

Telephone: (800) 350-2223 Fax: (805) 238-4201 Page Rev. Date: 09-26-16 PAGE 1 OF 3

P/N: 50-7502

## EEP T18 4-SPD TRANSMISSION TO JEEP DANA 300 TRANSFER CASE

### KIT CONSISTS OF:

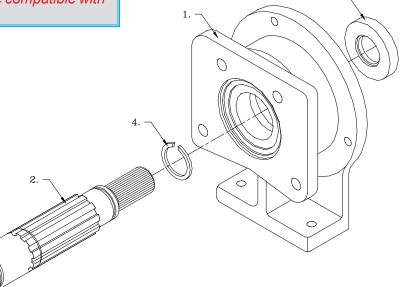
No.	Qty	Part No.	<u>Description</u>
1.	1	51-7502	ADAPTER CASTING
2.	1	52-7503	T18 MAIN SHAFT (Ref: 711375)
3.	1	716452	SNAP RING (Jeep #8132631)
4.	1	716517	GASKET (Dana 300)
5.	1	716722	SEAL (NAT #472319)
6.	2	723723	H.H.C.S. 3/8"-16 x 1-1/2"
7.	2	723728	S.H.C.S. 3/8"-16 x 2-1/4"
8.	2	723735	FLATWASHER 3/8" STD.
9.	2	724328	7/16"-14 x 1-1/4" H.H.C.S.



Some Jeep T18 transmissions will also require the idler shaft strap to be bolted or secured to the case. The easiest way is to drill and tap a hole in the center of the strap as shown above. If your T18 has the strap bolted to the case, you will not have to worry about this procedure.

Before assembly of the transmission with the new main shaft, you must verify that the correct shaft is being used. Your spline count on the shaft must be 23-splines. Advance Adapters also manufactures a 27-splines shaft that will not be compatible with vour Dana 300 transfer case.

The T18 shafts had two main shaft designs. The difference between the shafts is the hub between the second and third gears (both designs are interchangeable into the transmission). Some shafts have a snap ring and washer and others have the spacer as part of the shaft. Most of our shafts have the hub as part of the main shaft. If you have the snap ring design, just omit the washer and snap ring when loading the gears on the new main shaft.



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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## P T18 4-SPD TRANSMISSION T EEP DANA 300 TRANSFER CASE

### **WARNER T18 4 SPEED 1966 & UP:**

This adapter is designed to fit the Jeep version of the T18 4-speed. The difference between the Jeep and the Ford T18 is the bolt patterns on both the front and back of the 4-speed. The main shafts are identical. The casting in this kit for the Jeep T18 is the same as we use in the Ford T18, except it is machined differently for your transmission. The Jeep T18 uses a 6 hole bolt pattern on the back of the transmission. We have attempted to utilize as many of the stock holes as possible to fasten this adapter casting to your 4-speed. However, the lower two holes are not accessible to use with our adapter housing. Therefore, some machining is required on your 4-speed transmission in order to use this adapter.

Before you begin to assemble your transmission, you must make sure that you have received the correct main shaft. The spline on the end of the shaft must have 23 teeth. We manufacture two different T18 main shafts and it is possible that you could receive the 27 spline in error.

While the main shaft is still in your transmission, set the A/A transfer case adapter onto the back of your transmission. The adapter should index onto the rear output shaft bearing. This will align the adapter to your transmission. Install the top two fasteners from the adapter to the T18 to make sure the rotation is correct. The purpose of this is to locate a position for the new holes that need to be drilled into your Jeep T18. With the casting fastened to the T18, use either a marking pen or a metal scribe to mark the center of the lower two holes using the casting as a template.

Once the holes are marked, remove the casting and remove the main shaft out of the transmission. Using a drill press or a mill, drill and tap the two holes marked on your T18 transmission, 3/8"-16 is recommended. Care should be taken to keep the inside of the case as clean as possible from chips of metal and dirt. During finial assembly, the two center bolts to the T18 transmission that are installed through the back of the adapter should have silicone on the treads to prevent any leakage.

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. Warner gear has used two different shaft designs for the spacer between second and third gear. Some transmissions will use a snap ring and thrust washer, while others will use a built in shoulder. Both shafts are interchangeable. **Note:** Make sure you have the proper rear output shaft bearing. Some Jeep T18 transmissions used a narrow 308 bearing.

Install the new main shaft and gear assembly into the Jeep T18 case.

The new seal provided with the adapter kit must be installed with the open side towards the transmission. The casting will need to be installed on the T18. Use a small bead of RTV Blue Silicon on the backside of your transmission. Locate the adapter onto the back bearing for indexing. Install the top two and new bottom two bolts and tighten. Insert the two socket head bolts into the middle two holes and tighten. NOTE: The two socket head bolts will protrude slightly into the inside of the transmission case. Make sure they don't interfere with the gear. Shorten bolts if necessary.

The assembled length of the transmission and adapter will vary depending on which installation you are doing. On certain Jeep applications, we have set the length up to be an exact replacement of the original T4 & T5 transmissions.

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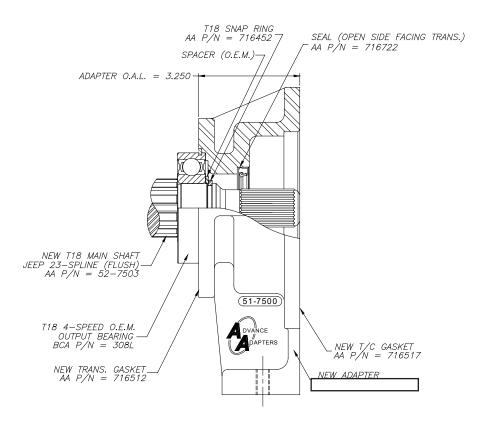
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With the adapter and transmission assembled, you are now ready to bolt the transfer case into position. There are no gaskets required between the transfer case and transmission since the new seal prevents any oil from entering this area. We have included a new gasket for added protection.

On installations using a 1 piece main shaft, make sure that the output shaft does not bottom out. We have found on occasion that a transmission output shaft may be slightly longer than we have allowed for and when coupling into the Dana 300 sleeve, we have found a small amount of interference. The adapter housing must be assembled to the back of the transmission without interference. DO NOT FORCE THE NEW TAILHOUS-ING ONTO THE TRANSMISSION. If assistance is needed, please feel free to call the number listed above.

The skid plate will need to be slightly modified to fit under the new transmission. Two new holes may be necessary for use with the new adapter and a slight notch may be required on the front leading edge of the skid plate for clearance around the front driveshaft.



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