



# Technical Service Information

## **FORD 5R110W *Torqshift***

### **FORWARD CLUTCH CHANGES FOR 2005**

**CHANGE:** Beginning at the start of production for 2005 models, Ford Motor Company increased the diameter and height of the forward planetary carrier, which affected many of the related internal parts. These changes were for the 6.0L Diesel equipped vehicles.

**REASON:** Greatly improved durability.

**PARTS AFFECTED:**

- (1) FORWARD PLANETARY CARRIER - Increased diameter, of approximately 1/4", to the planetary carrier, as shown in Figure 1. Notice also that the pinion pin diameter has increased and the pinion gears are taller than previous models, as shown in Figure 1.
- (2) FORWARD PLANETARY CARRIER LUBE DAM - Also increased in diameter to accommodate the new design carrier, as shown in Figure 1. Notice also that the new lube dam has only four retaining tabs instead of six.
- (3) NUMBER 11 THRUST BEARING - The outside diameter decreased to accommodate the new design planetary carrier, as shown in Figure 1.
- (4) FORWARD PLANETARY RING GEAR - Increased diameter, of approximately 1/4", to the ring gear, as shown in Figure 1, to accommodate the new design planetary carrier. The tooth count on the ring gear for the forward clutch frictions also changed.
- (5) NUMBER 10 THRUST WASHER - Increased in diameter and the tab configuration changed, as shown in Figure 1.
- (6) FORWARD CLUTCH STEEL PLATES - The inside diameter and the pilot diameter increased to accommodate the increased diameter of the planetary carrier, as shown in Figure 2. The outside tooth count did not change.
- (7) FORWARD CLUTCH FRICTION PLATES - The inside and outside diameters increased to accommodate the new design planetary carrier, and as a result the tooth count also changed, as shown in Figure 3.
- (8) FORWARD CLUTCH BACKING PLATE - The inside diameter and pilot diameter increased to accommodate the increased diameter of the planetary carrier, as shown in Figure 4. The outside tooth configuration did not change.
- (9) FORWARD CLUTCH HOUSING - The only thing that changed on the forward clutch housing was the diameter of the lube holes in the hub for the direct clutch plates, as shown in Figure 5.
- (10) SUN GEAR AND SHELL ASSEMBLY - The diameter and tooth count of the sun gear for the forward planetary side has increased, as shown in Figure 6. Also from the back side the snap retaining snap ring is no longer visible on the 2005 design, as shown in Figure 6.

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**INTERCHANGEABILITY:**

None of the parts listed above will interchange with any of the previous design parts, but when all parts are used as s service package, will retro-fit back on all previous models.

***Special Considerations:***

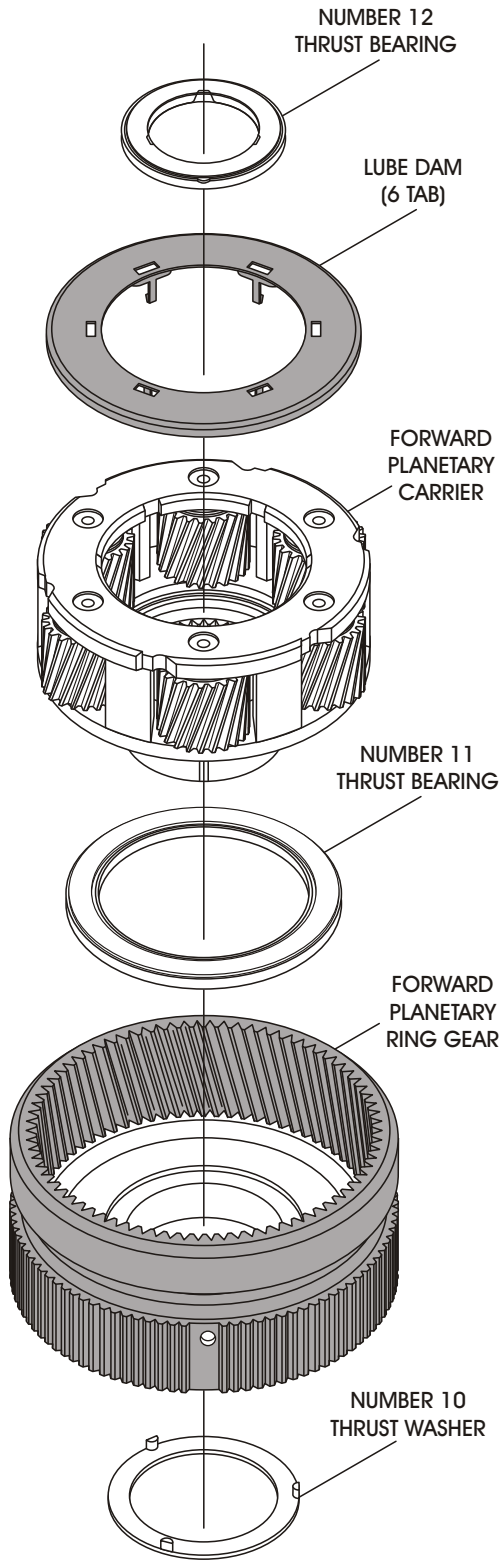
These changes will now allow you to assemble 2003/2004 models with 2005 model forward friction plates. If you do, ***No Forward*** will be the result.

**SERVICE INFORMATION:**

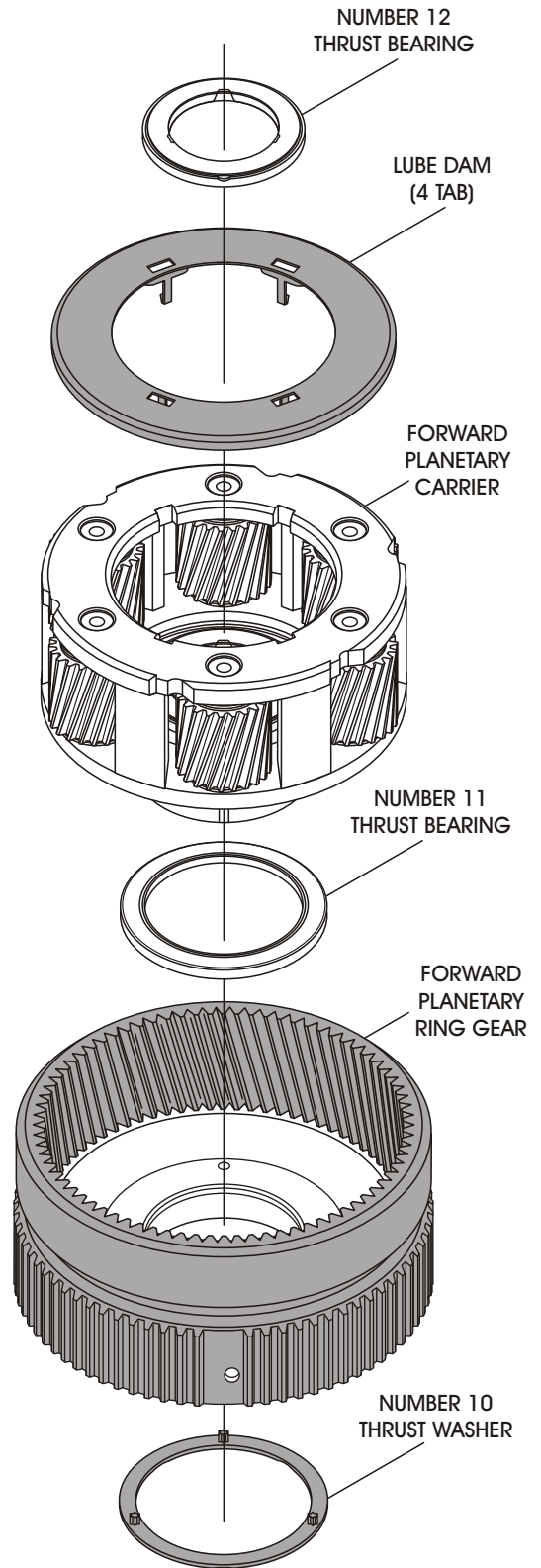
Forward Clutch Service Package ..... KT5C3Z-7A398-SA  
(Includes all parts listed above, plus 2005 Design rear planetary)

## FORWARD PLANETARY CARRIER DIFFERENCES

### 2003/2004 Models



### 2005/UP Models



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Figure 1

## FORWARD CLUTCH STEEL PLATES

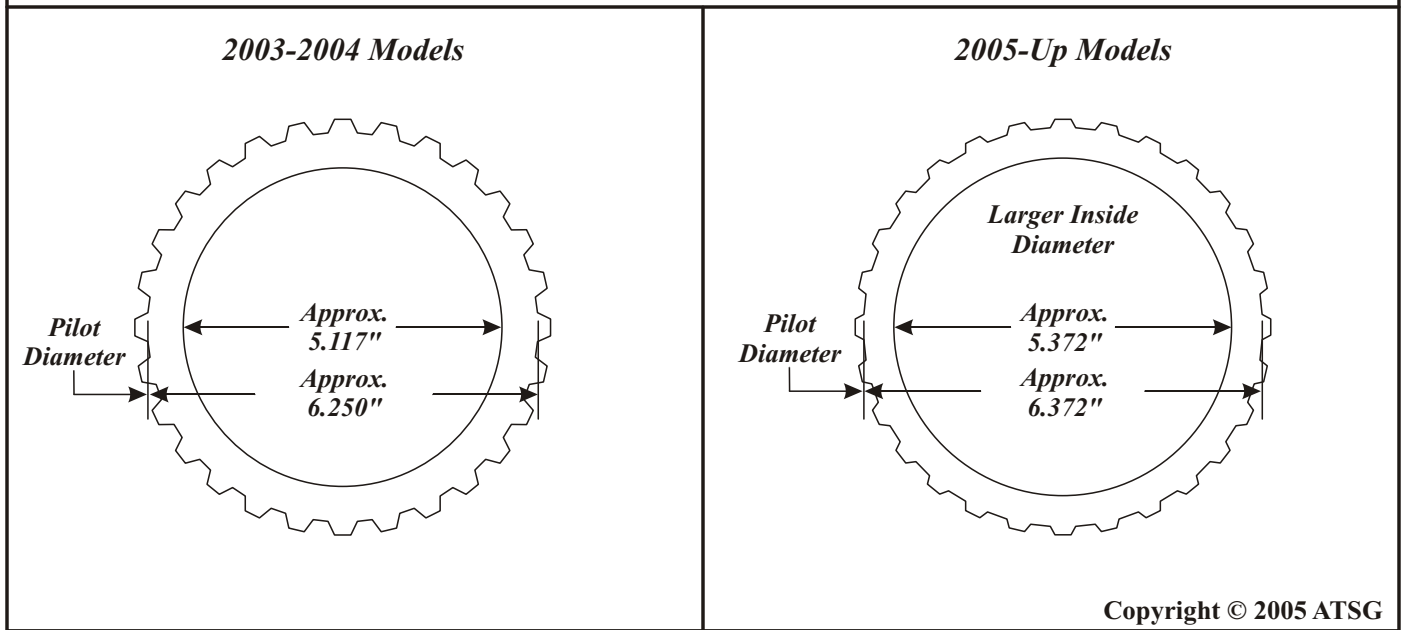


Figure 2

## FORWARD CLUTCH FRICTION PLATES

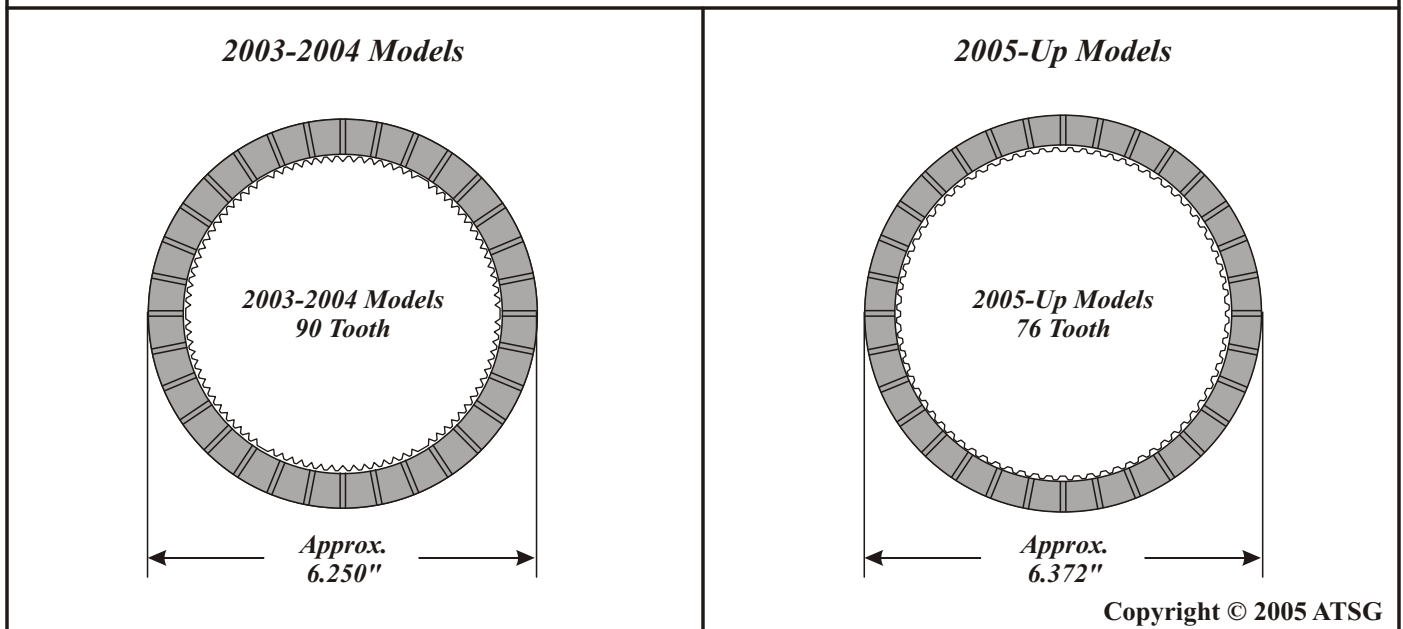


Figure 3

## FORWARD CLUTCH BACKING PLATE

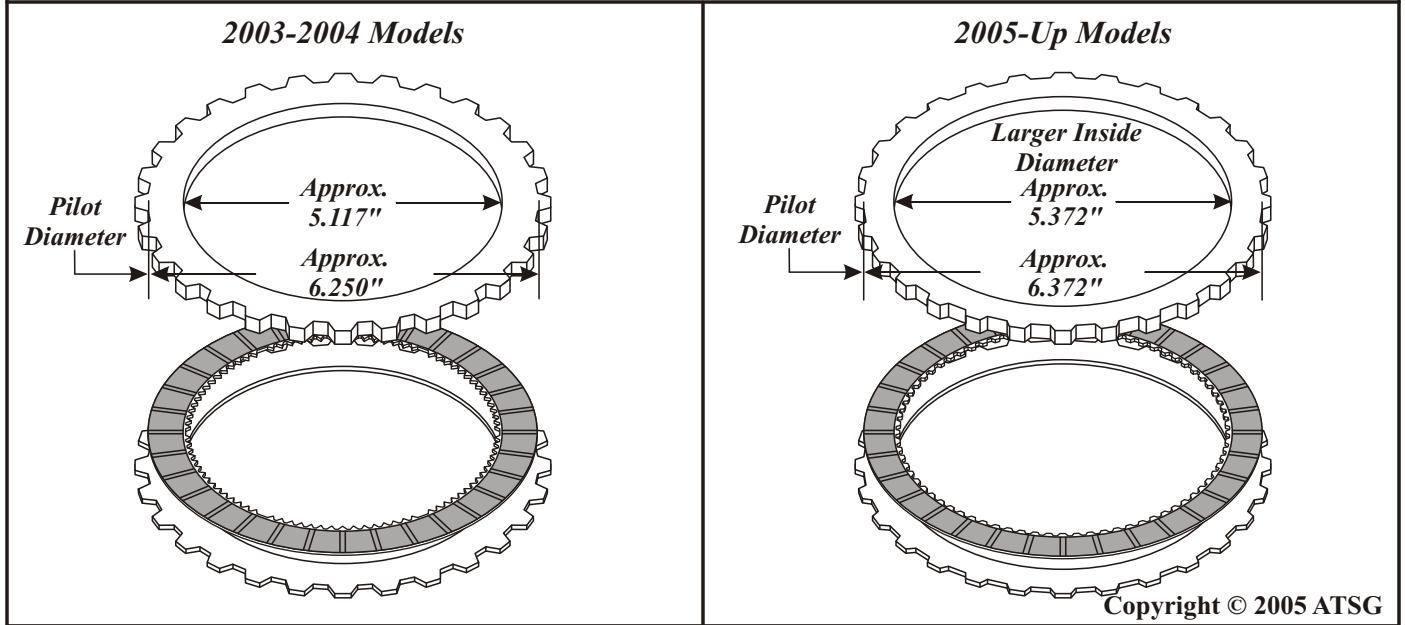


Figure 4

## FORWARD CLUTCH HOUSING

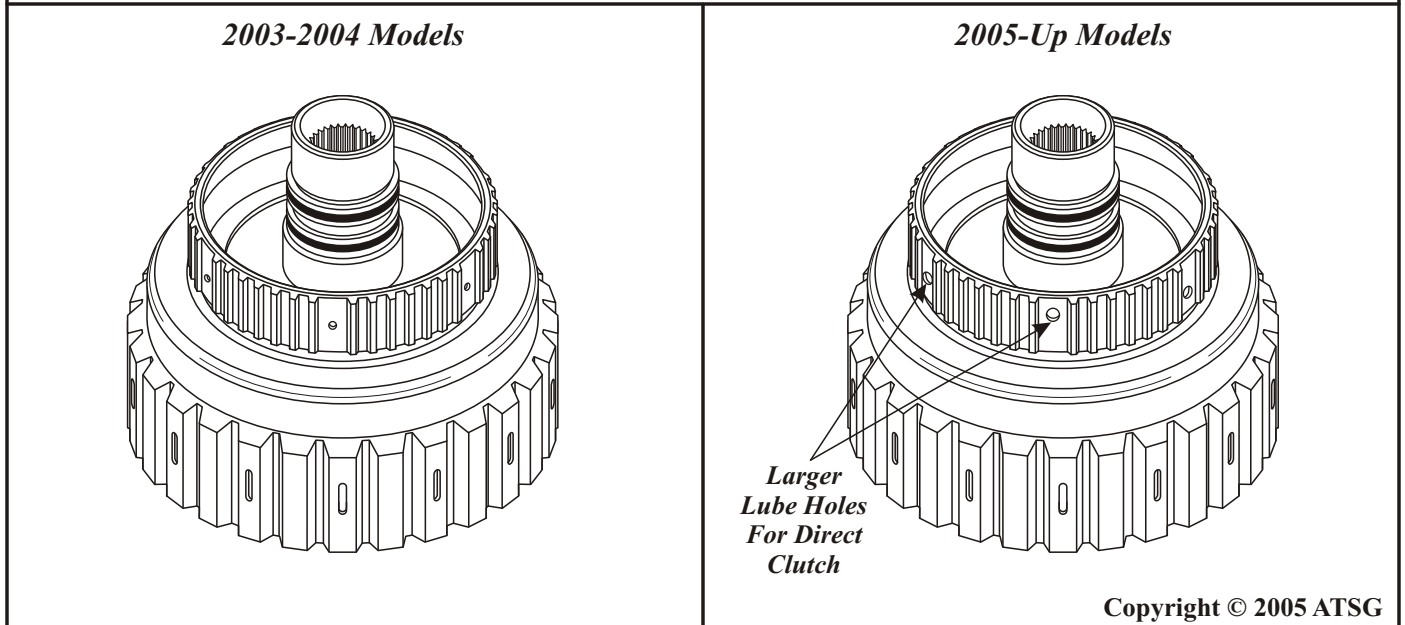
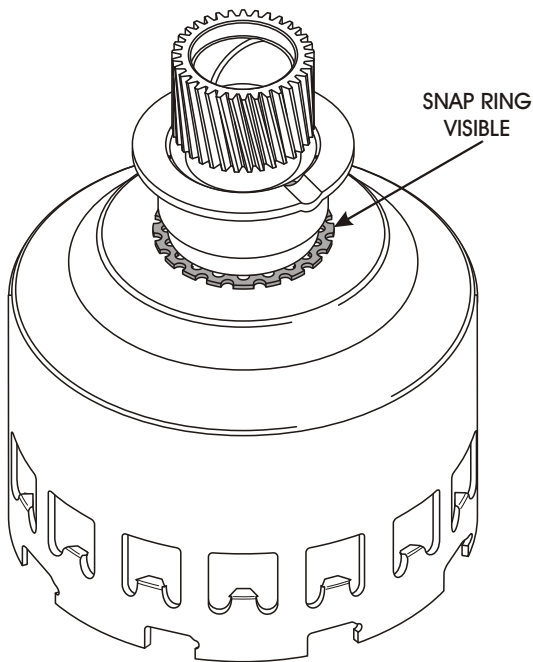
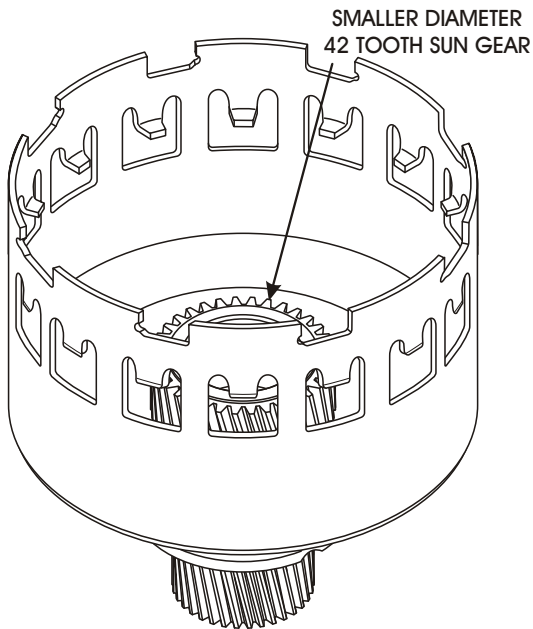


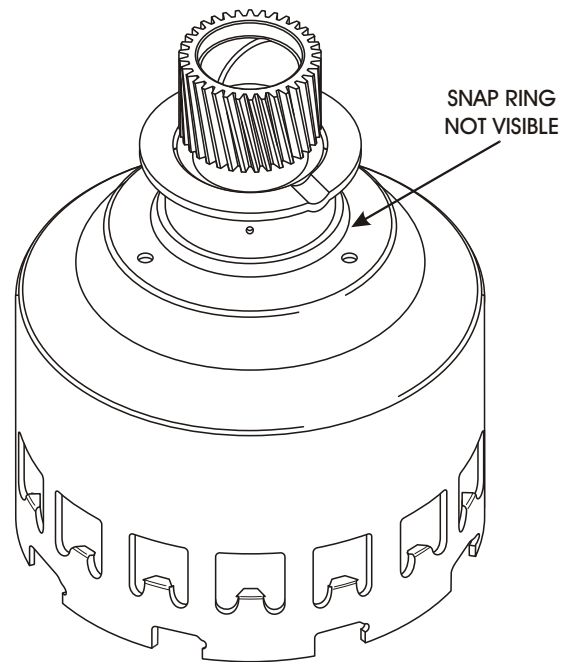
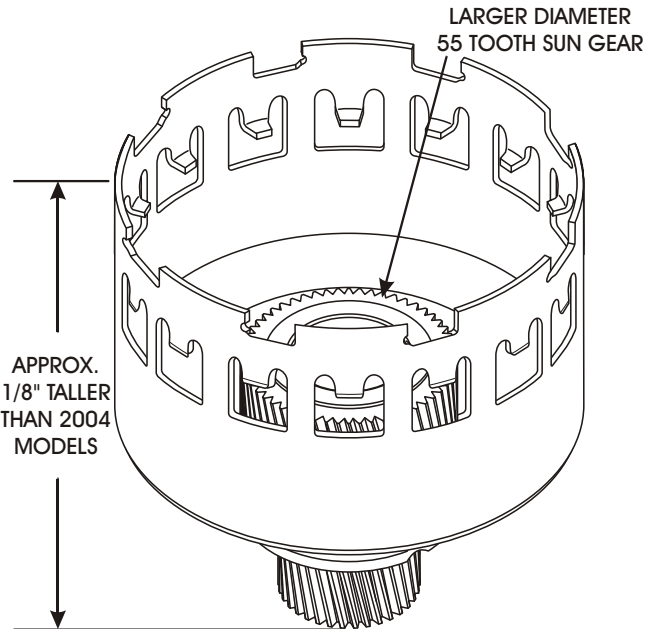
Figure 5

## SUN SHELL DIFFERENCES

### 2003/2004 Models



### 2005/UP Models



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Figure 6