



## Installation Instructions Competition/Plus Installation Kit

Fits: 1963-1967 Corvette w/Muncie manual Transmission

Catalog# 3733162

**WORK SAFELY:** Perform this on a good clean level surface for maximum safety and with the engine turned "off". Apply parking brake and place blocks or wedges in front of and behind both rear wheels to prevent movement in either direction.

**CAUTION:** To avoid any possibility of bodily injury or damage to vehicle, do not attempt disconnect or installation until you are confident that the vehicle is safely secured and will not move.

### **WARNING**

This transmission does not have an Interlock to prevent engagement of the Reverse gear when any of the forward gears are engaged. Severe damage to the transmission will result if this should occur. Double check the linkage before starting the engine or moving the car. Insert the Neutral Alignment Rod through levers and check positions of the transmission shifting arms. 1-2 and 3-4 transmission control arms must be at Neutral positions of their travel. Reverse gear control arm must be at the Forward end of its travel (Dis-engaged).

**ATTENTION:** Due to variations in the auto manufacturing tolerances, the transmission rods supplied with this kit may require slight bending to clear any obstructions, etc. Protect the threads while bending. **BEND RODS COLD! – DO NOT APPLY HEAT!**

1. Remove the bolts that fasten the transmission extension housing to the crossmember at the rear support. The Transmission can be moved to the right side to gain clearance for installation of the mounting plate and shifter.
2. Install mounting plate to tailshaft. Tighten all bolts securely.
3. Install shifter onto mounting plate. Tighten mounting bolts. Return transmission to normal position. Replace crossmember mounting bolts and tighten them.
4. Insert nylon bushings into arms. Assemble hooked ends of the rods into arms and secure with spring clips. Check assembly view for proper combination of parts.
5. Thread rod adjusting buttons onto rods. Spin buttons onto middle of thread length.
6. Install arm-rod-button assemblies onto transmission shafts. Refer to assembly view for proper part combinations. Fasten arms onto shafts with stock flatwashers, lockwashers, and nuts.
7. Insert nylon bushings into holes in levers – refer to assembly view. Align levers with shifter frame and insert neutral alignment rod through notches in frame and holes in levers.

8. Rotate transmission arm backward and forward. The neutral position for each arm can be felt at the mid-position of full travel. Reverse arm must be moved to the ends of its travel towards the front (dis-engaged position).

9. Adjust positions of the buttons on each rod to permit easy slip-in fit of button into nylon bushing in proper lever. TRANSMISSION ARMS MUST REMAIN IN NEUTRAL POSITION WHILE ALIGNMENT IS ACCOMPLISHED. Fasten buttons in levers with spring clips.

10. Remove neutral alignment rod. Test shifter. Stick should move freely from side to side at neutral (between 1-2 and 3-4 shifting paths). An increased pull toward the operator should engage the reverse lever. If shifter functions properly, proceed to step 11.

If the stick CANNOT be moved freely between 1-2 to 3-4 or reverse path, one or more of the rod button adjustments must be corrected. Move stick forward to 3<sup>rd</sup>, then back to 4<sup>th</sup>, then into neutral. Insert neutral alignment rod. If rod CANNOT be inserted freely, the 3-4 rod button is incorrectly adjusted. Similar testing of 1-2 shift will prove alignment of 1-2 rod adjustment.

Disconnect reverse rod adjusting button from reverse lever. Grasp rod and push toward front of car. (Reverse arm is disengaged when at end of forward travel). Adjust rod button for easy slip-in fit in bushing. Re-assemble and fasten with spring clip.

11. Adjust shifter stop bolts. Back both bolts out of shifter frame until only a few threads remain engaged. Push stick firmly into 3<sup>rd</sup> gear and hold. Screw 3<sup>rd</sup> gear stop bolt in until contact is felt. Back bolt out one turn and tighten locknut. Pull stick firmly back into 4<sup>th</sup> gear, screw 4<sup>th</sup> gear stop bolt in until contact is made, then back stop bolt out one turn and tighten locknut.

**NOTE:** A hole is provided in the reverse arm for the actuating rod of a GM back-up light switch. If your transmission is equipped with this switch, hook the switch rod in this hole.

