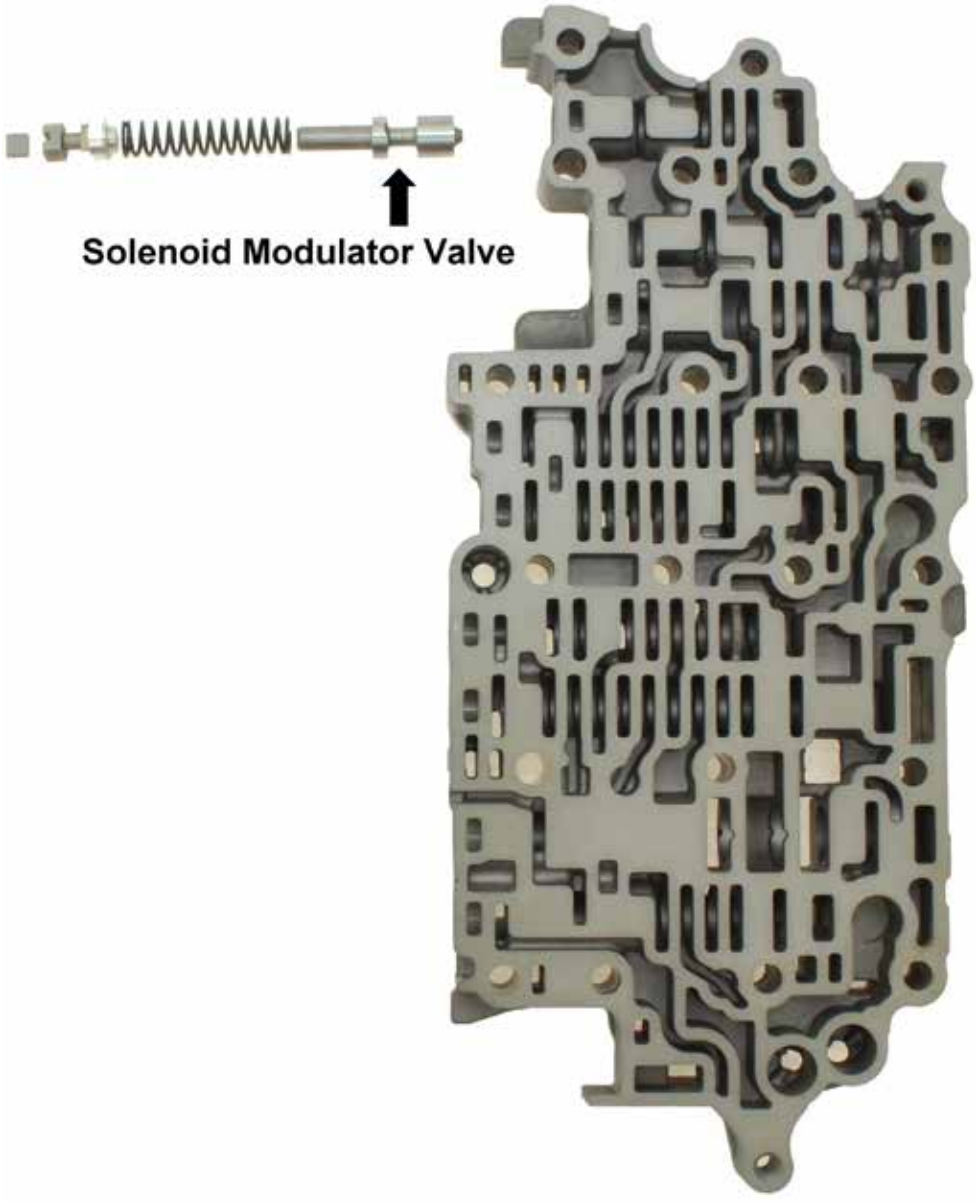
Technical Bulletin #1660

Transmission: *U660E, U660F, U760E & U760F*
Subject: *Erratic Shift Concerns, Solenoid Performance Codes and Erratic TCC Operation*
Application: *Toyota*
Issue Date: *January, 2015*

U660E, U660F, U760E & U760F

Erratic Shift Concerns, Solenoid Performance Codes

While working on a U650E, U660F, U760E or a U760F transmission, you may encounter erratic shift concerns, solenoid performance codes or erratic TCC operation. These concerns may be caused by a worn solenoid modulator valve and bore. Replacing the solenoid modulator valve and repairing the bore may be needed to repair this concern.

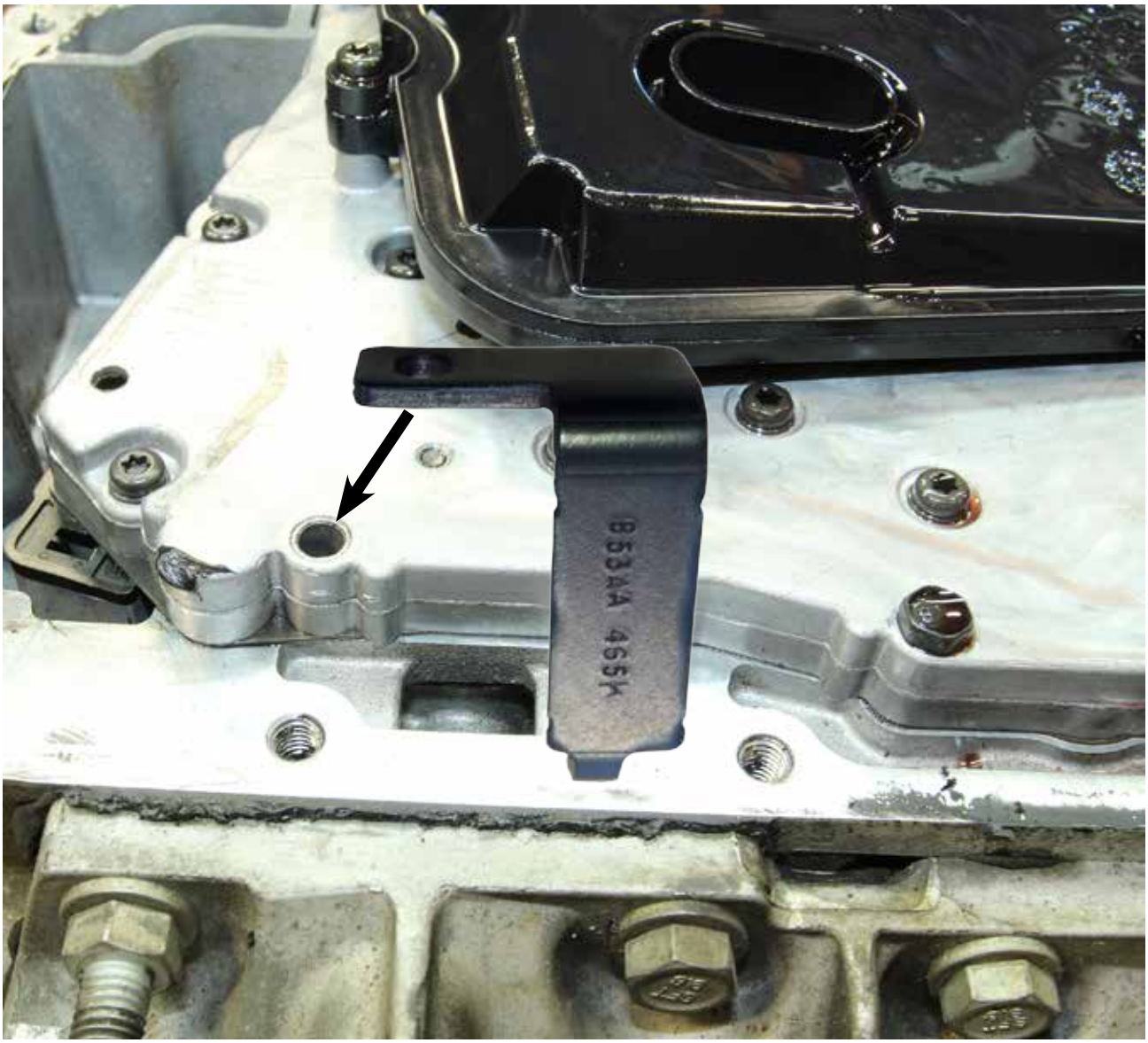


Technical Bulletin #1661

Transmission: *42RLE*
Subject: *Missing Bracket*
Application: *Chrysler, Dodge, Jeep*
Issue Date: *January, 2015*

42RLE
Missing Bracket

If you ever see this part in your parts basket and ask yourself if it belongs to your transmission, the answer is yes. This is a bracket that is used as a retainer for the parking pawl anchor pin in the rear of the case. It bolts onto the valve body at this location (see figure).



Technical Bulletin #1662

Transmission: *68RFE*
Subject: *Check Ball & Separator Plate Changes*
Application: *All*
Issue Date: *January, 2015*

68RFE
Check Ball & Separator Plate Changes

The O/D solenoid was eliminated and the hydraulics changed in 2009 model year. Along with these changes the separator plate changed and the #6 and #7 check balls were eliminated.

The 2006-to-2008 valve body separator plate (part number 545AB) is shown in figure 1. The 2009-and-later separator plate (part number 52120004A;) (figure 2) identifies the feed holes that were eliminated over check ball #6 and #7 locations.

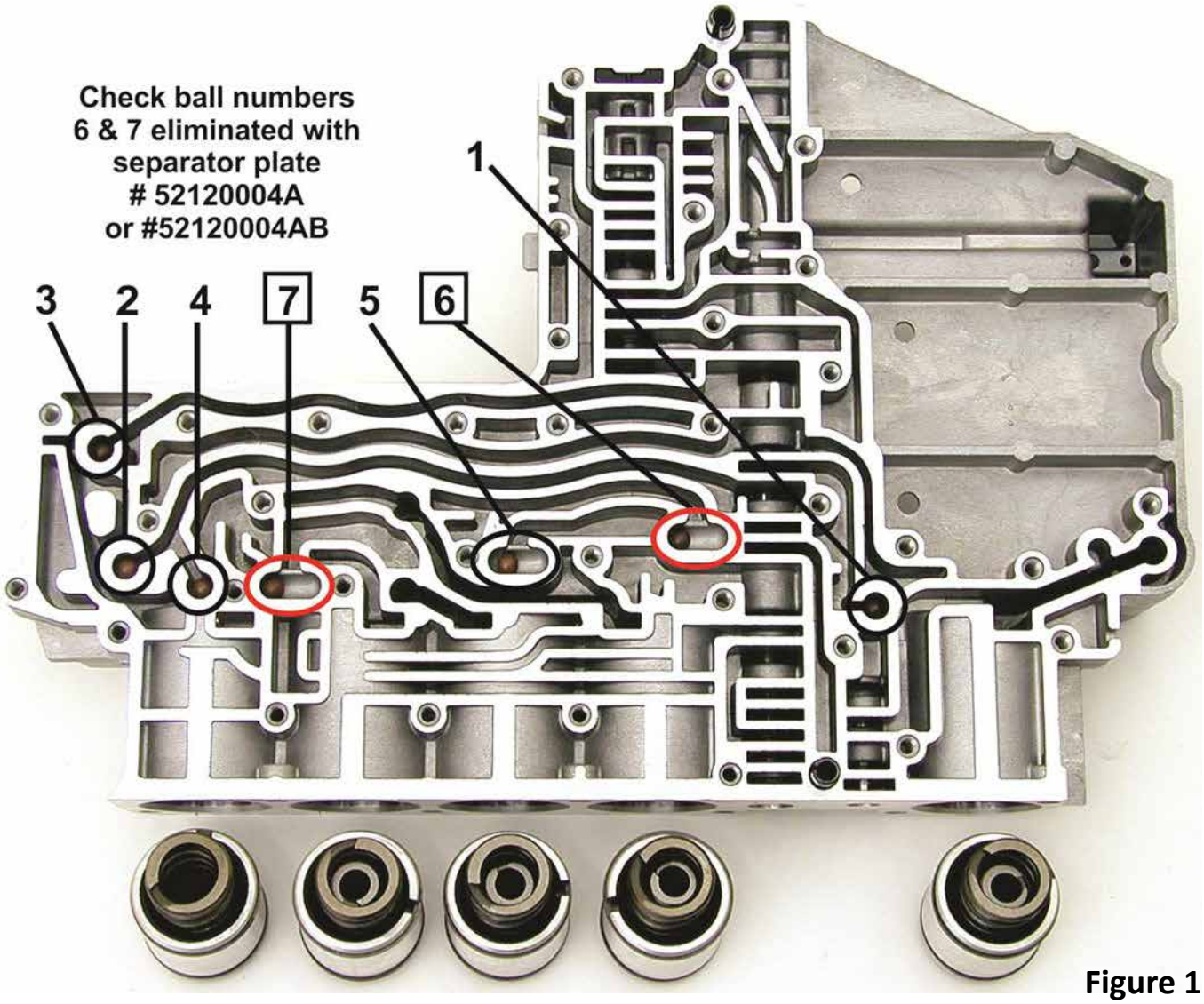


Figure 1

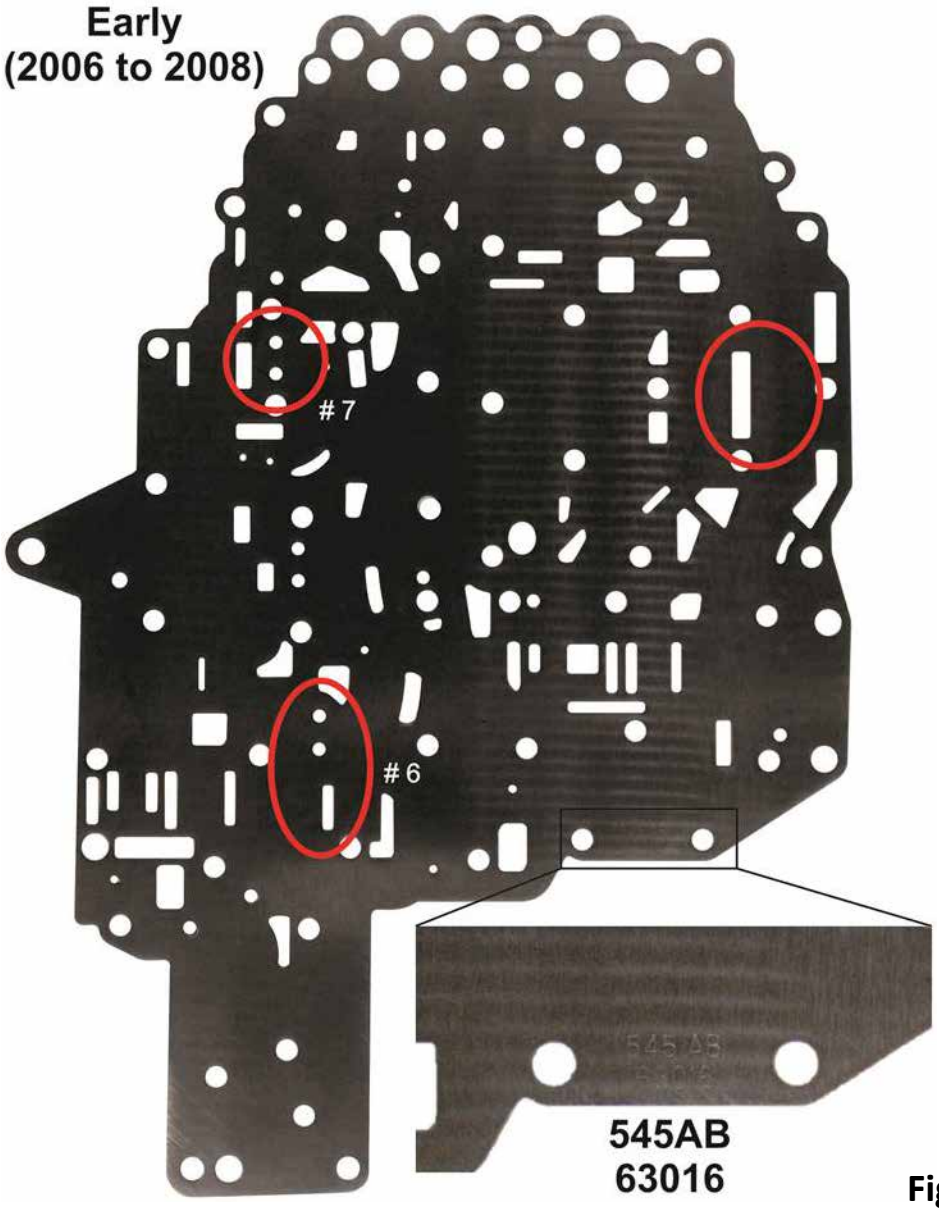


Figure 2

68RFE
Check Ball & Separator Plate Changes

Checkball #6 was removed to allow the multi select solenoid to control overdrive clutch apply instead of the overdrive solenoid. This eliminated the need for the overdrive solenoid (figure 3).

Check ball #7 was removed to allow the 2C solenoid to control the 2C clutch apply in the manual 2 range instead of the multi select solenoid (figure 3).

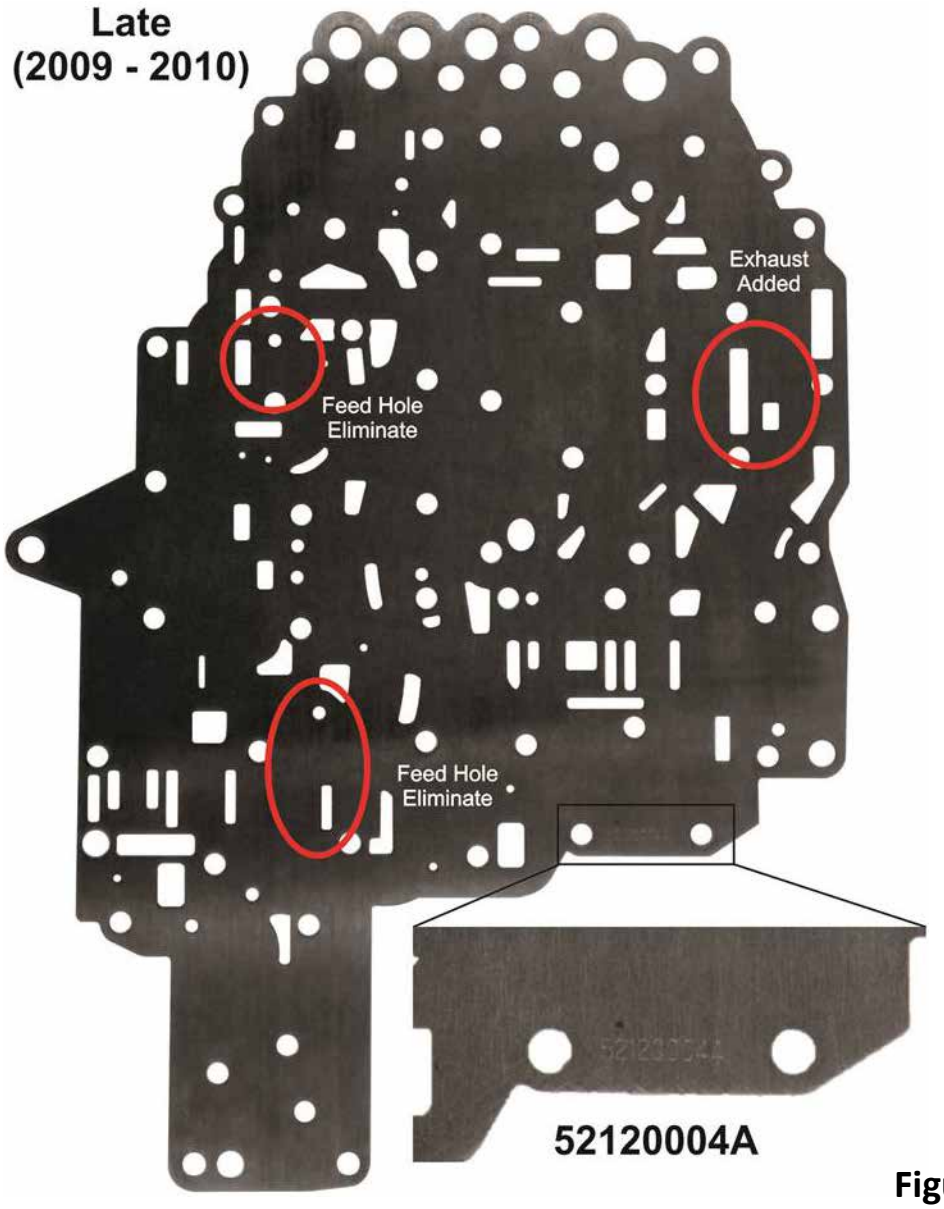
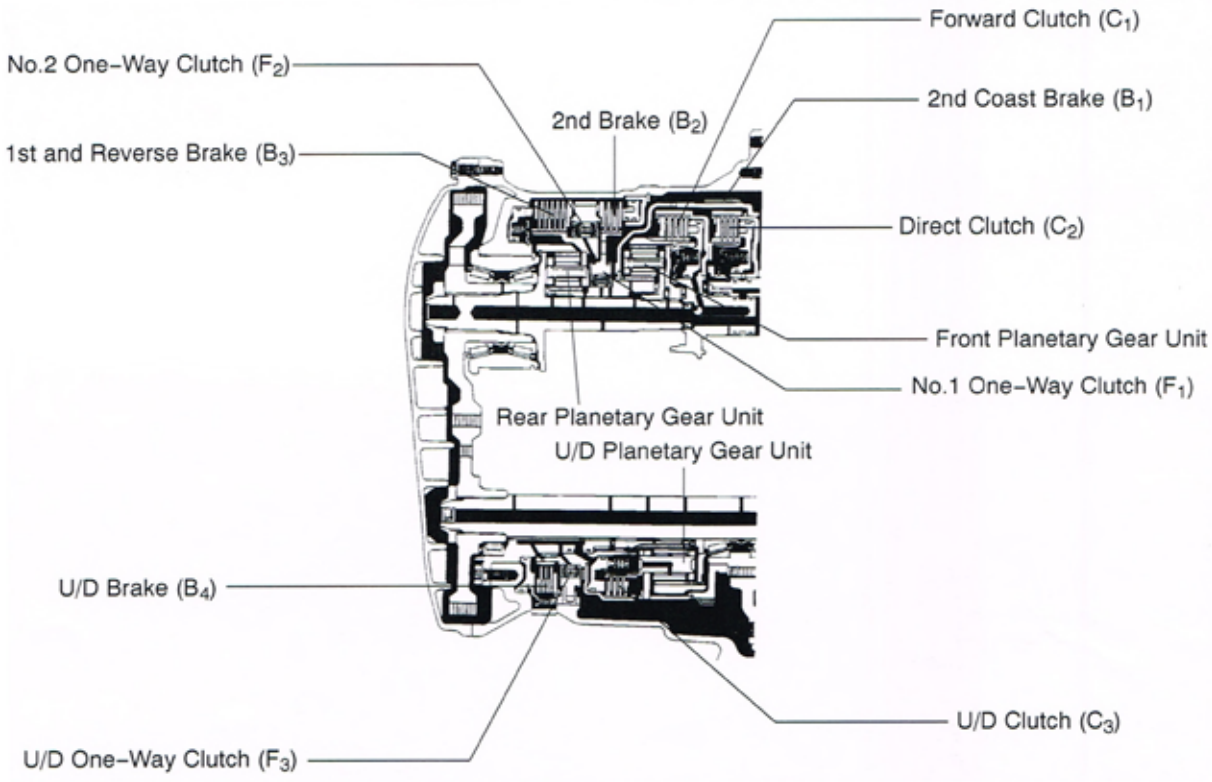


Figure 3

Technical Bulletin #1663

Transmission: *A245*
Subject: *Clutch Application Chart*
Application: *Toyota*
Issue Date: *January, 2015*

A245
Clutch Application Chart



Shift Lever Position	Gear	Shift Solenoid Valve No. 1	Shift Solenoid Valve No. 2	C1	C2	C3	B1	B2	B3	B4	F1	F2	F3
P	Park	ON	OFF							●			
R	Reverse	ON	OFF		●				●	●			
N	Neutral	ON	OFF							●			
D	1st	ON	OFF	●						●		●	●
	2nd	ON	ON	●				●		●	●		●
	3rd	OFF	ON	●	●			●		●			●
	O/D	OFF	OFF	●	●	●		●					
2	1st	ON	OFF	●						●		●	●
	2nd	ON	ON	●			●	●		●	●		●
	3rd*	OFF	ON	●	●			●		●			●
L	1st	ON	OFF	●					●	●		●	●
	2nd*	ON	ON	●			●	●		●	●		●

● : Operating
* : Downshift only in the 3rd gear for the 2 position and 2nd gear for the L position - no upshift.

Technical Bulletin #1664

Transmission: *BDGA*
Subject: *Bind in Drive, Manual Detents OK, 2-3 Flare, Codes P0756 & P0757*
Application: *Honda*
Issue Date: *January, 2015*

BDGA

Bind in Drive, Manual Detents OK, 2-3 Flare, P0756 & P0757

A complaint of bind in drive which could be driven through, along with a flare on the 2-3 shift may be caused by the solenoid connectors swapped. The TCM also had two codes P0756 Shift Solenoid B Stuck Off and P0757 Shift Solenoid B Stuck On.

The technician then discovered that the two solenoids were in the wrong location. Shift solenoid B was installed in the location closer to the firewall and the TCC solenoid was in stalled in the location closer towards the radiator, which is the opposite of where they should be.

The solenoids connections cannot be swapped but the solenoids can be installed into the wrong hole. After correcting the solenoid location mix up the symptoms still seemed to appear. After careful examination of the solenoid connectors it was noticed that one the wires to the TCC solenoid was barely connected. Once the connection was corrected the transmission performed normally.

Someone else may get these codes with the symptom of a bind on takeoff with a 2-3 Flare. Because they just didn't know they have it in the wrong location. Obviously the bind is caused by the TCC solenoid being fired because it was in the solenoid B location. Fixing the pulled wire on the TCC solenoid was the final solution.

No electrical code was found in the scan tool for the wiring issue, just the stuck on and stuck off codes due the bind on takeoff. Not seeing the solenoid electrical code could easily fool anyone into the wrong diagnosis. The only thing that makes sense is possible the transmission was taking off in a higher gear after the solenoids were relocated to their correct locations by the electrical problem with the TCC solenoid.

Special thanks to Ray at East Cooper Trans in Mount Pleasant, SC.

Technical Bulletin #1665

Transmission: *6R60/80/90*
Subject: *Valve Body and Separator Plate Changes*
Application: *All*
Issue Date: *January, 2015*

6R60/80/90
Valve Body and Separator Plate Changes

The 6R60, 6R75 and 6R80 are referred to as TCM Driven units, initially released with Bosch solenoids and six dampers (accumulators) for the 6R60 and 6R75 transmissions until 2008 ½ or J1 units. In 2008 ½ (11/16/09 J2 units) during testing Ford learned that only two were required so they eliminated four dampers; A,B,C and TCC (figure 1) along with the feed holes in the separator plate part #6L2P-7Z490-FD (figure 2). The D1 regulator spring bore 201 was removed and added a bleed circuit to the "D" clutch these vehicle required using MERCON SP oil. The ID number on the 2006 to 2008 separator plate is 6L2P-7Z490-FB (figure 3).

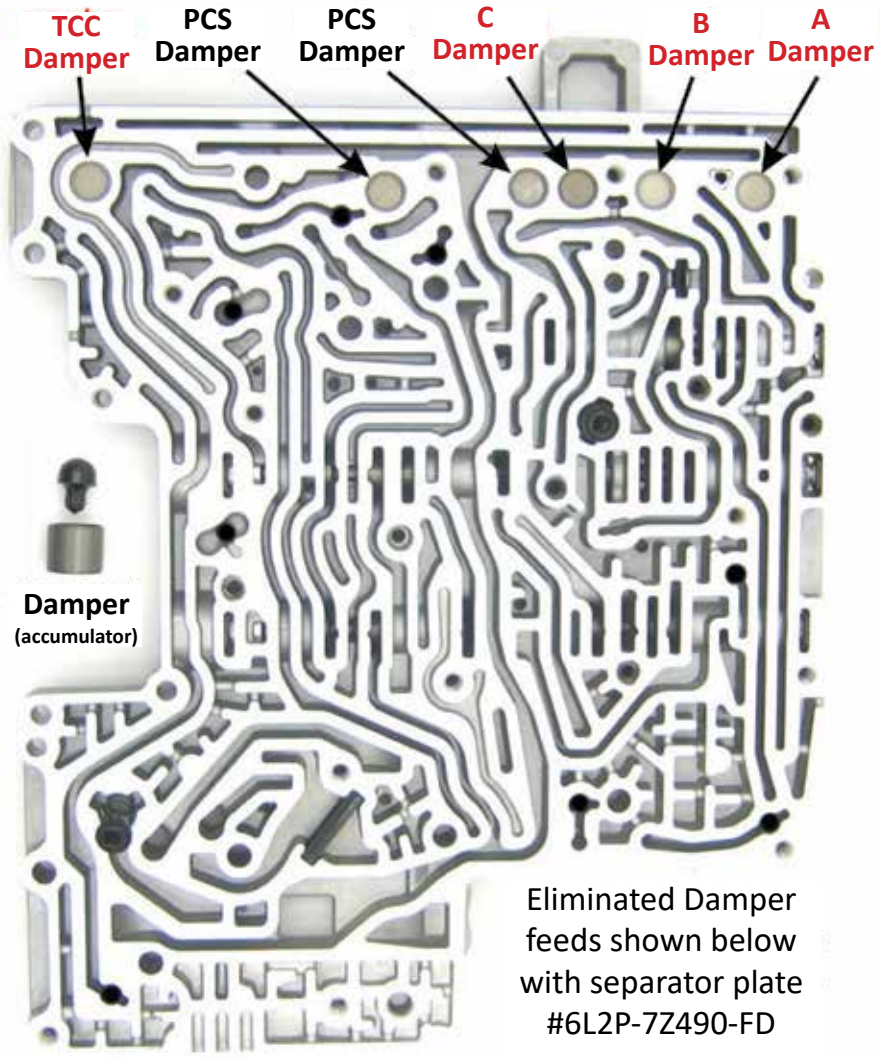


Figure 1

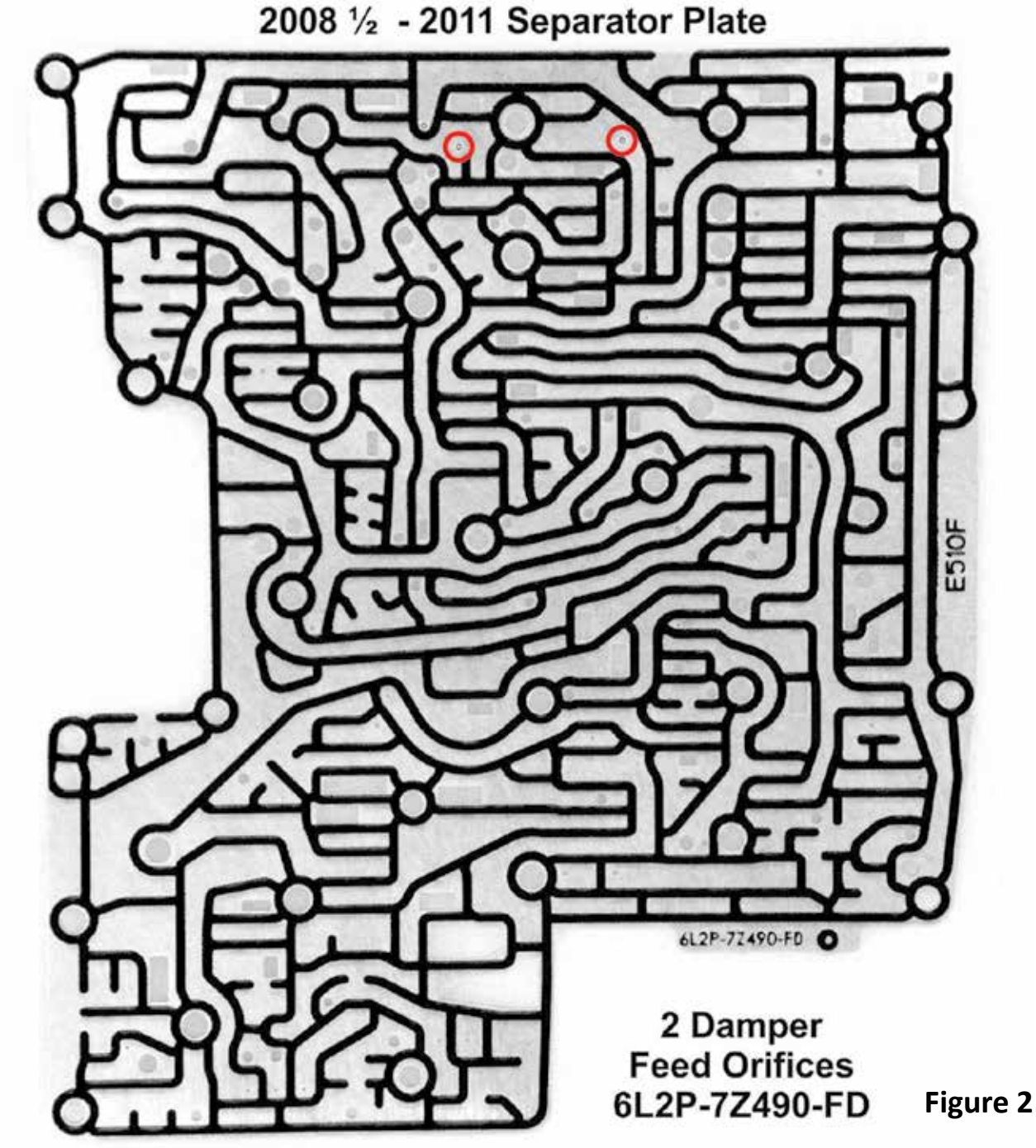
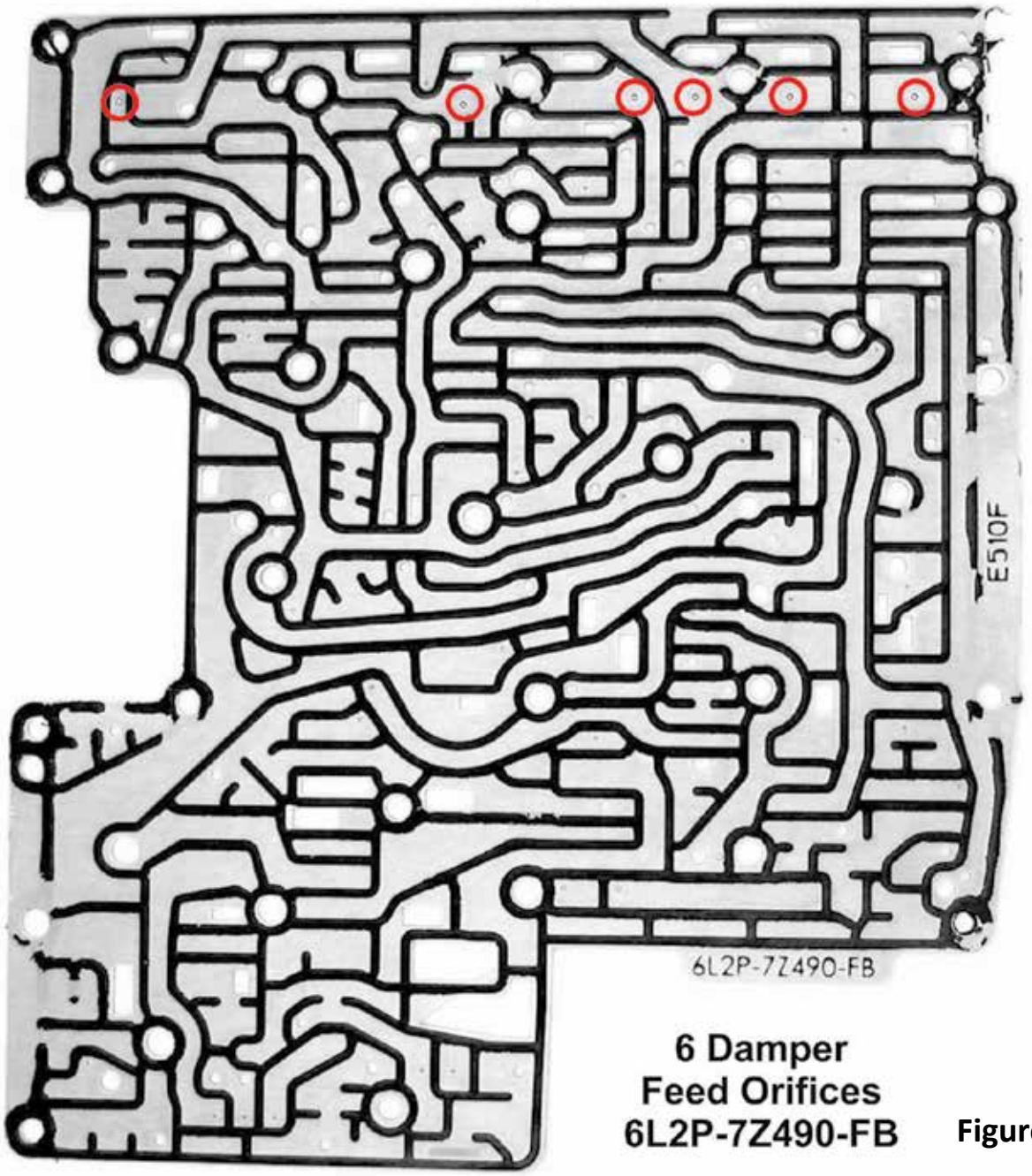


Figure 2

6R60/80/90
Valve Body and Separator Plate Changes

2006 - 2008 Separator Plate



6 Damper
Feed Orifices
6L2P-7Z490-FB

Figure 3

6R60/80/90
Valve Body and Separator Plate Changes

#1665

In 2009 they eliminated casting feed to the accumulator in bore 109 and switched to MERCON LV on the 6R80 models. In 2011 the Saturn solenoids and new strategy entered the picture for non TCM controlled units and a one way clutch (sprag) was added to these units. The TCM was relocated off the valve body external to the transmission. These solenoids required the added dampening so they had to bring the dampers back. The separator plate also added the four damper feed holes and changing from a silk screen design gasket to a bonded gasket (figure 4). There is one half year in the 6.2L models for 2010 ½ with Saturn solenoids non TCM without a one way clutch.

Figure 4

#1665

6R60/80/90
Valve Body and Separator Plate Changes

Parts information

6L2P-7Z490-FB: 2006 to 11/15/09 (6 damper feed holes)
6L2P-7Z490-FD: 11/16/09 to 11/3/10 (2 damper feed holes) CL3P-7Z490-AA: 11/4/10 & later bonded gasket (6 damper feed holes)

If you get one of these plates in a rebuild kit and it does not match the one that came out of the vehicle the holes should be drilled to match the original one. These plates are calibrated to the year make and model designation.