

NO: 21-01-99 Rev. A

SUBJECT: NV 247 Transfer Case - Low Speed Grinding Noise

DATE: Aug. 13, 1999

THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 21-01-99, DATED FEB. 5, 1999, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS**** AND INCLUDE THE ADDITION OF A VEHICLE PRODUCTION DATE, A REVISED FLUID, AND A REVISION TO THE REPAIR PROCEDURE.**

OVERVIEW:

****This bulletin involves the replacement of the transfer case lubrication pump assembly and fluid.****

****NOTE: THIS BULLETIN APPLIES TO VEHICLES BUILT BEFORE DEC. 1, 1998 (MDH 1201XX).****

SYMPTOM/CONDITION:

A grinding, raspy noise may be present in the transfer case. This noise will be present during a light acceleration or float condition at speeds up to 35 mph. The noise is most noticeable when the vehicle has not been driven for several hours. It typically lessens as the vehicle warms up and is often not present when the vehicle is at operating temperature. The condition is caused by high internal pressure in the lubrication supply pump, which allows the rotors to misalign and produce noise. A revised lubrication pump assembly has been released to correct the condition.

DIAGNOSIS:

If the vehicle exhibits the condition described above, perform the Repair Procedure.

PARTS REQUIRED:

Qty	Part No.	Description
1	05013017AB	Lubrication Pump Assembly
**2	05016796AA	Fluid, Transfer Case (Quart) **

REPAIR PROCEDURE:

1. Raise the vehicle on a hoist.
2. Remove the transfer case drain plug and drain the transfer case fluid.
3. Mark the front and rear propeller shaft yoke for alignment reference and remove the front and rear propeller shafts.
4. Support the transmission with a jack stand.
5. Remove the rear cross member and skid plate.
6. Disconnect the transfer case shift cable from the range lever.
7. Disconnect the transfer case vent tube.

8. Support the transfer case with a transmission jack stand securing it with chains.
9. Remove the transfer case attaching nuts and pull the transfer case and jack rearward to disengage it.
10. Remove the transfer case from the vehicle.
11. Remove rear retainer bolts and remove rear bearing locating ring access plug.
12. Loosen rear retainer with pry tool to break sealer bead (pry only against retainer boss).
13. Remove rear retainer as follows:
 - A. Spread rear bearing locating ring with snap ring pliers.
 - B. Slide retainer off main shaft and rear bearing.
14. Remove rear bearing snap-ring and rear bearing (Note position of bearing locating ring groove for assembly reference).
15. Disengage oil pickup tube from oil pump, remove and dispose oil pump assembly.
16. Install new lubrication pump, p/n 05013017AB. Tighten the rear retainer bolts to 30 Nm (25 ft. lbs.)
17. Install the transfer case reversing the removal procedure. Tighten the attaching nuts to 41 Nm (30 ft. lbs.).
18. Install the propeller shafts. Tighten the attaching screws to 19 Nm (14 ft. lbs.).
19. ****Install the drain plug and fill the transfer case with transfer case fluid, p/n 05016796AA, until the fluid runs out the fill plug (1.6 liters - 1.7 quarts). Install the fill plug.****

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

20. ****Drive the vehicle in a safe area and manner. Perform small radius (tight) circles.****

****NOTE: A MINIMUM OF FIVE (5) LEFT TURN CIRCLES AND FIVE (5) RIGHT TURN CIRCLES MUST BE COMPLETED.****

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Op. No.	Time
21-38-02-90	2.2 Hrs.

FAILURE CODE:

Code	Description
P8	New Part