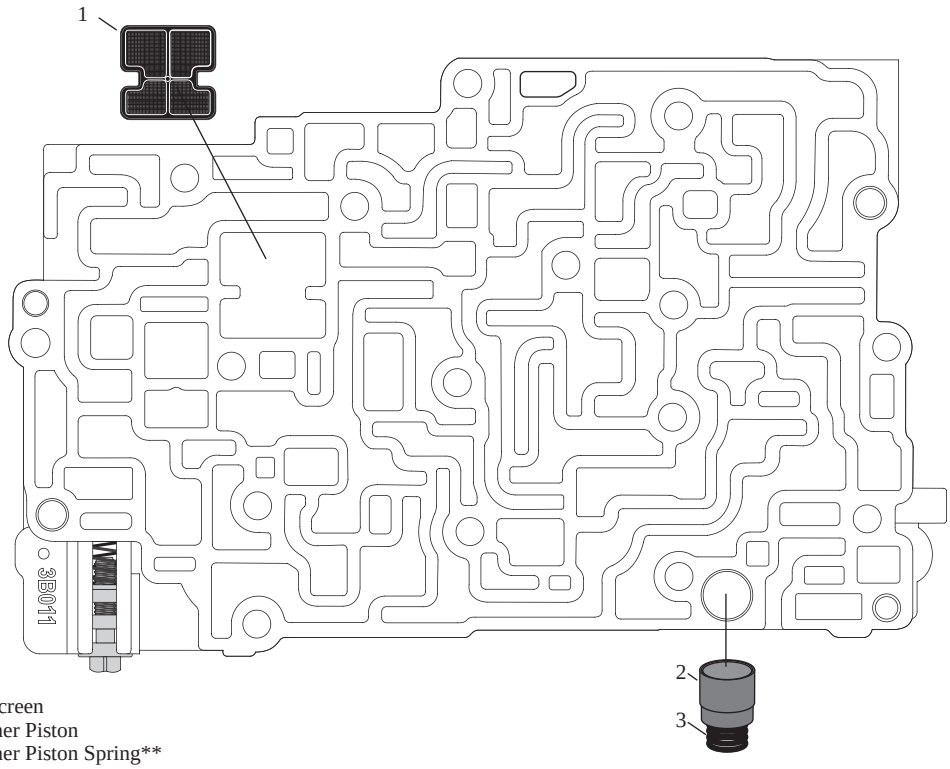
A dampner is a hydraulic device used to reduce pulsations in a hydraulic system.

Figure 20

A6MF1

SMALL PART LOCATION AND IDENTIFICATION

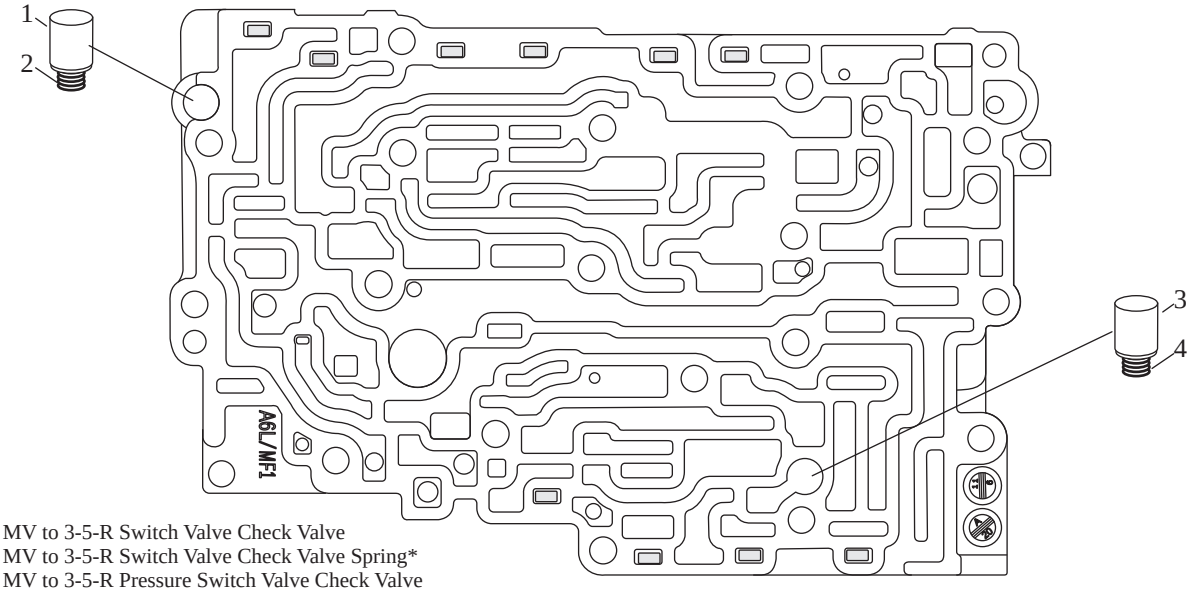
MIDDLE VALVE BODY HOUSING UPPER SIDE



1. Line Pressure Screen
2. 2/6 VFS Dampner Piston
3. 2/6 VFS Dampner Piston Spring**

** .445x.294x.051x6

MIDDLE VALVE BODY HOUSING BOTTOM SIDE



1. MV to 3-5-R Switch Valve Check Valve
2. MV to 3-5-R Switch Valve Check Valve Spring*
3. MV to 3-5-R Pressure Switch Valve Check Valve
4. MV to 3-5-R Pressure Switch Valve Check Valve Spring*

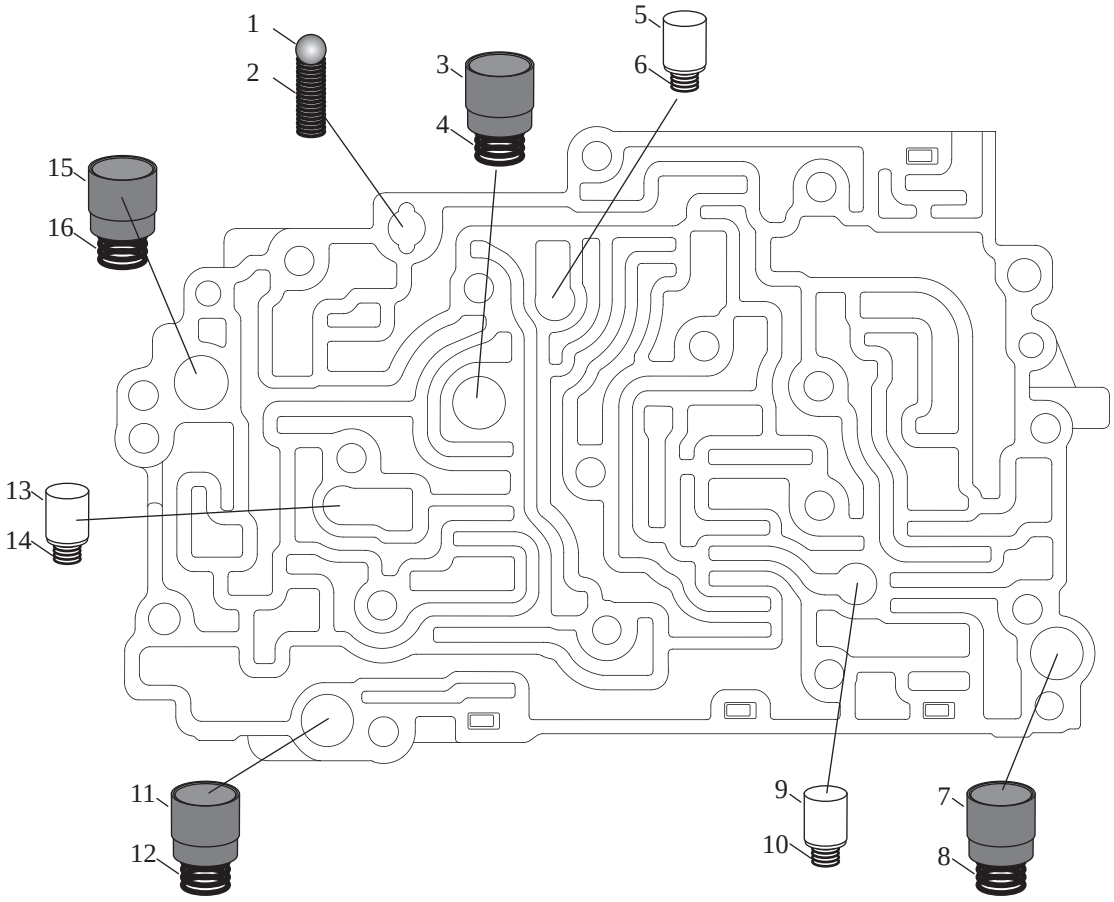
* .535x.175x.020x16

Figure 21

A6MF1

SMALL PART LOCATION AND IDENTIFICATION

LOWER VALVE BODY HOUSING UPPER SIDE



1. Line Pressure Release Ball (.280")
2. Line Pressure Release Spring (.682x.290x.040x10)
3. UD VFS Dampner Piston
4. UD VFS Dampner Piston Spring**
5. Pressure Switch Check Valve
6. Pressure Switch Check Valve Spring*
7. 3-5-R VFS Dampner Piston
8. 3-5-R VFS Dampner Piston Spring**
9. MV to 3-5-R Switch Valve Check Valve
10. MV to 3-5-R Switch Valve Check Valve Spring*
11. OD VFS Dampner Piston
12. OD VFS Dampner Piston Spring**
13. OD & UD VFS Check Valve
14. OD & UD VFS Check Valve Spring*
15. LPC VFS Dampner Piston
16. LPC VFS Dampner Piston Spring**

* .535x.175x.020x16
** .445x.294x.051x6

Figure 22

A6MF1

CASE PASSAGE IDENTIFICATION

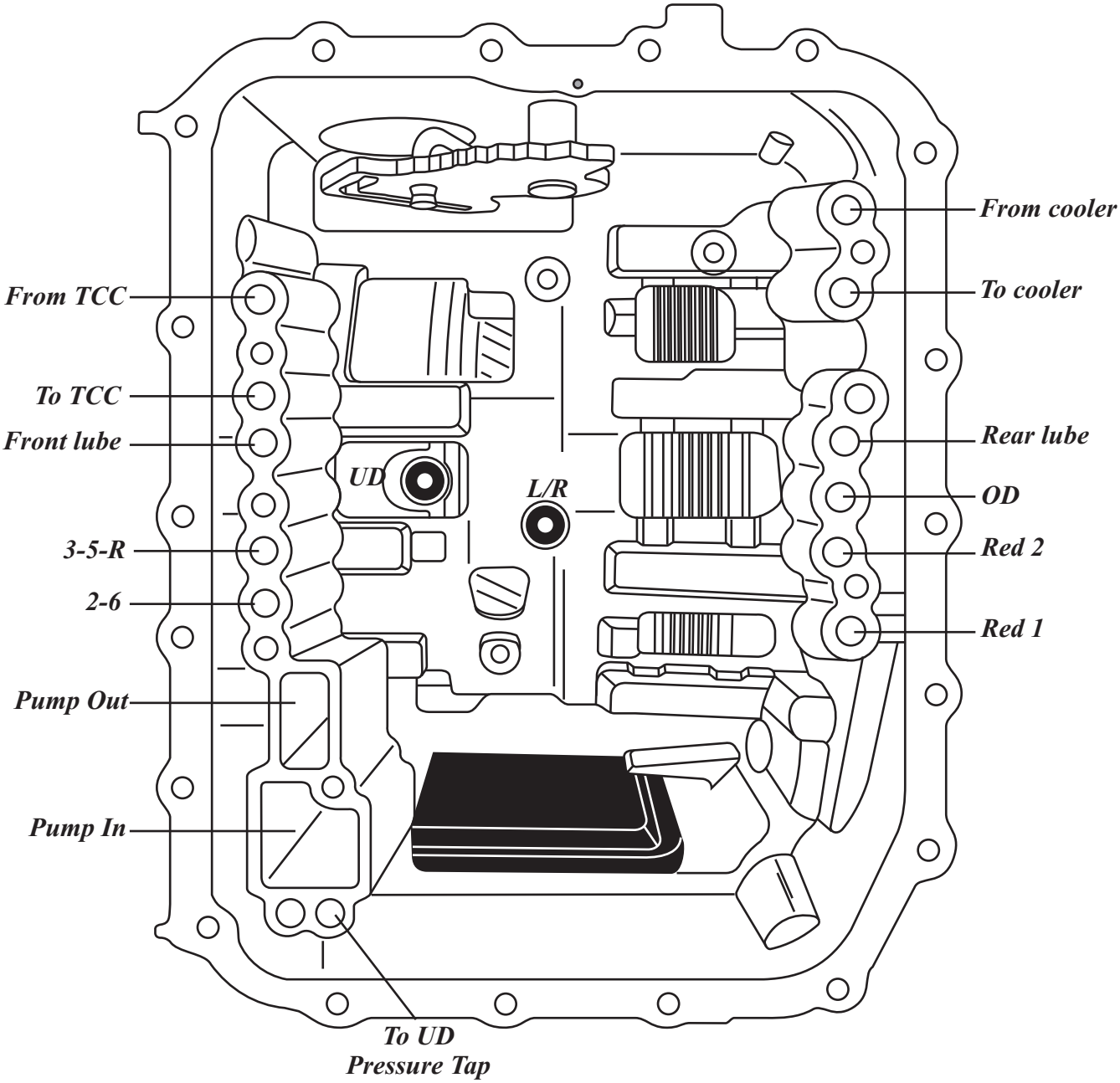


Figure 23