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P/N: 50-6102

FORD NP435 4 SPEED TRANSMISSION TO JEEP DANA 18/20

KIT CONSISTS OF:

No.	Qty	Part No.	Description
1	1	51-7510	FORD NP435 4SP ADAPTER CASTING
2	1	51-7700	JEEP DANA20/T18 4-SP CASTING
3	**1**	52-3800 Modified	NP435 X DANA 300-23 MAIN SHAFT
52-3800 must be shortened 1" on the 23Spline end before shipping.			
4	1	52-8600	JEEP T5 TO DANA 18/20 T/C-23T
5	4	725040	STUD BOLT 1/2"-13 x 2"
6	1	716512	GASKET (NP435)(T18)
7	1	716517	GASKET-N.P.208 TRANSFER CASE
8	1	716568	T.C. GASKET/JEEP&TOY L/C
9	1	716711	SEAL-18/20 ADAPTERS
10	10	723704	3/8 LOCKWASHER
11	4	725004	HEX NUT 1/2"-13 PLATED
12	4	723722	H.H.C.S. 3/8"-16 X 1-1/4" (GR5)
13	6	723723	H.H.C.S. 3/8 -16 X 1-1/2 gr. 5 zinc
14	1	723731	S.H.C.S. 3/8 -16 X 1 ZINC
15	1	728701	NUT-NYLON LOCK 7/8"-16
16	1	BG	Buyers Guide

OPTIONAL ITEMS:

Qty	Part No.	Description
1	716302	SEALED BEARING
1	716001 or	
1	716002	BEARING RETAINER
1	716021	TRANSMISSION SUPPORT

FORD NEW PROCESS NP435 4-SPEED

The NP435 transmission can be identified by a case length of 10-3/4" and a case casting number of C95711, C96391 or C13894. The aluminum case shift cover has a casting number of #C11240, C97233 or C994569. The P.T.O. opening is on the right hand side at center of the case and the shift cover is mounted to the top of the case with 8-bolts. The new shaft furnished with this kit must be carefully compared to the original shaft removed from your transmission. The NP435 transmission required for this kit are from Ford F100, F200 & F300 1 ton trucks. The front bolt pattern on the Ford transmission will have an 8-1/2" x 6-1/4" bellhousing pattern with a bellhousing pilot diameter of 4.848". The assembled length of the transmission and adapter will vary depending on which installation you are doing.

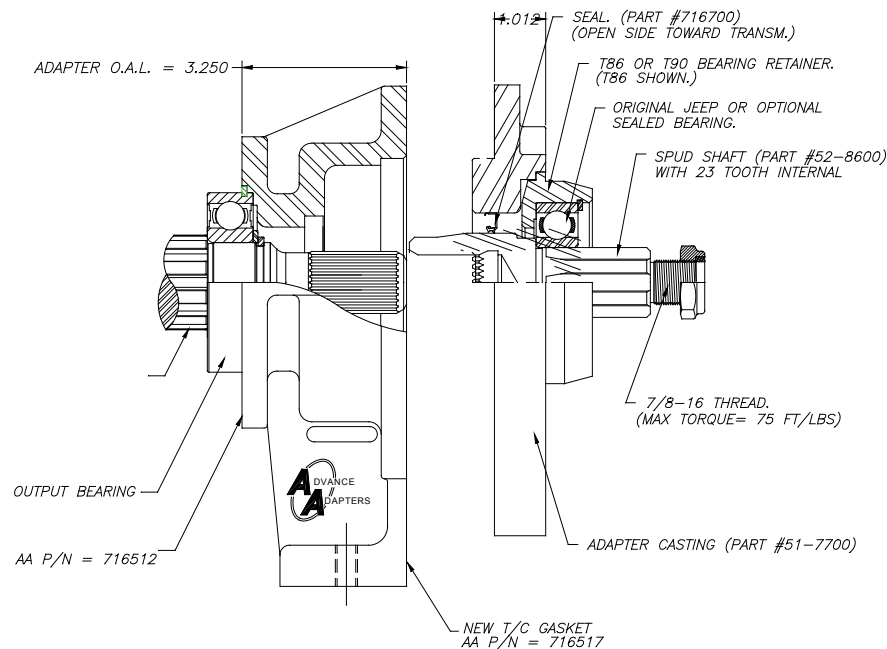
When assembling the gears onto the new main shaft, make sure that all gears have the proper end clearance required for oiling. *Make sure that all transmission assembly work is done by a competent mechanic.* All surfaces must use gaskets to prevent oil leakage. When bolting the adapter to the main transmission case, you must use two studs in the lower two holes of the adapter. A slight modification may be necessary to obtain the proper clearance around the lower bearing cover of the stock transmission. We have come across two different bolt patterns on the back side of the transmission case. The difference is between 2-wheel and 4-wheel drive applications. If the transmission was originally used in a 4-wheel drive vehicle, the lower two holes will be spread further apart. If the transmission was originally used in a 2-wheel drive vehicle, then the lower two holes will be in line with the upper two holes.

The kit is only available for 1-3/8"-6 spline gear sizes. If you are replacing a T14 Jeep 3 speed or a Scout automatic, you will need to purchase a new output gear for this conversion.

If you are using a Dana 18 twin stick transfer case, you will need to grind some material from the rear corner of the NP435. The casting is thick, so no strength will be lost.

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.

FORD NP435 4 SPEED TRANSMISSION TO JEEP DANA 18/20



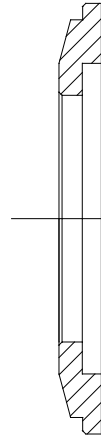
CAUTION:

WHEN INSTALLING A NEW TRANSMISSION MAIN SHAFT INTO THE NEW PROCESS CASE YOU MUST MAKE SURE THE INPUT SHAFT IS PROPERLY PRE-LOADED FOR PROPER BEARING AND GEAR CLEARANCES. WE HAVE EXPERIENCED GEAR SIEZURE IN THE 3rd GEAR AREA OF THE TRANSMISSION SHAFT DUE TO THE IMPROPER CLEARANCE FROM THE FRONT INPUT SHAFT. THE 3rd GEAR TO INPUT SHAFT CLEARANCE MUST BE .010" TO .015" IN ORDER TO AVOID SEVERE DAMAGES. IF THIS CLEARANCE IS NOT OBTAINED, YOU WILL FIND THE INPUT SHAFT DRAGGING ON THE 3rd GEAR AND CREATING EXCESSIVE HEAT THAT WILL CAUSE GEAR SIEZURE. REFER TO THE FORD SERVICE MANUAL FOR SPECIFIC INSTRUCTIONS ON TRANSMISSION ASSEMBLY PROCEDURES.

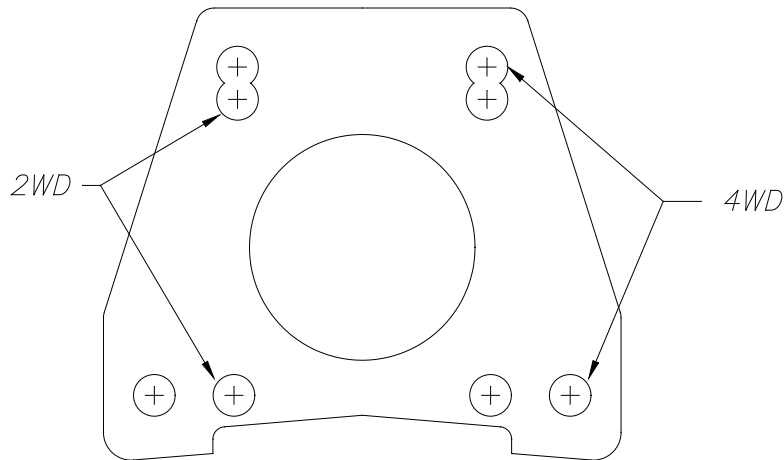
NOTE: Advance Adapters machines the new output shaft to the same specifications of your stock main shaft. However, every so often we have had customers inform us of a problem with the rear snap ring groove not being wide enough. This groove is in the same location as the stock NP435 shaft. We have found that New Process has had different thicknesses of snap rings through the years. If your snap ring will not fit into the snap ring groove once the rear bearing is installed, the easiest fix is to sand the snap ring thinner until it fits. If you do this, you should put the side of the snap ring that has not been sanded towards the bearing.

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FORD NP435 4 SPEED TRANSMISSION TO JEEP DANA 18/20



OPTIONAL BRG. RETAINER
FOR T90 APPLICATIONS
AA P/N = 716002



TRANSMISSION TO ADAPTER
BOLT PATTERN
BOTH NP435 2WD & 4WD TRANSMISSIONS
CAN BE USED WITH THIS
ADAPTER KIT

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