

Installation Instructions

Part No. 3738605

Competition/Plus® Installation Kit

For 1973-1974 Chevy Camaros & Pontiac Firebirds
(both w/console) w/1969+ Muncie M-20, M-21 & M-22
transmissions (shift arms attach to forks with bolts)

Rev 03/04/2020



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.

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!**

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 THE LEVERS AND CHECK THE 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).

1. Remove the stock shifter and linkage. Disconnect the backdrive rod at the stock Reverse arm only.
2. Install the shifter onto the mounting plate and tighten mounting bolts. Insert the nylon bushings into the arms. Assemble the hooked ends of the rods into the arms and secure with spring clips. Refer to the diagram for proper combination of parts.
3. Thread the rod adjusting buttons onto the rods. Spin the button onto the middle of thread length.
4. Install the arm-rod-button assemblies onto the transmission shafts. Refer to the diagram for proper part combinations. Fasten the arms onto the shafts with stock flat-washers, lockwashers and bolts.
5. Insert the nylon bushings into the holes in the levers – (Refer to the diagram). Align the levers with the shifter frame and insert the neutral alignment rod through the notches in the frame and holes in the levers.

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

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

8. Remove the neutral alignment rod and test the shifter. The 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 the shifter functions properly, proceed to number 9.

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 the stick forward to 3rd, then back to 4th, then into Neutral. Insert the neutral alignment rod. If the rod CANNOT be inserted freely, the 3-4 rod button is incorrectly adjusted. Similar testing of the 1-2 shift will prove the alignment of the 1-2 rod adjustment.

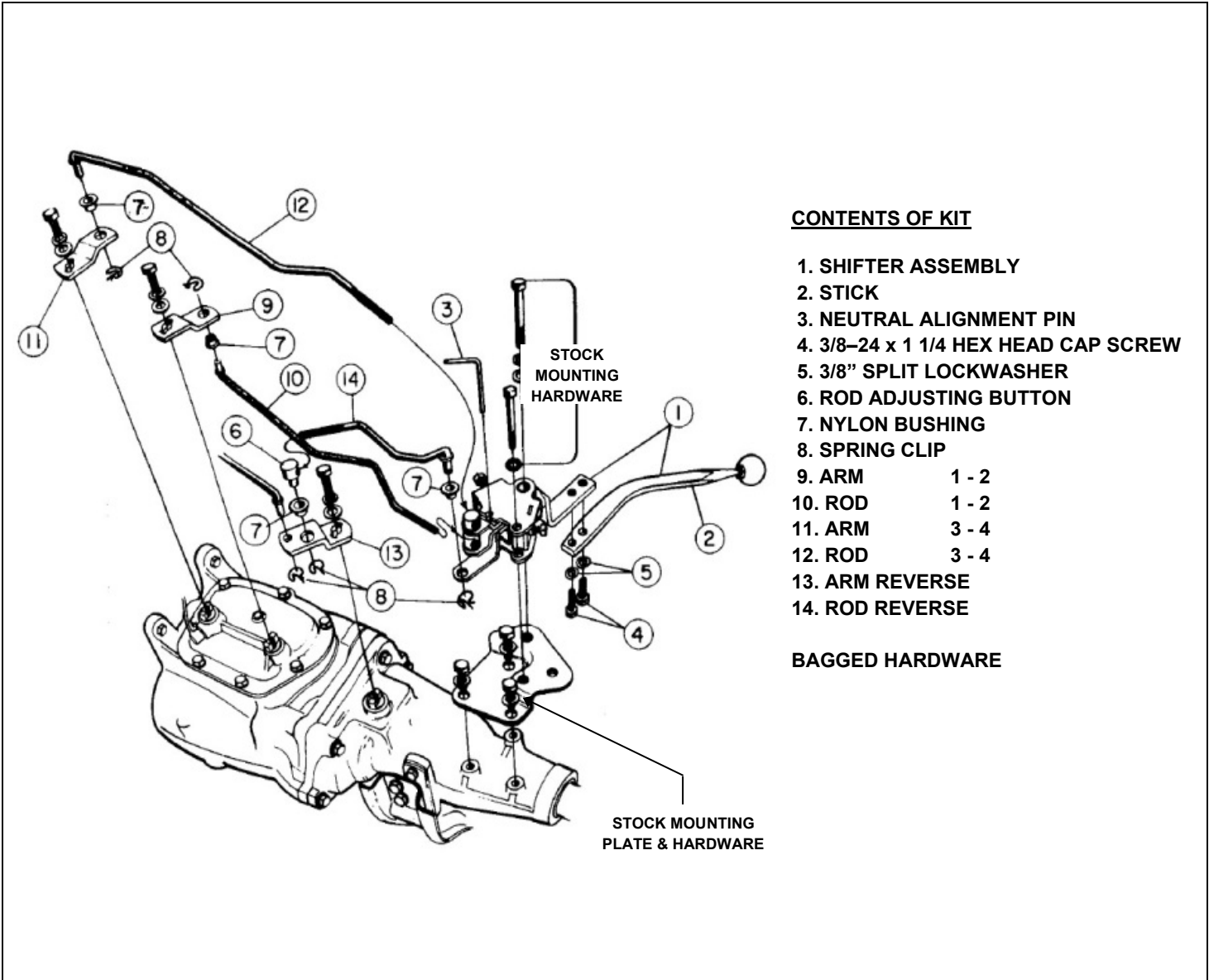
To check the reverse rod button adjustment, place the stick at Neutral. Disconnect the reverse rod adjusting from the reverse lever. Grasp the rod and push toward the front of the car. (Reverse arm is dis-engaged when at the end of forward travel.) Adjust the rod button for easy slip-in fit in the bushing. Re-assemble and fasten with a spring clip.

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

10. Connect the backdrive linkage rod to the hole provided at the lower end of the HURST reverse arm – See diagram. Fasten the rod with the stock clip.

IMPORTANT

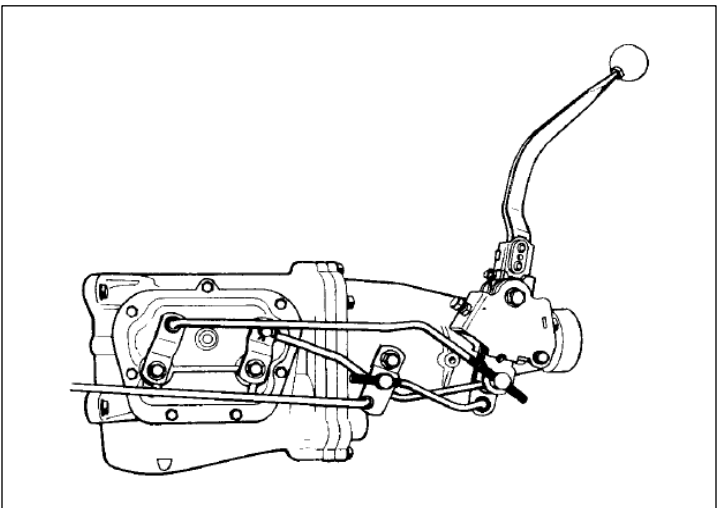
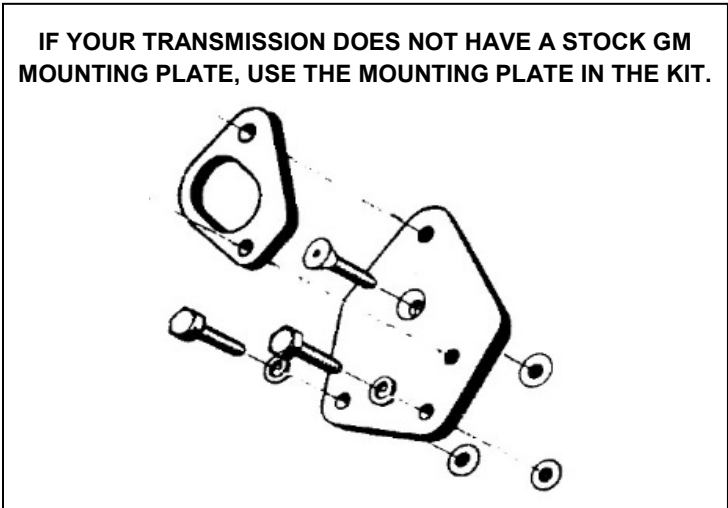
After the installation has been completed, check to be sure that the column lock functions properly. If the backdrive does not lock the column or the shifter cannot be put into REVERSE, adjust the backdrive linkage at the lower end of the column rod.



CONTENTS OF KIT

- 1. SHIFTER ASSEMBLY
- 2. STICK
- 3. NEUTRAL ALIGNMENT PIN
- 4. 3/8-24 x 1 1/4 HEX HEAD CAP SCREW
- 5. 3/8" SPLIT LOCKWASHER
- 6. ROD ADJUSTING BUTTON
- 7. NYLON BUSHING
- 8. SPRING CLIP
- 9. ARM 1 - 2
- 10. ROD 1 - 2
- 11. ARM 3 - 4
- 12. ROD 3 - 4
- 13. ARM REVERSE
- 14. ROD REVERSE

BAGGED HARDWARE



IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

Technical Service

Hurst Performance maintains a highly trained technical service department to answer your technical questions, provide additional product information and offer various recommendations.



Hurst Performance Products

(866) 464-6553

www.hurst-shifters.com