

# Installation Instructions

Part No. 3737131



## Competition/Plus® Installation Kit

For 1969-1970 Chevrolet Nova & Chevy II without console  
w/1969+ Muncie M-20, M-21 & M-22 transmissions  
(shift arms attach to forks with bolts).

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**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. SEVER 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 backdrive and rod at the stock reverse arm only.
2. Remove the two bolts and lockwashers that fasten the transmission pad to the crossmember. Use a suitable jack to raise the transmission clear off the rubber insulator pad. Place a block of wood between the top of the jack and the transmission housing before raising the jack.
3. Slide the base of the HURST mounting bracket between the transmission pad and the rubber insulator. Replace the stock mounting bolts but do not tighten them. Fasten the rear end of the bracket with the “U” clamp bolt. Remove the jack and tighten all mounting bolts.
4. Install the shifter onto the mounting bracket and tighten the mounting bolts.
5. Assemble the rods to their respective arms using nylon bushings and spring clips. Refer to the diagram for proper parts combinations. Spin the buttons onto the threaded ends of the rods to the middle of the thread length.
6. Install the arm/rod/button assemblies onto the transmission. Fasten the arms to the shafts using the stock nuts, lockwashers and flatwashers.

7. Insert the nylon bushings into the holes in the levers – See 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.

8. 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 the car (dis-engaged position).

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

10. 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 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 the stick forward to 3<sup>rd</sup>, then back to 4<sup>th</sup>, 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.

11. 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 3<sup>rd</sup> gear and hold it. Screw the 3<sup>rd</sup> gear stop bolt in until contact is made. Back the bolt out one turn and tighten the locknut. Pull the stick firmly back into 4<sup>th</sup> gear. Screw the 4<sup>th</sup> gear stop bolt in until contact is made, then back it out one turn and tighten the locknut.

12. 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.

**SWITCH ACTIVATING ARM INCLUDED  
-FOR COLUMN SHIFT APPLICATION**

**DO NOT  
Dis-assemble  
Shifter Unit**

### CONTENTS OF KIT

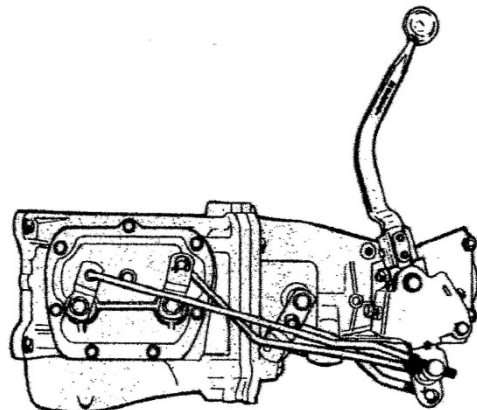
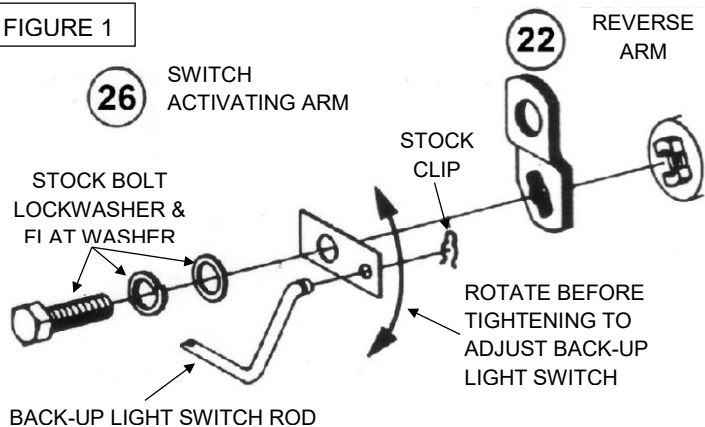
- 5. 3/8" SPLIT LOCKWASHER
- 6. MOUNTING BRACKET
- 7."U" CLAMP
- 8. 5/16" FLATWASHER
- 9. 5/16 - 24 SELF-LOCKING NUT
- 10. 7/16 - 20 x 3 HEX HEAD CAP SCREW
- 11. 7/16" SPLIT LOCKWASHER
- 12. 7/16" FLATWASHER
- 13. 3/8 - 24 x 3 HEX HEAD CAP SCREW
- 14. 3/8" FLATWASHER
- 15. 3/8 - 24 HEX NUT
- 16. ARM 1 - 2
- 17. ROD 1 - 2
- 18. NYLON BUSHING
- 19. SPRING CLIP
- 20. ARM 3 - 4
- 21. ARM 3 - 4
- 22. ARM REVERSE
- 23. ROD REVERSE
- 24. ROD ADJUSTING BUTTON
- 25. NEUTRAL ALIGNMENT ROD
- 26. SWITCH ACTIVATING ARM

### **BAGGED HARDWARE**

**DO NOT REMOVE  
TRANSMISSION  
FROM CAR**

BLOCK OF WOOD  
JACK  
CROSSMEMBER SHOWN  
CUT AWAY TO EXPOSE  
MOUNTING PAD

**FIGURE 1**



**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.



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