



# Technical Service Information

## FORD 4R100 INTERMEDIATE "DIODE" FREEWHEEL FAILURE

**COMPLAINT:** Some Ford Motor Company vehicles equipped with the 4R100 transmission may exhibit premature failure of the newly introduced Intermediate "Diode" Freewheel device that was installed in model year 2001 and illustrated in Figure 1.

**CAUSE:** The cause may be, more than expected load factors.

**CORRECTION:** The Intermediate "Diode" is ***no longer serviced*** by Ford Motor Company. The part number now supercedes to all of the previous design level parts, which include the direct clutch housing, intermediate sprag assembly, outer race to direct drum thrust washer, and the intermediate friction plates. All of the previous design level parts are illustrated in Figure 2, along with the OEM part numbers. The intermediate frictions must be replaced because the tooth count on the outer race between the diode and the sprag are different.

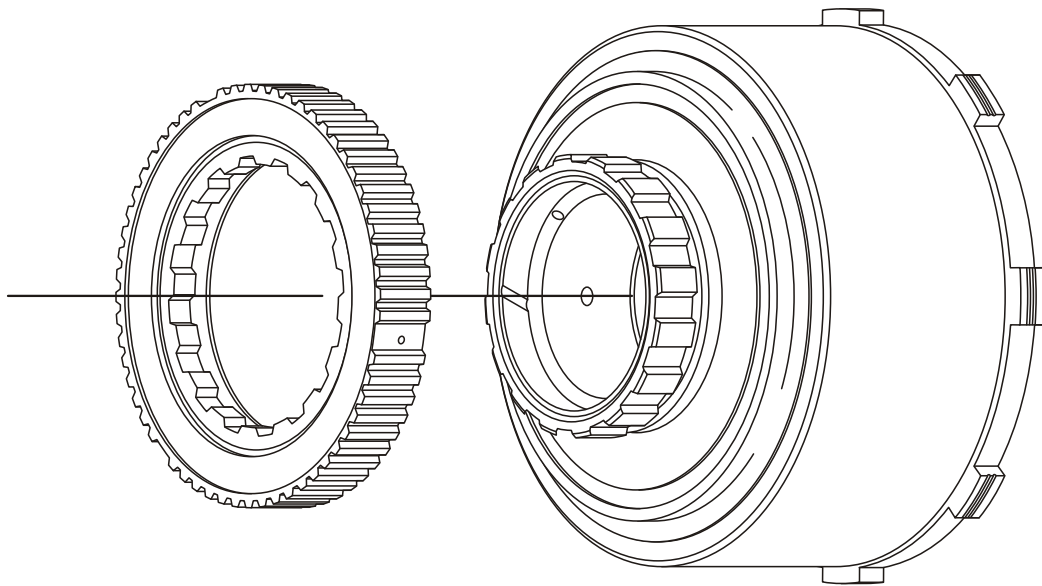
***Special Note: ATSG recommends replacing the Intermediate "Diode" during service, even if it has not yet failed, to protect yourself from possible future failures.***

### SERVICE INFORMATION:

Direct Clutch Housing, 2nd Design (Without 4 Tab Washer) .....	YC3Z-7D044-BA
Direct Clutch Housing, 1st Design (With 4 Tab Washer) .....	F81Z-7D044-BA
Sun Shell, Hardened, 2nd Design .....	YC3Z-7D064-BA
Sun Shell, Regular, 2nd Design .....	YC3Z-7D064-BA
Direct to Forward Drum 4 Tab Thrust Washer .....	E9TZ-7C096-A
Direct Drum to Outer Sprag Race Thrust Washer .....	E9TZ-7G401-A
Intermediate Sprag Assembly .....	E9TZ-7A089-B
Intermediate Friction Plates (Special 50 Tooth, 3 Required) .....	1C3Z-7B164-BA

## 4R100 INTERMEDIATE "DIODE"

*No Longer Available For Service*



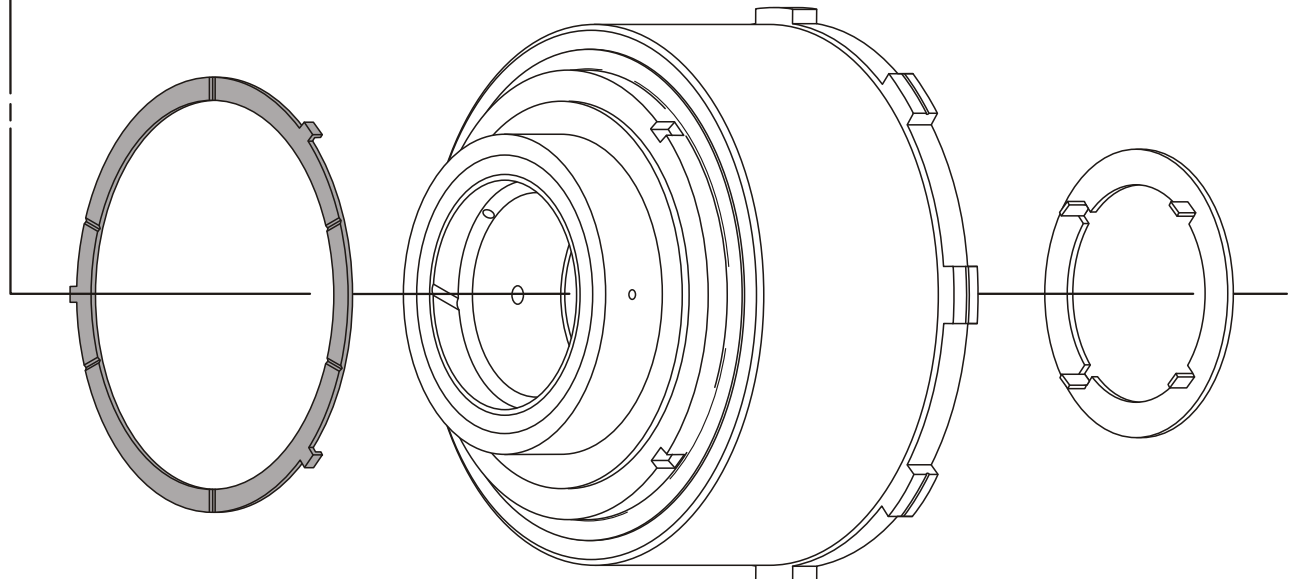
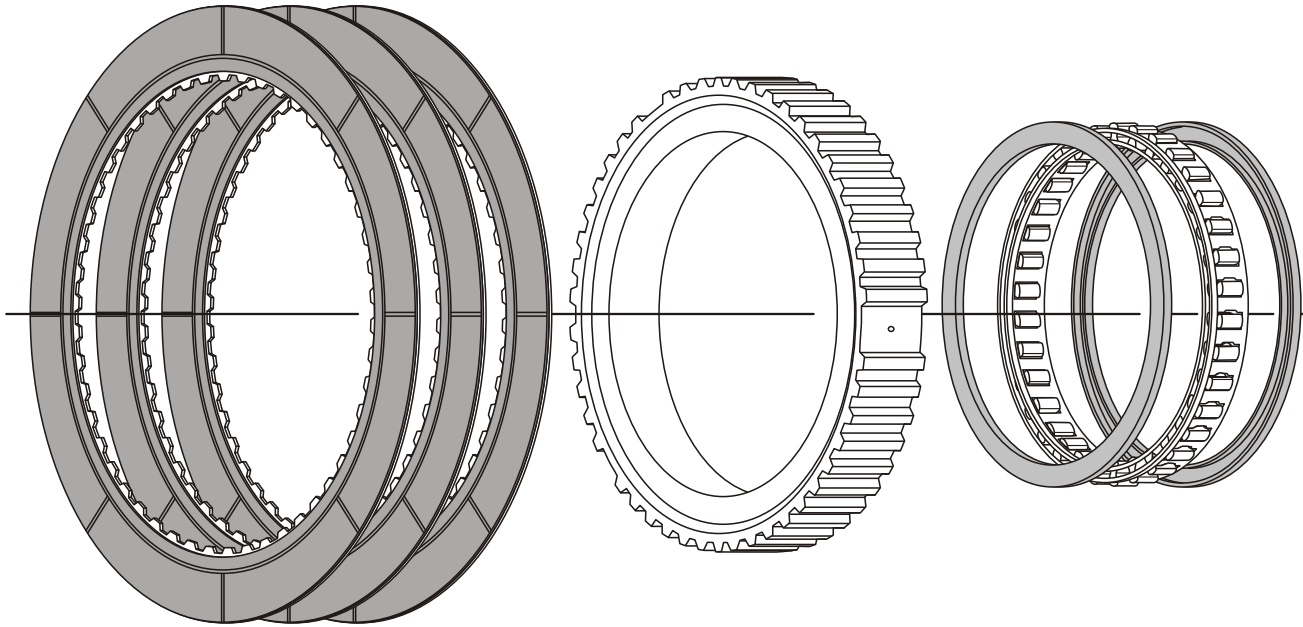
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Figure 1

## PARTS NEEDED TO REPLACE INTERMEDIATE DIODE

*Intermediate Friction Plates*  
Part Number 1C3Z-7B164-BA  
(3 Required)

*Intermediate Sprag Assembly*  
Part Number E9TZ-7A089-B



*Outer Race To Drum Thrust Washer*  
Part Number E9TZ-7G401-A

*Direct Clutch Housing*  
Part No. YC3Z-7D044-BA (No Washer)  
Part No. F81Z-7D044-BA (With Washer)

*4 Tab Thrust Washer*  
Part Number E9TZ-7C096-A

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**Figure 2**