



Technical Bulletin #831A

Transmission: 5L40E

Subject: *Fluid Fill Procedure*

Application: 2000-2007 BMW, 2003-2009 Cadillac

Issue Date: September, 2013

5L40E

Fluid Fill Procedure

Recommended Fluid

Manufacturer recommends DEXRON-III automatic transmission fluid/VI/Mercon V. Check with your parts suppliers for specific models. Fill transmission to appropriate level.

Fluid Capacities

Dry Fill 9 Qts, (8.5 L)

Service Fill Approximately 3-4 Quarts +/- 1/2 Qt. **(Follow the directions below)**

There are multiple locations for the drain/fill hole depending on application. Drivers side rear, drivers side front, passengers side rear. See page 2.

After the fluid has been drained and the filter and gasket have been replaced.

1. Add enough fluid to bring the fluid level to the bottom of the threaded plug hole.
2. Start the engine.
3. Depress the brake pedal and move the shift lever through the gear ranges, pausing a few seconds in each range. Return the shift lever to the Park range.
4. Raise the vehicle on a hoist. The vehicle must be level with the engine running and the shift lever in the Park range.
5. Let the A/T fluid temperature rise until it has reached 86°-122° F (30°-50° C). Remove the transmission plug.
6. If needed, add appropriate fluid in increments of 0.5 quart (0.47L) until the fluid drains from the threaded hole plug.

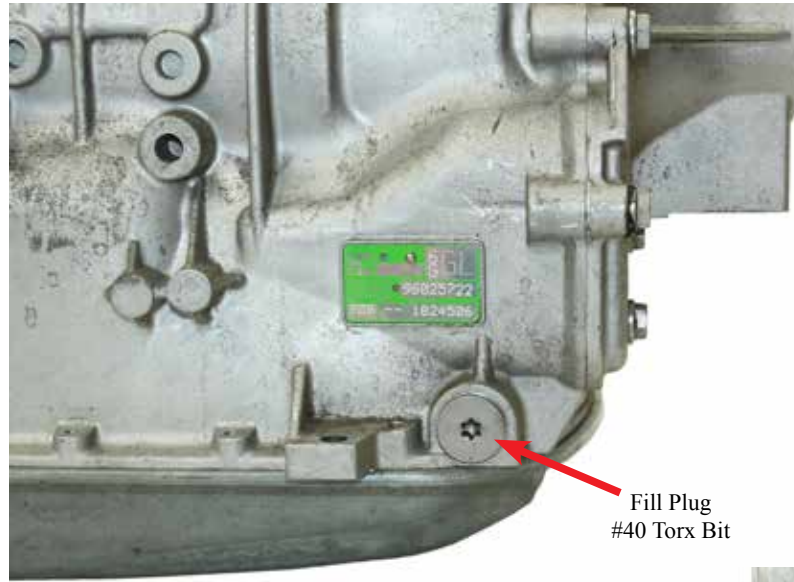
NOTE: The level hole plug and "O" ring can be reused if they are not damaged.

7. Allow fluid to finish draining out of the plug hole. Inspect the level hole plug and "O" ring for damage. Install the transmission hole plug and tighten to the specified value.
8. Wipe any excess fluid from the transmission with a rag or shop towel. When the repair is complete, the system is in good working condition.

CAUTION: The engine must be running when the transmission fluid is being inspected. The transmission fluid will be hot. Since the actual fluid level is unknown, stand clear when removing the fill plug. Have a container ready to capture any lost fluid. DO NOT turn the engine off with the fill plug removed, as you can be injured by hot transmission fluid being expelled out of the oil fill opening.

5L40E Fluid Fill Procedures

#831A



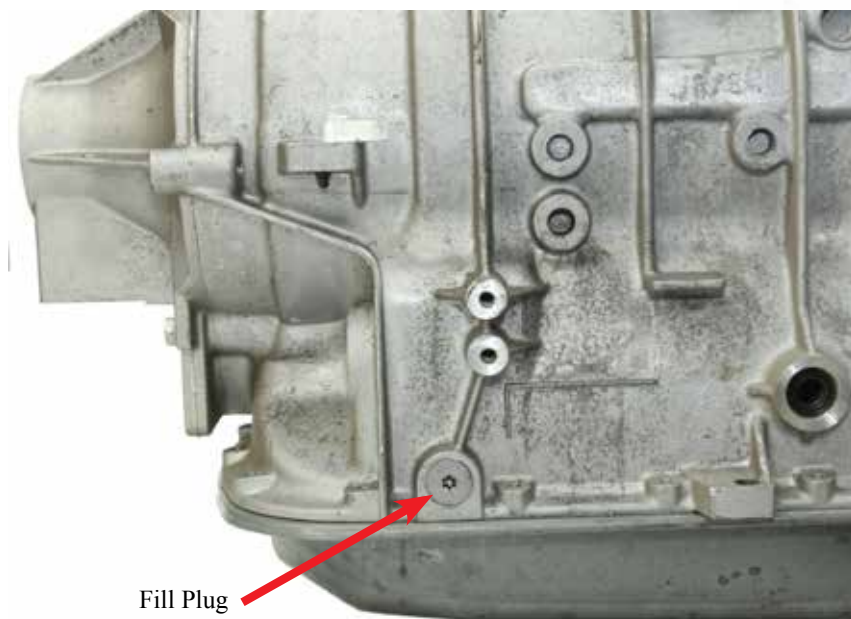
Driver Rear

Fill Plug
#40 Torx Bit



Driver Front

Fill Plug
#40 Torx Bit



Passenger Rear

Fill Plug
#40 Torx Bit



Technical Bulletin #1555

Transmission: CFT-30

Subject: Line Pressure Code P0868

Application: 2005-2012 Ford/Mercury

Issue Date: September, 2013

CFT-30

Line Pressure Code P0868, Low Scanner Pressure Readings

A blown valve body gasket can cause a P0868 pressure code on this transmission. The CFT-30 transmission has no provision for pressure testing with a gauge. All pressure testing is scanner based. Use your scanner to verify this concern. Replace the gasket and resurface the separator plate as necessary.





Technical Bulletin #1556

Transmission: ZF5HP19

Subject: Cold Operating Strategy

Application: 2000-2007 Porsche Boxster

Issue Date: September, 2013

ZF5HP19

Cold Operating Strategy, 2nd Gear Starts, Erratic Downshift

Cold operating strategy is below 102° F (39° C). At this temp and below the transmission will start off in 1st gear. After 3 minutes of operation the transmission will take off in 2nd gear. This is normal, it's an emission based strategy. The range indicator on the dash will display which gear the transmission is starting off in. If the vehicle is equipped with a power sport mode button, the transmission will take off in 1st gear when activated. The power sport mode provides an overall performance shift strategy. Full throttle take off from a stop will also shift the transmission down to 1st gear.





Technical Bulletin #1557

Transmission: 4L60E

Subject: Harsh Shifts, Misfire Codes

Application: Non E85 Flex Fuel Vehicles

Issue Date: September, 2013

4L60E

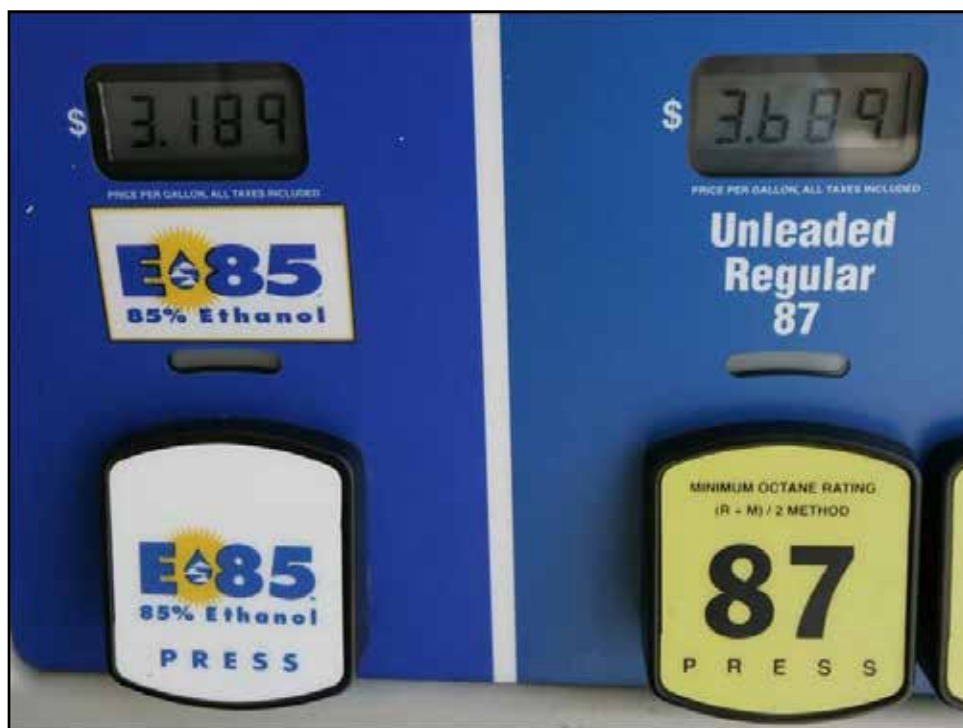
Harsh Shifts, Misfire Codes, Wrong Fuel, Fuel Trim Codes

All Flex Fuel vehicles are designed to run on gasoline and E85 fuel. E85 type fuel is blend of 85% Ethanol and 15% gasoline. If E85 fuel is run in a NON Flex Fuel compatible vehicle the engine will run lean. This will set cylinder misfire and fuel trim DTC's and Various O2 sensor DTC's may also be set along with disabling the traction control system which illuminates the TCS lamp.

Harsh shifts will also occur when the PCM recognizes the lean condition after start up, it will cut the EPC command signal to the transmission resulting in high line pressure.

You should check with your customer when misfire codes are found after fuel fill.

NOTE: Do not attempt to fix the transmission shifting complaints if the engine is not performing correctly or has DTC's stored.





Technical Bulletin #1558

Transmission: CVT/JF011E

Subject: Pressure Tap Locations/Specifications

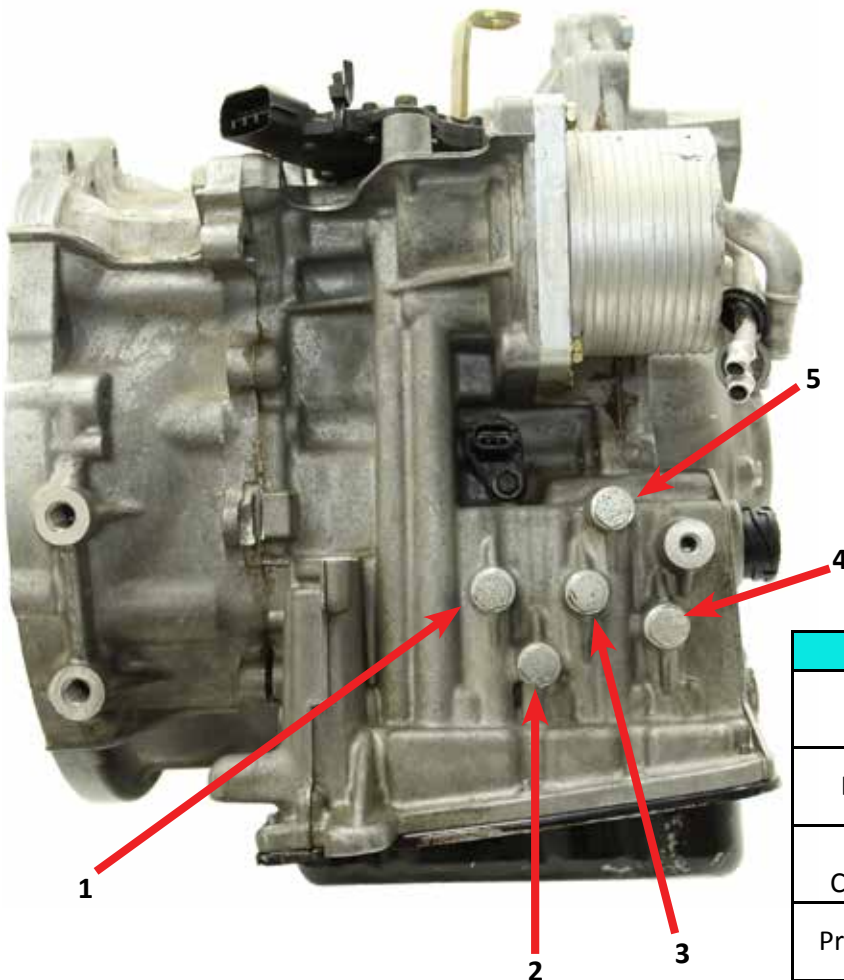
Application: 2006 - 2012 Caliber

Issue Date: September, 2013

CVT/JF011E

Pressure Tap Location/Specifications, Pressure Test

Use the illustrations and specifications when pressure testing the Dodge CVT/JF011E.

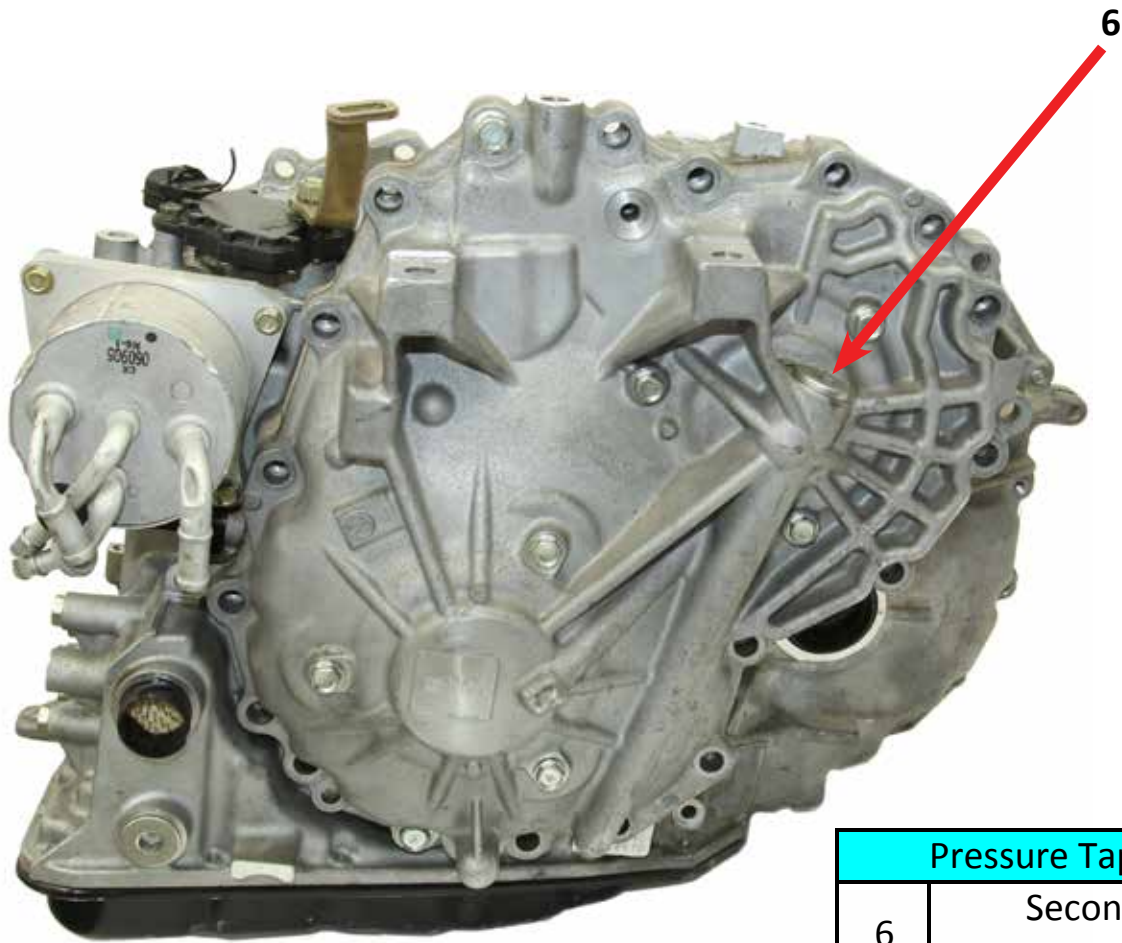


Pressure Tap I.D.	
1	Line Pressure
2	Forward Clutch Pressure
3	Primary Pressure
4	Torque Converter Apply Pressure
5	Torque Converter Release Pressure

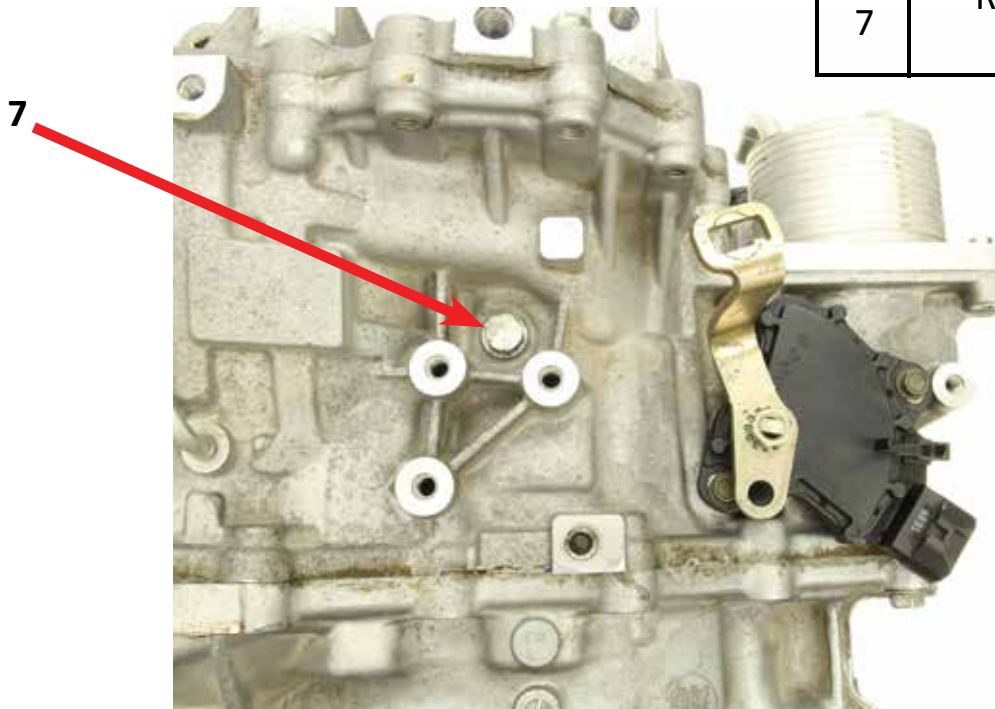
Fluid Pressure Specifications		
Component	Fluid Pressure Min. - Max.	Measurement Condition
Line Pressure	72 - 870 psi	Idling
Forward Clutch Pressure	14 - 217 psi	Idling
Primary Pressure	14 - 870 psi	Idling
Torque Converter Apply Pressure	0 - 145 psi	Lock Up ON
Torque Converter Release Pressure	0 - 145 psi	Lock Up Off
Secondary Pressure	14-870 psi	Idling
Reverse Brake Pressure	14 - 217 psi	Idling R position

CVT/JF011E Pressure Tap Location/Specifications, Pressure Tests

#1558



Pressure Tap I.D.	
6	Secondary Pressure
7	Reverse Brake Pressure





Technical Bulletin #1559

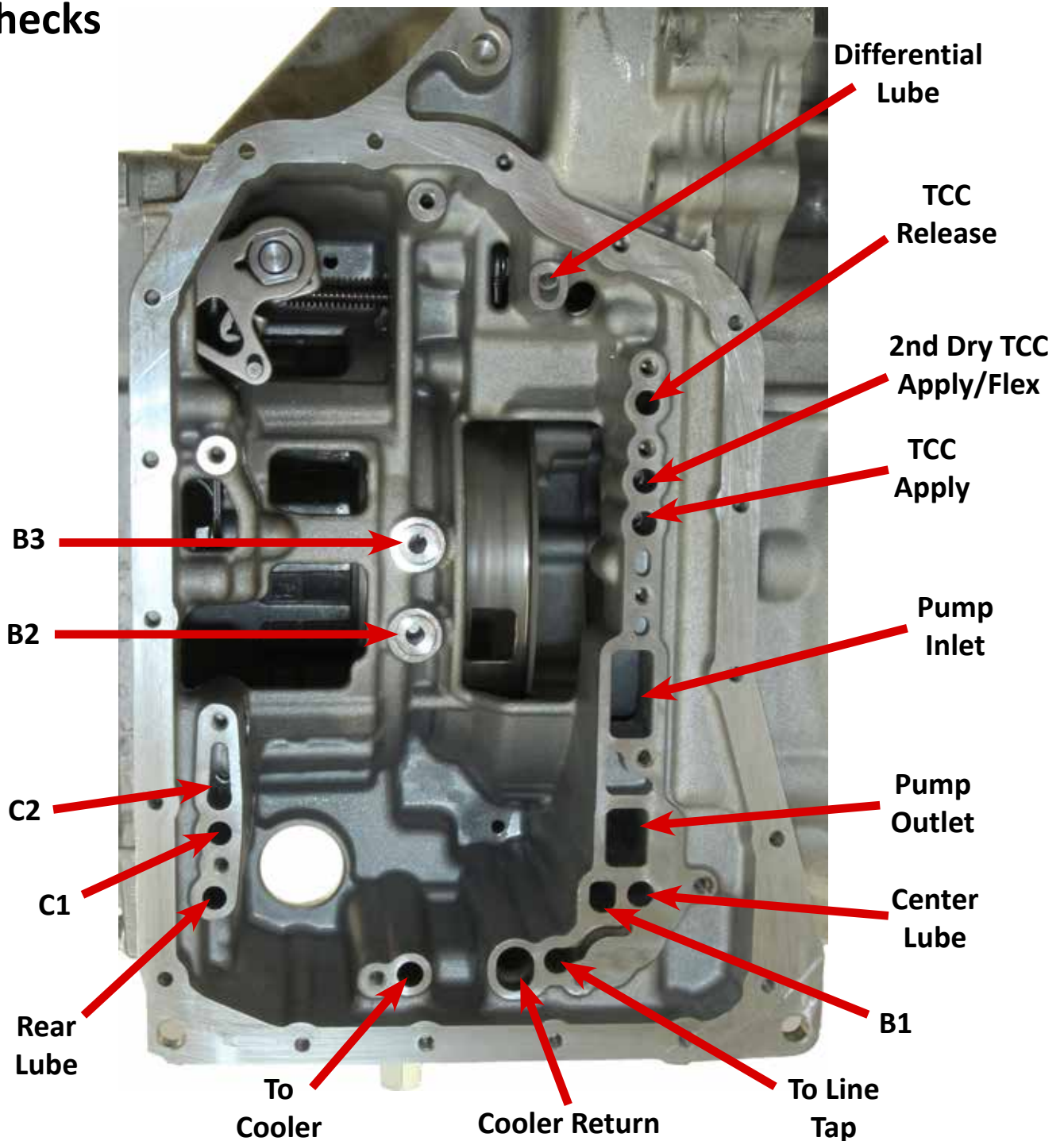
Transmission: *U660E*

Subject: *Air Checks*

Application: *Lexus/Toyota*

Issue Date: *September, 2013*

U660E Air Checks





Technical Bulletin #1560

Transmission: 09G

Subject: *Erratic/Harsh Shifts, Lock-up Concerns, Rebuilding Techniques*

Application: VW

Issue Date: *September, 2013*

09G

Erratic/Harsh Shifts, Lock-up Concerns

Erratic/harsh shifts and lock-up concerns are often causes for an overhaul. If you have and or all of these concerns there are some common areas to check during the rebuild. The solenoid modulator valve and the lock up control valve are located in the upper valve body and are common wear areas.

You can perform a wet air test by adding ATF to test location and follow with low air pressure. If oil and air leak past the bore valve land into the next passage the valve is worn and needs to be addressed.

You can also perform a vacuum test at the same locations. Apply a small amount of assembly lube and use vacuum test plate. Start a test log with your test result to determine pass or fail chart.

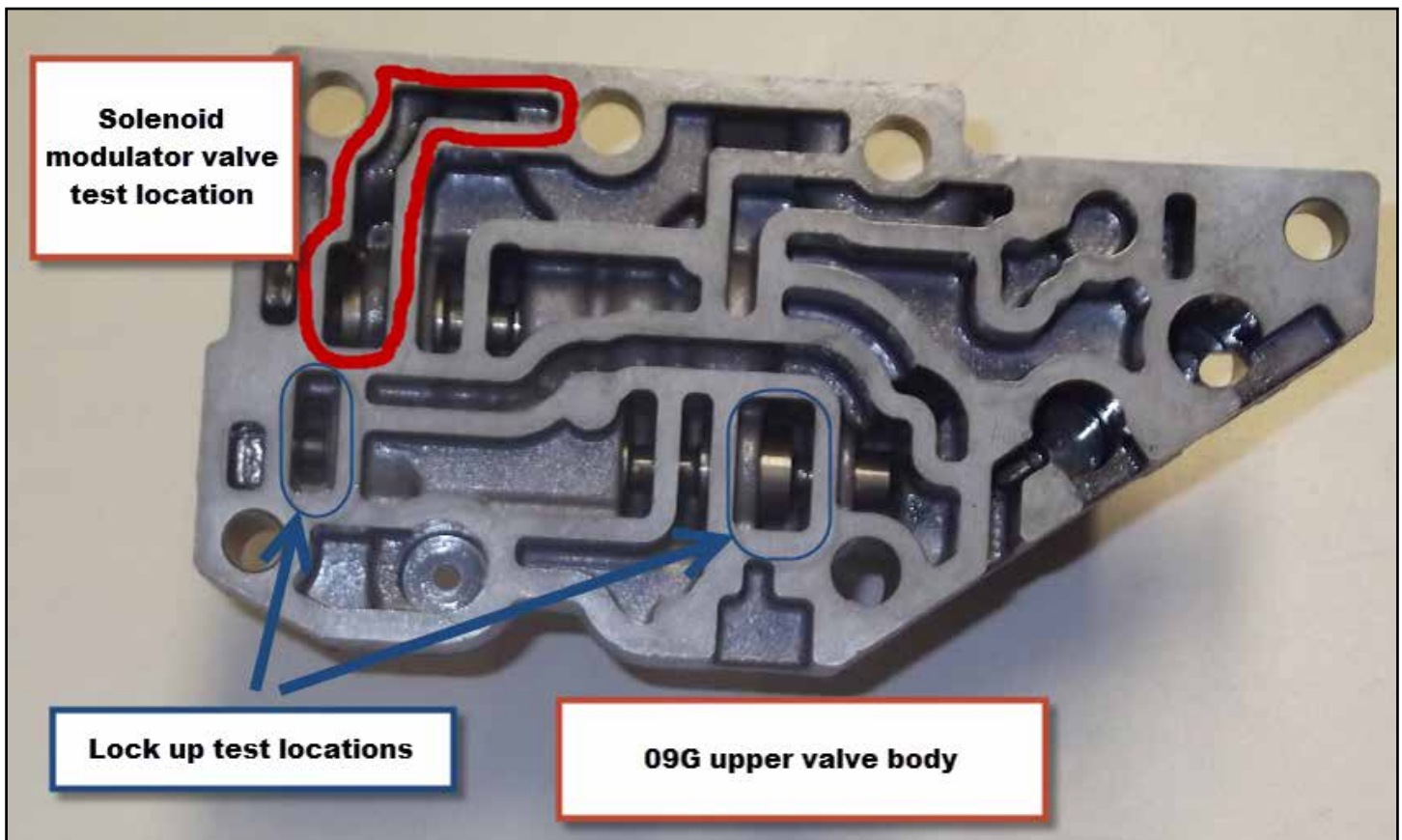


Figure 1

09G Erratic/Harsh Shifts, Lock-Up Concerns

#1560

There is another solenoid modulator valve that is in the lower valve body that needs to be checked for wear. If these bores are damaged you can repair or replace the valve body.

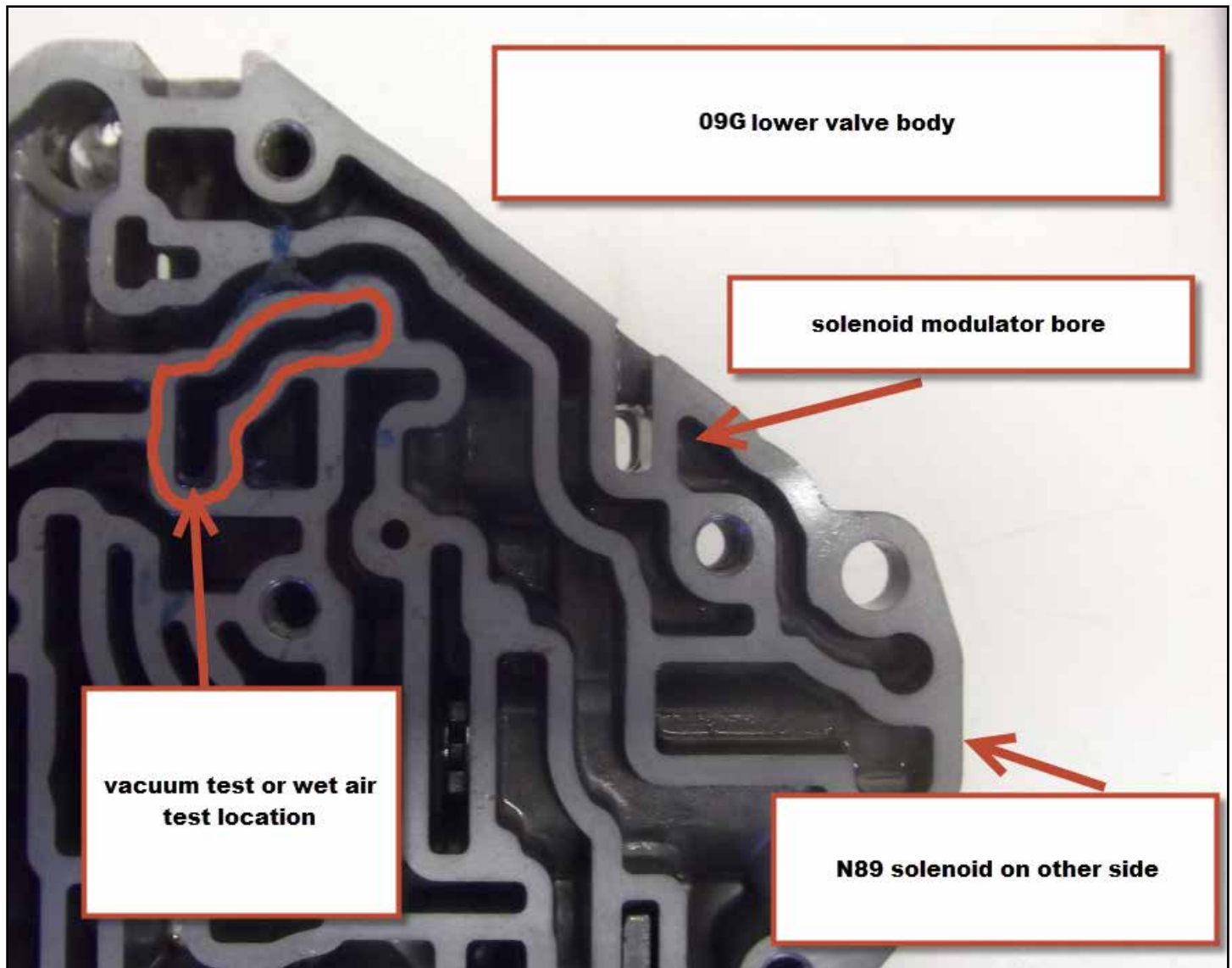


Figure 2