

# 1963 Corvette: Zone Letter: Propeller Shaft Balancing

**Subject:** Propeller Shaft Balancing  
**Model and Year:** 1963 Corvette - A. I. 63-25  
**To:** REGIONAL SERVICE ENGINEERS  
**From:** H. A. Bangsberg  
**Address:** Central Office  
**Date:** August 27, 1963

In cases where high speed vibration persists on 1963 Corvettes after the wheels and tires have been carefully balanced, a reduction in vibration may be achieved by balancing the propeller shaft on the vehicle.

The balancing procedure consists of raising the rear of the vehicles, running the engine at 3600 – 4200 RPM in high gear and adjusting propeller shaft balance through the use of hose clamps as balance weights.

Page 2 of this letter lists the step-by step procedure to be followed.

Extra copies of this letter are to be supplied for distribution to the Zone Service Managers.

H.A. Bangsberg

Technical Service Department

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**SERVICE INSTRUCTIONS**

1. Raise rear of vehicle and support the frame side rails ahead of the rear axle.
2. Remove rear wheels and tires and brake drums.
3. Raise and support the rear control arms to place axle drive shafts at approximate curb height.
4. Install two Part No. 1161694 worm screw hose clamps over the rear end of the propeller shaft with the clamp screws located 180 degrees apart.
5. Start engine and evaluate vibration in direct drive at 3600 – 4200 Engine RPM.
6. If vibration is present, rotate one clamp 90 degrees in either direction and recheck vibration.
7. Rotate this clamp until a minimum amount of vibration is felt. Rotate second clamp, moving adjusting screw toward the first clamp, until the vibration is reduced to a minimum.
8. Mark propeller shaft and axle companion flange for re-installation in same relative location in case of future propeller shaft removal.

The front end of the propeller shaft can be balanced, if necessary, using the same procedure listed above. The amount of unbalance encountered at this location is generally less than at the rear, and may be corrected with smaller clamp adjustments.

If it becomes necessary to replace either the propeller shaft or the transmission slip yoke, the propeller shaft and slip yoke should be replaced as an assembly.

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