

WILD HORSES **FOUR WHEEL DRIVE**

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Extreme Duty Dana 20 Output System **#8272 Date 10/17/05 rev. 0**

Congratulations on your purchase of the Wild Horses Extreme Duty Dana 20 output system. This product was developed to fix the weak link in your Bronco's Dana 20. A lot of time designing, developing and testing have went into this unit. Each system is complete and you should not need any additional parts. This system is a direct bolt into the stock bronco Dana 20 output housing. The assemble unit will be about 3/4" longer than the stock assembly. This will most likely work with your existing driveshaft but in some cases rear driveshaft shortening may be necessary. It is the installers responsibility to determine the suitability of the driveshaft at the time of the install.

Parts list #8272: 1 shaft nut 1 shim pack **tool list:** Foot lb. torque wrench (8272)
1 shaft 1 shaft yoke inch lb. rotating torque wrench (8272)
1 speedo gear 1 bearing kit basic hand tools

Parts list #8277 Complete assembled unit ready to install and gasket

General instructions: It is best to read through the entire instruction sheet to get a grasp of the scope of the project and make sure you are prepared.

Part 1: Removal of old output assembly #8272 and #8277

1. Safety first: Disconnect the battery and block the tires.
2. Clean any dirt, grime, and debris from around the rear output shaft housing. This is a good time to change the t-case oil as well.
3. Remove the rear driveshaft from the rear output yoke. You can tie it out of your way or completely remove it from the Bronco.
4. Remove the speedo cable from the output housing.
5. Remove the 5 bolts that attach the rear output housing to the t-case.
6. Remove the rear output housing. Be careful not to drop the 13 loose roller bearings into the t-case. If you do you will need to get them out of the case. Tilt the yoke down as you are removing the housing. This should keep the loose bearings from falling into the case.
7. Remove the bearings from the bore of the stock shaft. You will need these for your install later.
8. Remove the nut holding the yoke on the shaft.
9. Place the assembly in a press and press the shaft out of the housing.
10. Remove the seal, bearings and races from the housing.
11. **Clean** the housing thoroughly before assembly.

Part 2: Assembly of system into stock housing #8272 (#8277 step 10 only)

1. Install races into housing. Be sure they are seated all the way down.
2. Press the inner bearing onto the new shaft. Be sure they are seated all the way down.
3. Place the shims and then the speedo drive gear onto the shaft. The thicker part of the speedo drive gear will go against the shims.
4. You should use transmission assembly lube on the bearings and races. Then place the shaft into the output housing.
5. Install the outer bearing onto the shaft.
6. Install the output yoke onto the shaft and torque the shaft nut to 125 lbs.

7. Using an inch-pound rotating torque wrench check torque on the assembly. The preload should be 2-7 inch-pounds. Add shims to decrease preload and remove shims to increase preload.
8. Once you have established the correct preload remove the nut and yoke from the assembly.
9. Install the seal in the housing, put assembly lube on the seal. Reinstall the yoke and nut. This time use some loktite on the nut and torque to 150 lbs.
10. Set the assembly on your work surface with the bore of the shaft facing up. Using assembly lube install the 13 loose roller bearing in the bore of the shaft.

Part 3: Installation into Bronco Dana 20 #8272 and #8277

1. Double check and make sure all gasket surfaces are clean. Install new gasket with silicone.
2. Carefully position rear output assembly on Dana 20. Be careful not to drop the loose bearings into the case. Bolt assembly to the Dana 20.
3. Install rear driveshaft to t-case output yoke. Check oil level and fill as necessary.

