

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

KIT CONSISTS OF:

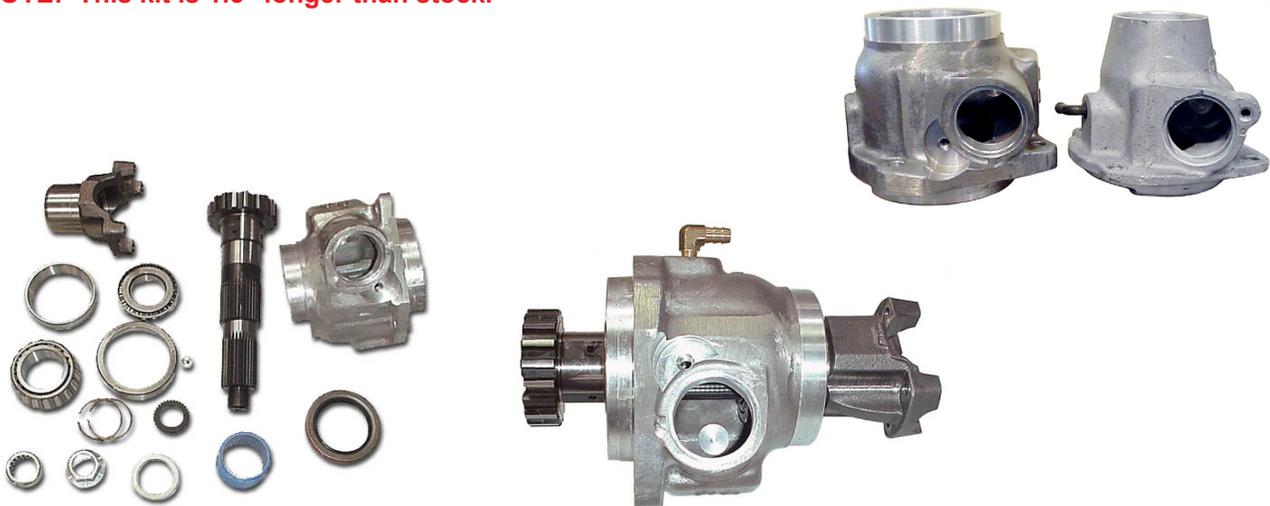
| No. | Qty | Part No. | Description |
|---|-----|----------|---|
| 1. | 1 | 300491 | REAR YOKE END PLAY SHIM (3 sizes) (Installed by AA) |
| 2. | 1 | 300513 | BEARING, REAR OUTPUT FRONT (Installed by AA) |
| 3. | 1 | 300515 | CAGED NEEDLE BEARING (Installed by AA) |
| <i>This needle bearing must be removed when installing this kit into a Scout.</i> | | | |
| 4. | 1 | 300104P | SPEEDOMETER HOLE PLUG |
| 5. | 1 | 300625 | SPEEDO RING GEAR |
| 6. | 1 | 300627 | CIRCLIP, SPEEDO RING GEAR |
| 7. | 1 | 300629 | SPEEDOMETER RETAINING CLIP |
| 8. | 1 | 300630 | O-RING FOR SPEEDOMETER |
| 9. | 1 | 300922 | BREATHER, BRASS ELBOW |
| 10. | 1 | 51-3020 | CASTING (Installed by AA) |
| 11. | 1 | 52-3000 | SHAFT (Installed by AA) |
| 12. | 1 | 716296 | THRUST WASHER FOR DANA 300 (Installed by AA) |
| 13. | 1 | 300314 | TAPPERED BEARING (Installed by AA) |
| 14. | 1 | 300514 | TAPPERED BEARING CUP (Installed by AA) |
| 15. | 4 | 723730 | S.H.C.S. 3/8"-16 x 1-1/4" |
| 16. | 1 | 723713 | 3/8"-16 x 1.25" STUD BOLT |
| 17. | 1 | 723701 | 3/8"-16 NUT |
| 18. | 1 | 301403 | BOLT- 5/16"-18 x 3/4" H.F.C.S. NON SERRATED W/ND |
| 19. | 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 # 50-3032 or 50-3033



NOTE: This kit is 1.5" longer than stock.



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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.



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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.



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- 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.

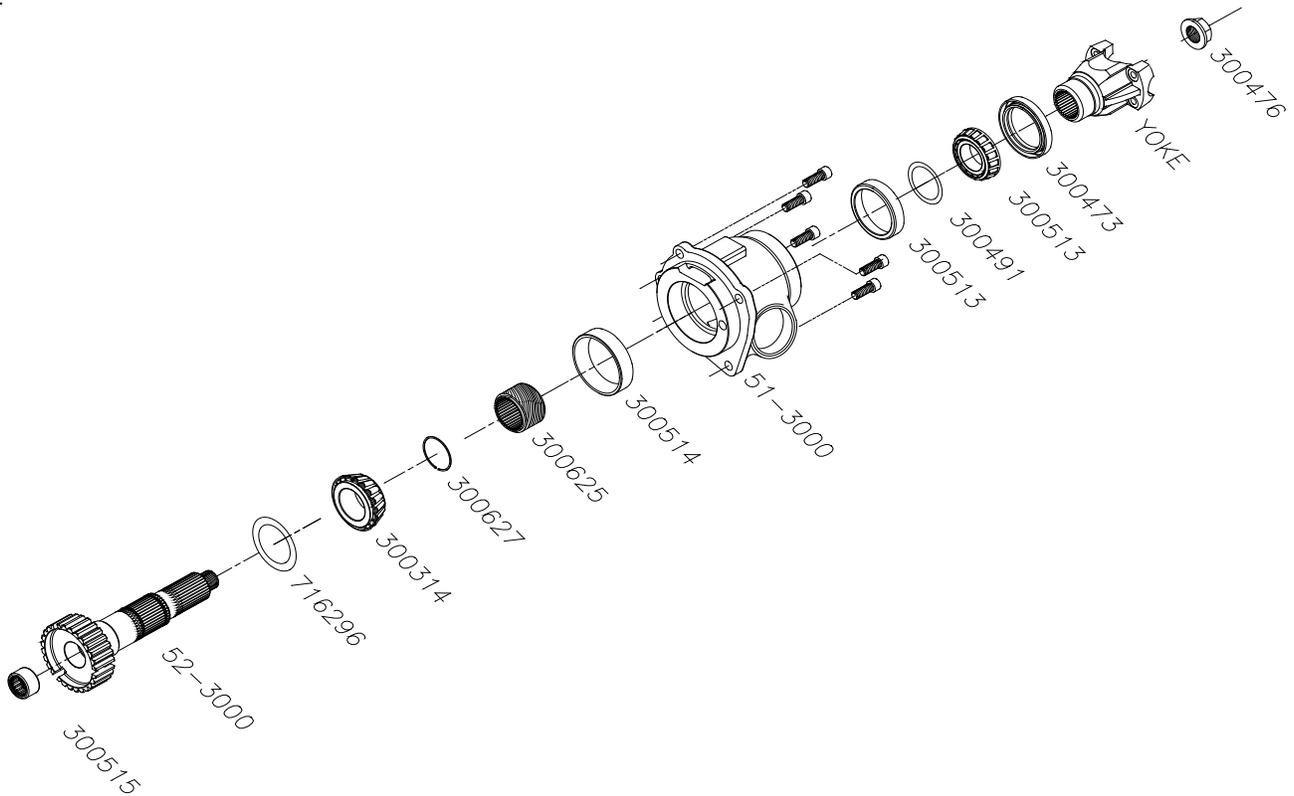


- Reinstall the front retainer assembly onto the Dana 300.
- Install the 1310 non-C.V. yoke, silicone on the yoke splines and nut. Torque to 150 ft./lbs.
- Turn the yoke to make sure the unit is not bound up or is not binding.



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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.

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| 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.

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