

# 1957 - 1958 Corvette: Service News: Corvette 4-Speed Transmission - Harsh Shift Into Third Speed

**Source:** Chevrolet Service News

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**Subject:** Corvette 4-Speed Transmission - Harsh Shift Into Third Speed

Some 1957 and 1958 Corvette four-speed transmissions have been built incorporating a third speed gear with  $7^{\circ}$  cone angle rather than the specified  $6^{\circ}$ , as illustrated in Figure 3. This may cause a harsh shift into third speed due to the resultant improper engagement of the synchronizer blocking ring and third speed gear cone.

The suggested correction, if the harsh shift is encountered, is to replace the third speed gear assembly No. 3743452 and the synchronizer blocking ring No. 3709348.

The following outlines an angle checking procedure for field usage.

1. Coat I.D. of blocking ring lightly with a dye such as Prussian Blue.
2. Carefully install the blocking ring on the third gear cone to obtain an engagement impression.
3. If the Prussian Blue impression on the cone is all at the rear (or predominantly at the rear) the cone angle can be assumed to be  $7^{\circ}$  and should not be used. If the Prussian Blue is

more or less evenly distributed on the cone surface, the angle is correct.

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