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P/N: 50-0231A

29 SPL. NP231 T/C 1996 & later INPUT GEAR DODGE NV4500 29 SPL. TRANSMISSIONS

KIT CONSISTS OF:			
No.	Qty	Part No.	Description
1.	1 *1*	52-0231	29 SPLINE INPUT GEAR
2.	°1°	716324	INPUT GEAR BEARING

THINGS TO CONSIDER BEFORE YOU BEGIN:

- 1. Medium strength thread locker is recommended on all threaded fasteners.
- 2. A sealant such as RTV (like the OEM sealant) is needed and is available from your local Jeep/Dodge dealer. P/N 82300234.

INSTRUCTIONS:

This new input gear will only fit the NP231 transfer cases. The installation of the gear will require the complete disassembly of your NP231 transfer case. Since the transfer case has to be completely disassembled, this is also a good time to install a short output shaft kit (fixed yoke kit) if you already have not done so.

If you've never disassembled a New Process transfer case, here are a couple of points to keep in mind that will make the installation much easier:

- 1. Keep all bolts, nuts, washers, etc. separated into groups as you remove them. Make sure you keep them in a labeled container that indicates what part of the transfer case they came from.
- 2. Keep all small parts in separate containers and label as to location and origin.
- 3. Make sure you have plenty of time and have a clean, spacious area to perform the installation.

Remove the front yoke nut with a 1-1/8" socket using an impact wrench. Remove the rear case bolts. A 10mm 12 pt. socket is needed for the spline head bolt and a 15mm socket for the remaining bolts. **NOTE:** The two black oxide finished bolts are located at the case dowel positions and require a washer under them. Start to remove the rear case from the front case by inserting pry bars at the cast-in locations **ONLY!** Pry apart evenly to break the sealer bead along the case mating surfaces. The front output shaft and chain should be retained with the rear portion of the case.





SPECIAL NOTE: The components packaged in this kit have been assembled and machined for specific type of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand modifications or changes that will be required to complete your conversion, we strongly recommend that you contact our sales department for more information. This instruction sheet is only to be used for the assembly of Advance Adapter components. We recommend that a service manual pertaining to your vehicle be obtained for specific torque values, wiring diagrams and other related equipment. These manuals are normally available at automotive dealerships and parts stores.



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On the front side of the transfer case, you'll need to remove the 4 bolts that retain the aluminum bearing retainer. Once this is removed, you'll find a snap ring that retains the input gear to the cases' input bearing. This snap ring must be removed so that the input gear can be removed from the inside.







On the inside of the transfer case, you'll now be able to remove the planetary assembly. Set the assembly on a work bench and locate the snap ring that retains the input gear into the planetary housing. Remove the snap ring and lift the input gear out of the planetary housing.



Once the input gear is removed, you'll find a thrust washer that must be reinstalled onto the new 29 spline input. When comparing the two input gears, you might find a difference between the two. The NP231 transfer case used two styles of front input bearings. The early transfer case used a wide bearing and the later model used a narrow bearing. New Process changed the design; however, they made it so the early input can still be used into the later model transfer case. The two center photos below show a later model input compared to our new input. The snap ring grove that holds the gear into the case is in the same location on both gears, and the shoulder on the gear located on the left compensates the late model input for the narrower bearing.



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The best way to allow for the installation of this early style gear into both applications is to supply a new wide style bearing with the gear. The stock front bearing should be removed and discarded.

This new bearing needs to be installed and used for all applications. Once the new bearing is installed, reassemble the transfer case. Consult a service manual for torque specifications.





Note: The only two parts you should have left out of the case is the old input gear and the old input bearing.



During reassembly, make sure the oil return hole matches the front retainer hole.

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