

203 TRANSFER CASE CONVERSION

PN:501

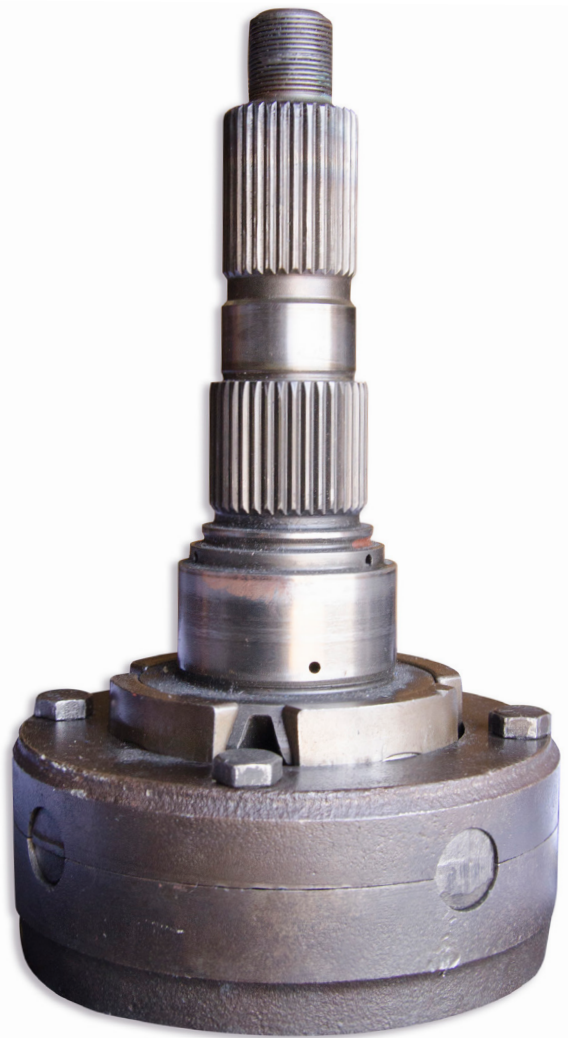


OUR FOUR TRANSFER CASE WEDGES REPLACE THE SPIDER GEARS AND CONNECT THE PLANETARY GEAR AND REAR OUTPUT SHAFT MAKING ONE UNIT. SIMILAR IN DESIGN & FUNCTION TO THE BEST SHAFT TYPE CONVERSION KITS.

MAKE YOUR OWN SHAFT TYPE CONVERSION

Our MILE MARKER KIT is the result of over two years of experimental kits and testing. It has all the advantages of the best shaft type conversion kits, yet it uses all the original parts, with no new yokes necessary. It has none of the disadvantages of the crown type kits by being one unit. No thrust is applied to the bearing. Our bearing serves as a spacer to keep the chain sprocket clear of the planetary ring. No elbow for extra oil. Simple-Easy Installation. Fits all 203 Transfer Cases. Fits All Transfer 203 Cases.

- Increase Gas Mileage Up To 30%
- Improve Tire Life
- Get Better Handling
- Extend Drive Train Life



INSTALLATION INSTRUCTIONS FOR TRANSFER CASE CONVERSION

(NOTE: THERE ARE TWO STYLES OF OUTPUT SHAFTS USED ON THE PN 203,
OUR DIRECTIONS ONLY COVER THE BOLT TOGETHER STYLE)

TOOLS NEEDED:

- 1 5/16 Socket with Breaker Bar
- 9/16 Socket with Extension and Ratchet
- 10" Crescent wrench or Channel Locks
- Rubber Mallet
- Gasket Sealer

DIRECTIONS:

1. Unbolt the rear drive shaft from the transfer case yoke, wrap tape around the U-joint cups and wire the drive shaft up and out of the way of the tail housing.

2. Unscrew the speedometer cable retaining nut, then remove the cable from the side of the tail housing.

3. Remove yoke with 1 5/16 socket and breaker bar. (Figure 1)

4. Unbolt the 8 bolts that retain the tail housing assembly to the Transfer Case. Remove entire tail housing (tap with a rubber mallet to loosen, if necessary). (Figure 2)

CAUTION: Some oil will spill.

Note: On Ford 203 Transfer Cases with optional lock-out light switch in the differential housing, both the switch and the poppet ball plug, spring, etc., must be removed before the housing can be removed from the chain housing.

5. Remove rear output shaft. (Figure 3)

Note: 15 needle bearings will fall out. Catch these in your hand. Save these.

6. Remove planetary gear ring by pulling straight back. (Figure 4)

Figure 1



Figure 2

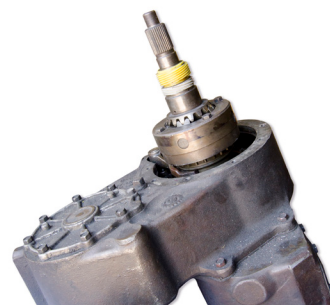


Figure 3



Figure 4



7. On 1973 and early 1974 models, remove the spacer from shaft and replace with later model (74-80) spacer. The correct spacer measurements are 1.74 in O.D., 1.51 in I.D., 0.31 in wide. (Figure 5)

Note: On all models, this spacer must be used; never reassemble without it.

8. Install 3 piece spacer assembly. Dip in clean oil before installing. (Consist of one steel ring + roller bearing + another steel ring or one thick steel ring [install first] + roller bearing + thin steel ring.) (Figure 6)

9. Disassemble planetary gear ring; set aside spider gears, curved washers, needle bearings. Reassemble as in Figure 7 and 8. Torque the 4 bolts holding the assembly together to 35 ft lbs. (Figure 7 and 8)

Note 1: The cross piece (Figure 9) must have the long side facing the rear output shaft when you install the transfer case wedges.

Note 2: The unit will fit together snug. However, if you have excessive wear, it may be necessary to make and install thin shims behind the wedges.

10. Install needle bearings (15) in rear output shaft. Install unit on main output shaft. (Figure 10)

Note: Leave all stock shims on shaft behind speedometer gear.

To ensure adequate lubrication to all non-moving parts, it is recommended the shifting lock lever be engaged for a few miles, once a week!



Figure 5



Figure 6



Figure 7



Figure 8

OPERATIONS:

11. Clean transfer case and install new gasket (gasket sealer will hold it in place).

12. Install tail housing and tighten all 8 bolts. (Figure 1)

13. Check end play (move rear output shaft in and out). You need .010 to approximately .050. No end play - too much? Remove 6 bolts that hold rear section of tail housing; now remove or add shims from behind speedometer gear as needed and reassemble.

Note : If the transfer case is on a bench, and not installed on a vehicle, the carrier may have dropped. Reach into the case and spin the spider gear while lifting up on it. Feel for the alignment pin to click into place.

14. Replace yoke and tighten to 120 ft lbs.

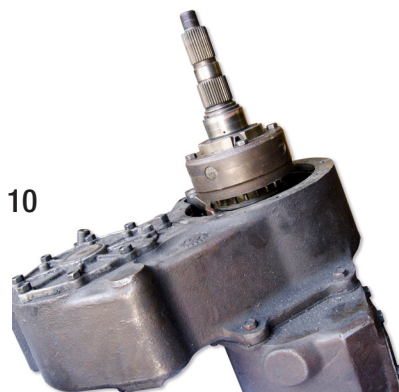
15. Install drive shaft and speedometer cable.

16. Refill transfer case oil to proper level.

Figure 9



Figure 10



WARRANTY INFORMATION:

Mile Marker/Selectro hubs, and Conversion Kits limited warranty

Mile Marker Industries warrants directly to the first purchaser that all Mile Marker Conversion Kits will be free from defect in material and workmanship appearing under normal use and service for a period of one year. Please register your warranty on our website at www.milemarker.com at the time of purchase or within 30 days by the end user. If you discover a hidden defect, Mile Marker will, as its option, repair or replace the product or necessary replacement parts at no charge to you, provided you remove the product from the vehicle and return it prepaid to Mile Marker Industries. If the product was purchased in the United States, the owner must contact our warranty department to get a Return Goods Authorization (RGA) Number before returning the product. If the product was purchased outside the United States, the owner must return the product to the original place of purchase.