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**P/N: 50-6000**

## MUNCIE 4-SPEED TRANSMISSION TO JEEP DANA 300 TRANSFER CASE

### KIT CONSISTS OF:

No.	Qty	Part No.	Description
1	1	51-6000	ADAPTER- MUNCIE TO D300
2	*1	*52-3400	SHAFT- MUNCIE 4SP TO D300 32T
3	1	52-0208	DANA 300 INPUT SHAFT
4	1	716308	SHIELED BEARING
5	1	716500	GASKET SET-MUNCIE 4 SPEED M20/21/22
6	1	716517	GASKET-N.P.208 TRANSFER CASE
7	1	716701	SEAL-MUNCIE
8.	1	716749	SEAL (CR #19778)
9	4	723701	NUT 3/8 -16 PLATED GRD 5
10	9	723704	LOCK WASHER 3/8 ZINC
11	3	723708	STUD BOLT 3/8 -16 X 2-1/2
12	1	723712	STUD BOLT 3/8 -16 X 3-1/2 GRD B7
13	5	723725	H.H.C.S. 3/8 -16 X 2 PLATE GR 5
14	3	724303	LOCK WASHER 7/16 STD PLTD
15	1	724304	HEX NUT PLATED 7/16 -14
16	1	724309	H.H.C.S. 7/16 -14 X 2 zinc gr. 5
17	1	724357	H.H.C.S. 7/16 -14 X 3-1/4 GR 5
18	1	724360	STUD BOLT. 7/16 -14 X 2-3/4 (MUNCIE KITS)

### OPTIONAL ITEMS:

Qty	Part No.	Description
1	715501	HURST SHIFTER
1	716003	X-MEMBER MT.
1	715625 or 626	LINKAGE
1	715600	HURST SHIFTER

\*\*MUNCIE SHAFT 52-3400 MUST BE SHORTENED TO 14.25" O.A.L.

\*\* check splines for fitment

#### INSTALLATION DANA 300 INPUT:

- Starting at the Dana 300 transfer case, remove the 6 socket head bolts from the aluminum index hub on the front side the transfer case.
- Using the two slots on the side of this retainer, you will need to pry the retainer out of the transfer case. This retainer assembly does pilot into the rear output shaft of this transfer case, if the retainer assembly seams tight to remove try spinning the rear output shaft.
- Once the retainer is removed you will need a pair of snap ring pliers to remove the snap ring that retains the drive gear to the input shaft. Remove the snap ring and the drive gear from the input shaft. The aluminum retainer should now have the bearing, input shaft, seal and a snap ring holding the bearing into the retainer. This snap ring must also be removed to allow the bearing and input shaft to be pressed out of the index housing.
- The seal will also require to be pressed out of the index retainer. The retainer should now be empty.
- Install the new bearing onto the new input shaft, install both components into the stock retainer and install the stock snap ring.
- Install the input drive gear onto the input shaft and retain it with the stock snap ring. Make sure the gear is installed so that the cogged side of the gear is facing away from the bearing.
- Install the new seal provided in the kit. The open side towards the transmission.
- Apply Loctite 515 or equivalent sealant to the retainer surface and install into the Dana 300 transfer case. Make sure the pocket bearing is installed in the Dana 300 output shaft.
- Bolt retainer to transfer case using the stock bolts. Torque to 10 ft./lbs.

**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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## MUNCIE 4-SPEED TRANSMISSION TO JEEP DANA 300 TRANSFER CASE

### MUNCIE 4 SPEED 1963-1974

This transmission can be identified by an aluminum case that is 10" long and a side cover having 7 bolts. The reverse shift lever will be coming out of the aluminum tailhousing. The front bearing retainer will have a diameter of 4.648" which will require the transmission to be used with car-type bellhousings.

This adapter kit is for the General Motors Muncie 4 speed transmission. The new shaft included with this adapter will fit all models from 1963 to 1974. The only exception is that in 1963, the first gear main shaft design was changed so first gear rode directly on the main shaft. If your transmission is a 1963, then you will need to purchase a new first gear and first gear bushing. The adapter housing is a direct copy of the original tailhousing that your transmission was equipped with. You will need to disassemble the shift lever shaft, steel ball, and spring for re-assembly into the new adapter. The original taper pin must be reinstalled to hold the reverse gear shaft in position. A new seal has been provided to prevent leakage out the reverse gear shaft. The seal must be installed with the open side towards the transmission.

The total overall length of the transmission and adapter will be longer than your original transmission and on most conversions, will require driveshaft modifications. The adapter has provisions for mounting an optional crossmember mount as illustrated. Depending on the exact vehicle that this transmission is being installed into, you may require modifications to the clutch linkage, overdrive shifter bracket, and transfer case control linkage.

The adapter is set up for use with a Hurst Competition Plus shifter that can be bolted onto the new casting by using shifter bracket No. 715501. This bracket will accept all Hurst shifters. Special shifter linkage will be required since the shift tower location is so much further forward than on 2WD installations. We offer two different rod kits for use with this transmission. The rod kits are P/N 715625 (for transmissions that have studs on the shift levers) and P/N 715626 (for transmissions that have female threads).

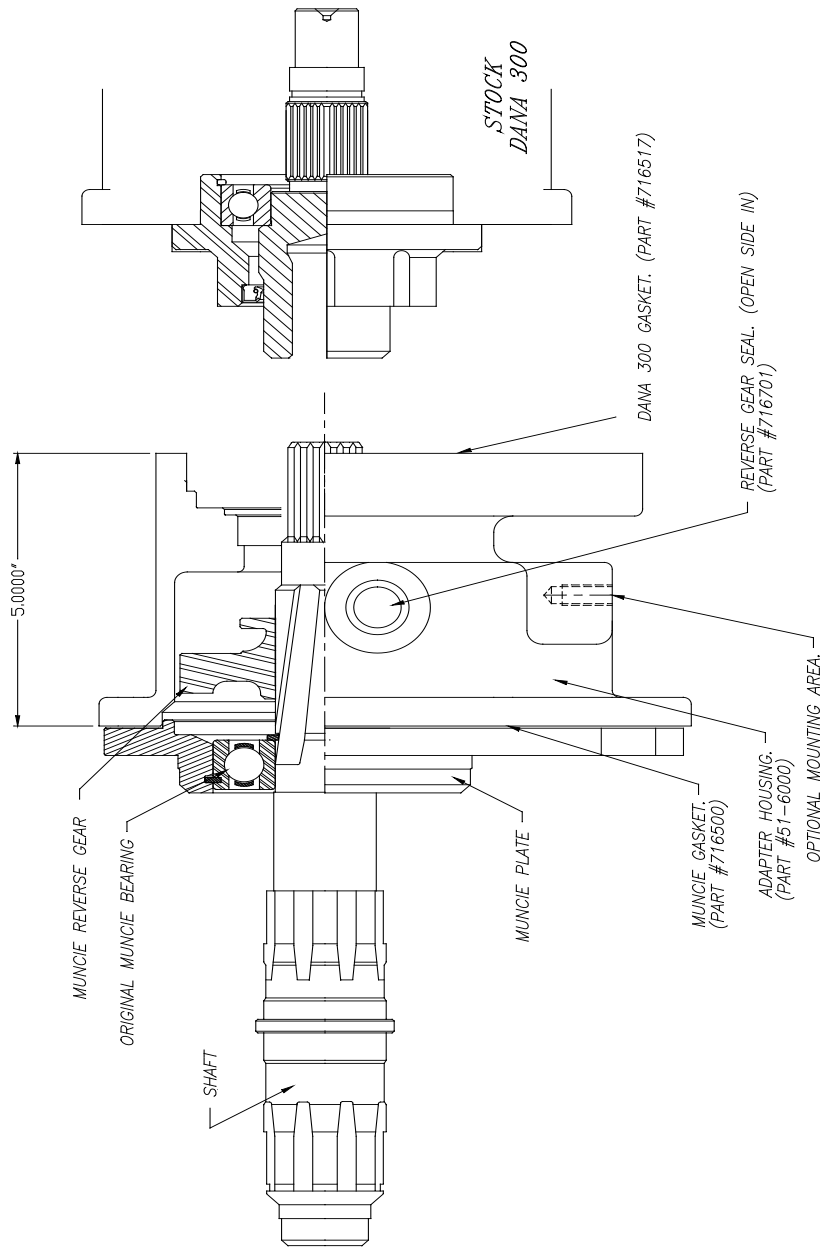
Since we have eliminated the seal between the transfer case and transmission, you will need to gasket and silicone the adapter to transfer case area.

### **Gear Ratios:**

<b>First</b>	<b>Second</b>	<b>Third</b>	<b>Fourth</b>
<b>2:54</b>	<b>1.88</b>	<b>1:46</b>	<b>1:00</b>
<b>2:20</b>	<b>1:64</b>	<b>1:27</b>	<b>1:00</b>

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