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## JEEP DANA 300 ROTATION KIT & NV3550 5-SPEED TO DANA 300 KIT

### KIT CONSISTS OF:

No.	Qty	Part No.	Description
1.	1	51-8603	ADAPTER CASTING
2.	1	52-3002	LONG DANA 300 INPUT SHAFT
3.	1	716308	SEALED BEARING
4.	2	716517	GASKET
5.	6	723701	3/8"-16 NUT
6.	6	723704	3/8 LOCK WASHER
7.	6	723711	STUD 3/8"-16
8.	6	723731	S.H.C.S. 3/8"-16 X 1"

### **SPECIAL NOTE:**

When rotating the Dana 300 to a higher rotation, you may experience some transfer case shifter interference. We recommend that a twin stick shifter for the Dana 300 be obtained to acquire the necessary clearances.

**ASSEMBLY NOTE:** Some NV3550 have a .100" stickout on the output shaft & require you to trim the output shaft flush with the rear of the transmission

### **INSTRUCTIONS:**

This kit is designed to adapt the Jeep NV3550 5-speed to the Jeep Dana 300 transfer case and also as a rotation kit for the Dana 300 transfer case.

This kit will allow you four rotation angles for the Dana 300 and proper spline engagement with little or no modifications.

A special long splined input shaft must be installed on the front of your Dana 300, replacing the stock input. The transfer case input assembly must be taken apart to install the new input shaft. To do this, remove the six Allen head bolts on the front retainer. 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 rings on this assembly, these items will need to be taken apart. Once the items are disassembled, you will need to set aside the stock input shaft and the stock roller bearing. A new sealed roller bearing has been provided to isolate the gear box fluids. Install the new Dana 300 input shaft and secure by using the stock snap rings. Once this assembly is assembled, you will then need to reinstall this retainer assembly back into your Dana 300 transfer case.

The adapter plate must be rotated to line up the 6 counter sunk holes to the Dana 300. Use a gasket or RTV blue silicone between these two components. Fasten the S.H.C.S. bolts with Loctite, securing the plate to the transfer case.

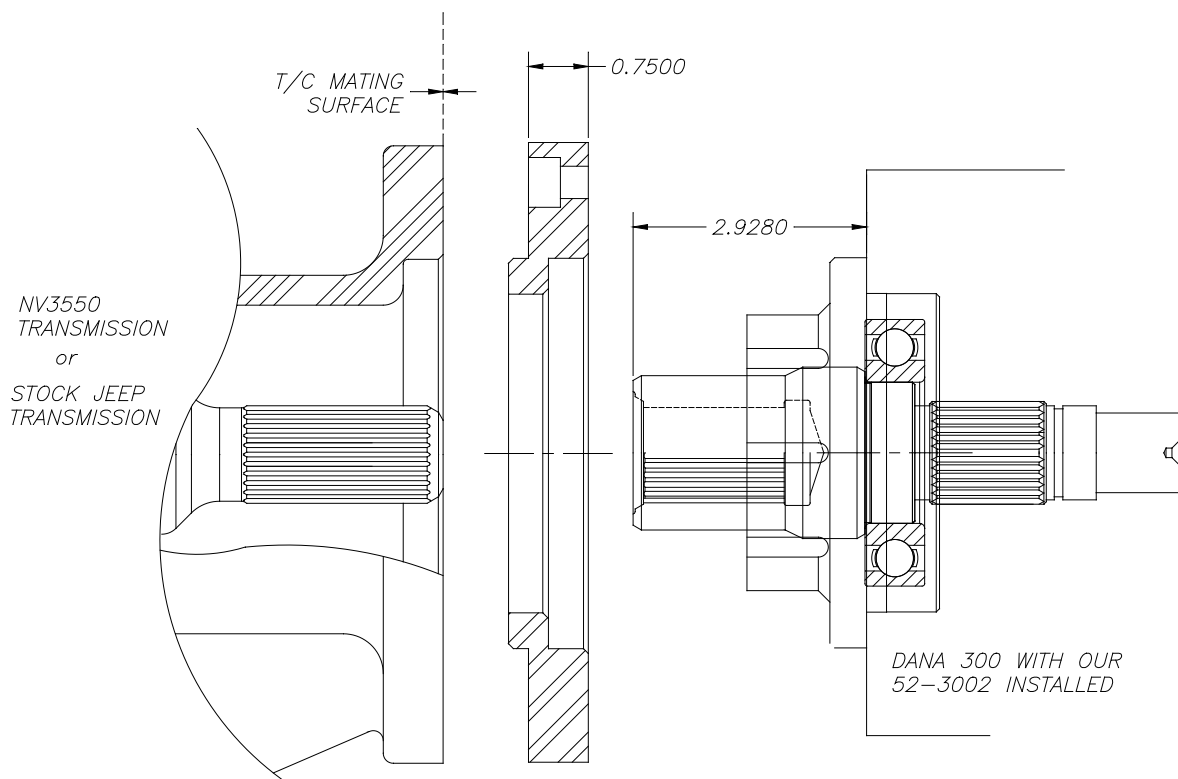
Once you decide on the rotation, install the six studs into the adapter ring (these studs are a tight fit into the ring). Use a gasket or RTV blue silicone and fasten the transfer case to the transmission adapter plate.

Things to consider during the installation are floorboard clearances and transfer case shifter handle location & clearance. Since we have rotated the Dana 300 up higher than the stock rotation, the shifter handle may need to be bent for proper fit. The other option is an aftermarket twin stick shifter for the Dana 300.

Due to the rotation of the transfer case you should add some additional oil to the transfer case to maintain proper oiling.

**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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**NOTE:** Some transmissions have a weep hole or slot on the rear transmission flange. When using this kit it is important that this hole/slot is sealed using RTV Blue Silicone. This will prevent fluid leaking from the adapter.

*The location may vary depending on the year and model of transmission, some transmissions have a weep hole that begins on the inside of the casting and continues down through the bottom of the mounting foot.*

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