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PAGE 1 OF 3 Page Rev. Date: 02-05-18  
P/N: 50-0209

## DODGE NV4500 23 SPL. 5 SPEED TO BRONCO DANA 20

### KIT CONSISTS OF:

No.	Qty	Part No.	Description
1.	1	51-0209	DANA 20 ADAPTER PLATE
2.	1	52-0209	SPUD SHAFT 23T INTERNAL
3.	1	715541	SHIFTER LINKAGE BRACKET <i>(See picture on page 3 for mounting)</i>
4.	1	716223	BEARING RETAINER
5.	1	716312	BALL BEARING
6.	1	716455	SNAP RING
7.	1	716513	GASKET
8.	1	716517	GASKET
9.	1	716713	SEAL (C/R 18676)
10.	1	716714	"O" RING
11.	6	723704	3/8" LOCK WASHERS
12.	2	723725	3/8"-16 x 2" LONG H.H.C.S. (shifter bracket)
13.	4	723724	3/8"-16 x 1-3/4" LONG H.H.C.S.
14.	6	723740	3/8"-16 x 1-1/2" LONG S.H.C.S.

#### NOTE:

**This adapter will only work with the "T" style shifter. If your vehicle has a "J" style, it will need to be replaced**

### INSTRUCTIONS:

This adapter kit is designed for exclusive use with the Dodge Standard Duty 4WD New Venture 4500 transmission.

The overall length of this transmission with the adapter is 19-1/2". This transmission adapter can be used with both V8 and 6 cylinder engine installations. This transmission assembly, with the new bellhousing, will have an overall length of approximately 27" from back of the engine to the front of the transfer case. This is the shortest possible length for NV4500 installations.

Since this application is for a Ford Early Bronco Model 20 transfer case, you will need to consider how to couple the NV4500 to the Ford engine. We recommend using a Dodge Standard Duty 4WD gas version of the NV4500. This transmission has an input shaft length that is compatible when using a Ford bellhousing to our adapter plate. We offer an adapter plate for the front side of the Dodge transmission that will adapt to all Ford bellhousings 1966 and newer.

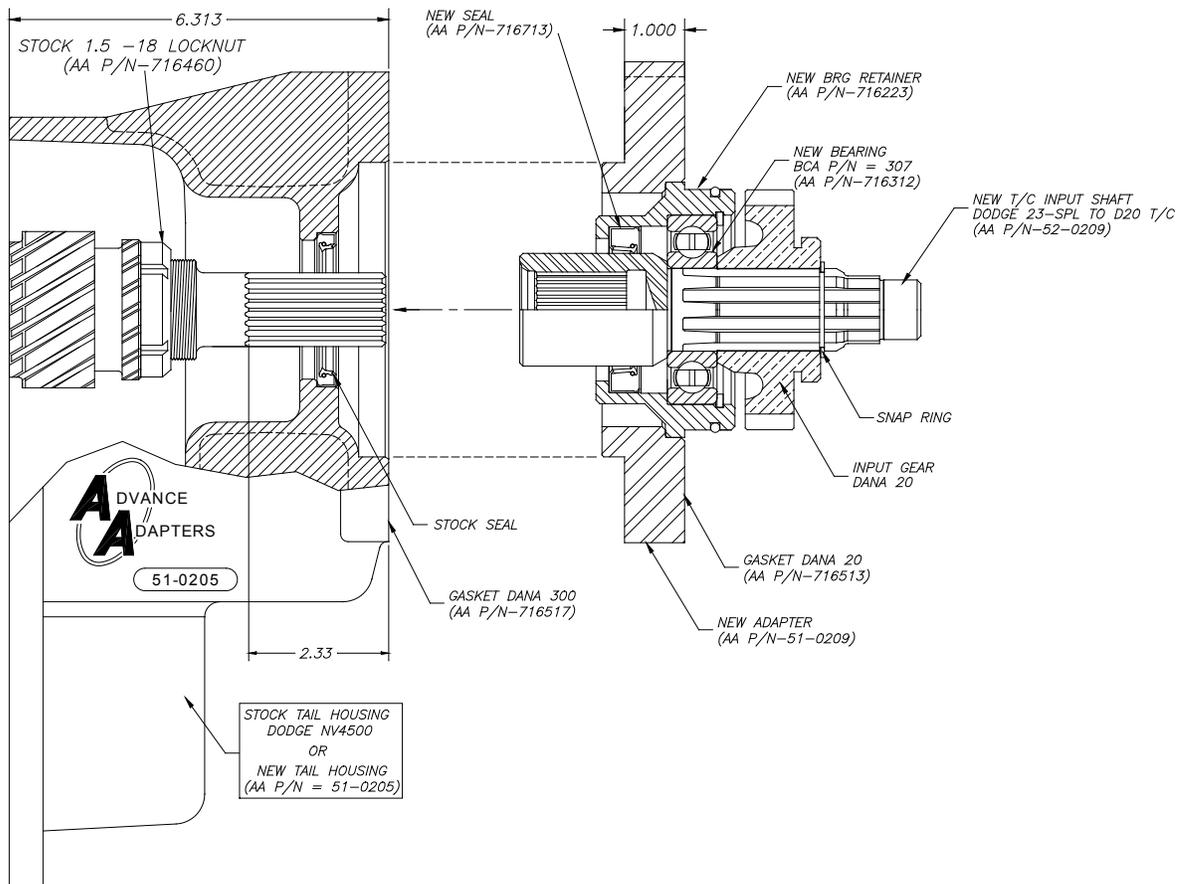
This kit is supplied with a new spud shaft, bearing, and seal. These components will need to be installed into our alignment retainer, along with the stock Bronco Dana drive gear. Make sure all snap rings are in place. Install the O-ring on the retainer along with a small amount R.T.V. Blue silicone, then install the retainer to your transfer case. Bolt the adapter ring to the Dana 20 using the 6 S.H.C.S. bolts. Rotate the spud shaft to check for proper installation. Before assembling the NV4500 to the Dana 20, you will have to modify the stock Dodge adapter housing. With a hack saw, cut the rear factory shifter boss off, as these will interfere with your transfer case shifter linkage.

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, causing premature failure. Take extra time to make sure that the shafts do not bottom out internally. If there is any interference problem, it may be necessary to grind the end of the new output shaft to obtain the proper length.

**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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A shifter bracket has been provided for a "T" style T/C shifter handle. Before installing your transmission and transfer case assembly in your vehicle, check the fit of this linkage and bracket. To fit the bracket to your transmission assembly, you will be required to modify the stock Dodge adapter housing. (See photos Page 3).



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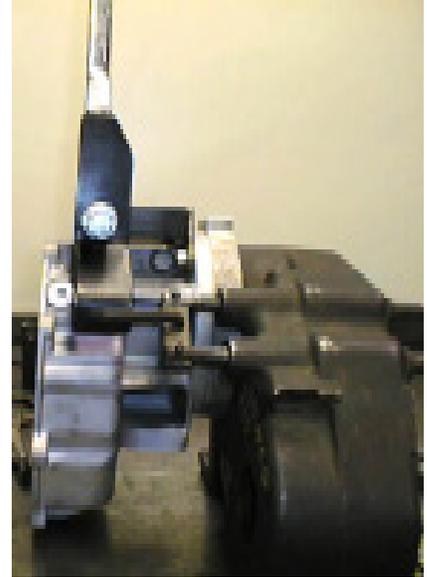
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Stock Dodge Adapter



Modified to fit the transfer case shifter linkage



"T" handle linkage installed



"T" handle linkage installed



Cut off the stock Dodge shifter bosses

**Hardware for the "T" style shifter has not been supplied due to the various different styles of after-market shift handles available.**

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