



FORD E40D OVERDRIVE ROLLER CLUTCH REPLACES THE PREVIOUS OVERDRIVE SPRAG ASSEMBLY

Beginning on August 11, 1994, ALL 1995 model E40D transmissions were produced with a new design “Overdrive Roller Clutch”, instead of the previous “Overdrive Sprag Assembly”. The previous design overdrive sprag is *NO LONGER AVAILABLE*. The previous part number will now supercede to part number F5TZ-7A089-A, which is a complete “Overdrive Roller Clutch Kit”, that will retro-fit back on ALL previous models (See Figure 1).

However, ATSG recommends that the “Overdrive Roller Clutch Kit” be installed on previous models, *ONLY IF YOU HAVE ALSO INSTALLED THE BALL BEARING CENTER SUPPORT KIT*, available under OEM part number F4TZ-7A 130-B. Refer to ATSG bulletin No. 95-05 for the ball bearing center support information and dimensions.

Use the following procedure to install the new design “Overdrive Roller Clutch Kit”, as it does not include any installation instructions in the kit.

- (1) Place the new inner cam on a flat work surface with the “Undercut” on the inside diameter facing UP, as shown in Figure 2.
- (2) Install the overdrive roller clutch assembly over the inner cam, with the 9 locking tabs on the inner diameter facing down, and the three upper locking tabs on the inner diameter facing up, as shown in Figure 2.
- (3) Push the overdrive roller clutch assembly all the way down, as shown in Figure 3.
- (4) Install the snap ring into the groove in the outer race, as shown in Figure 4.
- (5) Install the outer race assembly over the overdrive roller clutch, by holding the inner cam and rotating the outer race in a clockwise direction, until fully seated as shown in Figure 5.

NOTE:

WITH THE OUTER RACE SNAP RING FACING UP, AND THE INNER CAM “UNDERCUT” FACING UP, THE INNER CAM SHOULD FREEWHEEL IN A COUNTER-CLOCKWISE DIRECTION AND LOCK CLOCKWISE, WHILE HOLDING THE OUTER RACE. REFER TO FIGURE 5.

- (6) Install the completed Overdrive Roller Clutch Assembly into the overdrive ring gear, with the snap ring and the inner cam undercut, *facing up*, and install the outer race to ring gear snap ring, as shown in Figure 6.

**OVERDRIVE ROLLER CLUTCH ASSEMBLY
PART NUMBER E5TZ-7A089-A**

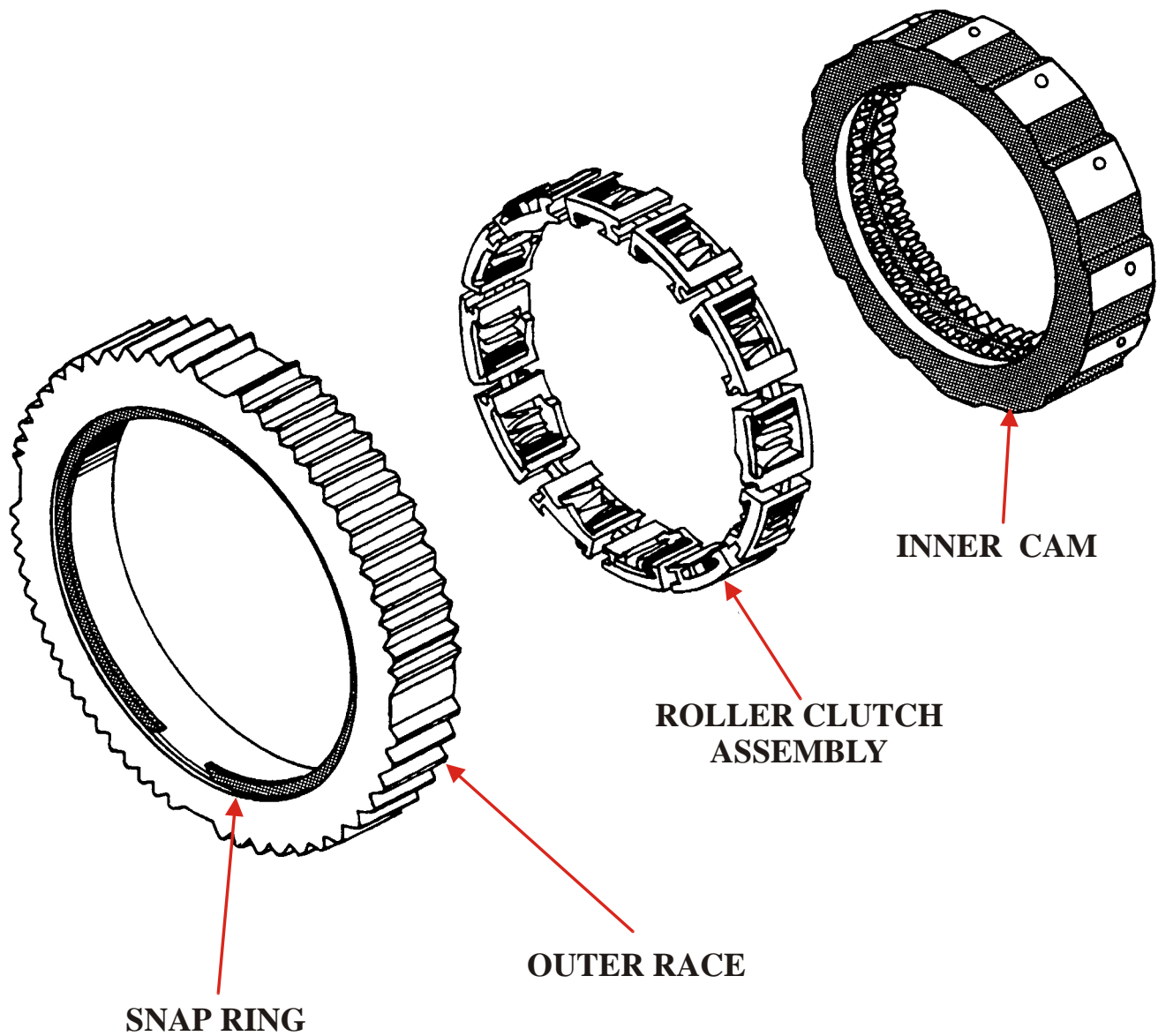


Figure 1

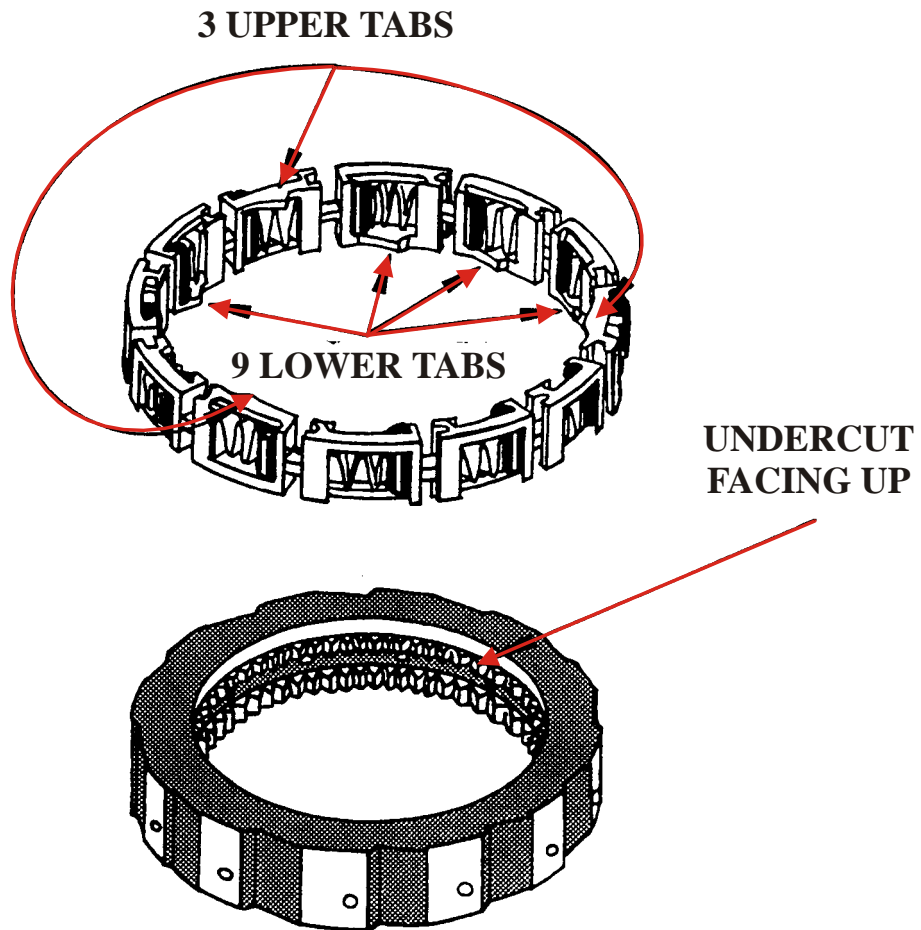


Figure 2

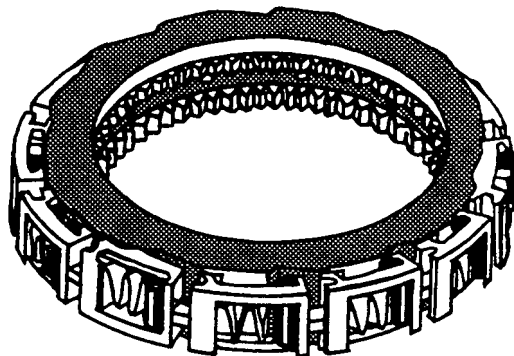
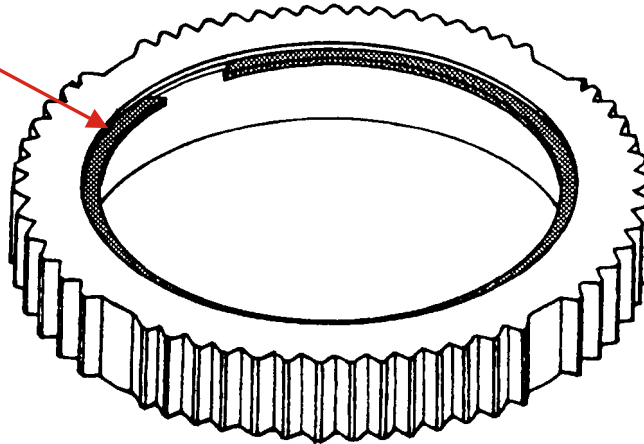


Figure 3

**SNAP RING
FACING UP**



**UNDER CUT
FACING UP**

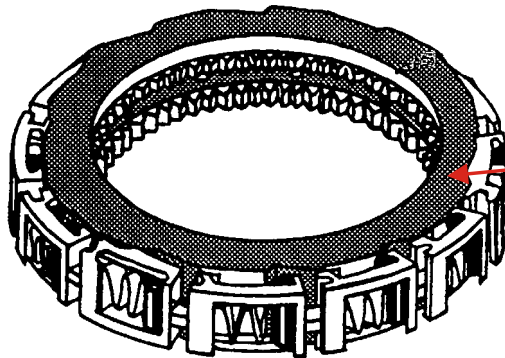
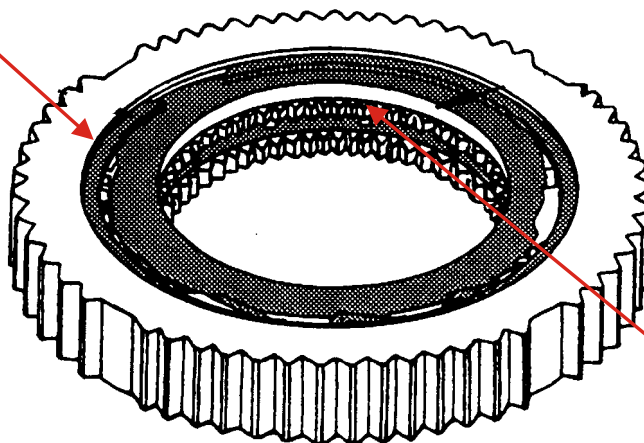


Figure 4

**SNAP RING
FACING UP**



**UNDER CUT
FACING UP**

Figure 5

INNER RACE MUST FREEWHEEL COUNTER CLOCKWISE

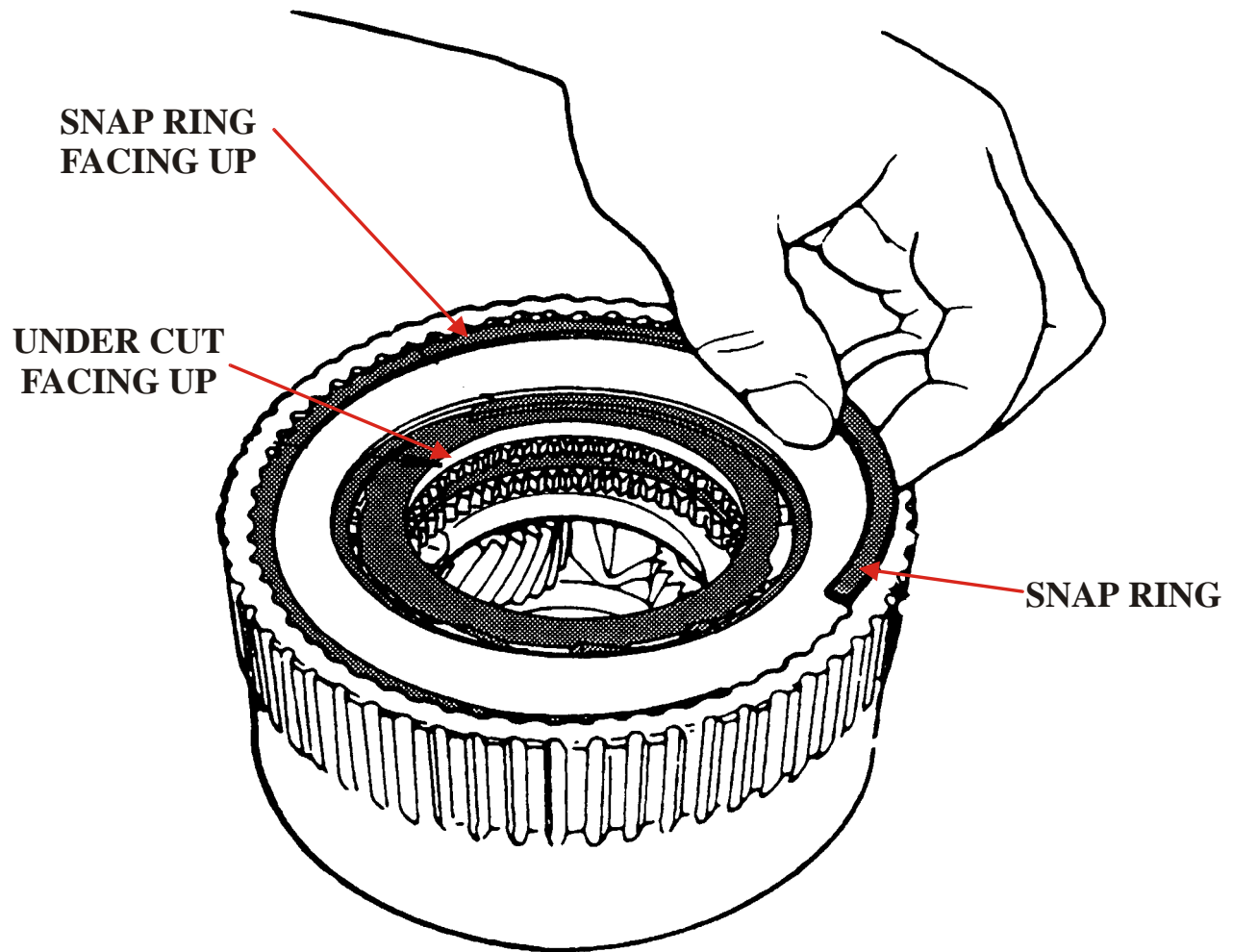


Figure 6