

Bulletin No.: 00-07-30-022C

Date: December 10, 2004

## TECHNICAL

### Subject:

No Reverse, Second Gear or Fourth Gear (Replace Reaction Sun Shell with More Robust Heat Treated Parts)

### Models:

1993-2005 Cars and Light Duty Trucks

with 4L60/65-E Automatic Transmission (RPOs M30 or M32)

### Supersede:

This bulletin is being revised to correct two part numbers referenced in the vehicle groups and add text after the Parts Information table. Please discard Corporate Bulletin Number 00-07-30-022B (Section 07 - Transmission/Transaxle).

### Condition

Some customers may comment on a no reverse, no second or no fourth gear condition. First and third gears will operate properly.

### Cause

The reaction sun gear (673) may not hold inside the reaction sun shell (670).

### Correction

Important: There are FOUR distinct groups of vehicles and repair procedures involved.

^ Vehicles built in the 2001 model year and prior that make use of a reaction shaft to shell thrust washer:

^ The sun shell can be identified by four square holes used to retain the thrust washer. Use reaction sun shell P/N 24228345 reaction carrier to shell thrust washer (699B) P/N 8642202 and reaction sun gear shell thrust washer (674) P/N 8642331 along with the appropriate seals and washers listed below.

^ Vehicles built in the 2001 model year and prior that have had previous service to the reaction sun shell:

^ It is possible that some 2001 and prior model year vehicles have had previous service to the reaction sun shell. At the time of service, these vehicles may have been updated with a Reaction Sun Shell Kit (Refer to Service Bulletin 02-07-30-003) without four square holes to retain the thrust washer. If it is found in a 2001 model year and prior vehicles that the reaction sun shell DOES NOT have four square holes to retain the thrust washer, these vehicles must be serviced with P/Ns 24229825 (674), 24217328 and 8642331 along with the appropriate seals and washers listed

below.

^ Vehicles built in the 2001 model year and later that make use of a reaction shaft to shell thrust bearing:

^ The sun shell can be identified by no holes to retain the thrust washer. Use reaction sun shell, P/N 24229825, reaction carrier shaft to shell thrust bearing (669A), P/N 24217328 and reaction sun gear shell thrust washer (674), P/N 8642331 along with the appropriate seals and washers listed below.

^ Vehicles built from November, 2001 through June, 2002:

^ These vehicles should have the reaction carrier shaft replaced when the sun shell is replaced. Use shell kit P/N 24229853, which contains a sun shell (670), a reaction carrier shaft (666), a reaction carrier shaft to shell thrust bearing (669A) and a reaction sun gear shell thrust washer (674). The appropriate seals and washers listed below should also be used.

^ When servicing the transmission as a result of this condition the transmission oil cooler and lines MUST be flushed. Refer to Corporate Bulletin Number 02-07-30-052.

Follow the service procedure below for diagnosis and correction of the no reverse, no second, no forth condition.

Important: If metallic debris is found on the transmission magnet, the transmission must be completely disassembled and cleaned. Metallic debris is defined as broken parts and pieces of internal transmission components. This should not be confused with typical "normal" fine particles found on all transmission magnets. Failure to properly clean the transmission case and internal components may lead to additional repeat repairs.

1. Remove the transmission oil pan and inspect the magnet in the bottom of the pan for metal debris.
2. Remove the transmission from the vehicle. Refer to the appropriate SI document.

Important: ^ Inspect all the transmission components for damage or wear. Replace all damaged or worn components. The parts list below should be sufficient to correct this concern.

^ This condition does not normally require replacement of the transmission completely. Components such as clutches, valve body, pump and torque converters will NOT require replacement to correct this condition.

1. Disassemble the transmission and replace the appropriate parts listed below.

Refer to the Unit Repair Manual - Repair Instructions.

2. Reinstall the transmission in the vehicle. Refer to appropriate service information.

When servicing the transmission as a result of this condition the transmission oil cooler and lines MUST be flushed. Refer to Corporate Bulletin Number 02-07-30-052.