

1964 Corvette: Service News: 1964 Powerglide Removal and Reinstallation

Model Year: 1964

Subject: Powerglide Removal and Reinstallation

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This article provides new service procedures recommended for removal and reinstallation of the Powerglide transmission used in 1964 model Corvettes. The service procedures for Powerglide removal and reinstallation that are shown in the 1963 Corvette Shop Manual are not applicable to the 1964 model.

1. Disconnect battery ground cable.
2. Remove ball end from transmission shift control lever.
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. 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 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.)
6. Pivot carrier support downward for access to prop shaft "U"-joint.
7. Disconnect prop shaft front and then rear "U"-joint bolts.
8. Disconnect parking brake cable from ball socket at idler lever, located near center of underbody.
9. Remove prop shaft by moving shaft forward.
10. Remove left bank exhaust pipe.
11. Remove right bank exhaust pipe and heat riser.
12. 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 oil cooler lines at transmission, remove pipe clip at crossmember and swing lines clear.
2. Remove converter housing underpan.
3. Remove converter to flywheel attaching bolts.
4. At transmission disconnect vacuum modulator line and speedometer cable.
5. Disconnect transmission shift linkage from transmission gearshift control lever. Remove shift lever.
6. At transmission, remove throttle valve linkage and disconnect neutral safety switch linkage; also remove the gearshift control linkage.
7. Remove neutral safety switch from transmission.
8. Remove transmission output shaft slip yoke and insert a plastic shipping plug in end of extension to prevent spillage of transmission fluid.

NOTE: The yoke is removed to avoid tearing the heat reflecting pad on the underbody when the transmission is being removed.

9. Remove bright metal ignition shielding from distributor area.
10. Remove the transmission dipstick and tube assembly.
11. Disconnect transmission vacuum modulator line at distributor advance line tee.
12. Position transmission hoist under transmission and attach safety chain to transmission.
13. Remove transmission converter housing-to-engine attaching bolts and slide transmission rearward.

NOTE: Observe converter when moving transmission rearward. If converter does not move with the transmission, pry it free of flywheel before proceeding.

14. Install converter retaining strap.
15. Lower and remove transmission from vehicle by tilting the front down and to the right while intermittently lowering the transmission to facilitate its removal.
16. Reinstall transmission assembly by performing the above steps in reverse order.

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