 Printable View (50 KB)	
<b>TSB</b> <b>05-21-8</b>	<ul style="list-style-type: none"> <li>• <b>DELAYED OR HARSH REVERSE ENGAGEMENTS - 5R55S TRANSMISSION - VEHICLES BUILT PRIOR TO 09/23/2004</b></li> </ul>
Publication Date: October 11, 2005	

**FORD:** 2004-2005 Thunderbird, Explorer  
**LINCOLN:** 2004-2005 LS, Aviator  
**MERCURY:** 2004-2005 Mountaineer

This article supersedes TSB **05-15-4** to correct the Service Procedure.

#### **ISSUE:**

Some 2004-2005 vehicles built prior to 09/23/2004 and equipped with the 5R55S transmission, may exhibit a delayed or harsh reverse engagement. This condition may be due to improper pressure control.

#### **ACTION:**

It may be necessary to replace the solenoid body assembly. Refer to the following Service Procedure.

#### **SERVICE PROCEDURE**

- NOTE:** INSTALLING TRANSMISSION ADDITIVE WILL PREVENT THE SYMPTOM ON SOLENOIDS THAT DO NOT YET EXHIBIT THE CONDITION BUT WILL NOT RESOLVE THE CONDITION IF IT ALREADY EXISTS.
- NOTE:** CONTAMINATION IS NOT THE CAUSE OF THE CONDITION ADDRESSED BY THIS TSB. IT IS NOT NECESSARY TO FLUSH THE TRANSMISSION COOLER/COOLER LINES OR REPLACE THE FLUID PAN FILTER (7A098). ALSO, DO NOT REPROGRAM THE PCM, REPLACE THE MAIN CONTROL ASSEMBLY (7A100) OR INSTALL AN INLINE SERVICE FILTER (7B155).
- NOTE:** DURING SOLENOID BODY REPLACEMENT THE VEHICLE'S BATTERY MUST BE DISCONNECTED TO PROPERLY CLEAR THE PRESSURE ADAPTIVE TABLES.

#### **LINCOLN LS AND THUNDERBIRD ONLY**

1. Lower the transmission cross member and transmission to gain access to the pressure control solenoid-C (PCC) port. DO NOT disconnect the drive shaft.
2. Install pressure gauge per Step 2 of "DIAGNOSTICS", below.
3. Reinstall cross member and snug the fasteners for diagnostic purposes only.
4. Proceed with the "DIAGNOSTICS" section of this TSB.
5. After the TSB repair is completed, torque the cross member fasteners to 41 lb-ft (55 N-m).

#### **DIAGNOSTICS - ALL VEHICLES**

1. Remove pressure tap plug at PCC port (Figure 1).

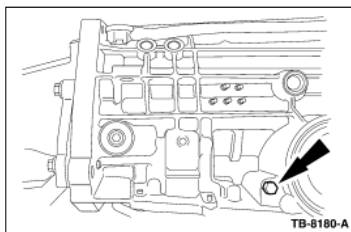


Figure 1 - Article 05-21-8

2. Install a pressure gauge into the PCC port, using a 1" long nipple and a 90 degree fitting (Figure 2).

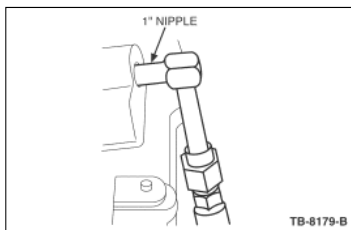


Figure 2 - Article 05-21-8

3. Warm transmission to above 150° F (66° C). Connect either WDS or NGS+ to verify that the Transmission Fluid Temperature (TFT) is above 150° F (66° C).
4. Place vehicle in park, engine off and check the gauge zero. This will be your gauge-starting zero for the procedure in the next steps. Note and record gauge zero.



**CAUTION:** IN ORDER TO OBTAIN CORRECT TEST RESULTS THE TRANSMISSION FLUID TEMPERATURE MUST BE ABOVE

150° F (66° C)

5. Start engine and let idle. Check the PCC pressure. PCC pressure should increase to between 0-15 psi.
  - a. If the PCC pressure is 0-15 psi while at idle in park, enter Output State Control with either NGS+ or WDS.
  - b. For NGS select Vehicle/Engine Selection; then select Diagnostic Data Link; select Module (PCM or TCM); then select Active Commands; select Output State Control; select Trans-Bench Mode.
  - c. For WDS select Tool Box; then select Datalogger, select Transmission; choose PCC# and push the tick mark; scale PCC pressure to 150 psi max; once rescaled hit the # sign then the button under the # sign and then the + sign to command pressures up and - to command pressures down.



**CAUTION: DO NOT COMMAND MORE THAN 105 PSI FOR THIS PROCEDURE. COMMANDING PRESSURES ABOVE 105 PSI MAY RESULT IN NO VISUAL CHANGE AT THE GAUGE AND RESULT IN MISDIAGNOSIS.**

- d. Follow the procedure listed in the appropriate model and year Workshop Manuals, for PCC in Bench Mode. Change PCC commanded using the sequence listed in the Workshop Manual, noting the gauge value at each.

**NOTE:** ACTUAL PRESSURES SEEN ON THE GAUGE MAY NOT MATCH THE COMMAND PRESSURES EXACTLY. THIS IS CONSIDERED NORMAL.

- e. For this procedure we are looking for increases and decreases. Gauge pressure should increase with each commanded increase, then decrease with each commanded decrease, returning to the same initial pressure indicated in Step a when the command is back to zero. If it does not respond to each command state change or return to ±10 psi of the initial value, replace the solenoid body. Refer to Workshop Manual for removal and installation instructions.
  - f. Do not continue with this TSB if the PCC pressure readings follow commanded changes. (Park/neutral at idle 0-15 psi and reverse at idle 90-120 psi.) Follow normal diagnostics.
6. Adjust the transmission fluid to the proper level using only packaged/bottled (not bulk) reformulated MERCON®V.
  7. Clear DTCs, verify that KAM has been cleared.
  8. Verify whether Customer Satisfaction Program 04B22 has already been performed. If it has not, add 5R55S/E and 5R44E Transmission Additive as directed and close out 04B22. If 04B22 has been performed, DO NOT install additional transmission additive.

PART NUMBER	PART NAME
4L2Z-7G391-AA	Solenoid Body Assembly

**WARRANTY STATUS:**

Eligible Under Provisions Of New Vehicle Limited Warranty Coverage And Emissions Warranty Coverage

OPERATION	DESCRIPTION	TIME
052108A	2004-2005 Lincoln LS, Thunderbird 5R55S Transmission: Replace The Solenoid Body Includes Time To Perform Diagnosis Outlined in Service Procedure (Do Not Use With 7000F, 7000A11, 7000A43, 7191A, 7191AXQ, 7191A5)	2.5 Hrs
052108B	2004-2005 Aviator, Explorer, Mountaineer 5R55S Transmission Replace The Solenoid Body Includes Time To Perform Diagnosis Outlined In Service Procedure (Do Not Use With 7000F, 7000A11, 7000A43, 7191A, 7191AXQ, 7191A5)	1.9 Hrs

**DEALER CODING**

BASIC PART NO.	CONDITION CODE
7G391	42

**NOTE:** The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford, Lincoln, or Mercury dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

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