

JEEP & SCOUT D300 T/C SHORT TAILHOUSING 32 SPLINE OUTPUT WITHOUT A YOKE

KIT CONSISTS OF:

No.	Qty	Part No.	Description
1.	1	300491	REAR YOKE END PLAY SHIM (3 sizes) <i>(Installed by AA)</i>
2.	1	300513A	BEARING, REAR OUTPUT FRONT <i>(Installed by AA)</i>
3.	1	300515	CAGED NEEDLE BEARING <i>(Installed by AA)</i> <i>This needle bearing must be removed when installing this kit into a Scout.</i>
4.	1	300625	SPEEDO RING GEAR
5.	1	300627	CIRCLIP, SPEEDO RING GEAR
6.	1	300922	BREATHER, BRASS ELBOW
7.	1	51-3020	CASTING <i>(Installed by AA)</i>
8.	1	52-3000	SHAFT <i>(Installed by AA)</i>
9.	1	716296	THRUST WASHER FOR DANA 300 <i>(Installed by AA)</i>
10.	1	300314A	TAPPERED BEARING (Installed by AA)
11.	4	723730	S.H.C.S. 3/8"-16 x 1-1/4"
12.	1	723713	3/8"-16 x 1.25" STUD BOLT
13.	1	723701	3/8"-16 NUT
14.	1	301403	BOLT- 5/16"-18 x 3/4" H.F.C.S. NON SERRATED W/ND
15.	1	300476	YOKE NUT

SPECIAL NOTE:

This kit will not work with the long version tailhousing of the Dana 300. The long style tailhousing measures approximately 4.5", and requires kit # 50-3032A

NOTE: This kit is 1.5" longer than stock.

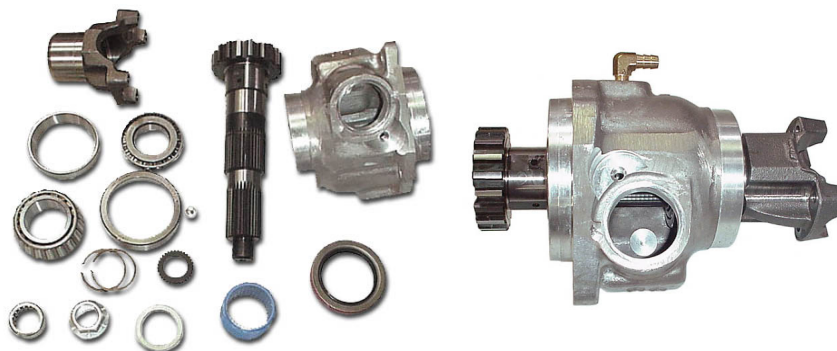
This tailhousing uses a larger Jeep speedometer.

you have a few options:

1. We offer a hole plug that seals the speedometer hole in this casting. P/N 300621

or

2. We offer a Jeep style speedometer housing that can be equipped with a new gear to calibrate your speedometer for tire size and axle ratio. P/N 301506. The speedometer gear options are on the last page.

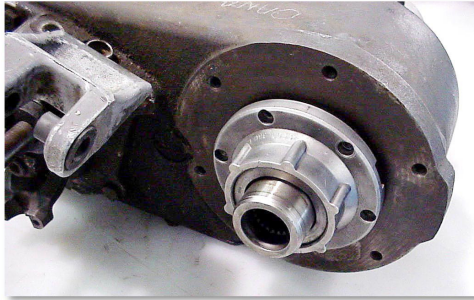


SPECIAL NOTE: The components packaged in this kit have been assembled and machined for specific type of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand modifications or changes that will be required to complete your 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.

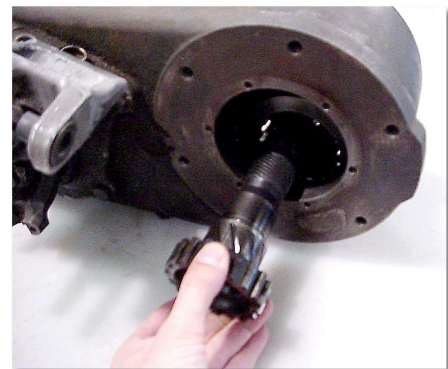
JEEP & SCOUT D300 T/C SHORT TAILHOUSING 32 SPLINE OUTPUT WITHOUT A YOKE

DISASSEMBLY INSTRUCTIONS:

1. Remove the transfer case from your vehicle.
2. Remove the bottom access cover of the Dana 300.
3. Remove the rear yoke.
4. Remove the front index retainer, gear, and input shaft of the Dana 300.



5. Unbolt and remove the tailhousing. With this removed, you should have the output shaft exposed with the tapered bearing still on the output shaft. This bearing is a tough one to remove. The best way to remove it is by using a bearing puller. Once the bearing is removed, the stock output shaft can be taken out through the front of the transfer case.

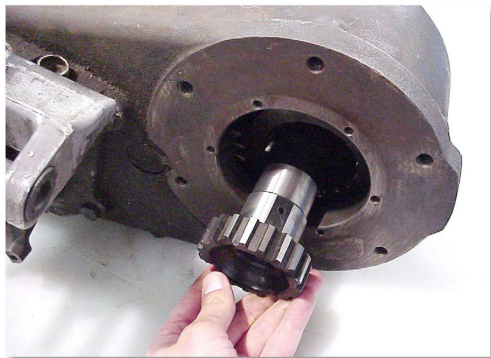


SPECIAL NOTE: The components packaged in this kit have been assembled and machined for specific type of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand modifications or changes that will be required to complete your 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.

JEEP & SCOUT D300 T/C SHORT TAILHOUSING 32 SPLINE OUTPUT WITHOUT A YOKE

ASSEMBLY INSTRUCTIONS:

1. Remove the new shaft from our tailhousing assembly. Be sure to retain the shim race to set the proper



end play. The pocket bearing should be

checked on our new shaft to verify that it has been installed.



2. Install the shaft through the front of the transfer case, through the slider hub, and onto the stock gear. You should make sure you lube the surface between the gear and shaft. Install the modified thrust washer onto the output shaft. This thrust washer is required to obtain proper gear and slider



alignment with the other components in the transfer case.

3. Once the gear, shaft, and thrust washer are in place, install the tapered bearing onto the shaft. This should be a light press fit.



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.

JEEP & SCOUT D300 T/C SHORT TAILHOUSING 32 SPLINE OUTPUT WITHOUT A YOKE

- Once the bearing is in place, install the speedometer snap ring and blue speedometer gear. Install the shim race provided in this kit ONLY. This kit's shim race has been matched for this specific output shaft & tailhousing. The shim has a small internal chamfer which fits up against the shoulder of the shaft. Make sure this is installed properly. A stud bolt must be installed and locktite into the bottom left tailhousing hole of the transfer case. Make sure the bolt does not go too far into the case and interfere with the Dana 300 gear. Let the locktite dry before installing the new tailhousing. As the tailhousing is being installed the 3/8-16 nut must be set into the clearance pocket on our tailhousing and installed onto the stud bolt as the tailhousing is put onto the Dana 300 case. Install the other 4 bolts to secure the tailhousing onto the Dana 300 case.
- A very small amount of RTV blue silicone should be used on the tailhousing mating surface to the Dana 300 case.

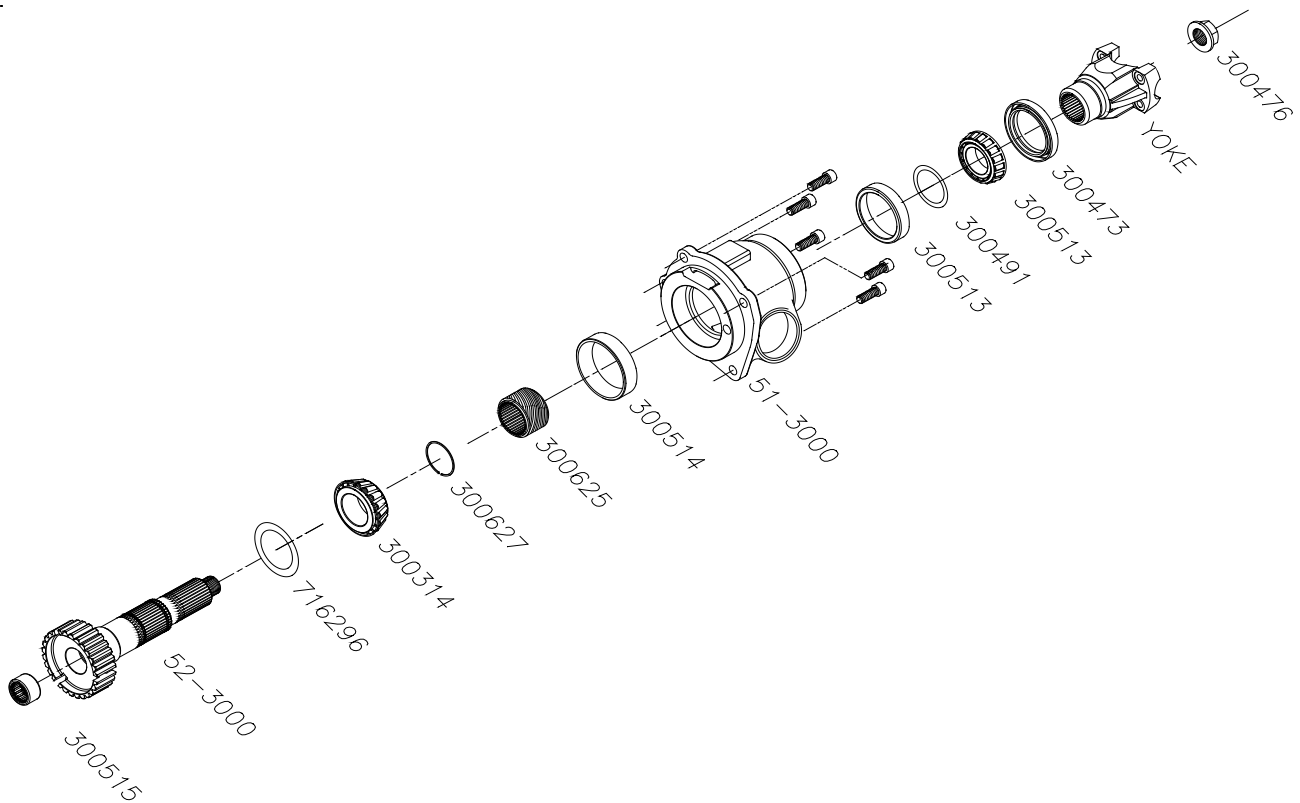


- Reinstall the front retainer assembly onto the Dana 300.
- Install the 1310 non-C.V. yoke, silicone on the yoke splines and nut. Torque to 150 ft./lbs.
- Turn the yoke to make sure the unit is not bound up or is not binding.



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.

JEEP & SCOUT D300 T/C SHORT TAILHOUSING 32 SPLINE OUTPUT WITHOUT A YOKE



Speedometer Calibration: There are two factors that affect your speedometer reading; actual tire diameter and axle gear ratio. The actual tire diameter is usually different than what is printed on the side wall of your tire. For example: A 33 x 11.5 x 15 tire (depending on the brand), may actually measure 32.5" in diameter. Tire sizes vary greatly among the suppliers. Even the same tire from the same manufacturer can vary as much as 7% in diameter.

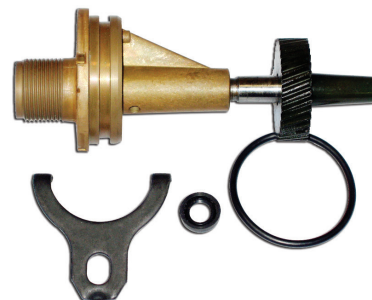
SPECIAL NOTE: The components packaged in this kit have been assembled and machined for specific type of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand modifications or changes that will be required to complete your 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.

JEEP & SCOUT D300 T/C SHORT TAILHOUSING 32 SPLINE OUTPUT WITHOUT A YOKE

TIRE DIAMETER	(Fig. E) AXLE GEAR RATIOS							
	5.38	5.13	4.88	4.56	4.10	3.73	3.55	3.07
44"	33T	32T	30T	28T				
42"	35T	33T	31T	29T				
40"	36T	35T	33T	31T	28T			
39"	37T	36T	34T	32T	28T	26T		
38"	38T	36T	35T	32T	29T	27T		
37"	39T	37T	36T	33T	30T	27T	26T	
36"	40T	39T	37T	34T	31T	28T	27T	
35"	42T	40T	38T	35T	32T	29T	28T	
33"		43T	40T	37T	34T	31T	29T	
32"			41T	39T	35T	32T	30T	26T
31"			43T	40T	36T	33T	31T	27T
30"				41T	37T	34T	32T	28T
29"				43T	38T	35T	33T	29T
28"					40T	36T	34T	30T

Listed below are a few of the part numbers for the Jeep speedometer pinion gears to calibrate your speedometer.

300620-26	SPEEDOMETER GEAR-LONG 26 TOOTH
300620-27	SPEEDOMETER GEAR-LONG 27 TOOTH
300620-28	SPEEDOMETER GEAR-LONG 28 TOOTH
300620-29	SPEEDOMETER GEAR-LONG 29 TOOTH
300620-30	SPEEDOMETER GEAR-LONG 30 TOOTH
300620-31	SPEEDOMETER GEAR-LONG 31 TOOTH
300620-32	SPEEDOMETER GEAR-LONG 32 TOOTH
300620-33	SPEEDOMETER GEAR-LONG 33 TOOTH
300620-34	SPEEDOMETER GEAR-LONG 34 TOOTH
300620-35	SPEEDOMETER GEAR-LONG 35 TOOTH
300620-36	SPEEDOMETER GEAR-LONG 36 TOOTH
300620-37	SPEEDOMETER GEAR-LONG 37 TOOTH
300620-39	SPEEDOMETER GEAR-LONG 39 TOOTH
300620-40	SPEEDOMETER GEAR-LONG 40 TOOTH
300620-41	SPEEDOMETER GEAR-LONG 41 TOOTH
300620-42	SPEEDOMETER GEAR-LONG 42 TOOTH
300620-43	SPEEDOMETER GEAR-LONG 43 TOOTH



This tailhousing offers a speedometer option (sold separately). This tailhousing is designed to fit a stock Jeep (1983-86) mechanical driven speedometer housing. Vehicles requiring a cable connection for the speedometer can order [P/N 301506](#). The speedometer gear is not included with this housing, but by using the charts above you can select the correct gear for your tire size and axle ratio.

If your stock cable does not fit this speedometer housing or if you require additional speedometer connections, then we recommend that you contact Nevada Speedometer at (775)358-7422.

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.