

**NO: 21-09-99**

**SUBJECT: NV 247 Transfer Case Shudder**

**DATE: June 4, 1999**

**THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETINS 21-17-98 DATED DEC. 11, 1998, WHICH SHOULD BE REMOVED FROM YOUR FILES AND A NOTE SHOULD BE MADE IN THE 1998 TECHNICAL SERVICE BULLETIN MANUAL (#81-699-99003). A NEW TRANSFER CASE FLUID HAS BEEN INTRODUCED INTO PRODUCTION. ALL REVISIONS ARE HIGHLIGHTED WITH **\*\*ASTERISKS\*\***.**

**OVERVIEW:**

This bulletin involves a new transfer case fluid, a revised repair procedure, and a change to the Maintenance Schedules "A" and "B".

**NOTE: **\*\*THIS BULLETIN APPLIES TO VEHICLES EQUIPPED WITH THE NV 247 TRANSFER CASE.****

**NOTE: **\*\*VEHICLES BUILT ON OR AFTER APRIL 9, 1999 (MDH 0409XX) HAVE THE NEW TRANSFER CASE FLUID ALREADY INSTALLED IN THE NV 247 TRANSFER CASE FROM THE ASSEMBLY PLANT.\*\*****

**SYMPTOM/CONDITION:**

A shudder and/or low pitched grunting noise may be present in the transfer case. The condition is a slip/stick condition in the progressive coupling assembly. The condition may be present at slow speeds, and/or during tight steering maneuvers such as parking or backing out of a driveway.

**DIAGNOSIS:**

The new transfer case fluid has several different characteristics from that of ATF- 4. Some of those characteristics are: a yellow color, a slightly higher viscosity, and a sweet (new vinyl like) odor. These characteristics may vary depending on how well the transfer case was drained prior to refill.

If a customer describes this condition, perform the Repair Procedure.

**NOTE: **\*\*THE RECOMMENDED MAINTENANCE INTERVAL FOR SCHEDULED SERVICE TO THE TRANSFER CASE FLUID IS CHANGED. FOR SCHEDULE – "A" (FOR NORMAL OPERATING CONDITIONS), IT IS RECOMMENDED THAT THE TRANSFER CASE FLUID BE DRAINED AND REFILLED EVERY 22,550 MILES OR 18 MONTHS. FOR SCHEDULE – "B" (OTHER THAN NORMAL OPERATING CONDITIONS), IT IS RECOMMENDED THAT THE TRANSFER CASE FLUID BE DRAINED AND REFILLED EVERY 21,000 MILES.\*\*****

**PARTS REQUIRED:**

Qty	Part No.	Description
2	05016796AA	Fluid, Transfer Case (Quart)**

**NOTE: THE USE OF ANY FLUID OR ADDITIVE, OTHER THAN TRANSFER CASE FLUID**

**05016796AA, IS NOT RECOMMENDED.**

**REPAIR PROCEDURE:**

1. Raise the vehicle on a hoist.
2. Drain the transfer case fluid as completely as possible. Install the drain plug.

**NOTE: \*\*IT IS IMPORTANT TO MAKE SURE ALL FLUID IS COMPLETELY DRAINED FROM THE TRANSFER CASE PRIOR TO REFILL.\*\***

3. Fill the transfer case with MOPAR fluid, \*\*P/N 05016796AA\*\*, until the fluid runs out the fill plug (1.6 liters – 1.7 quarts). Install the fill plug.
4. \*\*Drive the vehicle in a safe area and manner. Perform small radius (tight) circles. Even when the shudder condition is no longer present, a minimum of five ( 5 ) left turn circles and five ( 5 ) right turn circles must be completed.

Performing "figure 8's" may be more convenient as long as the circles are small.\*\*

Performing circles in reverse will cause the discs, within the progressive coupling of the transfer case, to move in a direction that is opposite to their movement when the vehicle is driven in a forward gear. This may be of added assistance with displacing the new fluid within the progressive coupling. Drive the vehicle in a safe area and manner.\*\*

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

<b>Labor Op. No.</b>	<b>Description</b>	<b>Time</b>
21-03-01-95	-----	0.5 Hrs.
21-03-01-60	Optional Equipment – Skid Plate	0.1 Hrs.

**FAILURE CODE:**

<b>Code</b>	<b>Description</b>
P8	New Part