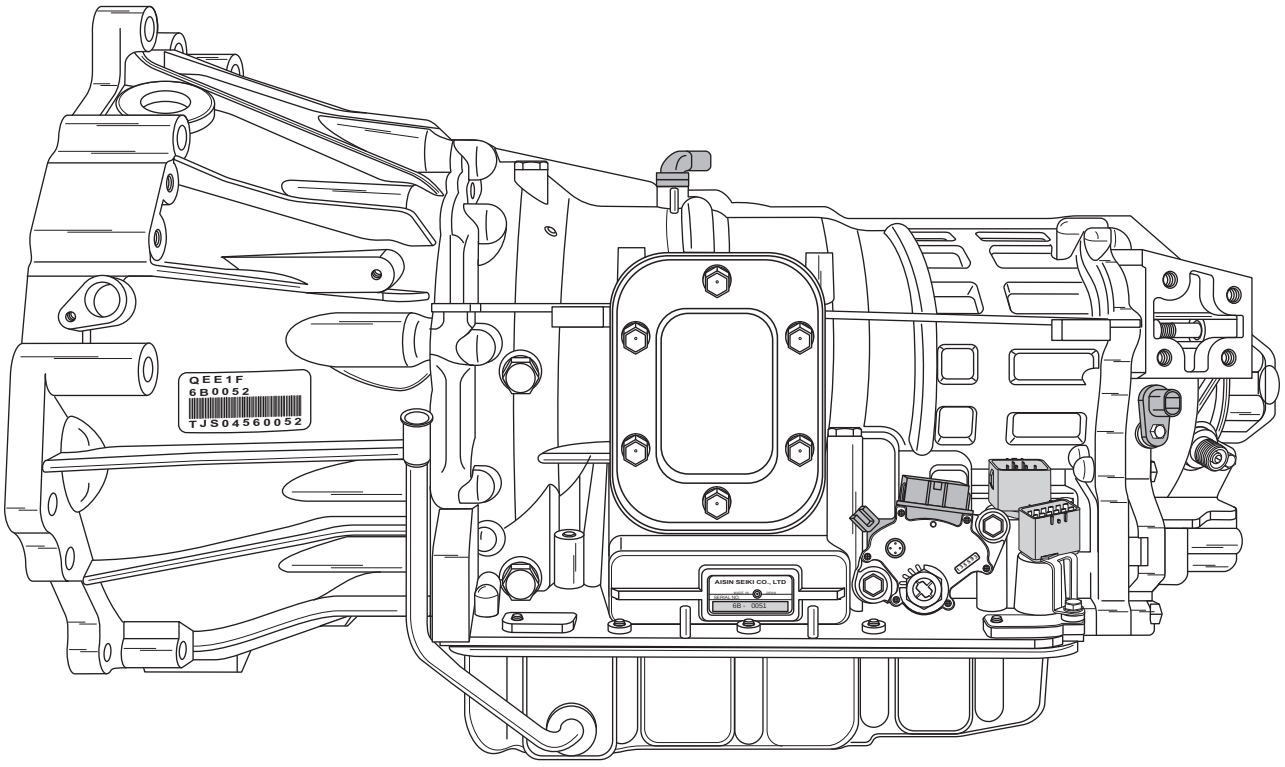
AS6 / AS68RC
PRELIMINARY INFORMATION

The following information is for the AS6 / AS68RC six speed Medium Duty Truck transmission. It is found in the Mitsubishi Fuso starting in 2005, 07 and up Isuzu cab over, and 07 and up Dodge incomplete chassis. There is information on both versions in the following pages. The operational characteristics displayed are for the Dodge, which are similar to the Isuzu. The Valve Body information and specifications are from an Isuzu application, and are very similar to the Dodge.

AS6 / AS68RC
ISUZU AND DODGE TRUCKS



GENERAL DESCRIPTION

Beginning in model year 2007 Daimler-Chrysler introduced a new rear drive transmission that is manufactured by Aisin Seiki in Japan and referred to as the AS68RC by Chrysler. It is a six speed, rear wheel drive (RWD) automatic transmission and found in Dodge 3500, 4500, and 5500 chassis, with the Cummins 6.7L diesel engine. Refer to Figure 1 for the definitions of AS68RC.

Primary reason was to assist Dodge's re-entry into the commercial truck market with its 26,000 lb GCVW rating. This is accomplished through the use of a multi-plate torque converter clutch and heavy duty gear train housed in a conventional transmission case assembly, as shown in Figure 3.

The primary mechanical components of the AS68RC are as follows:

- ***Three Driving Clutch Packs.***
- ***Two Brake Clutch Packs.***
- ***One One-Way Sprag Clutch.***
- ***Three Planetary Gear Sets.***
- ***Torque Converter Multi-Disc Lock-up Clutch***

Fuel efficiency is provided by clutch to clutch shifting, an on-demand torque converter clutch, and the use of two overdrive ratios. Refer to Figure 3 for component locations and identification of each component. The AS68RC provides six forward and one reverse range. With the selective lever in D (Drive), all forward ranges are available when the O/D and Tow/Haul features are Off.

Fully electronic shift and torque converter clutch controls optimize transmission operation, fuel economy, and towing capability. The Transmission Control Module (TCM) has the capability to alter shift schedules, line pressure, and the apply and release of the torque converter clutch. The TCM receives information from several electronic sensors and based on that information will output to the following solenoids located on the valve body.

- ***Four Linear (PWM) Solenoids.***
- ***Four On/Off Shift Solenoids.***

The TCM also communicates with the Engine Control Module (ECM) and the Totally Integrated Power Module (TIPM) via the CAN-C bus. The TCM is a stand alone module located located under driver side dash next to the steering shaft.

The AS68RC can also accommodate a variety of Power Take Off (PTO) accessories and is available in 2WD and 4WD versions.

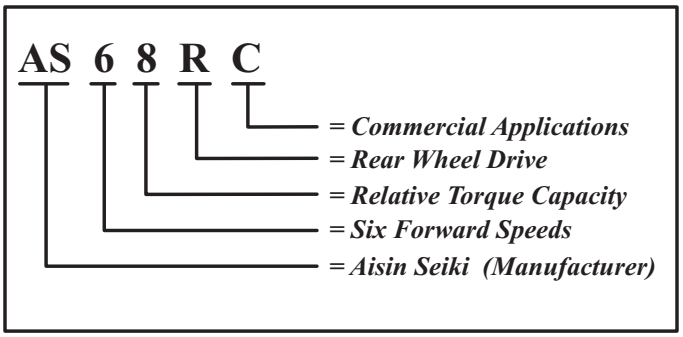
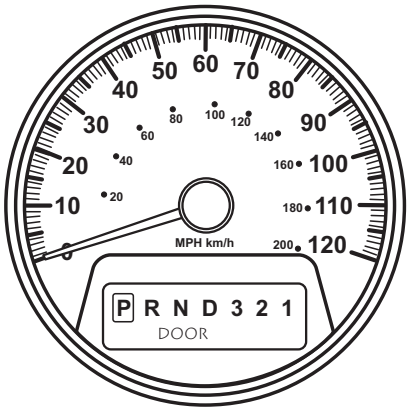


Figure 1



Instrument Panel (Speedometer)

Figure 2

AS68RC Shift Quadrant

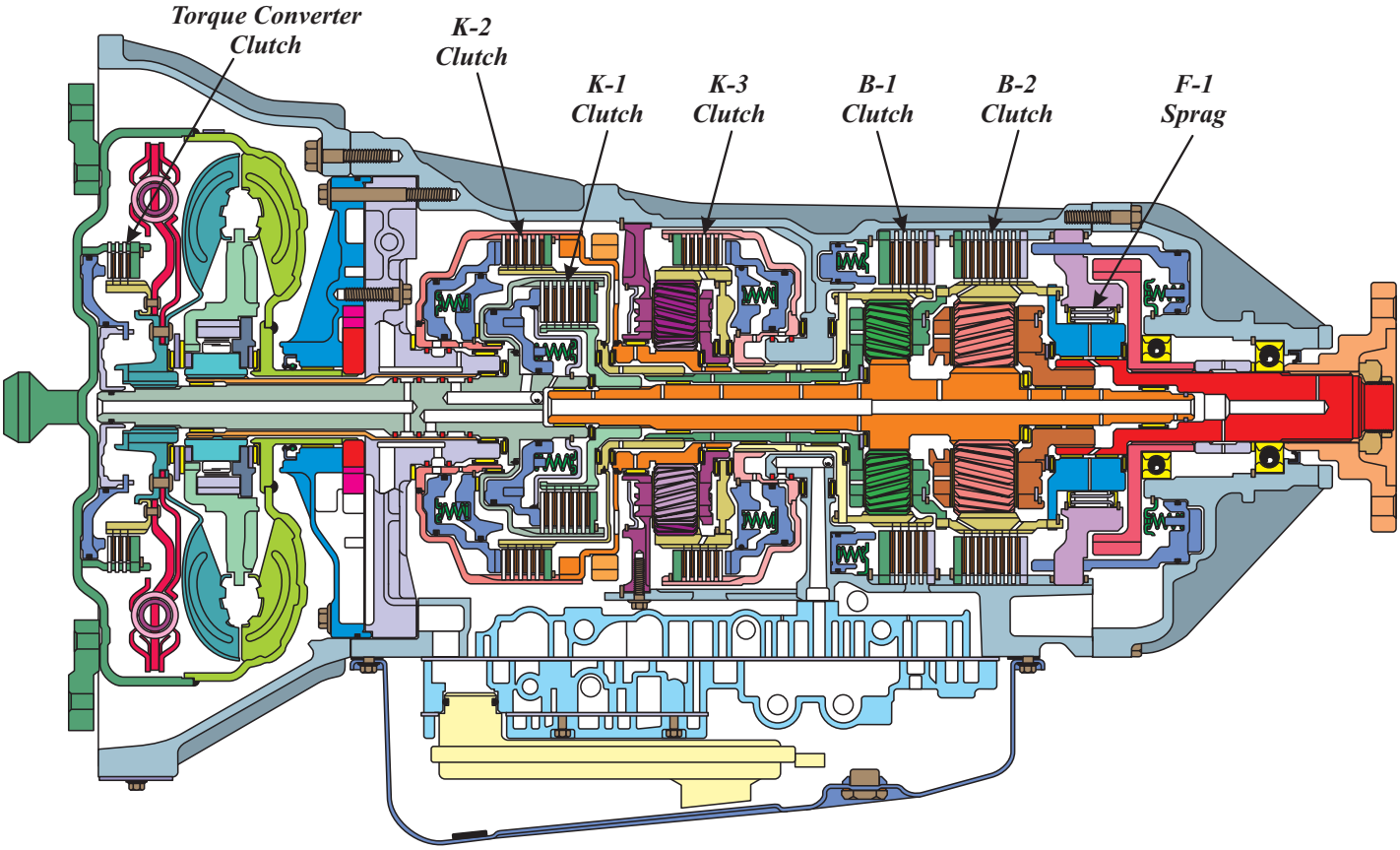
The AS68RC shift quadrant indicator is located in the speedometer housing, as shown in Figure 2 and is equipped with a column shift lever. Shift lever positions are as follows:

P When the Park position is selected, there is no powerflow through the transaxle. The parking pawl is engaged which locks the output shaft to the case. The engine can be started and the ignition key can be removed.

R When the Reverse position is selected, the vehicle can be operated in a rearward direction at a reduced gear ratio.

N When the Neutral position is selected, there is no powerflow through the transaxle. The output shaft is free to rotate and the engine can be started. This position can also be selected while the vehicle is moving to restart the engine, if necessary.

AS68RC INTERNAL COMPONENT IDENTIFICATION AND LOCATION



COMPONENT APPLICATION CHART

RANGE	K-1 Clutch	K-2 Clutch	K-3 Clutch	B-1 Clutch	B-2 Clutch		F-1 Sprag		Torq Conv Clutch	Gear Ratio
Park					On					
Reverse			On		On					3.54
Neutral					On					
"D"-1st	On				On		Hold			3.74
"D"-2nd	On			On					Applied*	2.00
"D"-3rd	On		On						Applied*	1.34
"D"-4th	On	On							Applied*	1.00
"D"-5th		On	On						Applied*	0.77
"D"-6th		On		On					Applied*	0.63

* TCC is available in 2nd thru 6th gear, based on throttle position, fluid temp and vehicle speed.

Figure 3

AS68RC Shift Quadrant (Cont'd)

D The Drive position is the normal position for most forward gear operations. The Drive position provides automatic upshifts and downshifts, apply and release of the converter clutch, and maximum fuel economy during normal operation. Drive range allows the transmission to operate in each of the six forward gear ratios, with the O/D and Tow/Haul in Off position. Downshifts are available for safe passing, by depressing the accelerator.

3 Manual "3" position prevents transmission from shifting above 3rd gear, and adds more performance and engine braking for hilly terrain. Manual 3 can be selected at any vehicle speed, but will not downshift until vehicle speed calibrated into the TCM has been reached, to prevent engine over-speed.

2 Manual "2" position prevents transmission from shifting above 2nd gear, and provides engine braking for hilly terrain. Manual 2 can be selected at any vehicle speed, but will not downshift until vehicle speed calibrated into the TCM has been reached, to prevent engine over-speed.

1 Manual "1" position prevents transmission from shifting above 1st gear, and provides maximum engine braking. Manual 1 can be selected at any vehicle speed, but will not downshift until vehicle speed calibrated into the TCM has been reached, to prevent engine over-speed.

AS68RC Tow/Haul and O/D Off

The "Tow/Haul" and "O/D Off" button is located on the end of the manual selector lever, as shown in Figure 4. Pressing the button once enables the Tow/Haul mode and the "Tow/Haul" lamp will be illuminated. In Tow/Haul mode 6th gear is disabled and all upshifts will be delayed. Closed throttle downshifts, for improved engine braking, may occur during steady braking conditions.

Pressing the button a second time enables the O/D-Off mode, where all 5th and 6th gear operation is inhibited (No overdrive ratios), and the O/D Off lamp will be illuminated. Tow/Haul and O/D Off lamps are located just to the right of the temperature gauge, as shown in Figure 4.

Pressing the button a third time will restore normal operation. Normal operation is the default on start-up, the switch must be pressed after each key start if Tow/Haul mode is desired.

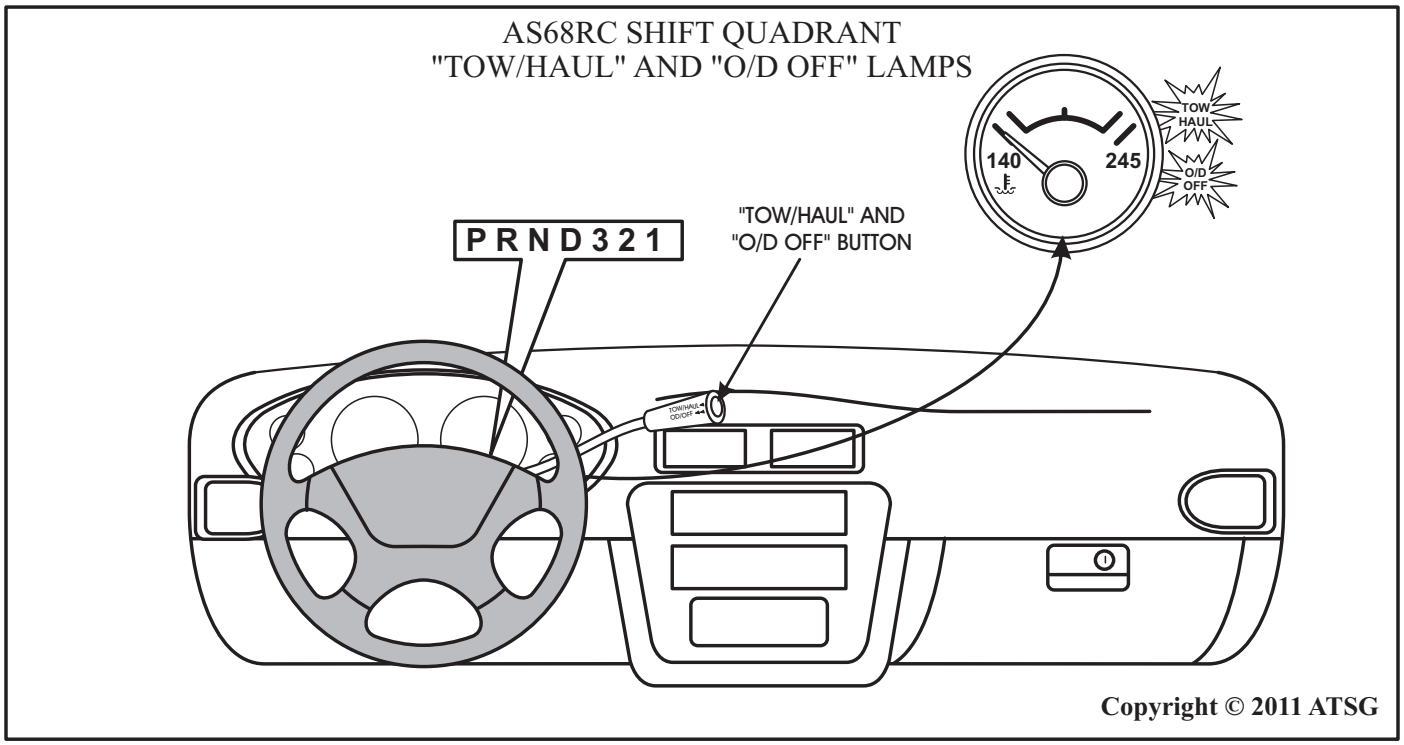
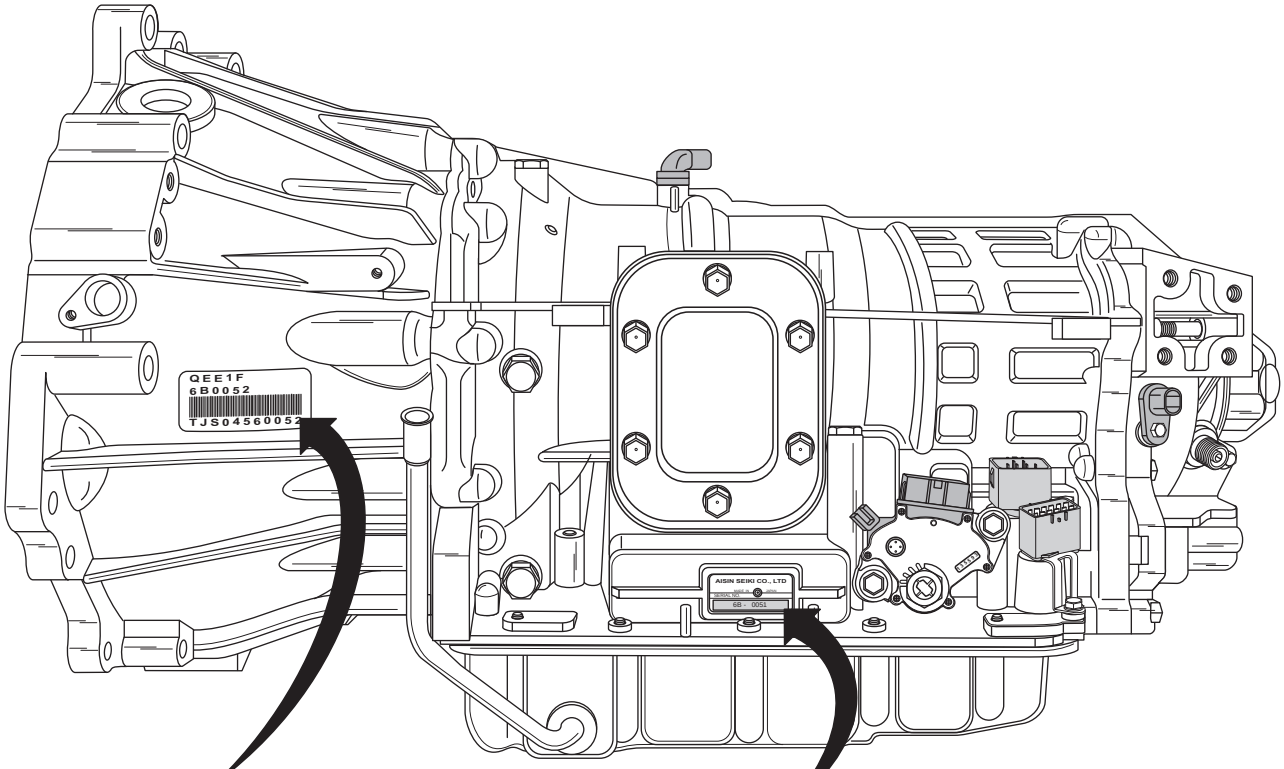


Figure 4

IDENTIFICATION TAG LOCATION

Transmission identification numbers are included in the bar code label located on the torque converter housing. There is also a stamped steel identification tag riveted to the left side of the transmission case, as shown in Figure 5. This tag also includes build date information. This information is necessary when any replacement parts are needed.

IDENTIFICATION TAG LOCATION



A	B	C	D	E	F	G	H	I	J	K	L
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Figure 5

EXTREMELY VERSATILE TRANSMISSION

The Aisin Seiki 6 Speed transmission, at the time of this printing, is found in the Isuzu NPR, Daimler-Chrysler 3500, 4500, 5500, and possibly replacing the AW450-43LE unit in Mitsubishi Fuso, and the Tiltmaster trucks.

The Aisin Seiki TR80 transmission can be adapted to virtually any type vehicle that is in need of the 26000 GCVW torque capacity rating. The TR80 transmission is equipped with a bolt-on converter housing that makes it adaptable to any engine size. The case is cast so that it can accommodate a variety of Power Take Off (PTO) accessories, with PTO openings available on either side, or on both sides. The bolt-on extension housing has several different mounting options available on the side and bottom of the housing and comes in 2WD and 4WD versions. Some models also use a speedometer gear and adapter in the extension housing, as shown in Figure 6. The Daimler-Chrysler version uses a mount on the bottom of the extension housing and a cross member. The Isuzu NPR uses the mounting holes on the top left and right sides of the extension housing, as shown in Figure 6 and 7.

There are also at least two different dip stick tube locations, as shown in Figure 6.

The turbine shaft speed sensor has two different locations, as shown in Figure 7. The Isuzu NPR mounts on the top center of the case, and the Daimler-Chrysler models is located on the driver side of the transmission, within the area of the unfinished casting for an additional PTO. Notice also that the transmission vent exhausts to the inside of the converter housing (See Figure 7).

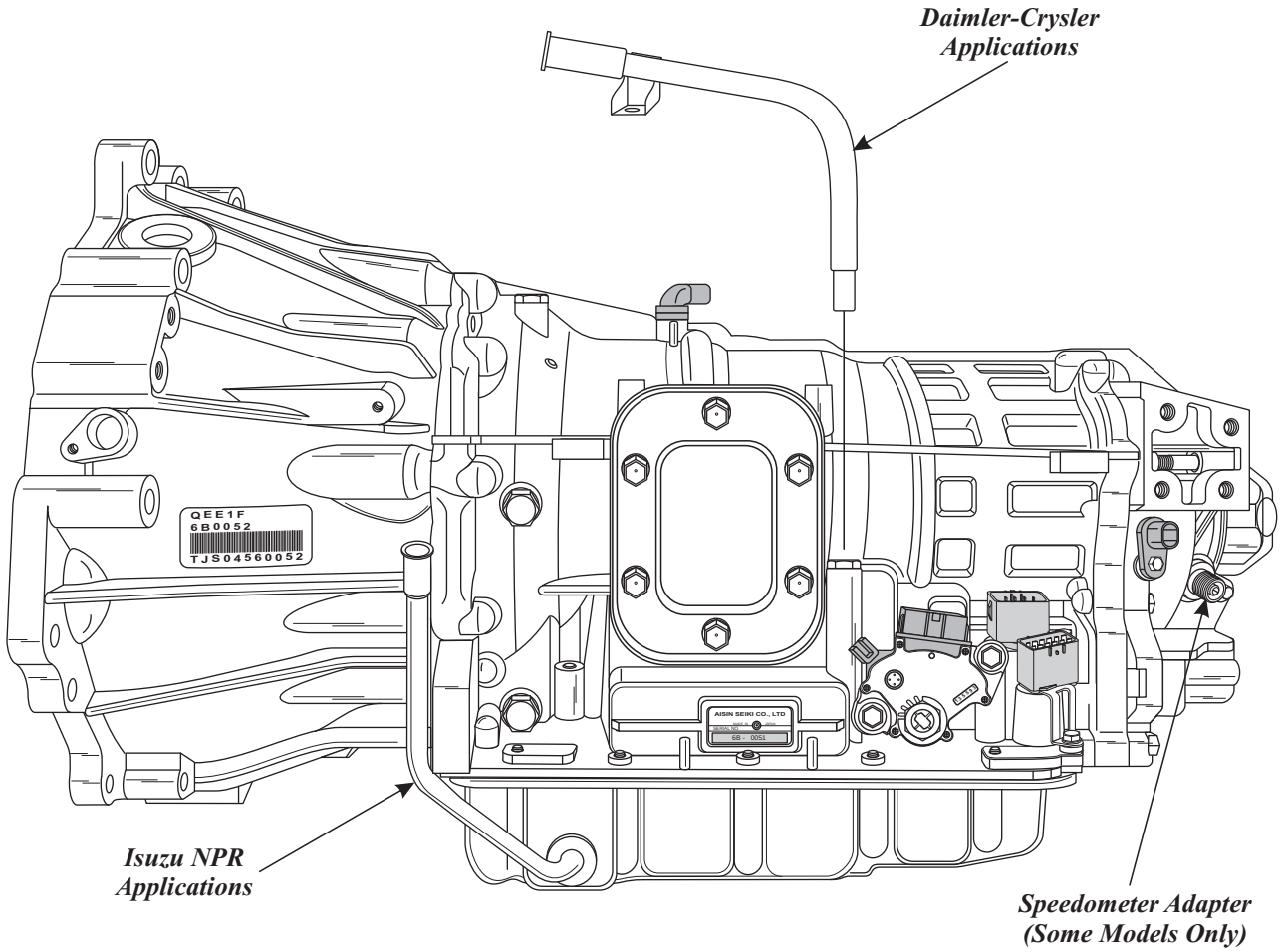
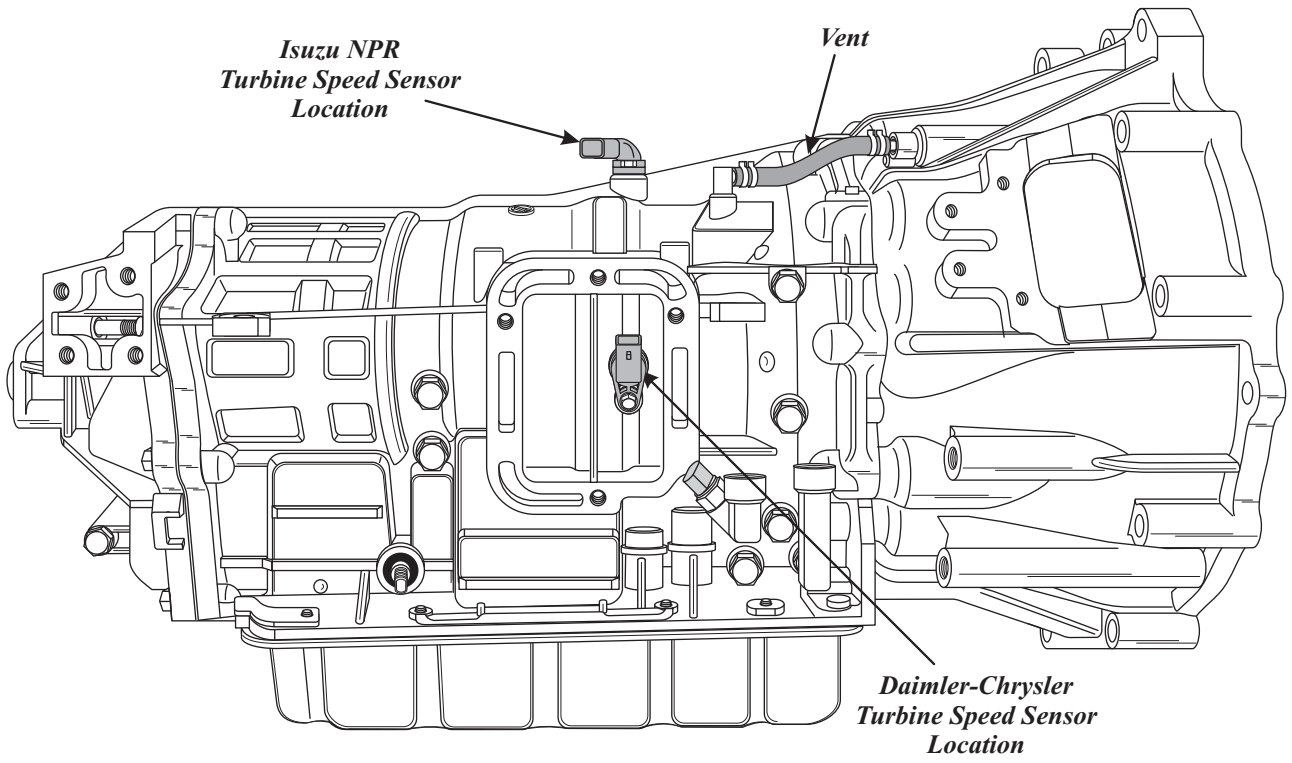


Figure 6



NOTE: Daimler-Chrysler Turbine Speed Sensor is located on the driver side as the active PTO window is located on the right hand side of the transmission.

Figure 7

EXTERNAL ELECTRONIC COMPONENTS

Input (Turbine) Speed Sensor

The Input Speed Sensor (ISS) is a magneto resistive speed sensor that generates a DC square wave signal that the TCM interprets as rotational speed. The ISS measures the speed of the sun gear for the P1 planetary. The P1 sun gear and the PTO drive gear are an assembly. The PTO drive gear serves as the tone wheel for the ISS. The ISS generates 69 pulses per revolution.

The ISS is primarily used by the TCM to monitor torque converter clutch application and slippage, and is the primary input for converter clutch pressure regulation.

The TCM also uses ISS signal with the Output Speed Sensor (OSS) signal to determine actual gear ratio. Both speed sensors share a common 8 volt supply from the TCM. The ISS is illustrated in Figure 8.

INPUT (TURBINE) SPEED SENSOR

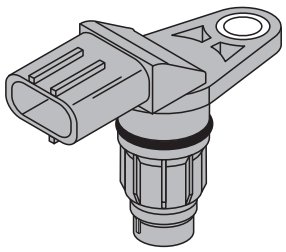


Figure 8

EXTERNAL ELECTRONIC COMPONENTS (CONT'D)

Output Speed Sensor

The Output Speed Sensor (OSS) is located on the driver side of the transmission and located in the extension housing, as shown in Figure 10. The OSS is a magneto-resistive speed sensor that generates a DC square wave signal that the TCM interprets as rotational speed. The OSS measures the speed of the parking gear teeth attached to the output shaft, providing the vehicle speed signal. The ABS system provides back-up vehicle speed should the OSS fail. The OSS generates 16 pulses per revolution.

The TCM uses the OSS signal to constantly monitor output shaft speed. It is used with the ISS signal to determine actual gear ratio. The OSS signal is compared to the vehicle speed signal from ABS to validate vehicle speed. Both speed sensors share a common 8 volt supply from the TCM. The OSS is illustrated in Figure 9.

OUTPUT SPEED SENSOR

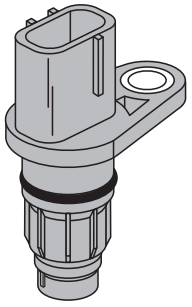


Figure 9

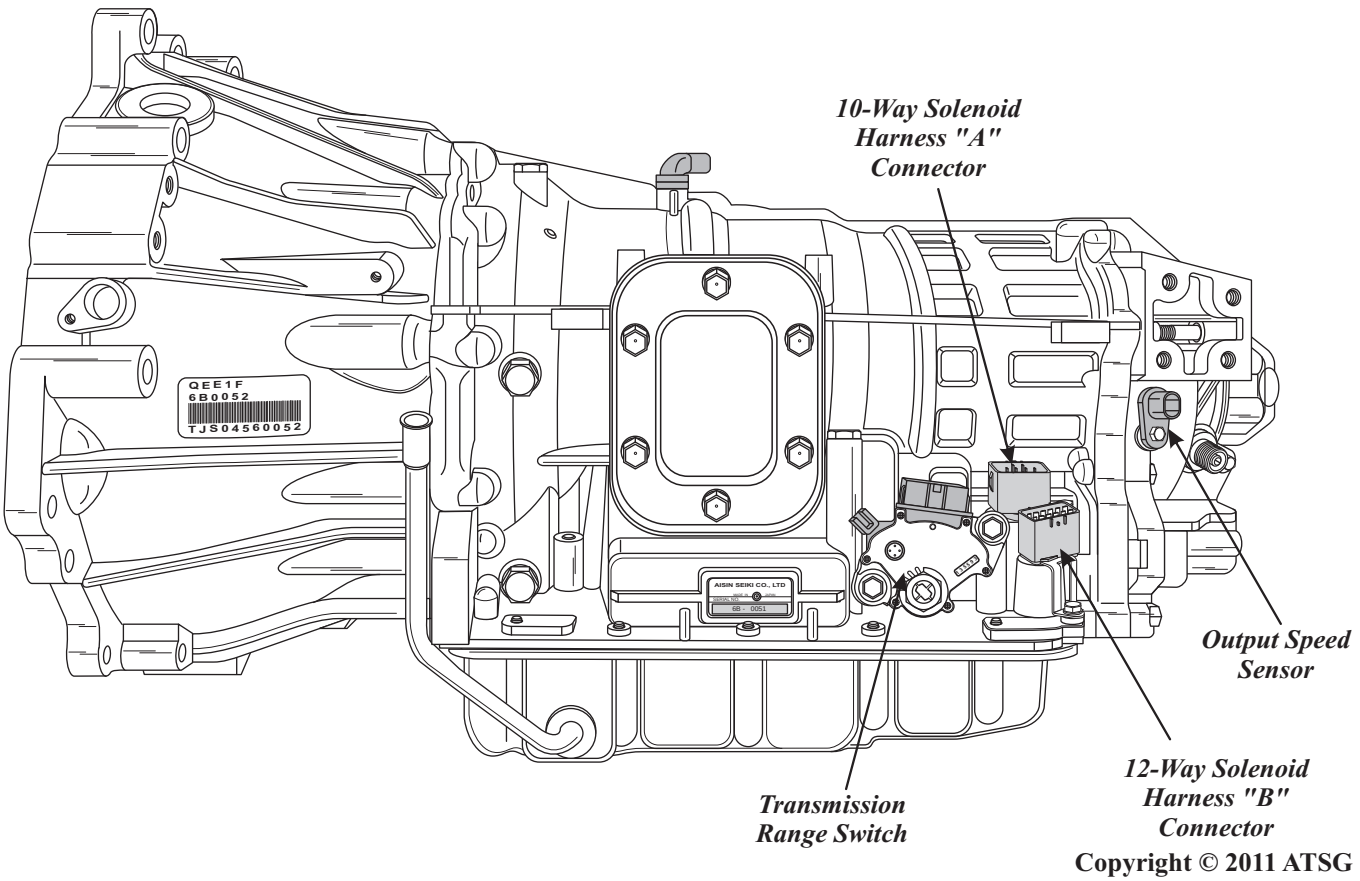


Figure 10

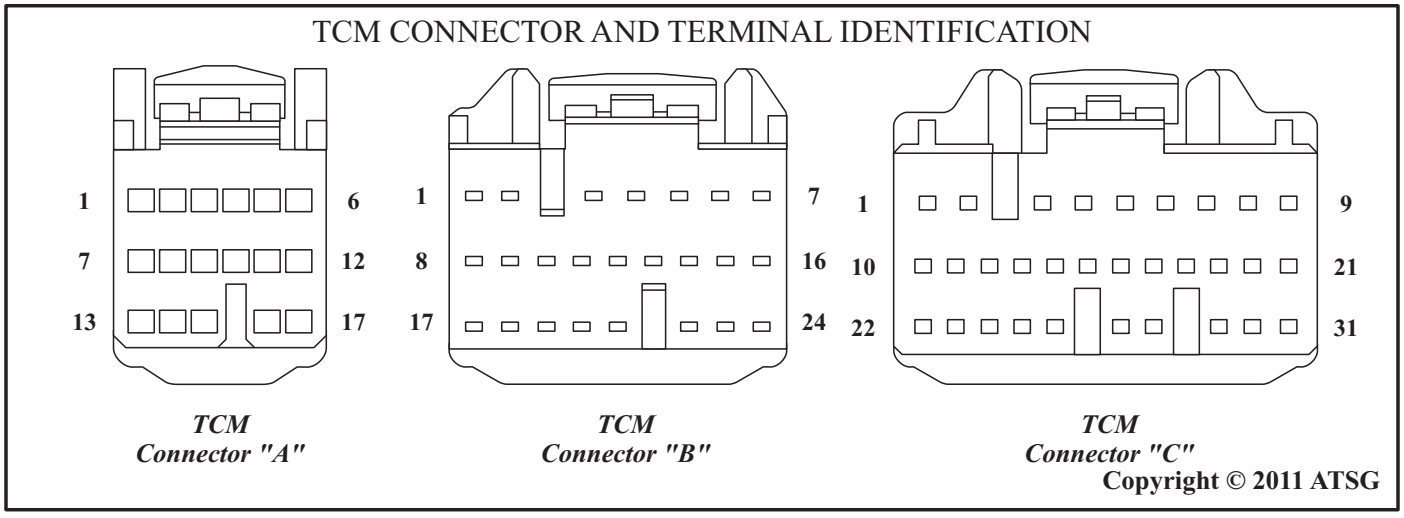


Figure 11

EXTERNAL ELECTRONIC COMPONENTS (CONT'D)

Transmission Case Connectors

The Aisin Seiki AS68RC uses two transmission case connectors with an internal wire harness for each, as shown in Figure 13. One of them is a 10 terminal connector referred to as "Solenoid A Harness" and the other is a 12 terminal connector referred to as "Solenoid B Harness".

Refer to Figure 12 for a solenoid resistance chart for each of the eight solenoids used in this unit.

Solenoid Resistance Chart	
Solenoid	***Resistance***
Linear Solenoid "A"	***5.5 - 7.5 Ohms***
Linear Solenoid "B"	***5.5 - 7.5 Ohms***
Linear Solenoid "C"	***5.5 - 7.5 Ohms***
Linear Solenoid "D"	***5.5 - 7.5 Ohms***
On/Off Shift Solenoid 1	***14 - 16 Ohms***
On/Off Shift Solenoid 2	***14 - 16 Ohms***
On/Off Shift Solenoid 3	***14 - 16 Ohms***
On/Off Shift Solenoid 4	***14 - 16 Ohms***

Figure 12

Transmission Range Switch

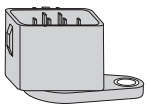
On the Aisin Seiki AS68RC (Chrysler) models a Transmission Range Switch (TRS) is used that has seven detent positions (P R N D 3 2 1), as shown in Figure 14. Although the charts in Figure 14 are used to check the integrity of the switch's range selection, using an ohmmeter, the best method is to check the switch in the vehicle with a voltmeter.

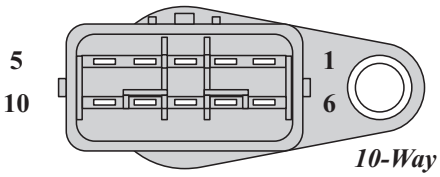
By looking at the chart in Figure 14, it can be seen that terminal 4 is the common terminal for all range selections. This is the voltage supply into the switch. Terminals 6 and 10 are used for starting purposes only. With the ignition switch "ON" there must be battery voltage at terminal 4. If there is not, this must be repaired first. If voltage is present, it should exit the assigned terminal for each range selection.

The TRS switch can also be checked for shorts. With the ignition switch "OFF", using an ohmmeter at the same terminals shown in the Figure 14 chart, the reading should be less than 2 ohms resistance.

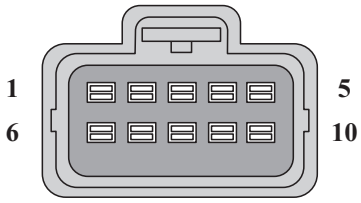
A complete wiring schematic from transmission to the TCM is shown in Figure 15 and 16. TCM connector identification is shown in Figure 11.

SOLENOID CONNECTOR AND TERMINAL IDENTIFICATION



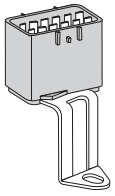


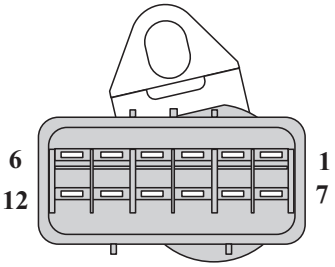
10-Way Solenoid Harness "A"



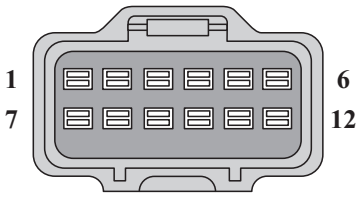
10-Way Vehicle Harness

All Connector Views are "Face View"





12-Way Solenoid Harness "B"



12-Way Vehicle Harness

10-Way Solenoid Connector "A"

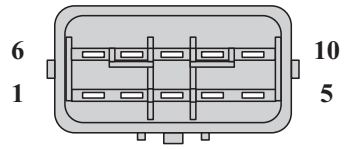
Terminal	*Function*	*TCM Conn. Number*	*Outside Wire Color*	*Inside Wire Color*
1	*Pressure Switch Number 7 (1/4" NPT)*	*C10*	*Dk Green/Violet*	*White*
2	*Pressure Switch Number 5 (1/8" NPT)*	*A11*	*Yellow/Dk Blue*	*Lt Green*
3	*TFT Sensor Voltage Signal*	*B15*	*Dk Green/Orange*	*Pink*
4	*Power Voltage for Linear Solenoid "C"*	*C5*	*Yellow/Brown*	*Dk Blue*
5	*Ground for Linear Solenoid "A"*	*C7*	*Dk Green/Lt Green*	*Black*
6	*Pressure Switch Number 8 (1/8" NPT)*	*C26*	*Dk Green/White*	*Black*
7	*Pressure Switch Number 4 (1/8" NPT)*	*A5*	*Dk Green/Brown*	*Orange*
8	*TFT Sensor Return*	*C28*	*Yellow/White*	*Tan*
9	*Ground for Linear Solenoid "C"*	*C15*	*Yellow/Pink*	*White*
10	*Power Voltage for Linear Solenoid "A"*	*C6*	*Dk Green/Tan*	*Yellow*

12-Way Solenoid Connector "B"

Terminal	*Function*	*TCM Conn. Number*	*Outside Wire Color*	*Inside Wire Color*
1	*Pressure Switch Number 1 (1/4" NPT)*	*A6*	*Dk Green/Brown*	*Tan*
2	*Pressure Switch Number 6 (1/8" NPT)*	*A16*	*Dk Green/Orange*	*Yellow*
3	*On/Off Shift Solenoid 2 Power*	*C22*	*Dk Green/Yellow*	*Black*
4	*On/Off Shift Solenoid 4 Power*	*B19*	*Dk Green/Lt Blue*	*Orange*
5	*Power Voltage for Linear Solenoid "D"*	*C30*	*Yellow/Gray*	*Dk Blue*
6	*Ground for Linear Solenoid "B"*	*C8*	*Yellow/Red*	*Tan*
7	*Pressure Switch Number 2 (1/4" NPT)*	*A17*	*Dk Green/Red*	*Pink*
8	*Pressure Switch Number 3 (1/8" NPT)*	*A12*	*Dk Green/Pink*	*Black*
9	*On/Off Shift Solenoid 3 Power*	*C3*	*Dk Green/Dk Blue*	*Yellow*
10	*On/Off Shift Solenoid 1 Power*	*C1*	*Dk Green/Gray*	*Lt Green*
11	*Ground for Linear Solenoid "D"*	*C31*	*Yellow/Pink*	*White*
12	*Power Voltage for Linear Solenoid "B"*	*C9*	*Yellow/Brown*	*Pink*

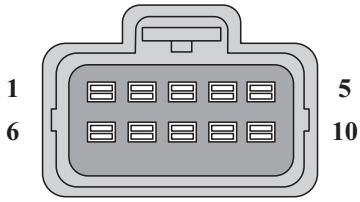
Figure 13

TRANSMISSION RANGE SWITCH TERMINAL IDENTIFICATION

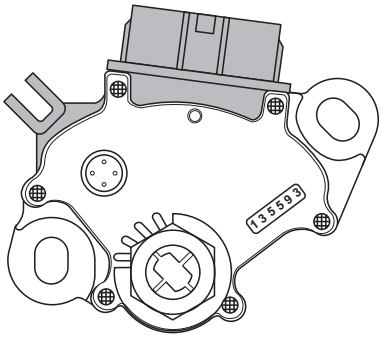


Transmission Range Switch Connector

All Connector Views are "Face View"



Transmission Range Switch Vehicle Harness Connector



Range	TRS 10-Way Connector									
	4	5	9	1	8	2	7	3	10	6
P	●	●							●	●
R	●	●	●							
N	●	●	●	●					●	●
D	●	●	●	●	●					
3	●	●	●	●	●	●				
2	●	●	●	●	●	●	●			
1	●	●	●	●	●	●	●	●		

10-Way Transmission Range Switch Connector

Terminal	*Function*	*TCM Conn. Number*	*Outside Wire Color*
1	*Transmission Range Switch "Neutral"*	*C29*	*Dk Green/Dk Blue*
2	*Transmission Range Switch "3"*	*C18*	*Dk Green/Dk Blue*
3	*Transmission Range Switch "1"*	*C16*	*Dk Green/Dk Blue*
4	*Power In From Integrated Power Module (IPM)*	*(IPM) B1*	*Pink/White*
5	*Transmission Range Switch "Park"*	*C20*	*Yellow/Dk Blue*
6	*To Ground At "G100"*		*Black/Lt Green*
7	*Transmission Range Switch "2"*	*C17*	*Dk Green/Yellow*
8	*Transmission Range Switch "Drive"*	*C19*	*Dk Green/Lt Blue*
9	*Transmission Range Switch "Reverse"*	*C21*	*Dk Green/Dk Blue*
10	*Park/Neutral Switch Input To Integrated Power Module (IPM)*	*(IPM) B2*	*Yellow/Dk Blue*

Figure 14

TYPICAL AS68RC SOLENOID AND PRESSURE SWITCH WIRE SCHEMATIC

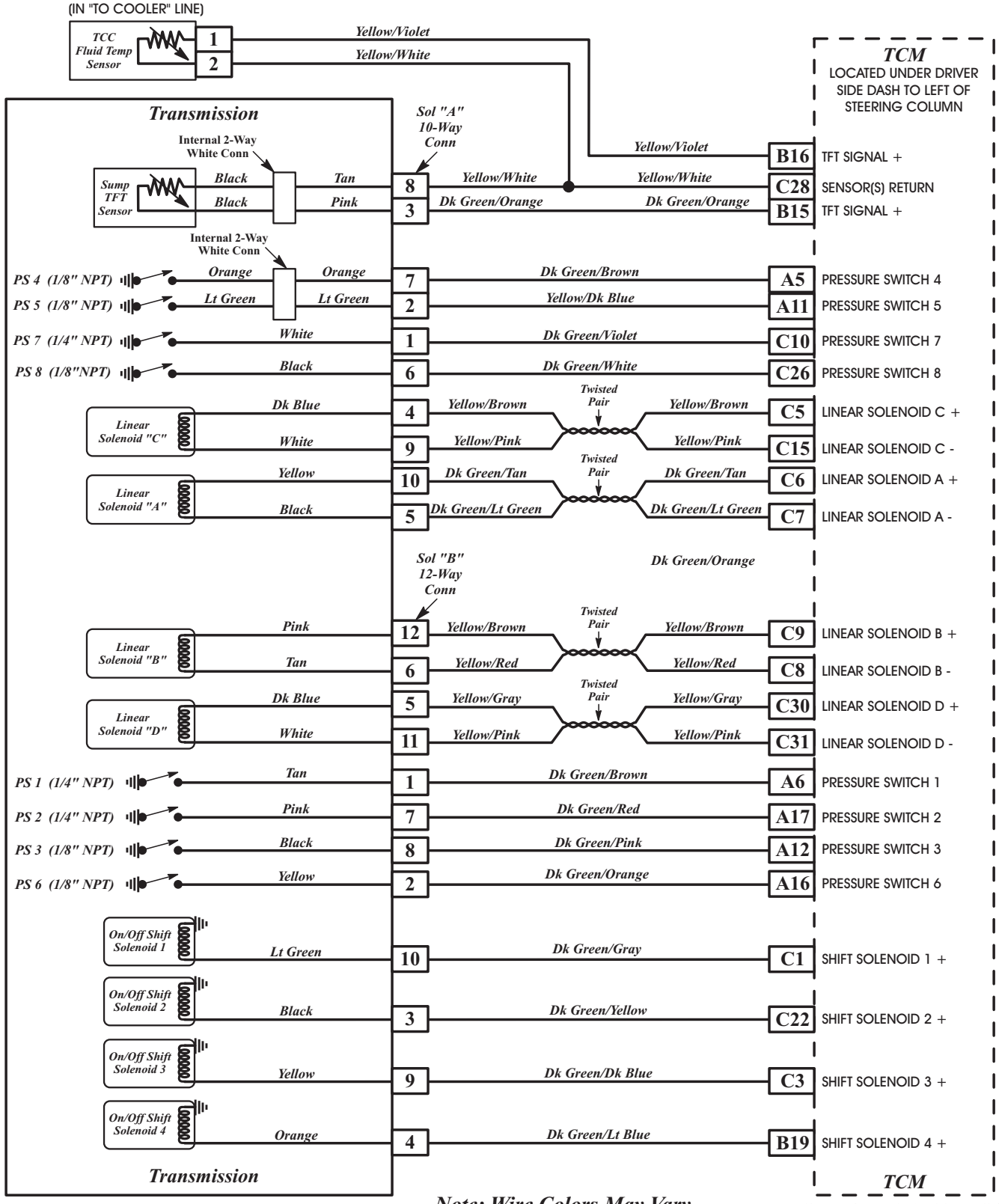


Figure 15

TYPICAL AS68RC RANGE SWITCH WIRE SCHEMATIC

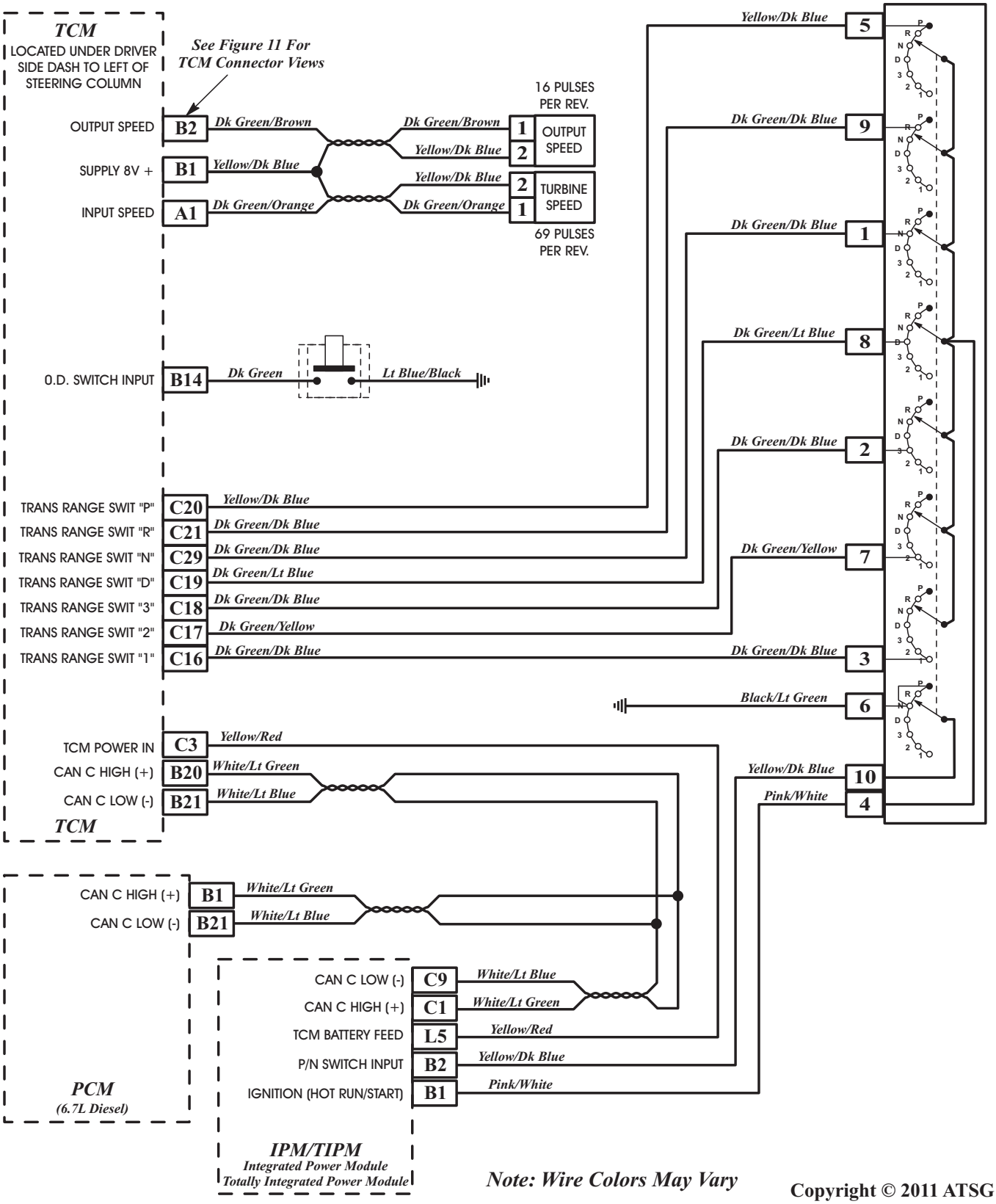


Figure 16

EXTERNAL ELECTRONIC COMPONENTS (CONT'D)

Converter Out Fluid Temperature Sensor

The torque converter out thermistor is mounted externally on the passenger side of the transmission, in the "To Cooler" fitting, as shown in Figure 18. Torque converter out temperature sensor monitors torque converter fluid temperature, which is typically much hotter than sump fluid temperature and determines appropriate TCC lock-up strategy.

INTERNAL ELECTRONIC COMPONENTS

Sump Fluid Temperature Sensor

The sump thermistor is located on the valve body under the linear solenoid bracket, as shown in Figure 17. Temperatures above and below normal operating range result in modified shift points until normal operating temperatures are resumed.

Both temperature sensors are Negative Thermal Coefficient (NTC) sensor, which means an increase in temperature results in a decrease in sensor resistance.

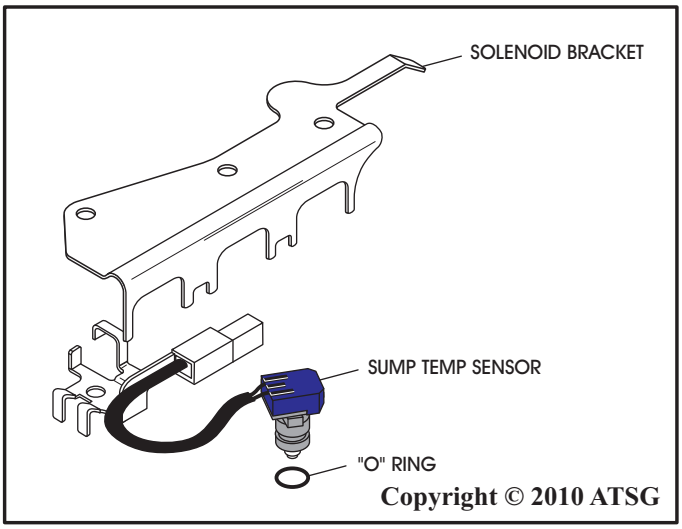


Figure 17

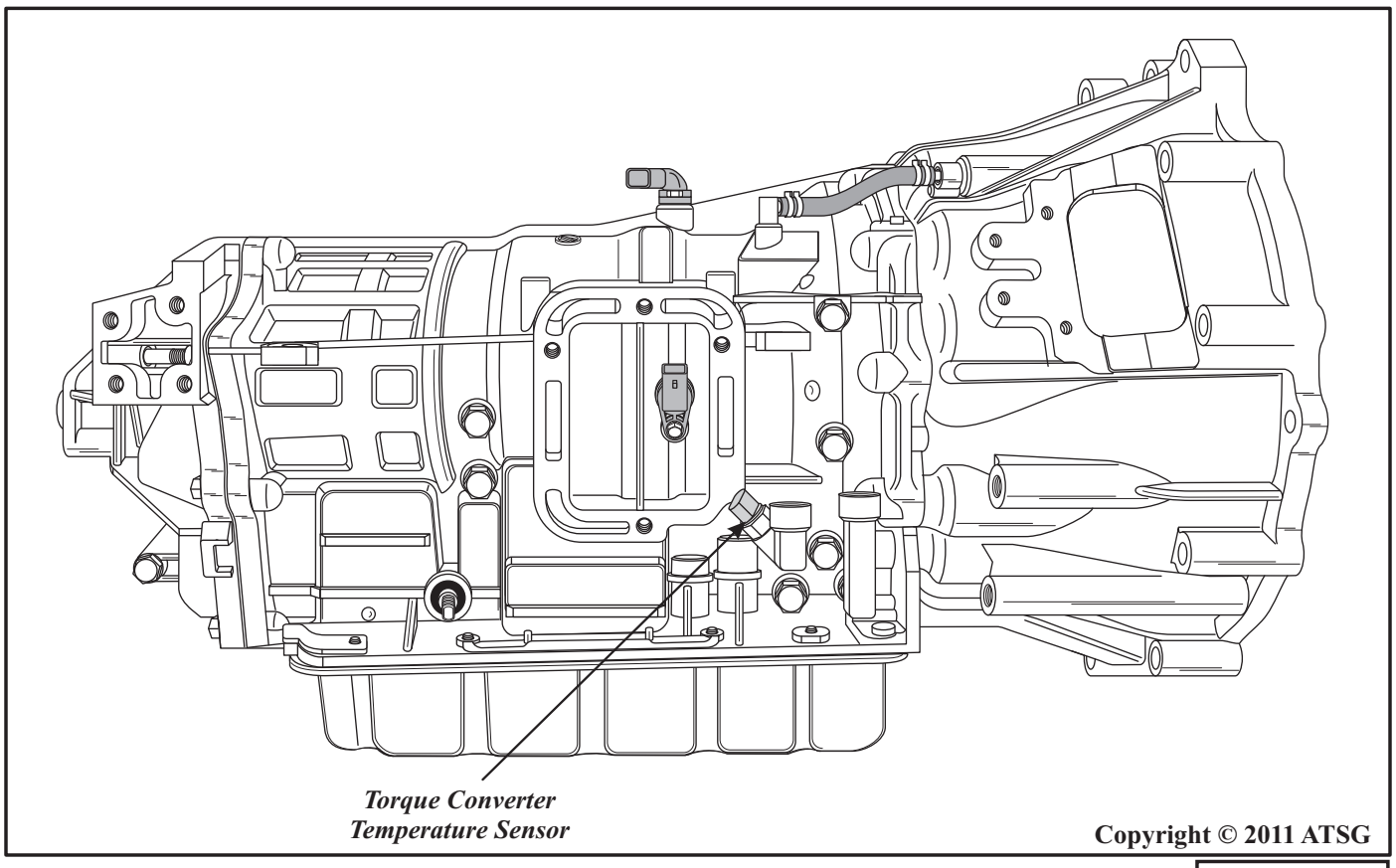


Figure 18

INTERNAL ELECTRONIC COMPONENTS

Control and Shift Solenoid Operation

There are a total of eight solenoids located on the valve body in the locations shown in Figure 19, along with the wire colors that are connected to each of the solenoids. The sump fluid temperature sensor location is also shown under the linear solenoid bracket.

There are four linear solenoids (PWM) and four On/Off Shift solenoids, as shown in Figure 19. The TCM uses the APP and OSS sensor signals as the primary influences on shift control. Based on a predetermined shift map, On/Off solenoids and Linear (PWM) solenoids are activated as needed to provide the appropriate gear.

All shifts are performed by means of clutch to clutch control where one clutch is engaged as another is disengaged (No double-swap shifts).

Linear (PWM) Solenoids "A", "C", "D"

These three solenoids operate in the same manner, as shown in Figure 20, based on commands from the TCM. All three of these linear solenoids are "Normally-Vented".

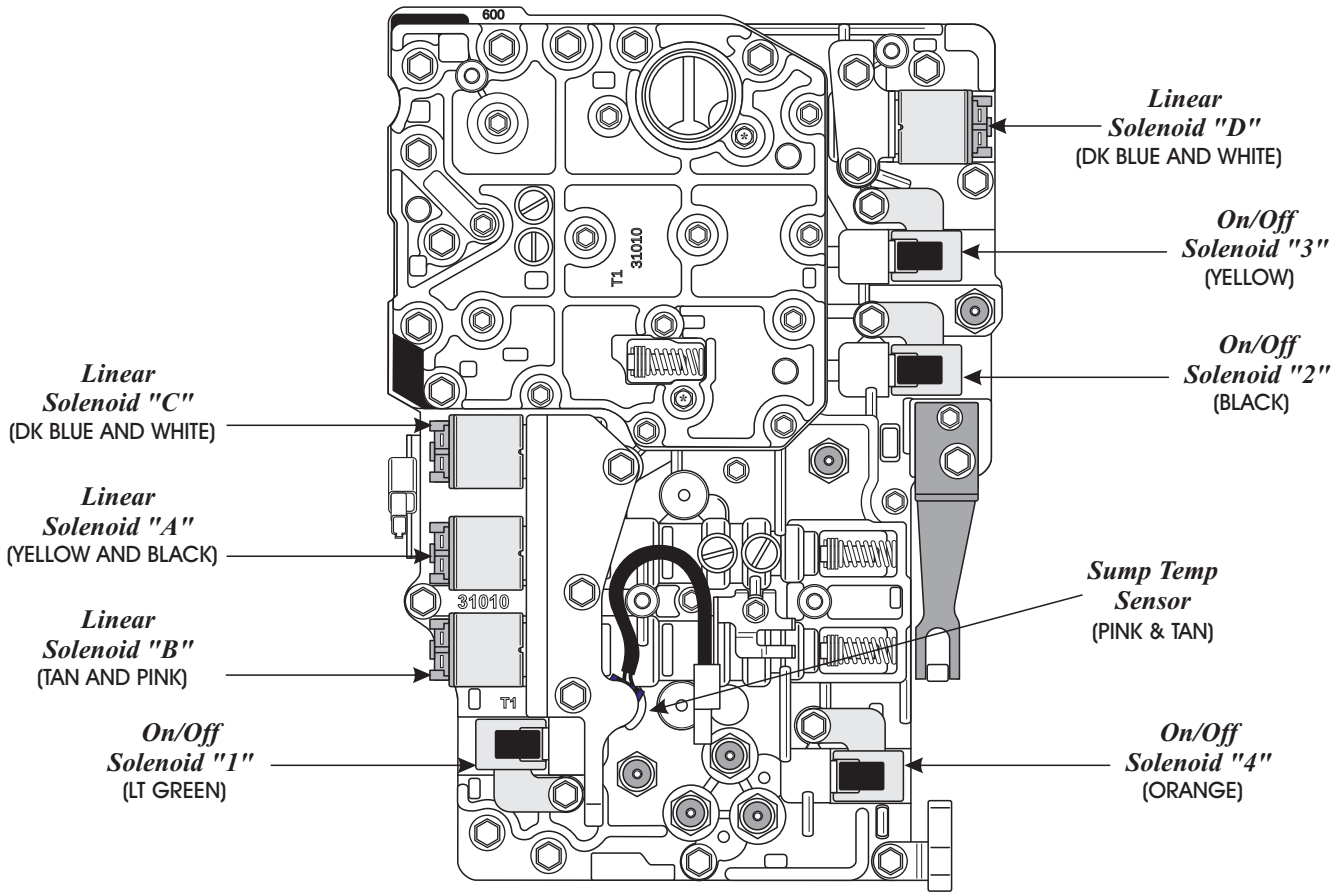
Linear (PWM) Solenoid "A"controls clutch pressures to the B1, K1 and K2 clutches.

Linear (PWM) Solenoid "C" is a multi-tasking solenoid, it controls Forward and Reverse engagements and torque converter clutch apply pressure.

Linear (PWM) Solenoid "D" controls the main line pressure.

Refer to Figure 20 for operational checks.

SOLENOID IDENTIFICATION



Currently The Solenoids "Are Not" Serviced Separately!

Figure 19

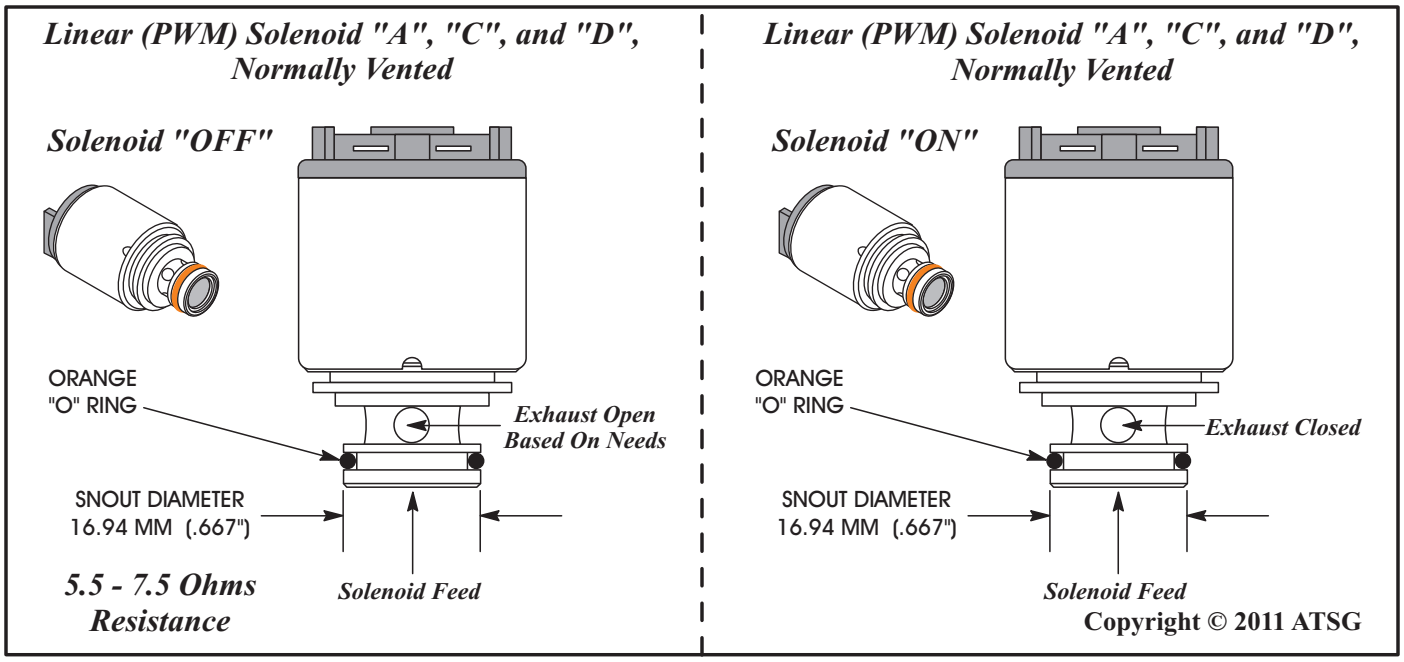


Figure 20

INTERNAL ELECTRONIC COMPONENTS (CONT'D)

Linear (PWM) Solenoid "B",

Linear (PWM) Solenoid "B" operates exactly the opposite of the other linear solenoids, in that it is "Normally Applied", as shown in Figure 21 The solenoid snout is also smaller in diameter than the other three and requires a different color "O" ring.

Linear (PWM) Solenoid "B" controls the clutch pressure to B2 and K3 clutches, based on the commands from the TCM.

Refer to Figure 21 for operational checks on Linear (PWM) Solenoid "B".

Continued on next Page

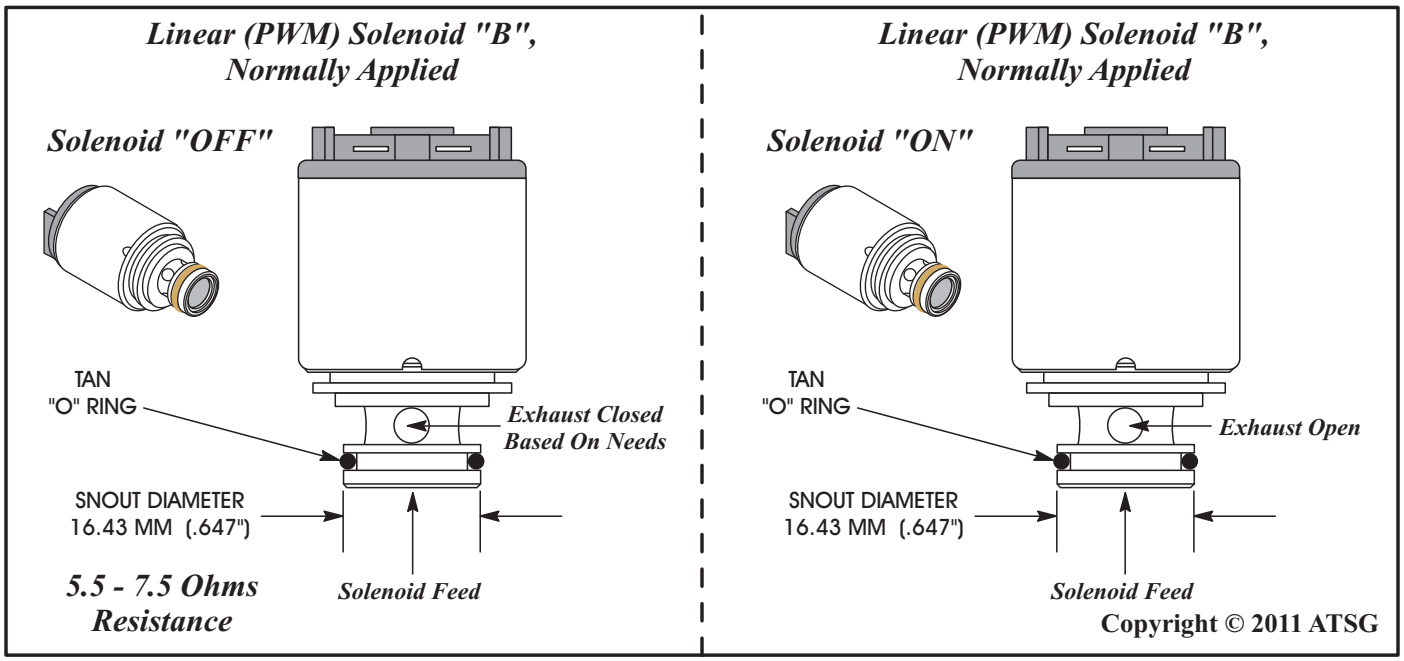


Figure 21

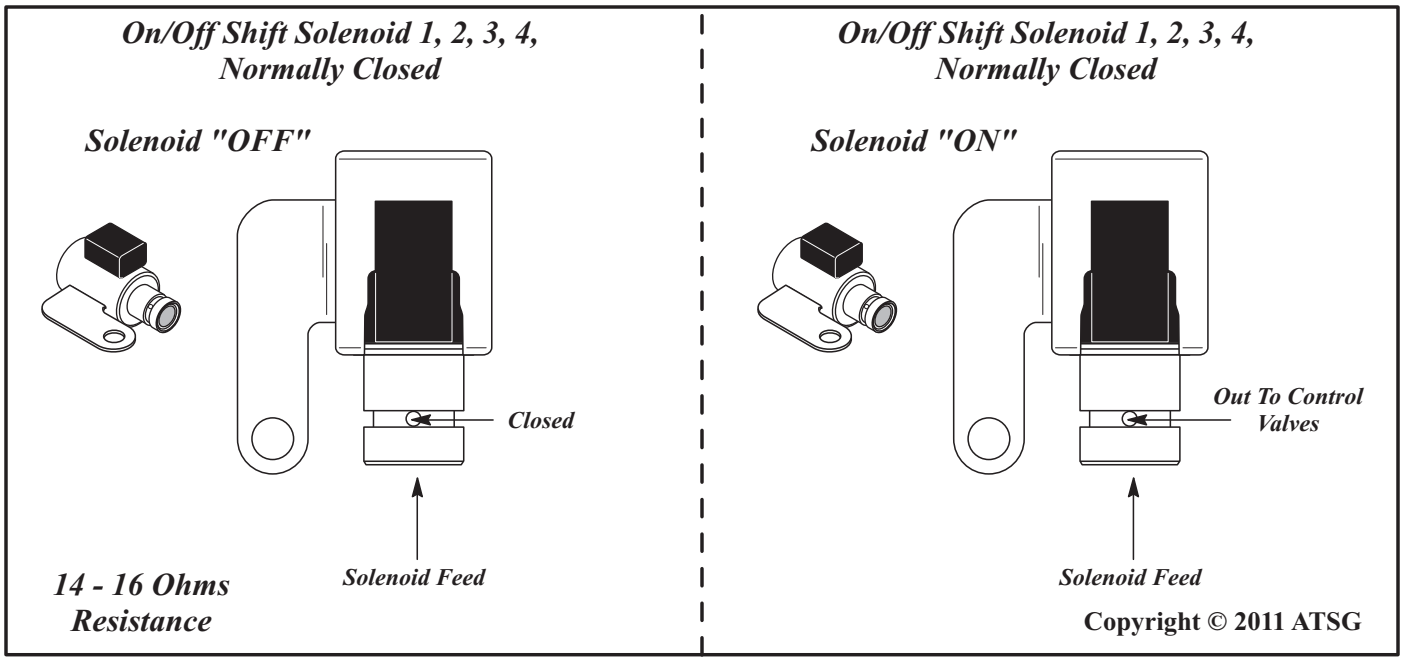


Figure 22

INTERNAL ELECTRONIC COMPONENTS (CONT'D)

On/Off Shift Solenoids 1, 2, 3, 4,

These solenoids all operate in exactly the same manner, as shown in Figure 22, based on commands from the TCM. All four of the On/Off solenoids are "Normally Closed".

These four solenoids operate in conjunction with the linear (PWM) solenoids to provide the proper gear ratio for the current road conditions.

Refer to Figure 22 for operational checks.

INTERNAL ELECTRONIC COMPONENTS (CONT'D)

Pressure Switches

The AS68RC transmission is equipped with eight "Normally Open" pressure switches that are mounted in the valve body. These pressure switches monitor various hydraulic circuits to verify proper valve operation. Refer to Figure 23 for their various locations, identification, and wire color that belongs on the switch, as well as testing procedures, for proper function of the switches.

Notice that three of the switches are 1/4" NPT and five of the switches are 1/8" NPT. NPT stands for National Pipe Thread.

Daimler/Chrysler part numbers are as follows:
1/8" NPT pressure switch is 68019699AA (5 Req.).
1/4" NPT pressure switch is 68019700AA (3 Req.).

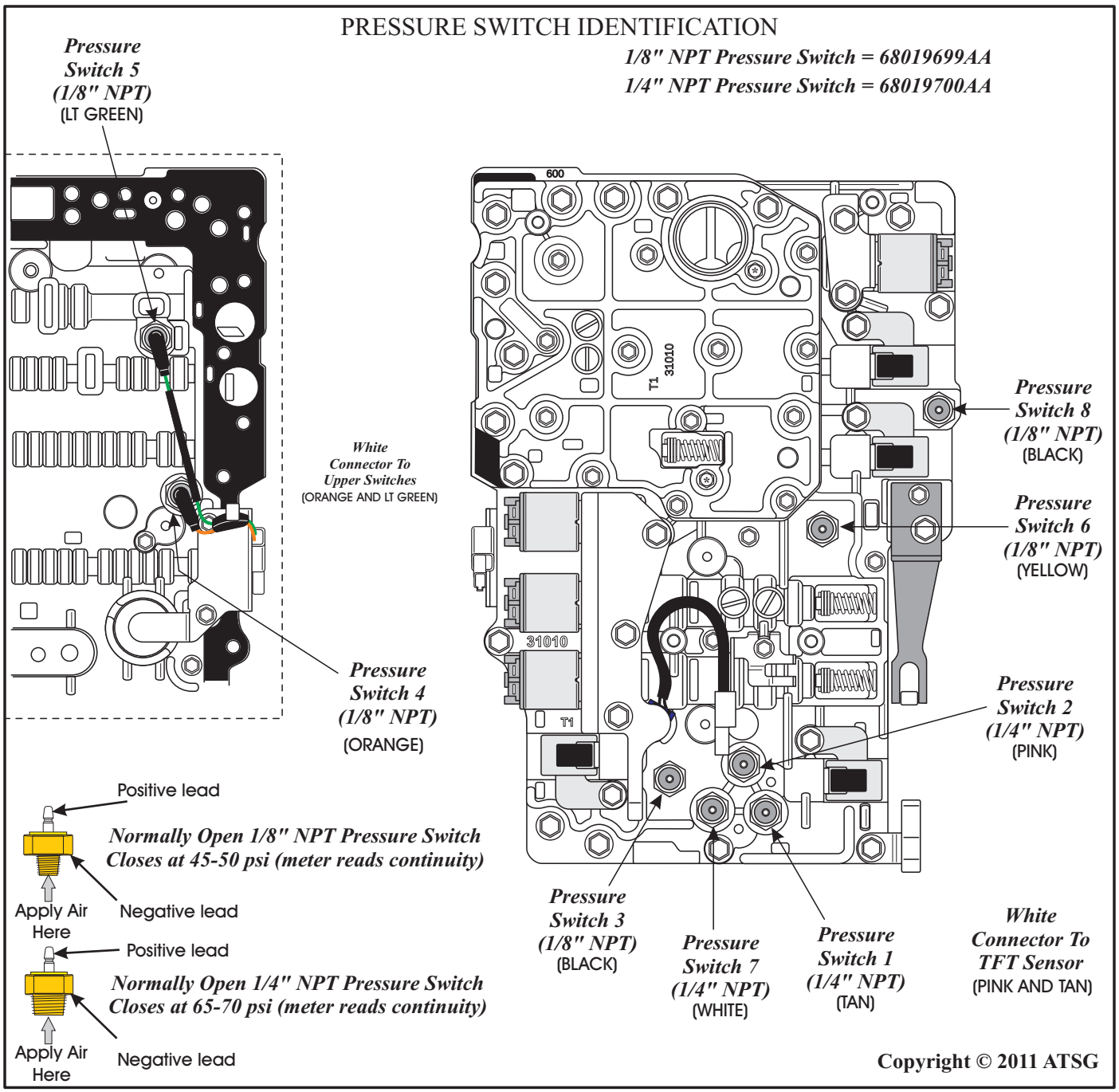


Figure 23

AS68RC SHIFT SOLENOID APPLICATION CHART																
	On/Off Solenoids (1)				*Linear (PWM) Solenoids (2)*				*Pressure Switches (3)*							
RANGE	**S1**	**S2**	**S3**	**S4**	**"A"**	**"B"**	**"C"**	**"D"**	**PS-1**	**PS-2**	**PS-3**	**PS-4**	**PS-5**	**PS-6**	**PS-7**	**PS-8**
Park	*Off*	*On*	*On*	*On*	*Low*	*High*	*Low*	*High*	*O*	*O*	*O*	*C*	*C*	*C*	*O*	*O*
Reverse (HT)	*On*	*Off*	*On*	*On*	*Low*	*Low*	*Low*	*Low*	*O*	*C*	*C*	*O*	*C*	*C*	*O*	*O*
Reverse	*On*	*On*	*On*	*On*	*Low*	*Low*	*High*	*Low*	*O*	*C*	*C*	*C*	*C*	*C*	*C*	*O*
Neutral	*Off*	*On*	*On*	*On*	*Low*	*High*	*Low*	*High*	*O*	*O*	*O*	*C*	*C*	*C*	*O*	*O*
Neut/Dr (T)	*Off*	*On*	*On*	*On*												
Dr-1st (Stop)	*Off*	*On*	*On*	*On*	*Low*	*High*	*High*	*Low*	*O*	*O*	*O*	*C*	*C*	*C*	*C*	*C*
Dr-1st	*Off*	*Off*	*On*	*On*	*Low*	*High*	*Low*	*Low*	*O*	*O*	*O*	*O*	*C*	*C*	*O*	*C*
Dr/1-2 (T)	*Off*	*Off*	*On*	*On*												
Dr-2nd	*Off*	*Off*	*Off*	*Off*	*High*	*High*	*Low*	*High*	*C*	*O*	*O*	*O*	*O*	*O*	*O*	*C*
Dr/2-3 (T)	*Off*	*Off*	*Off*	*On*												
Dr-3rd	*On*	*Off*	*Off*	*Off*	*Low*	*Low*	*Low*	*High*	*O*	*C*	*C*	*O*	*O*	*O*	*O*	*C*
Dr/3-4 (T)	*On*	*Off*	*Off*	*On*												
Dr-4th TCC	*On*	*On*	*Off*	*Off*	*High*	*High*	*High*	*High*	*C*	*O*	*C*	*C*	*O*	*O*	*O*	*C*
Dr/4-5 (T)	*On*	*On*	*Off*	*On*												
Dr-5th TCC	*Off*	*On*	*Off*	*On*	*Low*	*Low*	*High*	*High*	*O*	*C*	*O*	*C*	*O*	*O*	*O*	*C*
Dr/5-6 (T)	*Off*	*On*	*Off*	*On*												
Dr-6th TCC	*Off*	*On*	*Off*	*On*	*High*	*High*	*High*	*High*	*C*	*O*	*O*	*C*	*O*	*O*	*O*	*C*
Man-1st	*Off*	*Off*	*On*	*On*	*Low*	*Low*	*Low*	*Low*	*O*	*C*	*O*	*O*	*C*	*C*	*O*	*C*

(T) = Transition.
(HT) = High Torque

(1) All On/Off solenoids are normally closed and allow no fluid through the solenoid.
(2) Linear (PWM) solenoids "A", "C", and "D" are Normally-Vented. Linear (PWM) solenoid "B" is Normally-Applied. (Low and High refer to PWM Duty Cycle).
(3) All pressure switches are normally open and closed when oil pressure is applied, C = Closed (Grounded), O = Open (12V).

Figure 24

Default "Limp-In" Mode

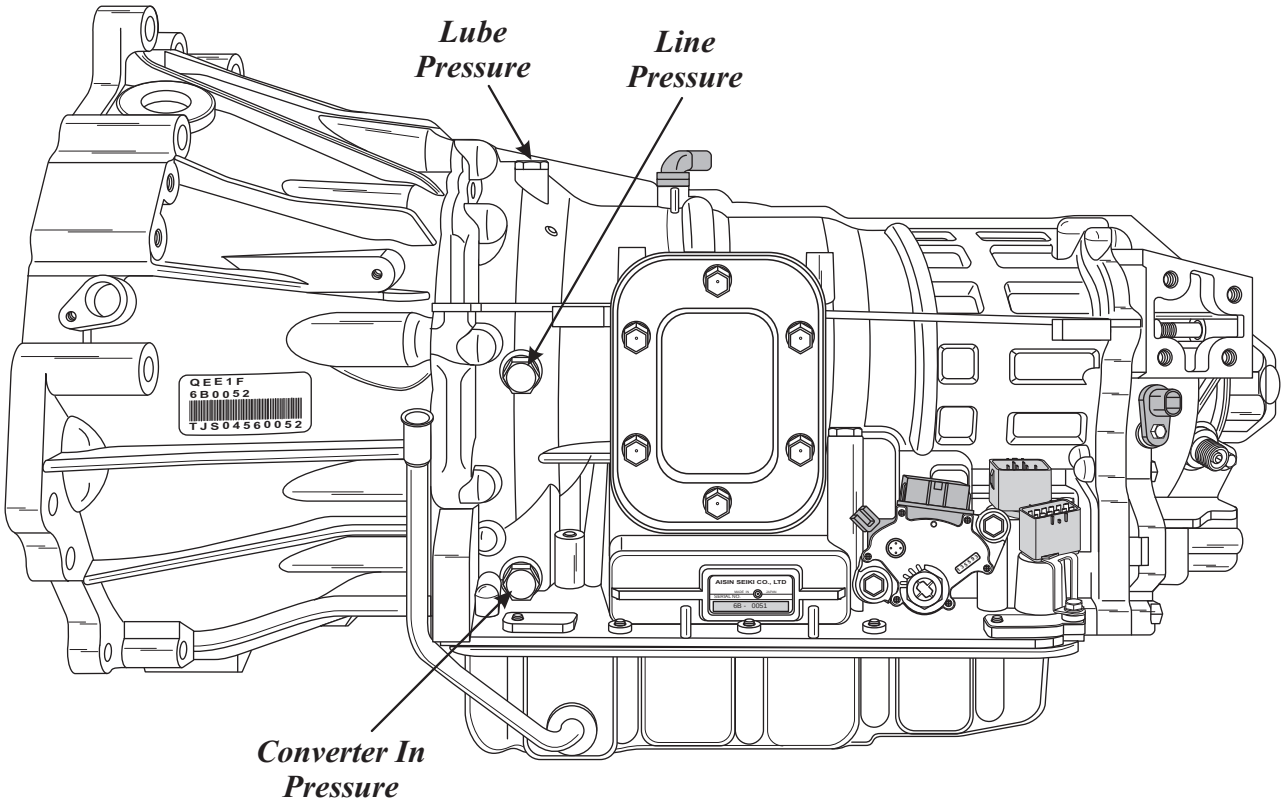
The "Limp-In" gear ranges available in the AS68RC are 5th gear, 3rd gear and reverse.

If the fault occurs when in 4th, 5th or 6th gear, the transmission will default to 5th gear and remain there until it is safe enough to downshift to 3rd.

If the fault occurs when in 1st, 2nd or 3rd gear, the transmission will default to 3rd gear and will not upshift to any higher gear.

Reverse is available in either default range. Default operation is indicated by the MIL lamp being illuminated and the transmission will have extremely harsh garage shifts, Park to Reverse & Park to Drive.

PRESSURE TAP LOCATIONS



Line Pressure Specifications							
	Line	*K1*	*K2*	*K3*	*B1*	*B2**	*TCC On*
Park	*110-250*	*0*	*0*	*0*	*0*	*70*	*0*
Reverse	*250*	*0*	*0*	*85-250*	*0*	*110-250*	*0*
Neutral	*115-250*	*0*	*0*	*0*	*0*	*70*	*0*
First	*250*	*75-250*	*0*	*0*	*0*	*110-250*	*0*
Second	*115*	*115*	*0*	*0*	*115*	*0*	*0*
Third	*115*	*115*	*0*	*115*	*0*	*0*	*115*
Fourth	*115*	*115*	*115*	*0*	*0*	*0*	*115*
Fifth	*115*	*0*	*115*	*115*	*0*	*0*	*115*
Sixth	*115*	*0*	*115*	*0*	*115*	*0*	*115*

Checked at 1500 RPM
**** Need OSS signal in Manual L - Raise rear wheels or Transfer Case in Neutral.***

Figure 25

PRESSURE TAP LOCATIONS

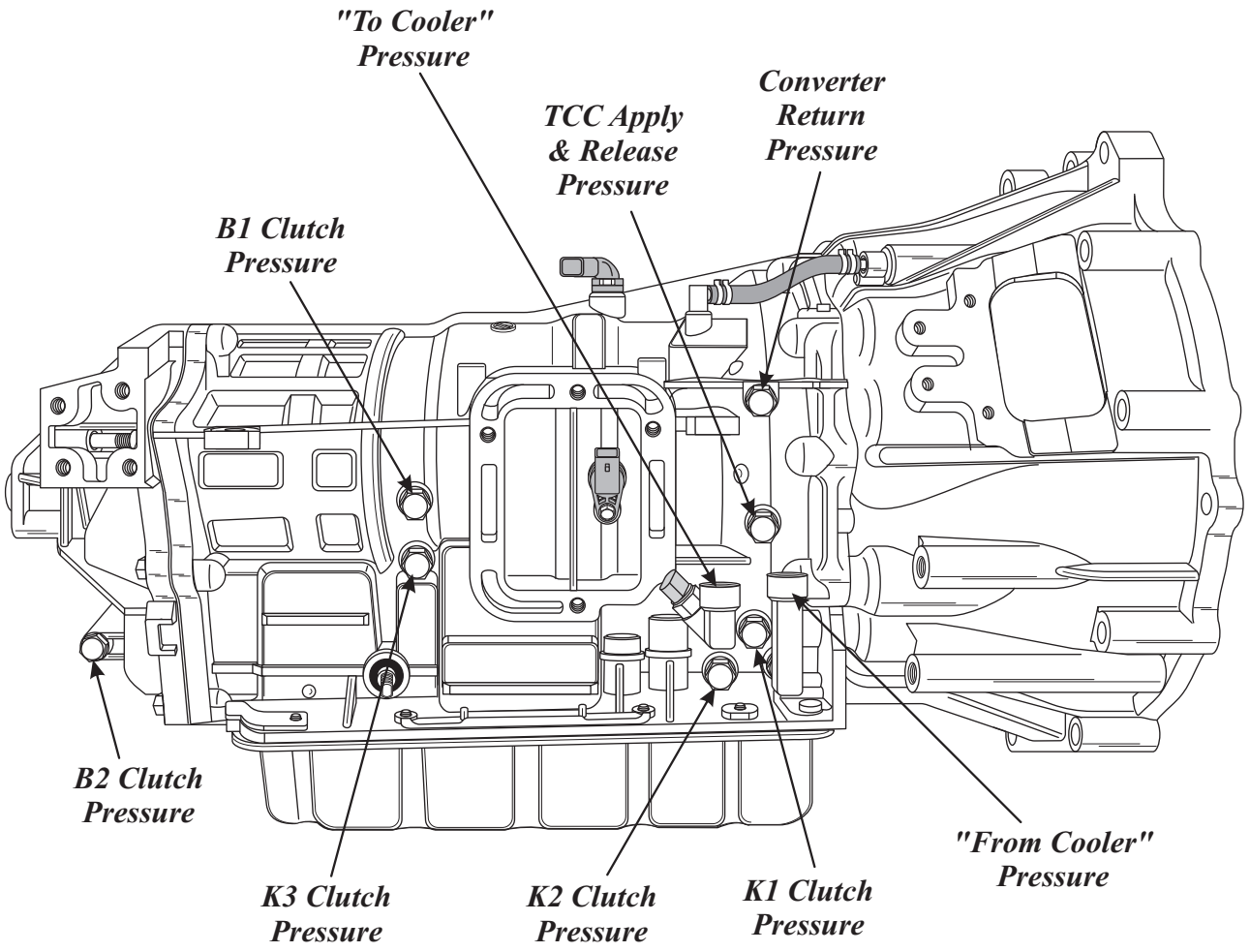
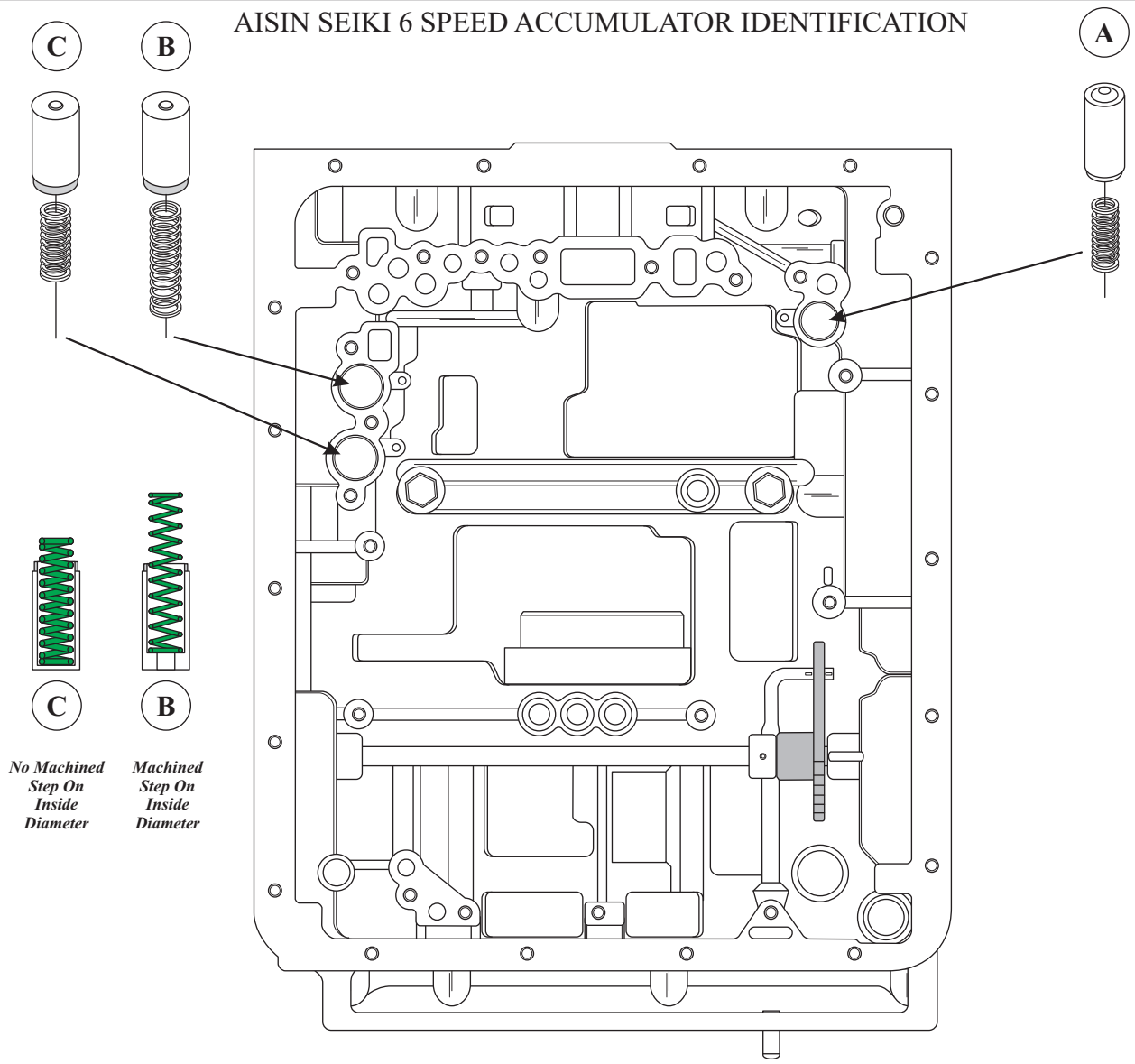


Figure 26

AISIN SEIKI 6 SPEED ACCUMULATOR IDENTIFICATION



Notice that accumulator "B" piston has a machined step on the inside diameter and requires the long blue spring. Accumulator "C" piston does not have the machined step and requires the shorter yellow spring.

The bore in the case for accumulator "B" is deeper than the bore for accumulator "C". When the accumulators are installed correctly, accumulator piston "B" will stick out of case approximately 3/4" and accumulator piston "C" will be almost flush with the case. Note: these two accumulators are used for Forward and Reverse engagements and are connected in the same oil circuit.

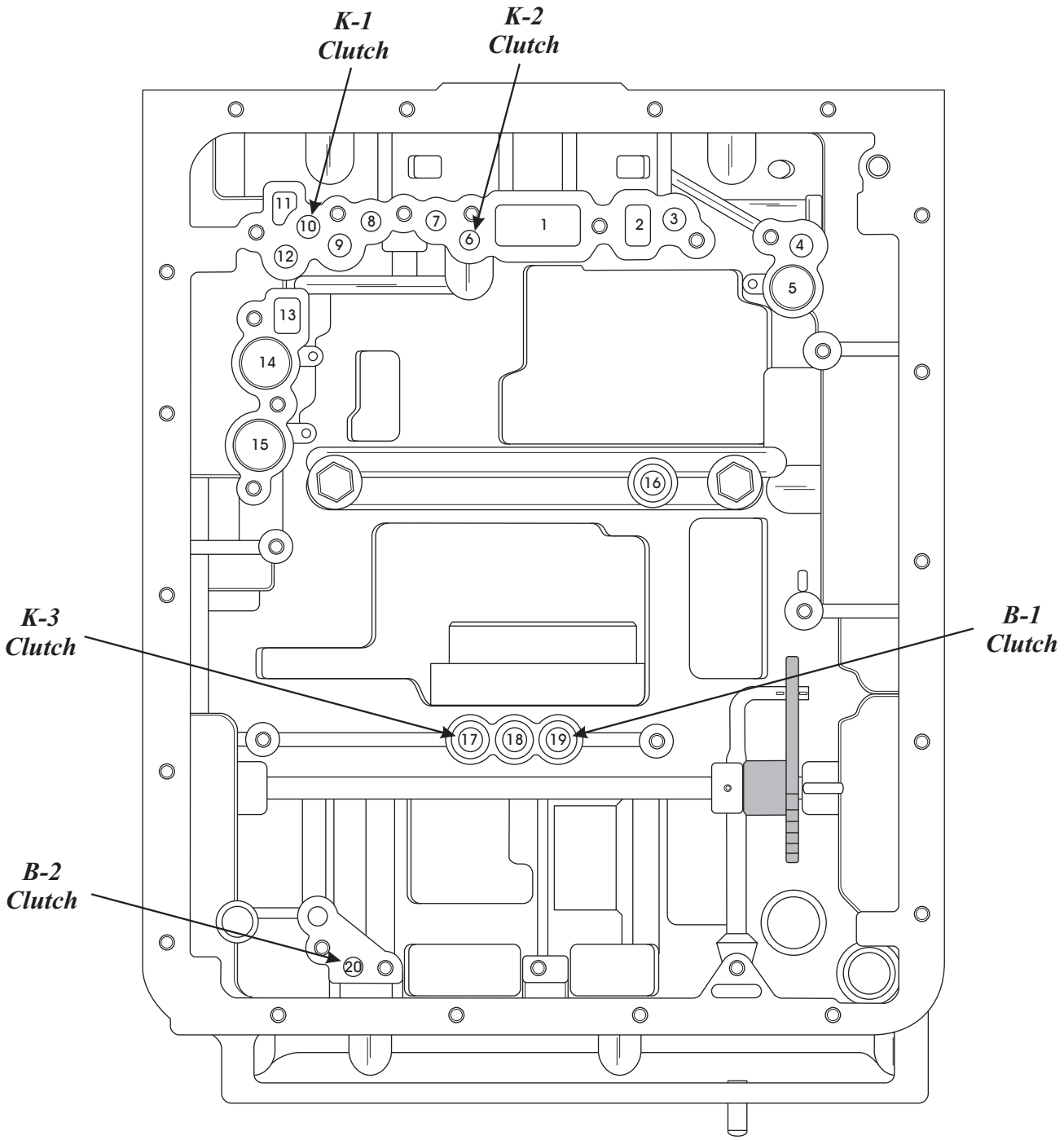
Note: These are Isuzu calibrations. Chrysler calibrations may be different.

CASE ACCUMULATOR SPRING SPECIFICATIONS

ACCUMULATOR "A" Free Length = 1.720" Spring Diameter = .433" Wire Diameter = .075" Approx Coils = 13 (PURPLE)	ACCUMULATOR "A" Piston Height = 1.471" Piston Diameter = .630"
ACCUMULATOR "B" Free Length = 2.590" Spring Diameter = .598" Wire Diameter = .060" Approx Coils = 12 (BLUE)	ACCUMULATOR "B" Piston Height = 1.460" Piston Diameter = .786" Machined Step Inside
ACCUMULATOR "C" Free Length = 1.987" Spring Diameter = .598" Wire Diameter = .103" Approx Coils = 12 (YELLOW)	ACCUMULATOR "C" Piston Height = 1.500" Piston Diameter = .786" NO Machined Step Inside

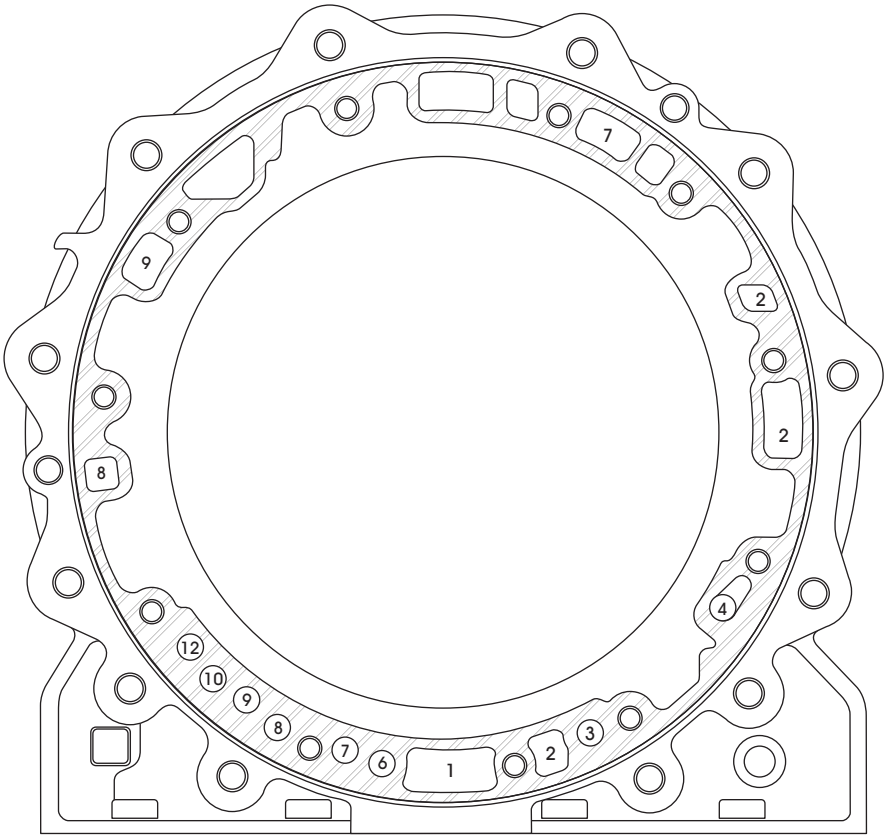
Figure 27

AIR CHECKS AND CASE PASSAGE IDENTIFICATION, VALVE BODY SIDE



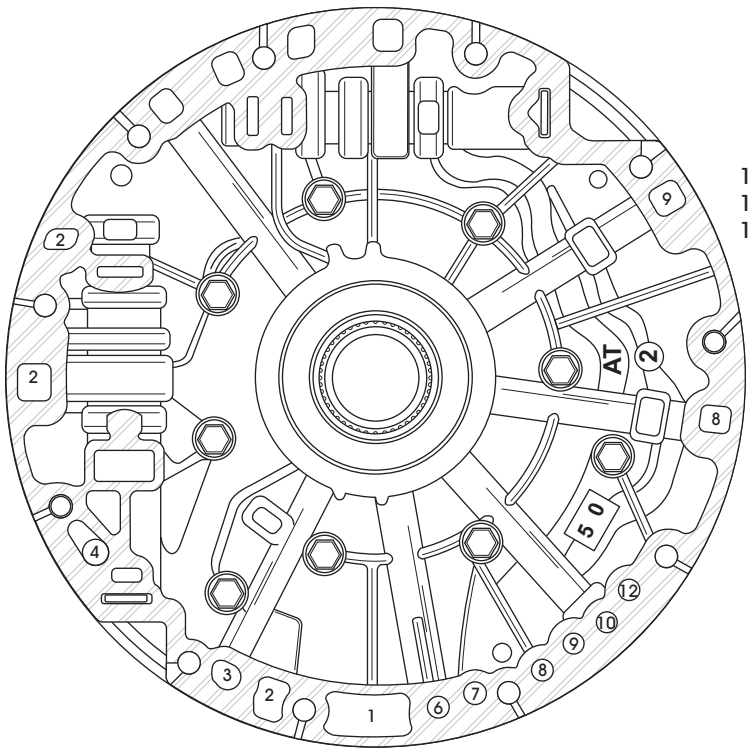
1 PUMP INLET (SUCTION).
2 PUMP OUTLET (LINE).
3 CONVERTER IN.
4 PRESSURE CONTROL SOLENOID TO P.R. VALVE.
5 PRESSURE CONTROL SOLENOID DAMPER PISTON.
6 K-2 CLUTCH.
7 LUBE TO PLANETARY PISTONS.
8 CONVERTER CLUTCH APPLY AND RELEASE.
9 CONVERTER RETURN.
10 K-1 CLUTCH.
11 "FROM" COOLER.
12 SECONDARY REG. PRESSURE TO LOCK-UP CONTROL VALVE.
13 "TO" COOLER.
14 NEUTRAL TO DRIVE AND REVERSE ACCUMULATOR.
15 NEUTRAL TO DRIVE AND REVERSE ACCUMULATOR.
16 LUBE.
17 K-3 CLUTCH.
18 LUBE.
19 B-1 CLUTCH.
20 B-2 CLUTCH.

Figure 28



CASE PASSAGE I.D.
FRONT OF CASE

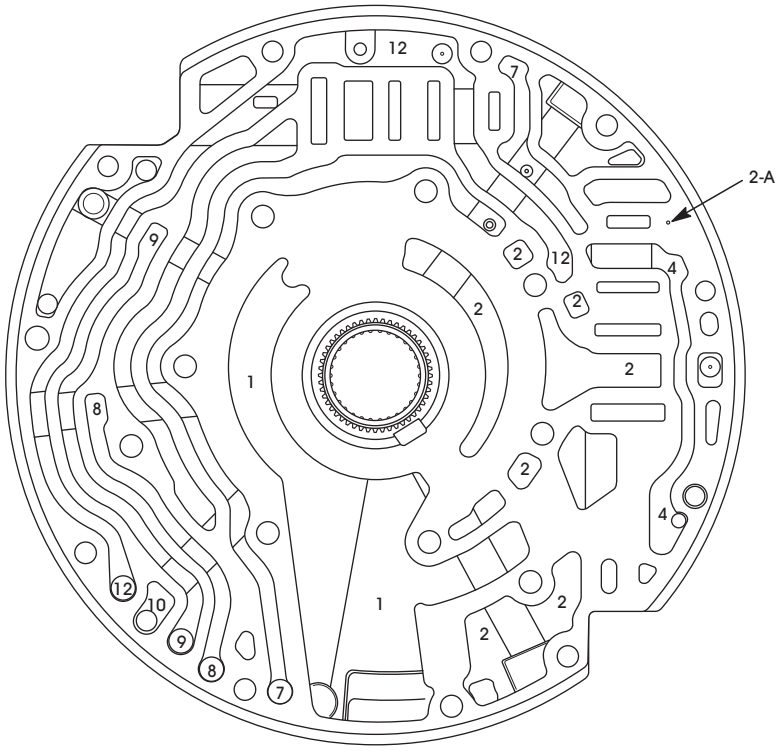
1 PUMP INLET (SUCTION).
2 PUMP OUTLET (LINE).
3 CONVERTER IN.
4 PRESSURE CONTROL SOLENOID TO P.R. VALVE.
5 N/A
6 K-2 CLUTCH.
7 LUBE TO PLANETARY PINIONS / CANCEL PRESSURE.
8 TCC APPLY AND RELEASE.
9 CONVERTER RETURN.
10 K-1 CLUTCH.
11 N/A
12 SECONDARY REG. FEED TO LOCK-UP CONTROL VALVE.

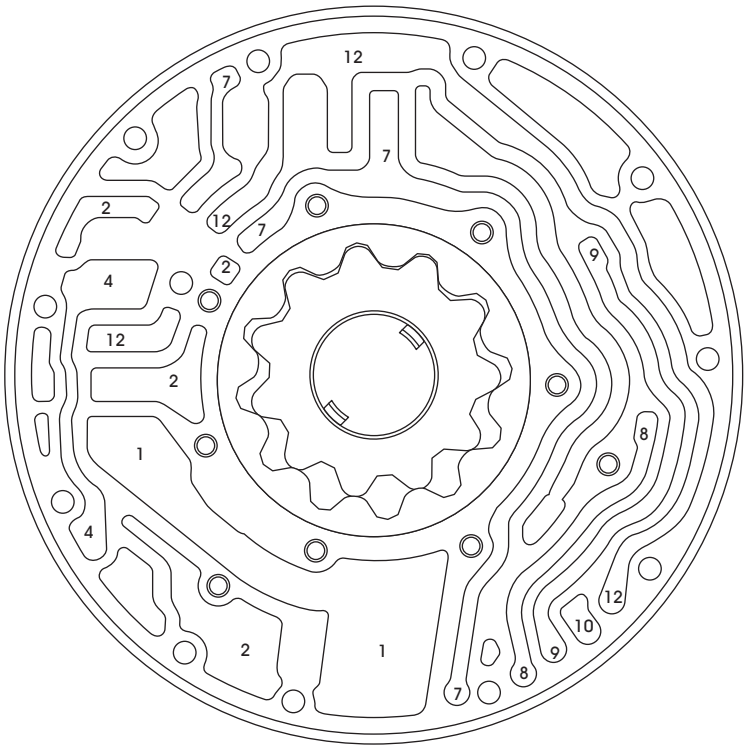


PUMP PASSAGE I.D.
REAR OF PUMP

Figure 29

PARTIAL PUMP PASSAGE I.D.





1 PUMP INLET (SUCTION).
2 PUMP OUTLET (LINE).
3 CONVERTER IN.
4 PRESSURE CONTROL SOLENOID TO P.R. VALVE.
5 N/A
6 K-2 CLUTCH.
7 LUBE TO PLANETARY PINIONS / CANCEL PRESSURE.
8 TCC APPLY AND RELEASE.
9 CONVERTER RETURN.
10 K-1 CLUTCH.
11 N/A
12 SECONDARY REGULATOR PRESSURE.

2-A LINE PRESSURE TO PRESSURE REG. BALANCE ORIFICE

Figure 30

VALVE BODY ASSEMBLY

The valve body is retained to the transmission case with 19 bolts of six different lengths, as shown in Figure 31. An additional bolt that fastens the detent spring must also be removed to relieve the tension on the inside detent lever for easier removal and installation.

There are a total of 19 different lengths of valve body bolts throughout the valve body. Refer to Figure 32, 33 and 34 for their lengths and locations. Illustration numbers, (example: 980), are referring to the exploded views in figures 31, 35 and 39.

VALVE BODY RETAINING BOLTS EXPLODED VIEW

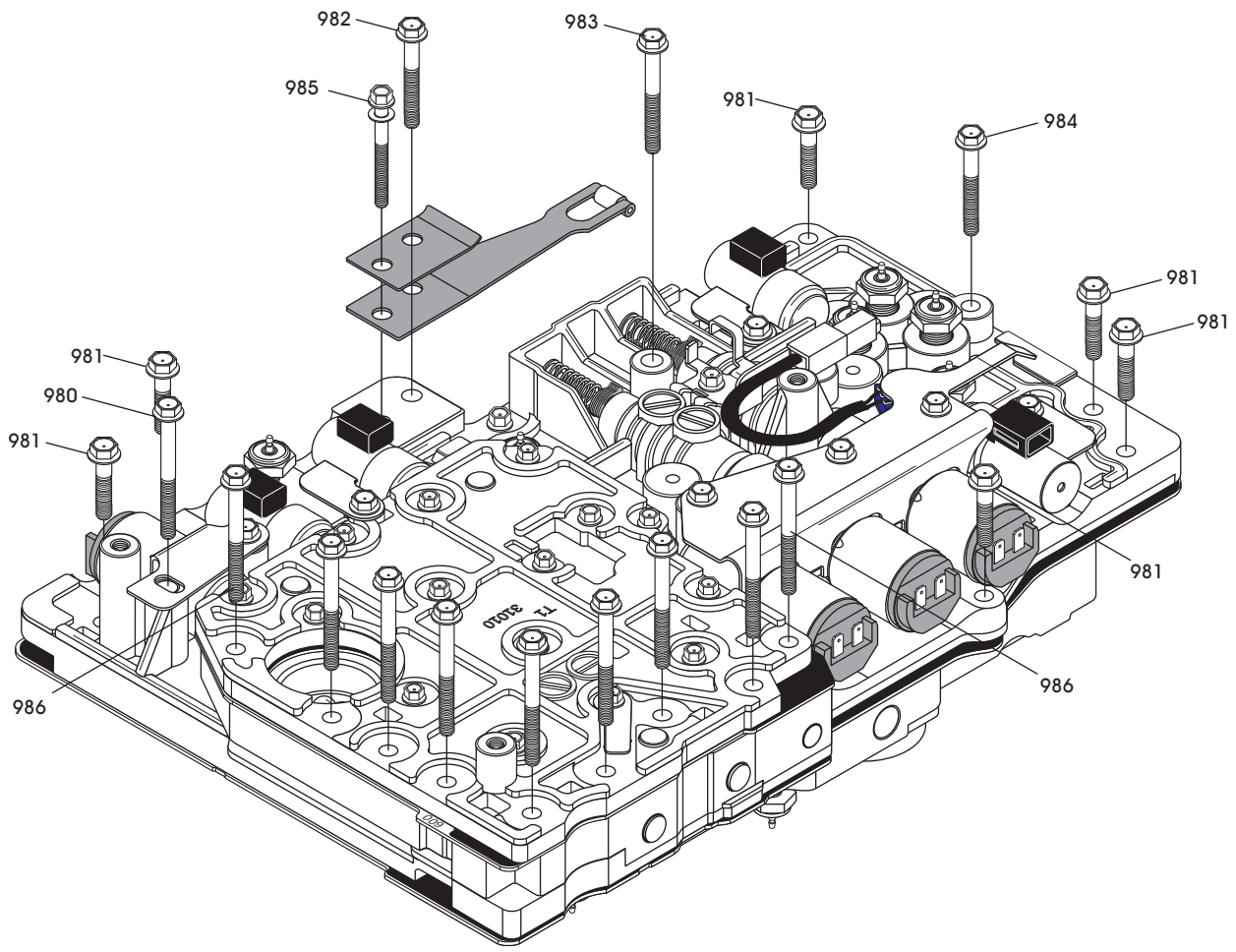
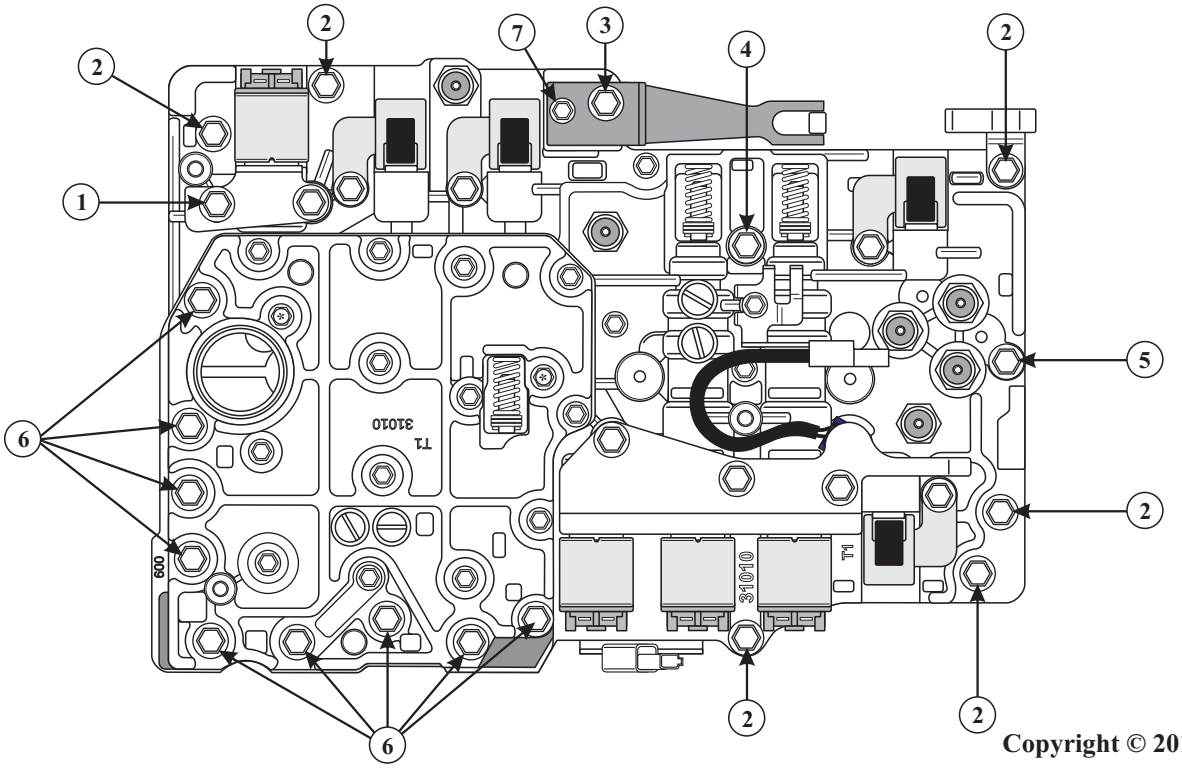


Figure 31

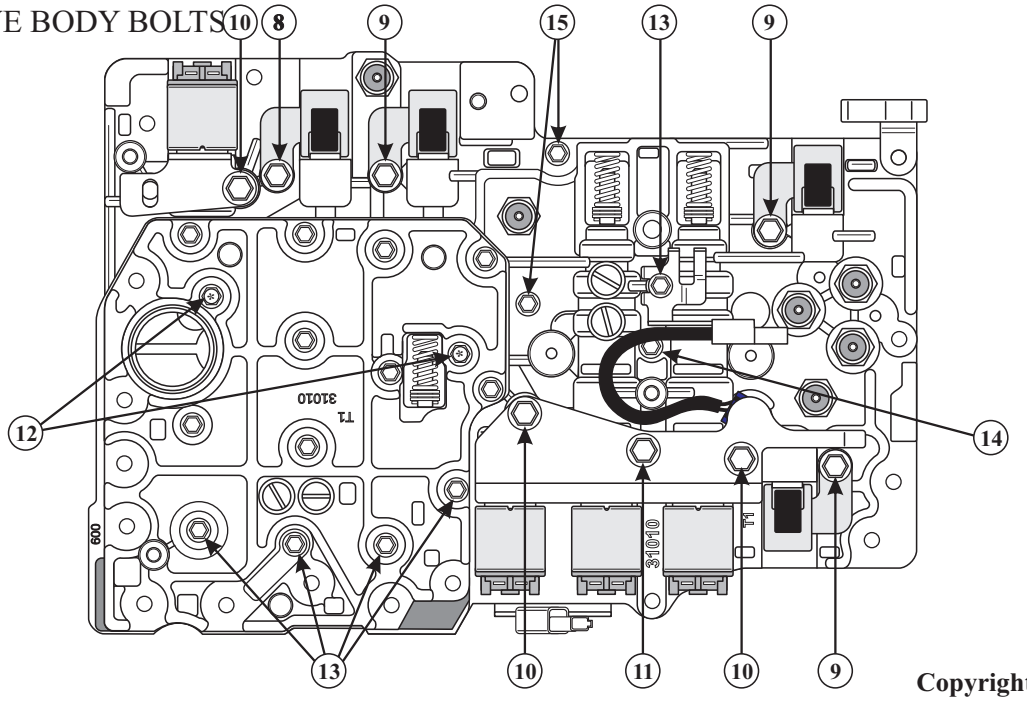
VALVE BODY RETAINING BOLTS



Reference Number	*Quantity*	*Head Size*	*Appearance*	*Length*
(1)	**1**	*10 mm*	ILLUSTRATION NO. 980	*58.0 mm (2.284") With Flange*
(2)	**6**	*10 mm*	ILLUSTRATION NO. 981	*31.2 mm (1.228") With Flange*
(3)	**1**	*10 mm*	ILLUSTRATION NO. 982	*43.0 mm (1.692") With Flange*
(4)	**1**	*10 mm*	ILLUSTRATION NO. 983	*50.0 mm (1.968") With Flange*
(5)	**1**	*10 mm*	ILLUSTRATION NO. 984	*41.2 mm (1.622") With Flange*
(6)	**9**	*10 mm*	ILLUSTRATION NO. 985	*56.2 mm (2.212") With Flange*
(7)	**1**	*8 mm*	ILLUSTRATION NO. 986	*41.5 mm (1.634") With Wave Washer*

Figure 32

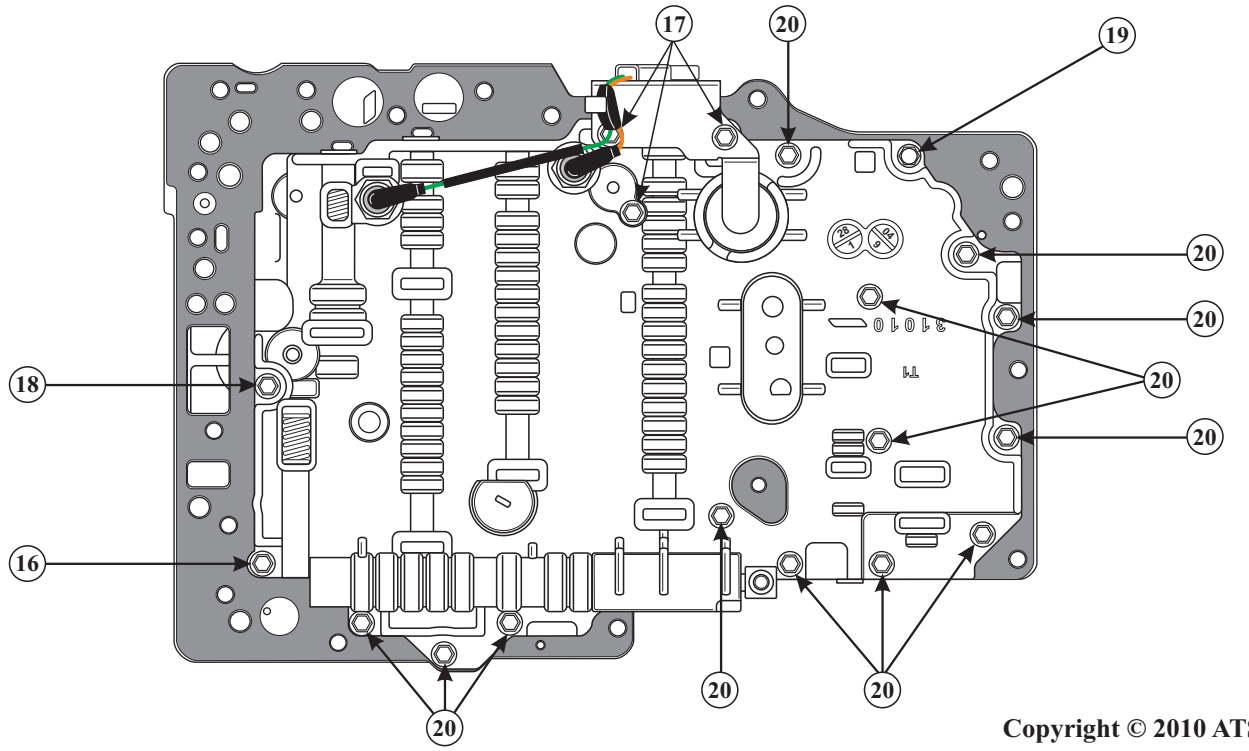
LOWER VALVE BODY BOLTS



Reference Number	*Quantity*	*Head Size*	*Appearance*	*Length*
(8)	**1**	*10 mm*	ILLUSTRATION NO. 987	*41.7 mm (1.642") With Flange*
(9)	**3**	*10 mm*	ILLUSTRATION NO. 988	*12.4 mm (.490") With Flange*
(10)	**3**	*10 mm*	ILLUSTRATION NO. 989	*25.0 mm (.984") With Flange*
(11)	**1**	*10 mm*	ILLUSTRATION NO. 990	*58.0 mm (2.284") With Flange*
(12)	**2**	*8 mm*	ILLUSTRATION NO. 991	*21.3 mm (.840") With Washer*
(13)	**14**	*8 mm*	ILLUSTRATION NO. 992	*55.0 mm (2.165") With Washer (13 In Cover, 1 In TFT Brkt)*
(14)	**1**	*8 mm*	ILLUSTRATION NO. 993	*37.6 mm (1.480") With Washer*
(15)	**2**	*8 mm*	ILLUSTRATION NO. 994	*29.4 mm (1.157") With Washer*

Figure 33

UPPER VALVE BODY BOLTS



Reference Number	*Quantity*	*Head Size*	*Appearance*	*Length*
(16)	**1**	*8 mm*	ILLUSTRATION NO. 995	*24.5 mm (.965") With Washer*
(17)	**3**	*8 mm*	ILLUSTRATION NO. 996	*42.3 mm (1.665") With Washer*
(18)	**1**	*8 mm*	ILLUSTRATION NO. 997	*40.0 mm (1.575") With Wave Washer*
(19)	**1**	*8 mm*	ILLUSTRATION NO. 998	*37.0 mm (1.457") With Wave Washer*
(20)	**13**	*8 mm*	ILLUSTRATION NO. 999	*37.5 mm (1.476") With Washer*

Figure 34

LOWER VALVE BODY EXPLODED VIEW

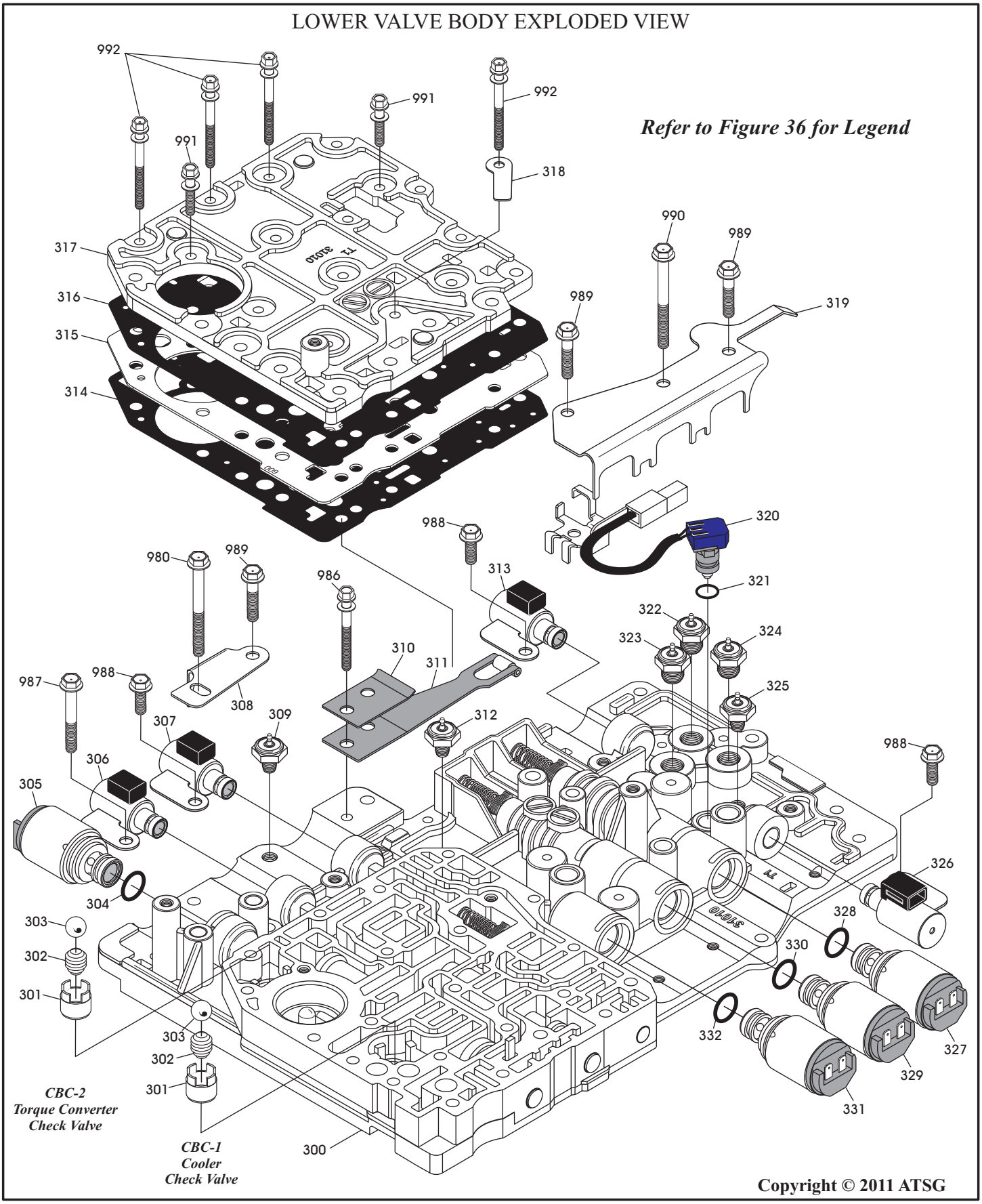


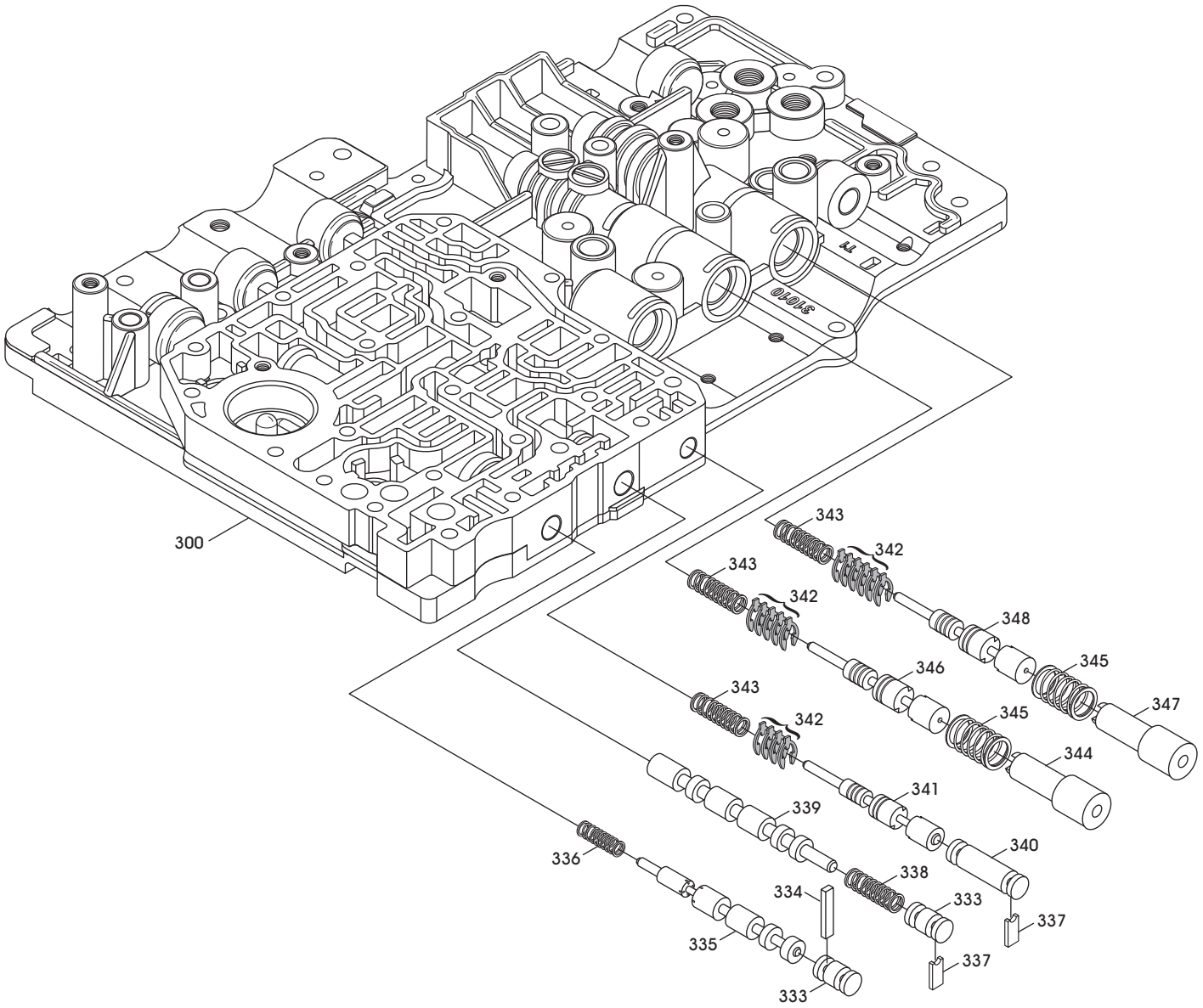
Figure 35

Figure 35 and 38 Legend

300 LOWER VALVE BODY CASTING.
301 LARGE CHECK BALL CAPSULE (2 REQUIRED).
302 LARGE CHECK BALL CAPSULE SPRING (2 REQUIRED) (WHITE).
303 LARGE CHECK BALL, 11 MM (.499") DIAMETER (2 REQUIRED).
304 LINEAR SOLENOID "D" "O" RING (ORANGE).
305 LINEAR SOLENOID "D", LINE PRESSURE, (SNOUT DIAMETER = .667").
306 ON/OFF SHIFT SOLENOID 3 (NO "O" RING USED).
307 ON/OFF SHIFT SOLENOID 2 (NO "O" RING USED).
308 LINEAR SOLENOID "D" RETAINING BRACKET.
309 PRESSURE SWITCH EIGHT (1/8" NPT).
310 DETENT SPRING COVER PLATE.
311 DETENT SPRING.
312 PRESSURE SWITCH SIX (1/8" NPT).
313 ON/OFF SHIFT SOLENOID 4 (NO "O" RING USED).
314 COVER PLATE SPACER TO LOWER VALVE BODY GASKET.
315 COVER PLATE SPACER PLATE.
316 COVER PLATE SPACER TO COVER PLATE GASKET.
317 COVER PLATE.
318 RETAINING PLATE (LOCK-UP CONTROL RETAINER).
319 LINEAR SOLENOID "B", "A", & "C" RETAINING BRACKET.
320 SUMP TEMPERATURE SENSOR & BRACKET ASSEMBLY.
321 SUMP TEMPERATURE SENSOR "O" RING.
322 PRESSURE SWITCH ONE (1/4" NPT).
323 PRESSURE SWITCH TWO (1/4" NPT).
324 PRESSURE SWITCH SEVEN (1/4" NPT).
325 PRESSURE SWITCH THREE (1/8" NPT).
326 ON/OFF SHIFT SOLENOID 1 (NO "O" RING USED).
327 LINEAR SOLENOID "B", SHIFT PRESSURE, (SNOUT DIAMETER = .647").
328 LINEAR SOLENOID "B" "O" RING (BROWN).
329 LINEAR SOLENOID "A", SHIFT PRESSURE, (SNOUT DIAMETER = .667").
330 LINEAR SOLENOID "A" "O" RING (ORANGE).
331 LINEAR SOLENOID "C", MULTIPLE TASK, (SNOUT DIAMETER = .667").
332 LINEAR SOLENOID "C" "O" RING (ORANGE).
349 SMALL CHECK BALL CAPSULE.
350 SMALL CHECK BALL SPRING (ORANGE).
351 SMALL CHECK BALL, 10 MM (.393").
352 ACCUMULATOR VALVE SPRING, 3 REQUIRED (RED).
353 ACCUMULATOR VALVES, LONG WITH DIMPLE, (.471" DIAMETER).
354 ACCUMULATOR VALVE SPRING, 2 REQUIRED (LT. GREEN).
355 ACCUMULATOR VALVES, SHORT WITH DIMPLE, (.491" DIAMETER).
356 LOWER VALVE BODY TO SPACER PLATE GASKET.
357 MAIN VALVE BODY SPACER PLATE.
358 SPACER PLATE TO UPPER VALVE BODY GASKET.
980 LINEAR SOLENOID "D" RETAINING BOLT (SEE BOLT CHART).
987 ON/OFF SHIFT SOLENOID 3 RETAINING BOLT (SEE BOLT CHART).
988 ON/OFF SHIFT SOLENOID RETAINING BOLT (SEE BOLT CHART).
989 LINEAR SOLENOID RETAINING BRACKET BOLT (SEE BOLT CHART).
990 LINEAR SOLENOID RETAINING BRACKET BOLT (SEE BOLT CHART).
991 COVER PLATE BOLTS (SEE BOLT CHART).
992 COVER PLATE BOLTS (SEE BOLT CHART.

Figure 36

LOWER VALVE BODY EXPLODED VIEW



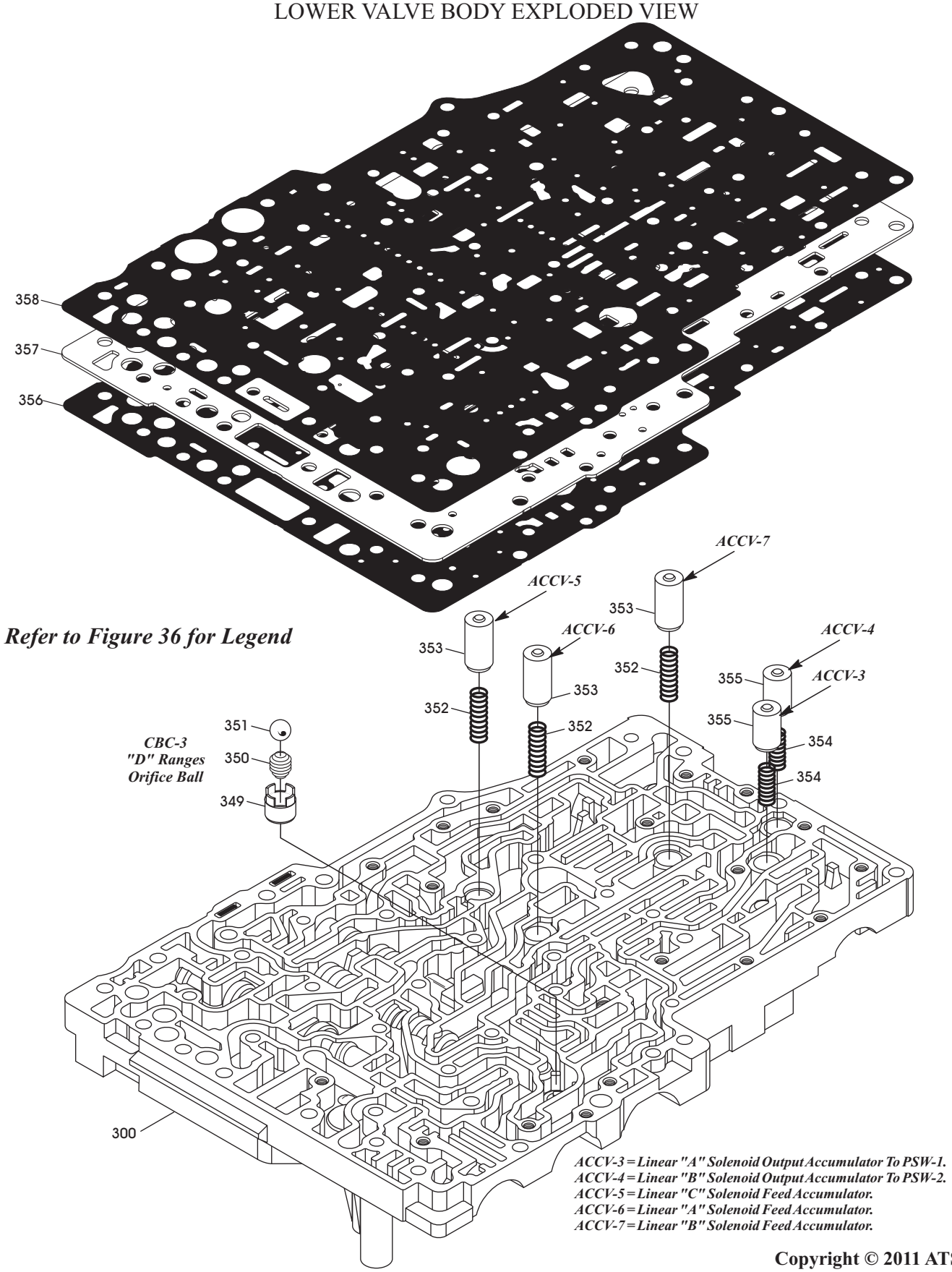
300 LOWER VALVE BODY CASTING.
333 VALVE TRAIN BORE PLUG (2 REQUIRED).
334 LOCK-UP CONTROL VALVE BORE PLUG RETAINER.
335 LOCK-UP CONTROL VALVE.
336 LOCK-UP CONTROL VALVE SPRING (PINK).
337 BORE PLUG RETAINERS (2 REQUIRED).
338 SHIFT VALVE NUMBER 4 SPRING (BLUE).
339 SHIFT VALVE NUMBER 4.
340 CONTROL VALVE NUMBER 3 BORE PLUG.
341 CONTROL VALVE NUMBER 3, K1 AND K3, (LARGE DIA. = .440").
342 CONTROL VALVE CLIPS (CALIBRATES SPRING PRESSURE).
343 CONTROL VALVE SPRING (3 REQUIRED) (YELLOW).
344 CONTROL VALVE NUMBER 1 PLUNGER (LARGE DIA. = .668").
345 CONTROL VALVE PLUNGER SPRING (2 REQUIRED) (BLUE).
346 CONTROL VALVE NUMBER 1, K1, K2 AND B3, (LARGE DIA. = .471").
347 CONTROL VALVE NUMBER 2 PLUNGER (LARGE DIA. = .648").
348 CONTROL VALVE NUMBER 2, K3 AND B2, (LARGE DIA. = .431").

LOWER VALVE BODY SPRING SPECIFICATIONS

SPRING NUMBER 336	SPRING NUMBER 343 (3)
Free Length = 1.230"	Free Length = 1.334"
Spring Diameter = .319"	Spring Diameter = .361"
Wire Diameter = .030"	Wire Diameter = .033"
Approx Coils = 12 (PINK)	Approx Coils = 11 (YELLOW)
SPRING NUMBER 338	SPRING NUMBER 345 (2)
Free Length = 1.585"	Free Length = .925"
Spring Diameter = .434"	Spring Diameter = .582"
Wire Diameter = .034"	Wire Diameter = .037"
Approx Coils = 9 (BLUE)	Approx Coils = 5 (BLUE)

Figure 37

LOWER VALVE BODY EXPLODED VIEW



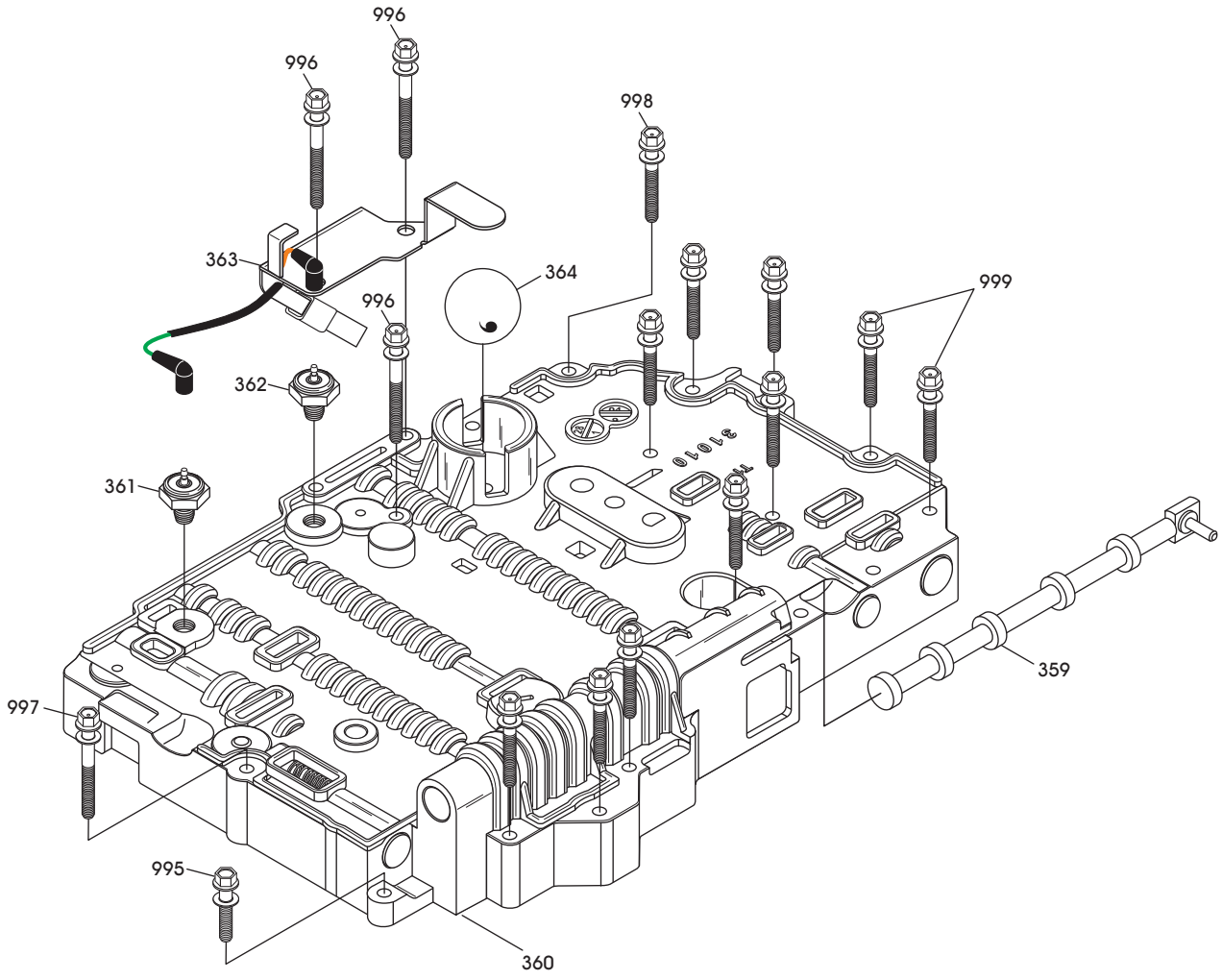
Refer to Figure 36 for Legend

Figure 38

There are a couple of things to be aware of when assembling the upper valve body and are shown in Figure 40. Notice the bore plug retainer for valve number 372. Even though it is the same as all the other retainers, it installs laying on its side, as shown in Figure 40. Installed like you ***think*** it should go, it will protrude past the valve body surface.

Also, valves 375 and 381 are both the same diameter and will install, but ***cannot*** be interchanged because of the valve land configuration. Install them as shown in Figure 40.

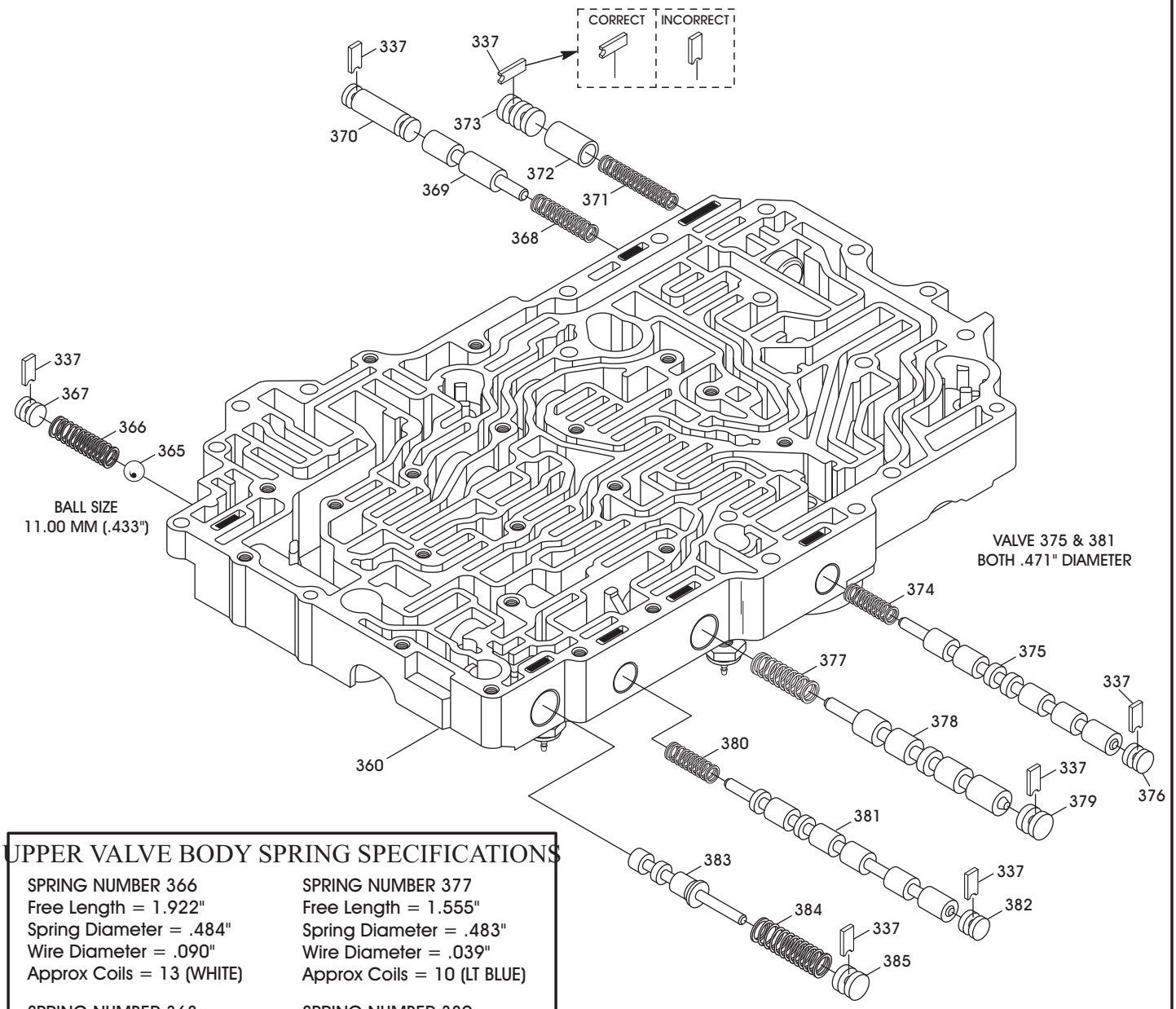
UPPER VALVE BODY EXPLODED VIEW



359 MANUAL VALVE.
360 UPPER VALVE BODY CASTING.
361 PRESSURE SWITCH FIVE (1/8" NPT).
362 PRESSURE SWITCH FOUR (1/8" NPT).
363 PRESSURE SWITCH HARNESS AND DRAIN BALL RETAINING BRACKET.
364 DRAIN BALL, 27 MM (1.062") DIAMETER.
995 VALVE BODY BOLT (SEE BOLT CHART).
996 RETAINING BRACKET BOLTS (SEE BOLT CHART).
997 VALVE BODY BOLT (SEE BOLT CHART).
998 VALVE BODY BOLT (SEE BOLT CHART).
999 VALVE BODY BOLTS (SEE BOLT CHART).

Figure 39

UPPER VALVE BODY EXPLODED VIEW



UPPER VALVE BODY SPRING SPECIFICATIONS

SPRING NUMBER 366
Free Length = 1.922"
Spring Diameter = .484"
Wire Diameter = .090"
Approx Coils = 13 (WHITE)

SPRING NUMBER 368
Free Length = 1.645"
Spring Diameter = .395"
Wire Diameter = .032"
Approx Coils = 11 (RED)

SPRING NUMBER 371
Free Length = 1.500"
Spring Diameter = .348"
Wire Diameter = .023"
Approx Coils = 17 (DK BLUE)

SPRING NUMBER 374
Free Length = 1.560"
Spring Diameter = .435"
Wire Diameter = .039"
Approx Coils = 10 (LT GREEN)

SPRING NUMBER 377
Free Length = 1.555"
Spring Diameter = .483"
Wire Diameter = .039"
Approx Coils = 10 (LT BLUE)

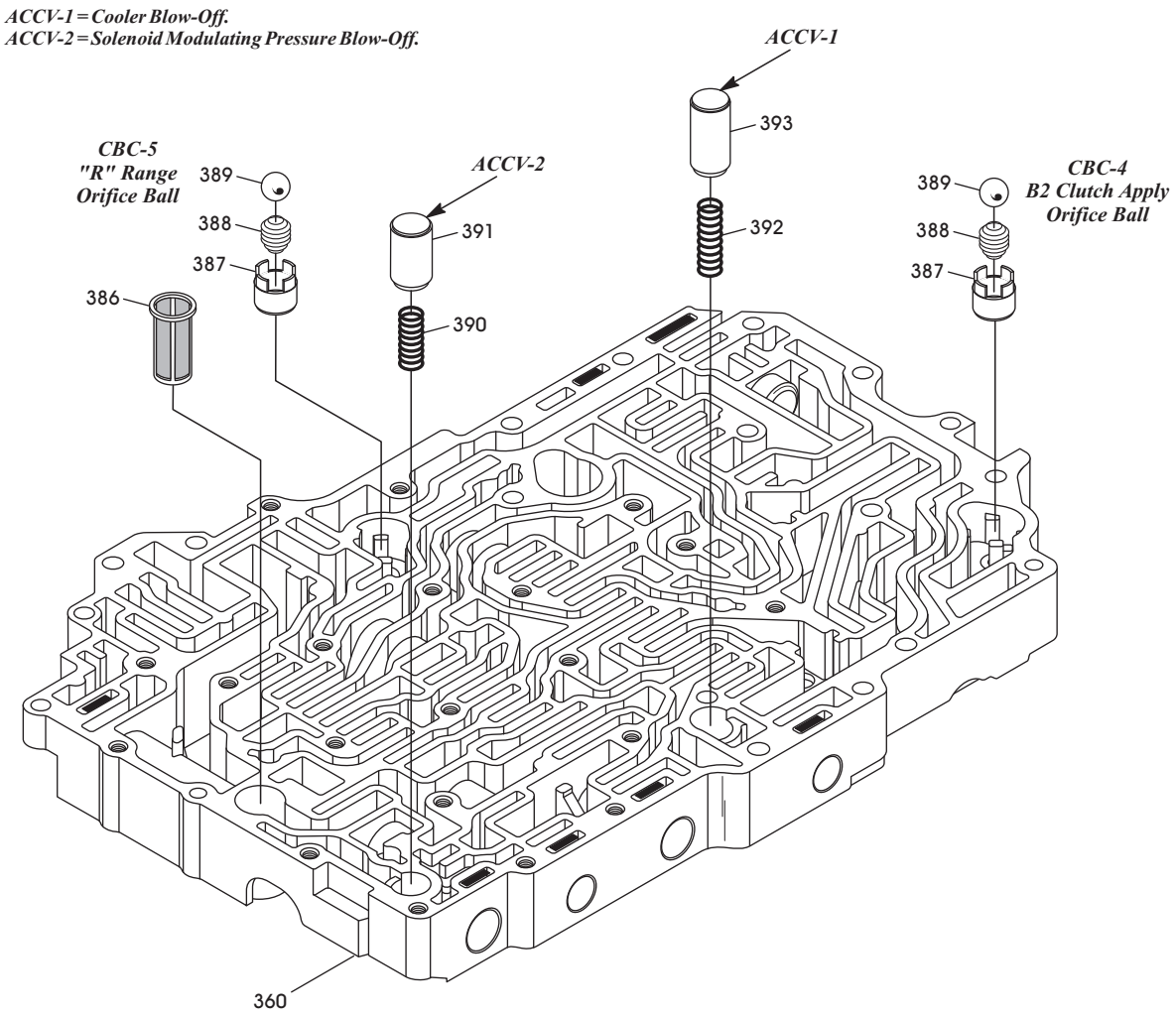
SPRING NUMBER 380
Free Length = 1.585"
Spring Diameter = .433"
Wire Diameter = .035"
Approx Coils = 9 (BLUE)

SPRING NUMBER 384
Free Length = 2.265"
Spring Diameter = .528"
Wire Diameter = .055"
Approx Coils = 12 (PINK)

Refer to Figure 41 for Legend

Figure 40

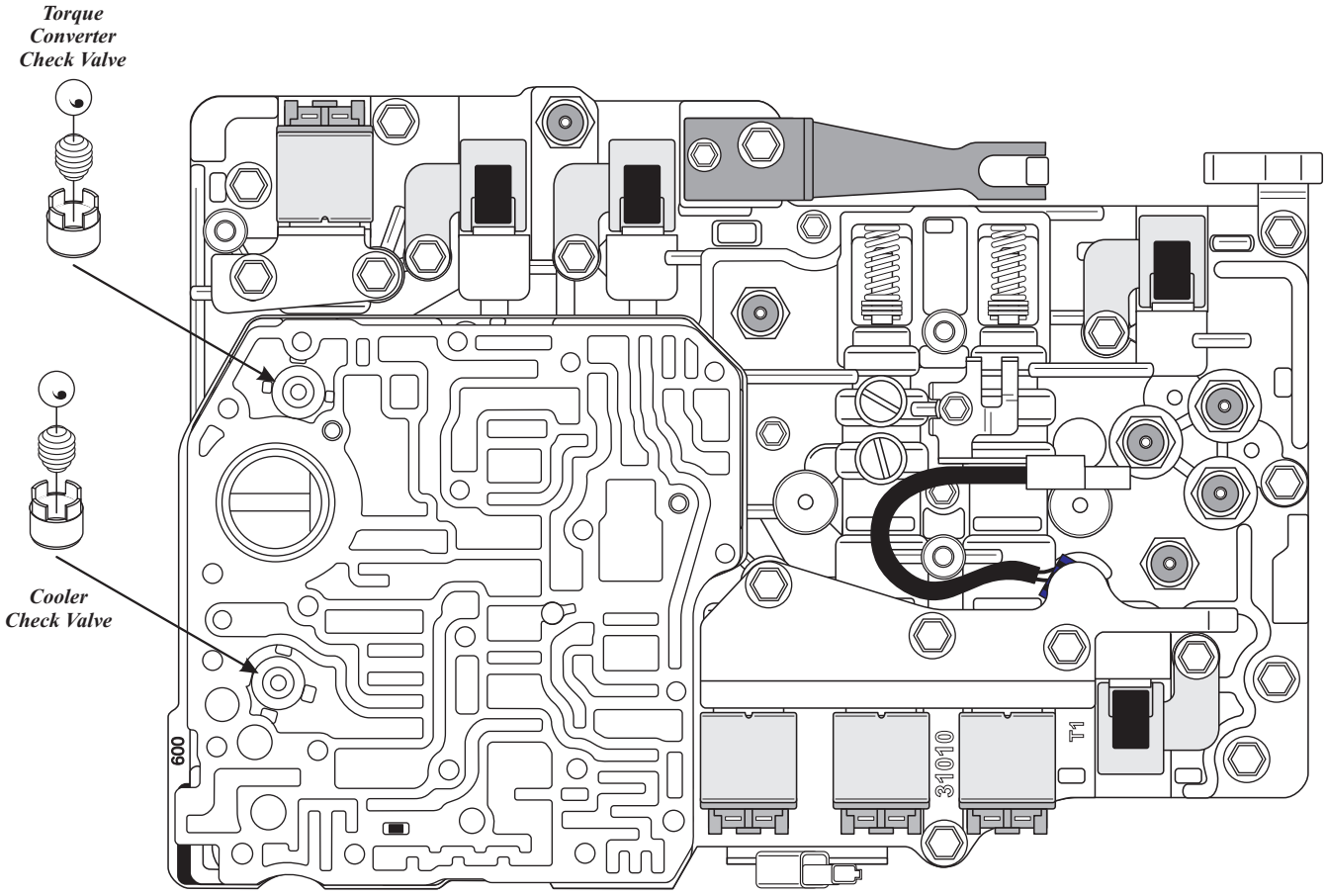
UPPER VALVE BODY EXPLODED VIEW



337 BORE PLUG RETAINERS (7 REQUIRED).
360 UPPER VALVE BODY CASTING.
365 LINE PRESSURE BLOW-OFF BALL, 11 MM (.433") DIAMETER.
366 LINE PRESSURE BLOW-OFF BALL SPRING (WHITE).
367 LINE PRESSURE BLOW-OFF BORE PLUG.
368 GAIN CHANGE VALVE SPRING (RED).
369 GAIN CHANGE VALVE.
370 GAIN CHANGE VALVE BORE PLUG.
371 COMBINED DRAIN VALVE SPRING (DK BLUE).
372 COMBINED DRAIN VALVE.
373 COMBINED DRAIN VALVE BORE PLUG *(NOTE RETAINER DIRECTION).*
374 SHIFT VALVE NUMBER 1 SPRING (LT GREEN).
375 SHIFT VALVE NUMBER 1.
376 SHIFT VALVE NUMBER 1 BORE PLUG.
377 SHIFT VALVE NUMBER 2 SPRING (LT BLUE).
378 SHIFT VALVE NUMBER 2.
379 SHIFT VALVE NUMBER 2 BORE PLUG.
380 SHIFT VALVE NUMBER 3 SPRING (BLUE).
381 SHIFT VALVE NUMBER 3.
382 SHIFT VALVE NUMBER 3 BORE PLUG.
383 MODULATOR VALVE.
384 MODULATOR VALVE SPRING (PINK).
385 MODULATOR VALVE BORE PLUG.
386 PLASTIC SCREEN.
387 SMALL CHECK BALL CAPSULE (2 REQUIRED).
388 SMALL CHECK BALL SPRING, 2 REQUIRED, (ORANGE).
389 SMALL CHECK BALL, 10 MM (.393") DIAMETER (2 REQUIRED).
390 ACCUMULATOR VALVE SPRING (WHITE).
391 ACCUMULATOR VALVE, SHORT W/O DIMPLE, .470" DIAMETER.
392 ACCUMULATOR VALVE SPRING (LT BLUE).
393 ACCUMULATOR VALVE, LONG W/O DIMPLE, .510" DIAMETER.

Figure 41

LOWER VALVE BODY FILTER SIDE

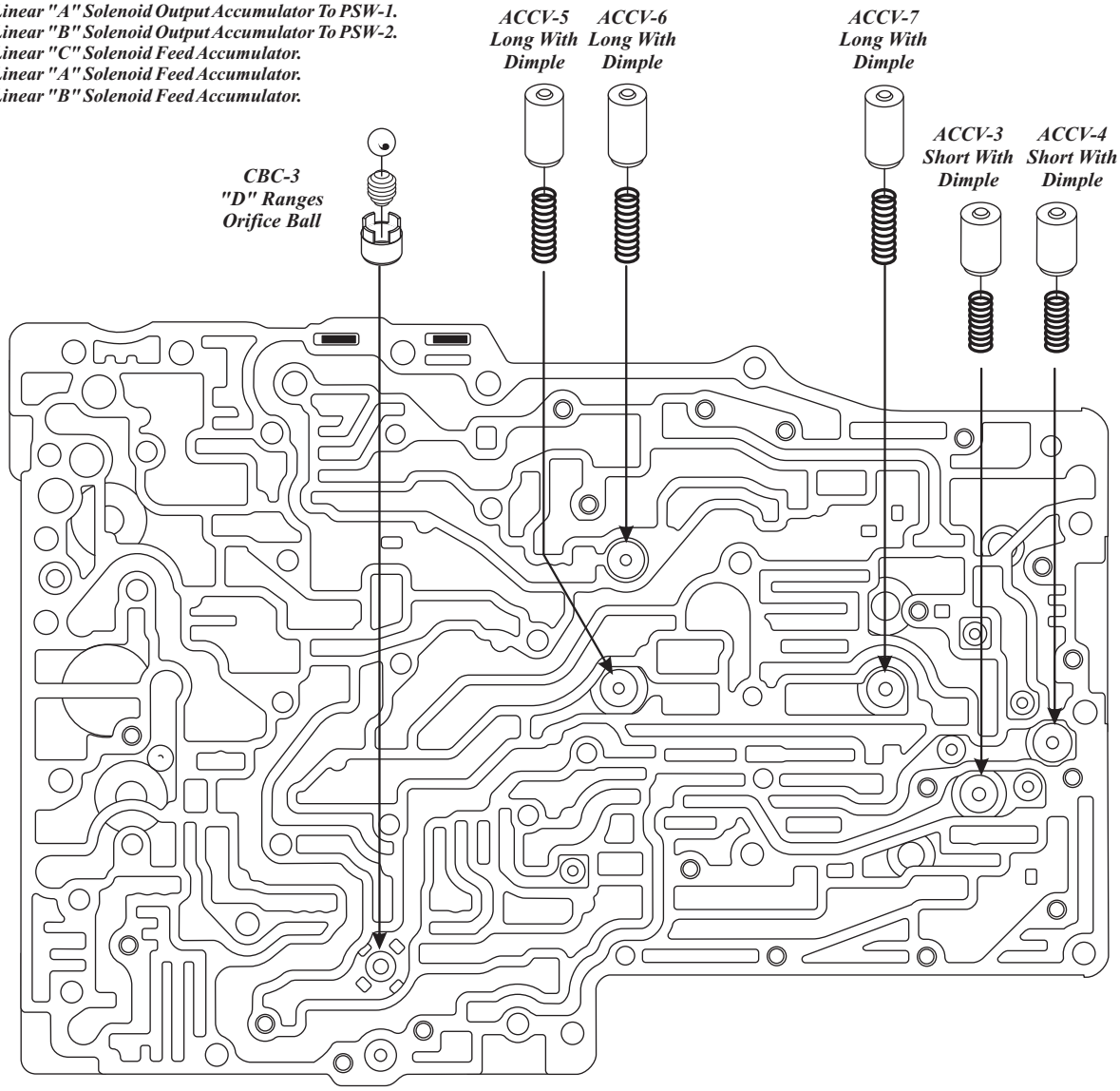


Check Ball And Capsule
CHECK BALL DIAMETER = .499"
CAPSULE DIAMETER = .667"
SPRING FREE LENGTH = .758" (WHITE PAINT)
SPRING WIRE DIAMETER = .019" (WHITE PAINT)
SPRING APPROX. COILS = 8 (WHITE PAINT)

Figure 42

LOWER VALVE BODY SPACER PLATE SIDE

ACCV-3 = Linear "A" Solenoid Output Accumulator To PSW-1.
ACCV-4 = Linear "B" Solenoid Output Accumulator To PSW-2.
ACCV-5 = Linear "C" Solenoid Feed Accumulator.
ACCV-6 = Linear "A" Solenoid Feed Accumulator.
ACCV-7 = Linear "B" Solenoid Feed Accumulator.



"Long" Accumulator Piston (With Dimple)
PISTON DIAMETER = .471"
PISTON OVERALL LENGTH = .996"
SPRING FREE LENGTH = 1.140" (RED PAINT)
SPRING WIRE DIAMETER = .049" (RED PAINT)
SPRING APPROX. COILS = 10 (RED PAINT)

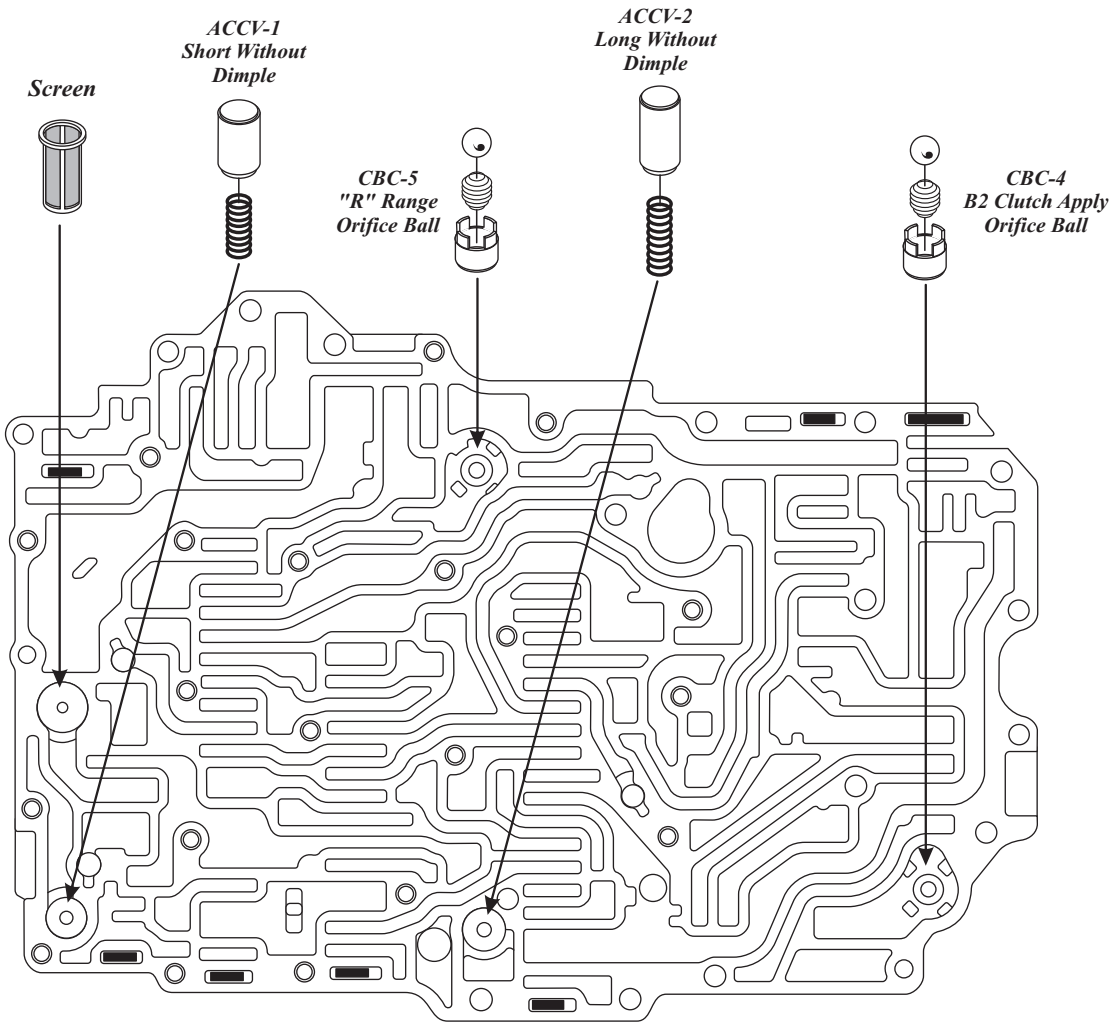
"Short" Accumulator Piston (With Dimple)
PISTON DIAMETER = .491"
PISTON OVERALL LENGTH = .785"
SPRING FREE LENGTH = .895" (LT GREEN PAINT)
SPRING WIRE DIAMETER = .063" (LT GREEN PAINT)
SPRING APPROX. COILS = 9 (LT GREEN PAINT)

Check Ball And Capsule
CHECK BALL DIAMETER = .393"
CAPSULE DIAMETER = .526"
SPRING FREE LENGTH = .502" (ORANGE PAINT)
SPRING WIRE DIAMETER = .014" (ORANGE PAINT)
SPRING APPROX. COILS = 7 (ORANGE PAINT)

Figure 43

UPPER VALVE BODY SPACER PLATE SIDE

ACCV-1 = Cooler Blow-Off.
ACCV-2 = Solenoid Modulating Pressure Blow-Off.



"Long" Accumulator Piston (Without Dimple)
PISTON DIAMETER = .510"
PISTON OVERALL LENGTH = .913"
SPRING FREE LENGTH = 1.325" (LT BLUE PAINT)
SPRING WIRE DIAMETER = .054" (LT BLUE PAINT)
SPRING APPROX. COILS = 13 (LT BLUE PAINT)

"Short" Accumulator Piston (Without Dimple)
PISTON DIAMETER = .470"
PISTON OVERALL LENGTH = .650"
SPRING FREE LENGTH = .932" (WHITE PAINT)
SPRING WIRE DIAMETER = .047" (WHITE PAINT)
SPRING APPROX. COILS = 11 (WHITE PAINT)

Check Ball And Capsule
CHECK BALL DIAMETER = .393"
CAPSULE DIAMETER = .526"
SPRING FREE LENGTH = .502" (ORANGE PAINT)
SPRING WIRE DIAMETER = .014" (ORANGE PAINT)
SPRING APPROX. COILS = 7 (ORANGE PAINT)

Figure 44

OIL PUMP COVER EXPLODED VIEW

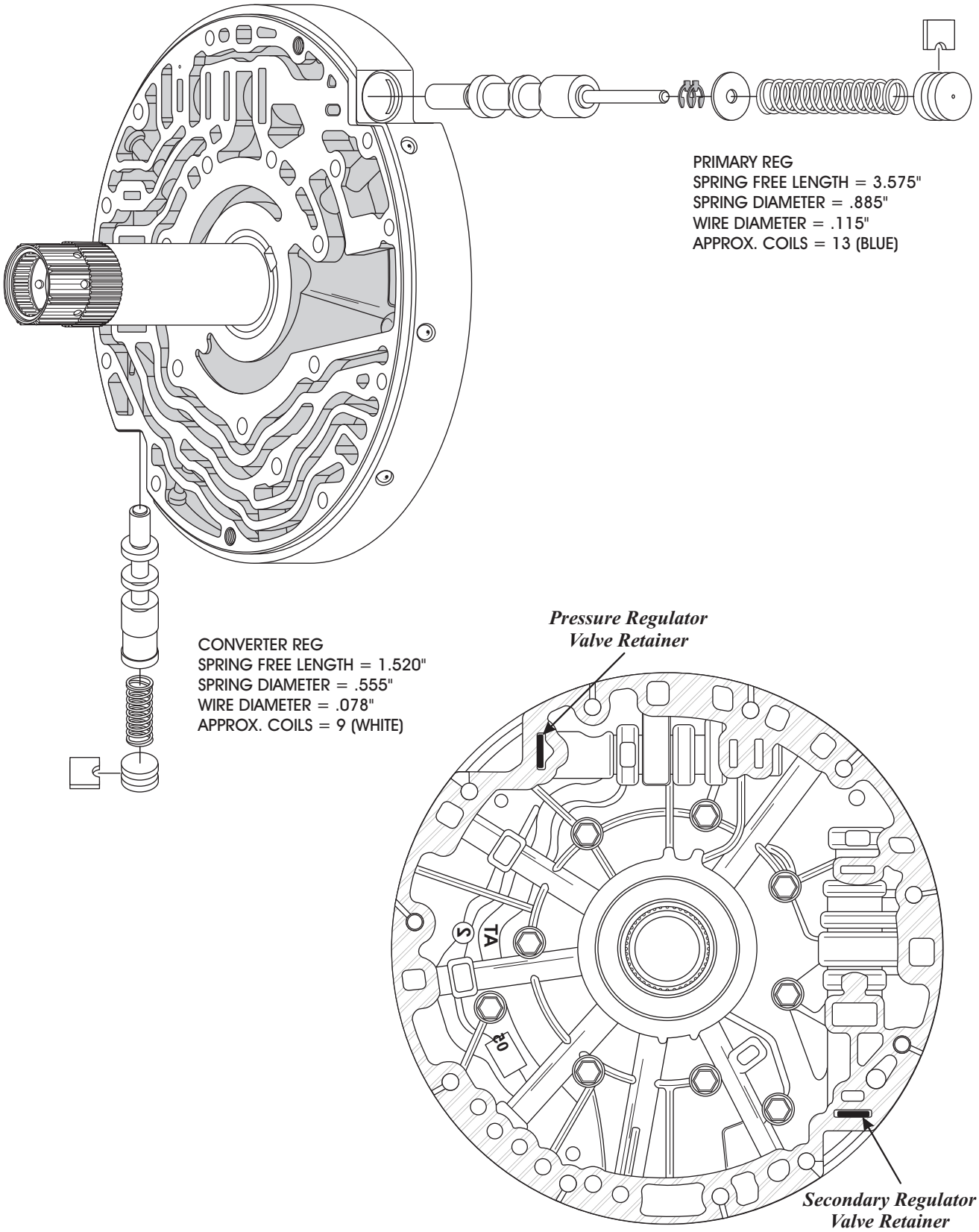


Figure 45

OIL PUMP BODY EXPLODED VIEW

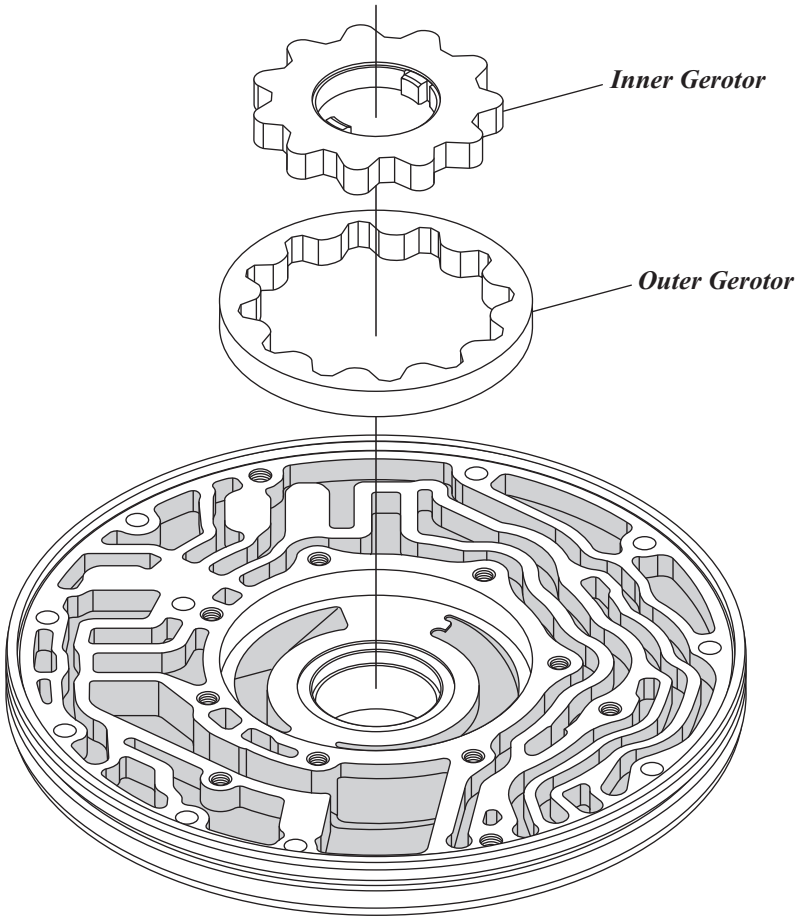


Figure 46

DAIMLER/CHRYSLER AS68RC DIAGNOSTIC TROUBLE CODES	
DTC	DESCRIPTION
P0560	***System Voltage Malfunction***
P0613	***Transmission Control Module (TCM)***
P0702	***Transmission Control System Electrical***
P0706	***Transmission Range Switch Rationality and Pressure Switch N0. 8***
P0707	***Transmission Range Switch Circuit Low***
P0708	***Transmission Range Switch Circuit High***
P0711	***Transmission Fluid Temperature Sensor A (Sump), Circuit Performance***
P0712	***Transmission Fluid Temperature Sensor A (Sump), Circuit Low***
P0713	***Transmission Fluid Temperature Sensor A (Sump), Circuit High***
P0717	***Input Speed Sensor Circuit, No Signal***
P0722	***Output Speed Sensor Circuit, No Signal***
P0730	***Incorrect Gear Ratio***
P0745	***Line Pressure Solenoid (Linear Solenoid "D") Electrical***
P0746	***Clutch Pressure Control Solenoid (Linear Solenoid "A") Performance or Stuck Off***
P0748	***Clutch Pressure Control Solenoid (Linear Solenoid "A") Electrical***
P0751	***On/Off Shift Solenoid 1 (A), Performance or Stuck Off***
P0756	***On/Off Shift Solenoid 2 (B), Performance or Stuck Off***
P0761	***On/Off Shift Solenoid 3 (C), Performance or Stuck Off***
P0766	***On/Off Shift Solenoid 4 (D), Performance or Stuck Off***
P0776	***Clutch Pressure Control Solenoid (Linear Solenoid "B") Performance or Stuck Off***
P0778	***Clutch Pressure Control Solenoid (Linear Solenoid "B") Electrical***
P0796	***Clutch Pressure Control Solenoid (Linear Solenoid "C") Performance or Stuck Off***
P0798	***Clutch Pressure Control Solenoid (Linear Solenoid "C") Electrical***
P0973	***On/Off Shift Solenoid 1 (A), Control Circuit Low***
P0974	***On/Off Shift Solenoid 1 (A), Control Circuit High***
P0976	***On/Off Shift Solenoid 2 (B), Control Circuit Low***
P0977	***On/Off Shift Solenoid 2 (B), Control Circuit High***
P0979	***On/Off Shift Solenoid 3 (C), Control Circuit Low***
P0980	***On/Off Shift Solenoid 3 (C), Control Circuit High***
P0982	***On/Off Shift Solenoid 4 (D), Control Circuit Low***
P0983	***On/Off Shift Solenoid 4 (D), Control Circuit High***
P1679	***TCU Not Calibrated***
P1720	***Loss Of Output Speed***
P2741	***Transmission Fluid Temperature Sensor B (Torque Converter Out), Circuit Performance***
P2742	***Transmission Fluid Temperature Sensor B (Torque Converter Out), Circuit Low***
P2743	***Transmission Fluid Temperature Sensor B (Torque Converter Out), Circuit High***
P2757	***TCC Pressure Control Solenoid (Linear Solenoid "C") Performance or Stuck Off***
U0001	***High Speed (CAN) Communication Bus***
U0100	***Lost Communication with TCM/ECM***
U0121	***Lost Communication with Anti-Lock Brake System (ABS) Control Module***
U0141	***Lost Communication with Totally Integrated Power Module (TIPM)***
U01400	***Implausible TPS Signal Received***
U01401	***Implausible Engine Speed Signal Received***
U140D	***Implausible Wheel Speed Signal Received***
C1400	***Implausible Wheel Speed Signal Received***

Figure 48