

# 1984 - 1985 Corvette: Service Bulletin: Noise in Direct Drive 4-Speed Manual Transmission

**Subject:** Noise in Direct Drive 4-Speed Manual Transmission

**Model and Year:** 1984 - 1985 Corvette

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TO: ALL CHEVROLET DEALERS

Some 1984 - 1985 Corvettes equipped with the 4-speed manual transmission with automatic overdrive may experience a noise in all gears (1st, 2nd, 3rd, and 4th) during direct drive operations (overdrive disengaged).

This condition may be caused by a worn annular bearing on the planetary gear carrier (see illustration). Continued operation of a noisy transmission in the direct drive model will cause damage to the planetary carrier, adapter plate, input sun gear, and input sun gear oil seal. If the input sun gear oil seal is damaged, it is possible for overdrive unit oil (Dexron II) to leak into the manual portion of the transmission.

On transmissions beginning with serial number D5C 14413 CF, a new planetary gear carrier has been released. This carrier (P/N 14094571) incorporates an annular bearing with increased thrust capacity.

Complaint vehicles will have transmissions built prior to serial number D5C

14413 CF. These transmissions are to be repaired by disassembling the overdrive unit according to the appropriate section in the Vehicle Services Manual to enable the following to be carried out:

1. Inspect the adapter plate surface, input sun gear, and input sun gear oil seal for damage. If there is indication of damage, the adapter plate, input sun gear, and input sun gear oil seal should be replaced. If there is no sign of damage, these parts may be reused.
2. If debris is present in the overdrive unit, completely disassemble and clean the unit, including the valve body. Thoroughly flush the cooler lines to remove any debris following the procedure outlined in the Vehicle Service Manual. Replace the oil filter.
3. If there is evidence of oil intrusion from the automatic overdrive unit into the 4-speed manual unit, the manual unit should be drained and flushed also.
4. Replace the planetary gear carrier with the new, P/N 14094571, carrier.

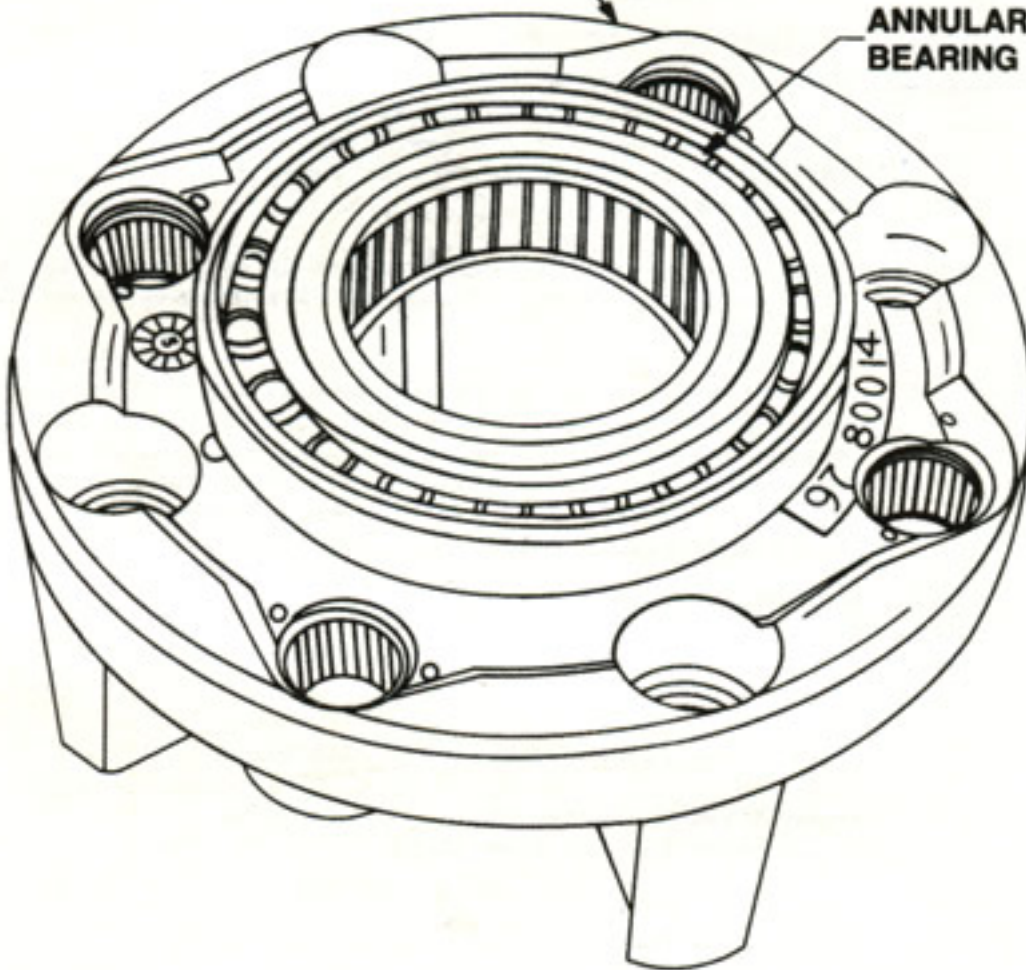
**NOTICE:** When an overdrive unit from a transmission built prior to serial number D5C 14413 CF is disassembled for any reason, it is recommended that a new, P/N 14094571, planetary gear carrier be installed to prevent potential future annular bearing failures.

The overdrive unit's serial number is on a metal tag attached to the oil pan by one of the pan retaining bolts on the front pan rail.

In addition, if the overdrive unit is from a transmission built prior to serial number D4L 10837CD, it is recommended that a new direct clutch thrust washer be installed to prevent potential future washer hang-up occurring. Replacement procedure for the direct clutch thrust washer is detailed in Chevrolet Service Bulletin #85-68.

**PLANETARY GEAR CARRIER**

**ANNULAR BEARING**



**Figure 1**

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