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P/N: 50-0205

NEW VENTURE 4500 5 SPEED TO JEEP DANA 300

KIT CONSISTS OF:

No.	Qty	Part No.	Description
1.	1	51-0205A	ADAPTER HOUSING 6.375" LONG
2.	1	52-0205	NV4500 23 SPLINE OUTPUT SHAFT
3.	1 Kit	716048	DANA 300 CROSSMEMBER SPACER
4.	1 Kit	716221	DANA 300 RETAINER KIT
5.	1	716460	SPECIAL NUT (Mopar No. 4637802)
6.	1	716517	GASKET
7.	1	716704	SEAL FOR NV TAILHOUSING

INSTRUCTIONS:

This adapter kit is designed for the 2WD or 4WD New Venture 4500 transmission. The output shaft must be removed and the new shaft installed. The original GM harmonic balancer or 2WD speedometer drive will need to be removed and replaced with the new nut provided in the adapter kit. We have included a new adapter housing that has the Dana 300 pattern and a seal that will fit the input sleeve of the Dana 300 transfer case. The main shaft of the transmission should be installed by a qualified transmission repair shop and it does require some special tools for proper installation.

When assembling the transmission to the transfer case, **DO NOT FORCE** the two gear boxes together. If the shaft is too long, there is the possibility of pre-loading the transmission bearings for premature failure. Take the extra time to make sure that the shafts do not bottom out internally. If there is an interference problem, it may be necessary to grind the end of the new output shaft to obtain the proper length. We have seen some variations as to the depth of the 23 tooth internal spline used in the Dana 300 coupler shaft.

A special front bearing retainer must be installed on the front of your Dana 300, replacing the stock retainer. When removing the six Allen head bolts, there are two pry grooves located on the stock retainer. Use two pry bars into these slots to remove this aluminum retainer. When the retainer is removed, you will find the drive gear, input shaft, and bearing on this retainer assembly. By removing the snap ring on this assembly, these items will need to be taken apart. Once the items are disassembled, you will need to set aside the stock aluminum retainer and the stock roller bearing. A new sealed roller bearing has been provided because the new aluminum retainer does not have a provision for a seal. Using these new components, reinstall the Dana 300 input shaft assembly using the stock snap rings. Once assembly is assembled, you will then need to reinstall this retainer assembly back into your Dana 300 transfer case.

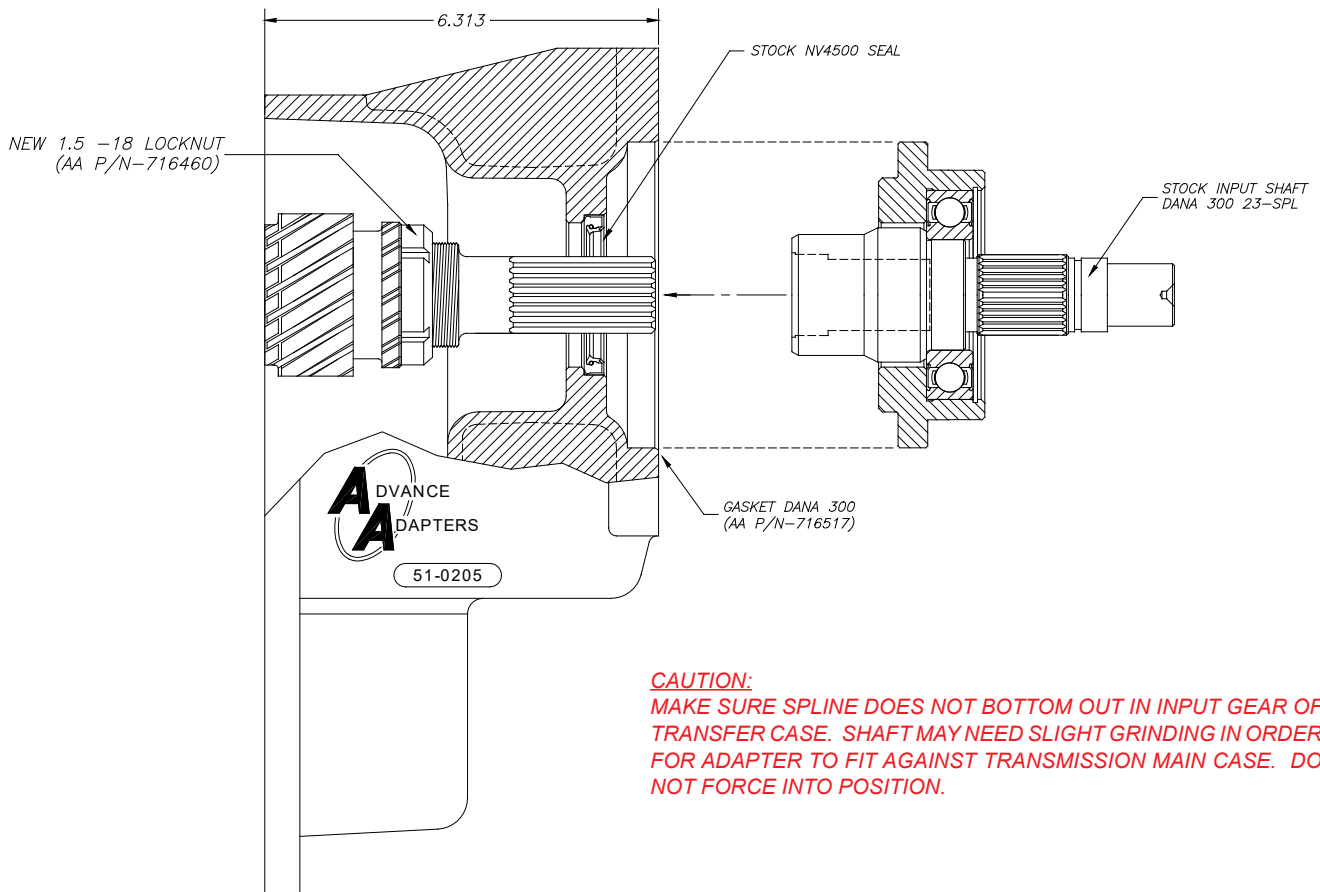
****CAUTION:** Make sure the pocket needle bearing inside the transfer case is still in place and care should be taken when installing so that the gears mesh. **DO NOT FORCE.** Use a sealant on the aluminum retainer between it and the case to prevent leakage. Install the six Allen bolts to the transfer case.

The stock seal in the adapter housing may or may not need to be removed. This is depending on the chamfer on your Dana 300. If this seal has to be removed, the sealed bearing is adequate in isolating the two gear box fluids. However, some gear boxes develop pressure which will sometimes cause leakage between the two gear boxes. An alternative is to run NV4500 fluid in both gear boxes.

The overall length of this transmission and adapter is 18-3/4". This transmission adapter can be used with both new V8 installations and 6 cylinder engines. This transmission assembly with the new bellhousing will have an overall length of approximately 25" from back of engine to the front of the transfer case. This length is the shortest possible for the NV4500 installations.

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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TRANSMISSION ASSEMBLY O.A.L. = 18-3/4"

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