Vehicle: Customer Interest A/T - 2nd to 3rd Gear Shift Flare

Bulletin No.: 03-07-30-033

Date: July 22, 2003

TECHNICAL

Subject:

Automatic Transaxle 2-3 Shift Flare During First Minutes of Driving After Cold Soak (Perform Bulletin Procedure)

Models:

2002 Saturn S-Series Vehicles with Automatic Transaxle (RPOs MP6, MP7)

Attention:

General Manager, Fixed Operations Manager, Parts Manager, Technician

Condition:

Some customers of 2002 S-series vehicles with MP6 or MP7 automatic transaxles may comment on a 2-3 shift flare during the first few minutes of driving after vehicle cold soak.

Cause:

This condition may be caused by improper pressure, a leak in the 2nd clutch circuit, improper clutch plate finish on 2nd and 3rd clutches, a restriction in the 3rd clutch oil delivery path in the end cover, or improper surface finish in the piston bores of the 2-3 clutch housing.

Correction:

To correct this condition, duplicate by cold soaking the vehicle the amount of time at temperature described by the owner. Refer to procedure in this bulletin.

Service Procedure

1. Verify proper transaxle pressures by installing gauge and performing stepped pressure test after cold soak.

Refer to "Stepped Pressure Test" procedure in the 2002 Saturn S-Series Automatic Transaxle Service Manual.

- ^ If pressures are low, follow the diagnostic chart for DTC P0745 for possible causes of low pressure. Refer to "P0745 PC Solenoid Pressure Low" diagnostic in the 2002 Saturn S-Series Automatic Transaxle Service Manual.
- ^ If pressures are within normal ranges, proceed to Step 2.
- 2. Remove the transaxle end cover. Refer to "End Cover Replacement" in the 2002 Saturn S-Series Automatic Transaxle Service Manual.
- 3. Check torque on input shaft nut and end cover 3rd clutch oil passage for restrictions.
 - ^ Input shaft nut torque should be 150 N.m (111 ft-lb). If nut is found to be loose, remove nut, clean threads and install new nut using Service Manual procedures and proceed to check 3rd oil passage.
 - ^ Check 3rd oil passage in the end cover by pouring transaxle fluid through it and another passage. If the passage is restricted, you will notice significantly less fluid flow through it. If 3rd clutch passage is found to be restricted, install new end cover per Service Manual procedures and retest for concern.
 - ^ If nut and 3rd clutch passage are okay, proceed to Step 4.
- 4. Remove transaxle from vehicle, Refer to "Transaxle Removal" in the 2002 Saturn S-Series Automatic Transaxle Service Manual.
- 5. Disassemble transaxle and install new 2-3 clutch housing, clutch pistons and clutch plates. Refer to "Transaxle Disassemble" in the 2002 Saturn S-Series Automatic Transaxle Service Manual.

- 6. Reassemble transaxle. Refer to "Transaxle Assemble" in the 2002 Saturn S-Series Automatic Transaxle Service Manual.
- 7. Install transaxle to vehicle. Refer to "Transaxle Installation" in the 2002 Saturn S-Series Automatic Transaxle Service Manual.
- 8. Verify that condition has been eliminated.

Part Number	Description	Qty
21003591	Cover asm - trans	1
2 1 001684	Gasket - trans cover	i
2 10 019 4 6	Housing asm - 2nd & 3rd clutch	1
21001582	Piston asm - drive clutch	2
21003389	Plate Asm - clutch press (internal tang)	9
21003390	Plate Asm - 2nd & 3rd dutch (external tang)	7
21001680	Nut - input shatt	1
21003589	Gasket - trans convicover (hub)	1
21003108	Gasket - trans case	1

Parts Information

Claim Information

To receive credit for this repair during the warranty coverage period, submit a claim through the Saturn Dealer System for one or both of the following operations:

- ^ K6490 (Cover and/or Gasket, Transaxle End R&R or Replace). An Add Time" Condition is provided to flow test the end cover.
- ^ K7136 (Shaft and/or Components, Input, Second/Reverse and Third Drive Clutch Housing Assembly).

5.4TURN bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly (rained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safety. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your SATURN Retailer for information on whether your vehicle may benefit from the information.

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