# 1964 Corvette: Service News: 1964 4-Speed Transmission Removal and Reinstallation

**Model Year:** 1964
**Subject:** 4-Speed Transmission Removal and Reinstallation
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This article provides new service procedures recommended for removal and reinstallation of the 4-speed transmission used in 1964 model Corvettes. The service procedures for 4-speed removal and transmission reinstallation that are shown in the 1963 Corvette Shop Manual are not applicable to the 1964 model.

1. Disconnect battery ground cable.

2. Disassemble transmission gearshift control lever by unscrewing ball from lever, lifting out "T" handle return spring and "T" handle, then removing the anti-rattle bushings.

3. Raise front and rear of vehicle.

4. Insert a block of wood between the top of the differential carrier housing and the underbody (to prevent upward travel of the carrier when carrier front support is disconnected).

5. Disconnect the differential carrier front support from its frame bracket by removing the nut on the underside of the biscuit

mount.

6. Pry the carrier downward to relieve load while removing the two center mounting bolts from the carrier front support (To pry carrier downward, insert crowfoot end of a pry bar through the opening in the carrier front support, hooking end of bar over top of the center mounting bolt pad cast in the underside of the carrier.)

7. Pivot carrier support downward for access to prop shaft "U"-joint.

8. Disconnect prop shaft front and then rear "U"-joint bolts.

9. Disconnect parking brake cable from ball socket at idler lever, located near center of underbody.

10. Remove prop shaft by moving shaft forward.

11. Remove heat deflectors from the right and left exhaust pipe.

12. Remove left bank exhaust system.

13. Remove right bank exhaust pipe and heat riser.

14. Disassemble transmission mount as follows:

    a. Remove the two bolts that attach rear mount cushion to the rear mount bracket.

    b. Support engine under oil pan and raise engine to remove load from rear mount cushion.

       CAUTION: *To avoid damage to oil pan, a suitable wide base, heavy wood platform should be placed between the jack pad and the oil pan.*

    c. Remove the three transmission mount bracket-to-crossmember bolts, then remove mount bracket.

    d. Remove the two bolts from mount pad to transmission case and remove rubber mount cushion and exhaust pipe "yoke."

1. Disconnect transmission shift linkage from transmission gearshift control lever. Remove shift lever.

2. Disconnect speedometer cable at transmission extension.

3. Remove transmission output shaft slip yoke.

   NOTE: *The yoke is removed to avoid tearing the heat reflecting pad on*

*the underbody when the transmission is being removed.*

4. Remove two bolts to disconnect the transmission gearshift control lever and bracket assembly from its adapter plate on side of transmission. Lower lever and bracket assembly and remove from the vehicle.

5. Remove the transmission-to-clutch-housing bolts.

6. Slide transmission assembly slightly rearward just enough to permit rotating of the transmission for access to the three flat head machine screws in the control lever bracket adapter plate. Remove adapter plate. Rotate transmission back to the upright position.

7. To allow room for transmission removal, slowly lower the rear of the engine until the tachometer drive cable at the distributor just clears the horizontal ledge across front of dash. CAUTION: The tachometer cable can easily be damaged by heavy contact with the dash.

8. Slide transmission rearward out of the clutch; then tip front end of transmission downward and lower the assembly from vehicle.

9. Reinstall transmission assembly by performing above steps in reverse order.

**Transmission Gearshift Control Removal**
(When Removal of Transmission Is Not Necessary)

To remove the gearshift control lever and bracket assembly, refer to the above transmission removal procedure and perform only steps 1, 2, 3, 11 (remove deflector from left pipe only), 12, 14, 15, 16 and 18 in order listed.

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