



**NUMBER:** 21-006-05

**GROUP:** Transmission

**DATE:** February 24, 2005

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**SUBJECT:**

NSG370 6-Spd Transmission - May Not Remain In Reverse Gear When Selected

**OVERVIEW:**

This bulletin involves replacing both the internal shift subassembly and the mainshaft reverse gear components.

**MODELS:**

2005	(KJ)	Liberty / Cherokee
2005	(TJ)	Wrangler

**NOTE: This bulletin applies to vehicles equipped with a NSG-370 6-speed manual transmission (sales code DEH).**

**SYMPTOM/CONDITION:**

Upon shifting the 6-speed manual transmission into Reverse, the customer may notice that reverse gear may not remain engaged.

This condition may follow/develop shortly after an accidental mis-shift into reverse has occurred. While the vehicle is moving forward and already in a forward gear, instead of shifting into another forward gear the reverse gear is incorrectly selected. Though reverse can not be obtained during the mis-shift attempt, damage to the internal shift subassembly and reverse gear may occur which may later prevent full reverse gear engagement when reverse is selected properly. The customer should be made aware of proper shift procedures.

This condition may also occur if the center floor console and/or shifter boot are not positioned properly.

**DIAGNOSIS:**

1. Verify that the center floor console and shifter boot are not preventing the transmission shifter from fully engaging reverse. Verify that the console is centered properly to the shifter. Verify that the shifter boot is installed properly.
2. If the center console and shifter boot are properly installed, and the transmission fails to remain in reverse as designed, perform the Repair Procedure.



**PARTS REQUIRED:**

Qty.	Part No.	Description
1	05175903AA	Kit, Reverse Gear - 4x4 or 4x2 (inc. internal shift subassembly, reverse gear, reverse syncrho sleeve, reverse blocker ring, retaining snap rings, oil seals, and counter shaft seal plug )
1	04318083	Mopar® Gasket Maker
2	04874464	Lubricant, Mopar® Manual Transmission (MS-9224)

**SPECIAL TOOLS/EQUIPMENT REQUIRED:**

9648	Mainshaft Build Fixture
9633	Build Fixture
NPN	3-Jaw Puller
W-262	Hub Installer
NPN	Hydraulic Press
9638	Seal Installer
9635	Seal Installer
9636	Shaft Remover and Installer
7829-A	Plug Installer
C-4171	Handle
6448A	Bearing Installer - Tube

**REPAIR PROCEDURE:**

Replace the manual transmission internal shift subassembly and reverse gear components. Refer to detailed disassembly and assembly repair procedures in TechCONNECT which are available in Group 21 - Transmission and Transfer Case / Manual Transmission - NSG370.

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

<b>Labor Operation No:</b>	<b>Description</b>	<b>Amount</b>
21-00-03-98	Replace Manual Transmission Internal Shift Assembly And Reverse Gear Components - TJ	3.9 Hrs.
21-00-03-98	Replace Manual Transmission Internal Shift Assembly And Reverse Gear Components - KJ	3.6 Hrs.
21-00-06-60	Optional Equipment: 4x4 Equipped - KJ	0.8 Hrs.

**FAILURE CODE:**

J1	Jumps Out Of Gear
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