

# 1964 Corvette: Engineering Service Letter: Muncie Four Speed Transmission Design Change

The following letter below is an internal Chevrolet Engineering Center letter that was meant for Zora Arkus-Duntov's desk. This letter notes that approximately 20,000 Muncie 4-speed transmissions of the first design were built prior to the second design going into production.

# ENGINEERING SERVICE LETTER

## PRODUCTION ENGINEERING DEPT. - C.E.C.

**SUBJECT:** MUNCIE FOUR SPEED TRANSMISSION - 1964 DESIGN  
CHANGE AFFECTING PAST MODELS SERVICE REPLACEMENT  
AND A FIELD FIX IF REQUIRED

**DATE** 8-20-63  
**SECTION** 7  
**MODEL** RPO M20 800-  
1200-1600-1800 & RPO  
M21-1200-1600-1800-1963

A design change is being introduced for start of production 1964 on subject transmission which includes a new transmission mainshaft, first speed gear, and first speed gear sleeve. The new parts are not interchangeable as details for service replacement on past models. The reasons for the changes are to provide positive first speed gear end clearance, and also to eliminate the possibility of seizure between the inside diameter of the first speed gear and the matching mainshaft outside diameter by use of a new sleeve. The seizure has been reported from the field in several instances at relatively low mileage, and the new parts indicated above are to be used for past model service replacement if this type of transmission failure is noted.

The following is a list of the new parts and past model parts affected by this design change:

New Parts	Old Parts	Name	Production Disposition
3849386	3831753	Shaft - Trans. Main	Cancelled & Repl. by 3849386
3849388	3831743	Gear - First Speed	Cancelled & Repl. by 3849388
3849408	-----	Sleeve - First Speed Gear	New
-----	*3831745	Washer - 1st Speed Gear Thrust	Cancelled & Not Replaced
-----	*3831759	Ring - Trans. Main Shaft Rear Brg. Retainer	Cancelled & Not Replaced
-----	*3832626	Ring - Trans. 1st & 2nd Synchronizer Retaining	Cancelled & Not Replaced

For a comparison between the new and old design in the transmission area affected see attached sketch. Old parts indicated by an asterisk (\*) are no longer required as part of revised design.

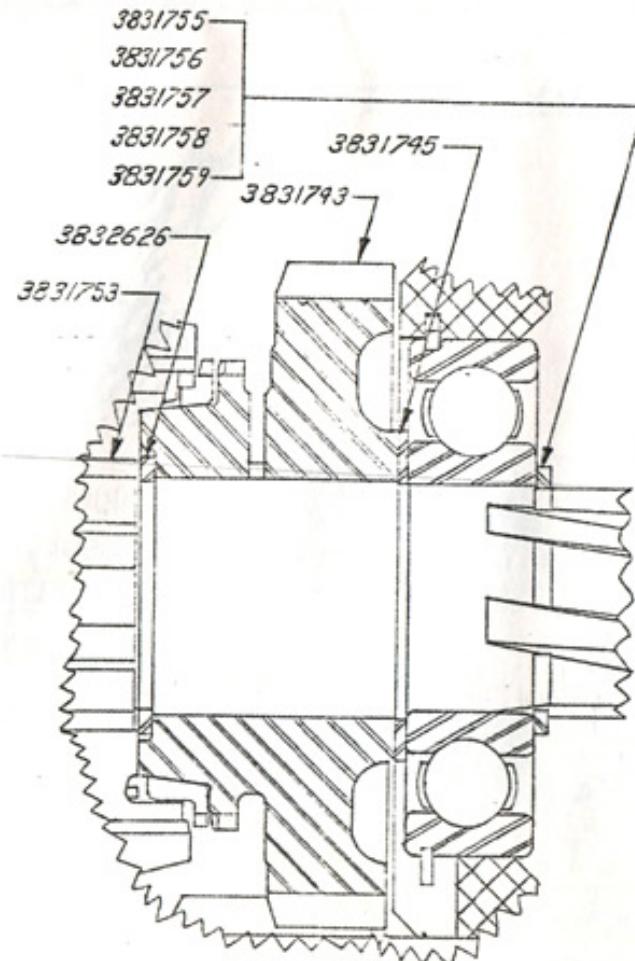
Approximately 20,000 total Muncie Transmissions of the first design will be built before this change is introduced.

From the viewpoint of excessive cost to the customer, if the combination of new parts was used for all past model service replacement, it was decided to maintain old stock.

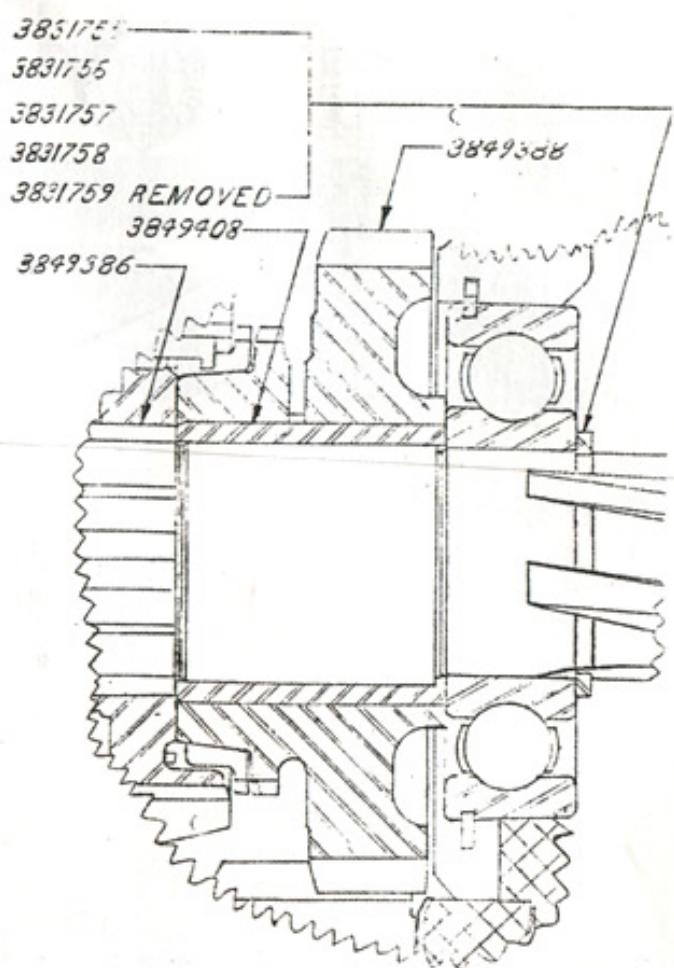
*R. A. Dittmer*

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Engineering Department

RAD/vg  
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cc: Messrs. J.G. Coffin, 1-139 CEC  
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*FIRST DESIGN*



*SECOND DESIGN*

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