

**NUMBER:** 21-003-01 REV A

**GROUP:** Transmission

**DATE:** Mar. 02, 2001

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THIS BULLETIN SUPERCEDES TECHNICAL SERVICE BULLETIN 21-003-01, DATED FEB. 02, 2001, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\*. THIS REVISION INCLUDES A NEW PART NUMBER.

# SUBJECT:

High Shift Effort When Shiftiing Out Of A Gear

## **OVERVIEW:**

This bulletin involves the replacement and lubrication of the five speed manual transmission shift shaft detent plunger.

## **MODELS:**

2000	AN	Dakota	
2000	BR/BE	Ram Truck	
2000	TJ	Wrangler	
2000	XJ	Cherokee	

NOTE: THIS BULLETIN APPLIES TO VEHICLES EQUIPPED WITH A NV3500 (DDC) OR NV3550 (DDD) FIVE SPEED MANUAL TRANSMISSION.

## SYMPTOM/CONDITION:

The customer may experience higher shift efforts when shifting out of a gear. This condition may be more common when either a second-to-third upshift or when a fifth-to-fourth downshift is attempted. Other upshift or downshift patterns may exhibit higher shift efforts when coming out of the original gear. In most cases, these other shift patterns will be less common in occurrence.

#### DIAGNOSIS/REPAIR PROCEDURES:

If the customer experiences the above condition, then perform the Repair Procedure.

# PARTS REQUIRED:

Qty.	Part No.	Description
1	04741128	Plug, Shift Shaft Detent
1	05016233AA	Plunger, NV3500 Detent

**1	05015949AA	Plunger, NV3550 Detent**
1	NPN	Lubricant (recommend Valvoline Dura-Blend Semi-Synthetic or Synthetic Grease - P/N's 278, 279, 985, 986 or its equivalent. Tub or tube.)

NOTE: THE LUBRICATING GREASE MUST CONTAIN MOLYBDENUM DISULFIDE AND HAVE AN OPERATING TEMPERATURE RANGE OF AT LEAST  $-40^{\circ}$  F TO  $+350^{\circ}$  F.

NOTE: THERE IS SUFFICIENT QUANTITY OF GREASE IN EACH TUBE OR TUB OF LUBRICANT TO EFFECT SEVERAL REPAIRS.

## **EQUIPMENT REQUIRED:**

8117A	Special Tool, Plug Remover
8123	Special Tool, Plug Installer (as required)

#### REPAIR PROCEDURE:

- Obtain access to the shift shaft detent plug on a Dakota or Ram Truck from under the vehicle. Raise and support the vehicle. The detent plug is located on the driver side of the transmission and in the recessed area above the clutch slave cylinder.
- 2. Obtain access to the shift shaft detent plug on a Cherokee or Wrangler from inside the vehicle. Remove the gear shift knob, the gear shift lever boot and bezel, the center console, the inner gear shift boot, and the floor pan cover. The detent plug is located on top of the transmission and immediately to the rear of shift tower.
- 3. Using the procedures outlined in the appropriate service manual, remove the shift shaft detent plug, spring, and plunger.

NOTE: ON CHEROKEE AND WRANGLER VEHICLES, THERE MAY NOT BE SUFFICIENT ACCESS TO THE SHIFT SHAFT DETENT PLUG TO USE SPECIAL TOOL 8117A. THE TECHNICIAN SHOULD CAREFULLY PRY OFF THE DETENT PLUG. PRY UP EVENLY AROUND THE TOP LIP OF DETENT PLUG.

- 4. Liberally lubricate the inside and outside of the new shift shaft detent plunger, p/n 05016233AA.
- 5. Install the new plunger and the original spring into the transmission detent bore.
- 6. Install the new detent plug, p/n 04741128. Make sure the detent plug is fully seated to the transmission housing.
- 7. On Cherokee or Wrangler vehicles, install the floor pan cover, the inner gear shift boot, the center console, the gear shift lever boot and bezel, and the gear shift knob.

#### **POLICY:**

Reimbursable within the provisions of the warranty.

## TIME ALLOWANCE:

Labor Operation No:		
21-75-01-90	Plunger, Detent - Replace (TJ, XJ)	0.4 Hrs.
21-75-01-90	Plunger, Detent - Replace (AN, BR, BE)	0.6 Hrs.

# **FAILURE CODE:**

P8	New Part
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