LONG HN-1000
5-SPEED
H-PATTERN SHIFTER

Features

• The Long Shifter for the G-Force or Richmond gear 5-Speed has a patented rail slide design. Perfect for road racing and street applications.

• The Long H-Pattern 5-speed shifter is the only one of its kind to use a reverse lock-out. To engage reverse, push the handle down and pull back from the 5th gear position.

• The shifter handle is spring loaded for a better feel of the gear position.

• Long shifters use 7/16" diameter heavy duty rods for more rigidity and less deflection, ensuring a more positive shift.

HN-1000 Shifter shown with the Richmond 5-Speed transmission.
INSTALLATION INSTRUCTIONS

1. Install mounting plate (2) on transmission as shown in exploded assembly drawing.

2. Install shifter using mounting bolts shown in assembly drawing. Tighten bolts to the specified torque and then install locknuts on the back of mounting plate.

***IMPORTANT***
TIGHTEN BOLTS TO THE SPECIFIC TORQUES.
DO NOT OVER TIGHTEN

3. Swing all shifters levers together to center of shifter so that the holes in the levers line up with hole “A” in the shifter frame (see drawing). Insert the neutral alignment pin place (#4) through the shifter and all levers. This locks all the levers precisely at neutral.

4. Assemble transmission arms with their respective rods using nuts and washers. Refer to the exploded assembly drawing for correct part relationships.

5. Install Arm/Rod assemblies on proper transmission shafts. Begin with 1st/2nd assembly, and then install 3rd/4th, then 5th/ReverseFasten arms to shafts with nuts and lock washers that were removed from the shafts. All arms must be in their neutral positions while alignment is established. Neutral is the detent at the middle between limits of travel (rotation) of transmissions arms.

6. Start rod adjusting buttons onto threaded ends of rods and adjust position of buttons to allow easy slip fit of button point into hole in its respective shifter lever. Fasten buttons in levers with spring clips.

7. Remove neutral alignment pin. Test shifter. Pull the stick over toward driver, and then push it forward into 1st gear. Shift through the pattern 1 2 3 4 5 (refer to the following drawing of the shifter pattern on the sheet). The stick will normally rest in the 3-4 track when stick is moved to neutral and released. Check reverse engagement. If any difficulty is encountered during test shifting, return stick to neutral. Re-insert neutral alignment pin and check by removing spring clips from buttons one at a time. Buttons must withdraw from and re-enter holes in shifter levers freely. Adjust the buttons, as necessary, to gain free entry of the buttons into the holes in levers.

***CAUTION***
DO NOT ALLOW STICK TO BE PULLED INTO REVERSE WHILE VEHICLE IS IN FORWARD MOTION

8. After installation has been completed, check for possible interference due to excess length of rods protruding behind shifter levers. Excess length may be cut off with a hacksaw. A minimum length of 1/2 inch of threaded rod must extend beyond rod buttons.

9. Lubricate ends of rods at arms and buttons with light oil or grease.

ATTENTION

Due to variations in auto manufacturing tolerances the transmission rods supplied with this kit may require slight bending to clear obstructions etc. Protect threads while bending rods.

HEAT MUST BE APPLIED TO BEND RODS.

CONTENTS OF KIT

1. HN01 MOUNTING PLATE
2. HN02 SHIFTER ASSEMBLY
3. HN04 NEUTRAL ALIGNMENT PIN
4. HN05 ROD ADJUSTING BUTTON (3)
5. HN06 SPRING CLIP (3)
6. HN07 ARM (3)
7. HN08 ROD 1ST/2ND
8. HN09 ROD 3rd/4th
9. HN10 ROD 5th/REVERSE
10. HN11 SPACER
11. HN12 SHIFTER HANDLE (Optional handles available)
12. 1/2-13 X 2-1/2 HEX HEAD CAP SCREW
13. 3/8-16 X 2-1/2 FLAT HEAD CAP SCREW (2)
14. 3/8-16 X 1* FLAT HEAD SOCK SCREW (3)
15. 1/2-13 LOCKNUT
16. 3/8-16 LOCKNUT (2)
17. 3/8 LOCK WASHER (6)
18. 3/8-24 JAM NUT (5)
19. 3/8-16 HEX NUT (3)
20. 3/8 FLAT WASHER (3)
21. 3/8-24 STOP BOLT
22. BB-5 SHIFT BALL

*SEE SHIFTER HANDLE DRAWING
FOR OPTIONAL HANDLES

LONGS MACHINE AND TOOL
150 N. Grant Street
Cleona, PA 17042
717-202-8374

SHIFTING PATTERN

1 3 5
2 4 R

(PUSH DOWN HANDLE FOR REVERSE)
INTEMS 12 AND 13 MUST BE TORQUED TO NOTED SPECIFICATIONS.

1ST-3RD-5TH GEAR STOP BOLT. SIMILAR BOLT AT FRONT OF THE SHIFTER IS THE 2ND-4TH GEAR STOP.

NOTE: WHEN SHIFTER IS INSTALLED IN THE FORWARD POSITION, YOU MAY HAVE TO GRIND THE EXTENSION SHAFT HOUSING AT THIS AREA TO GAIN CLEARANCE.
ACCESSORIES

LONG SHIFTER KNOB
(Black only)

Aluminum Knobs (Black or Red Anodize)

4-Speed 5-Speed 6-Speed

SHIFTER KNOBS

SHIFTER HANDLES

150 N. Grant Street
Cleona, PA 17042

Telephone: 717-202-8374
Fax: 717-202-8372
www.longshifters.com