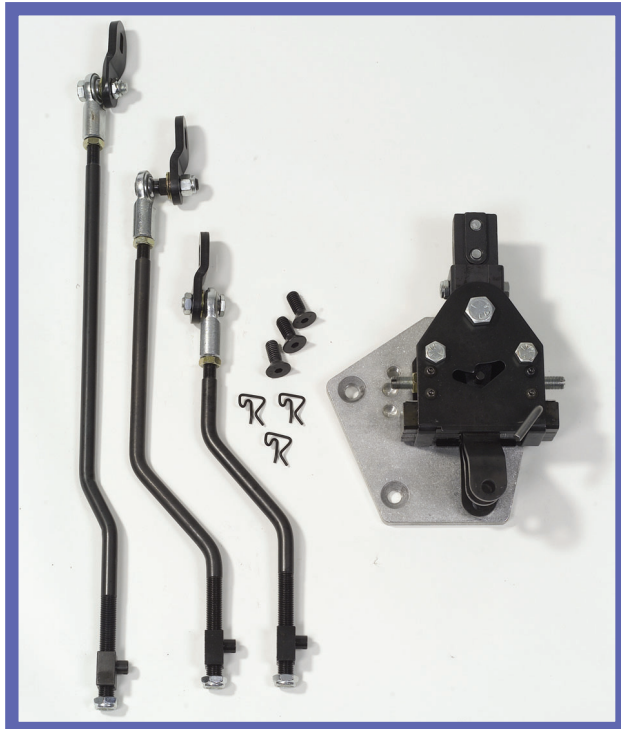


LONG

SHIFTERS



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.

G-FORCE & RICHMOND STREET TRANSMISSIONS

FIVE SPEED APPLICATION

FOR RACE TRACK USE ONLY

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**

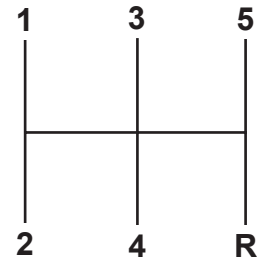
3. Swing all shifters levers together to center of shifter so that the holes in the levers line up with hole "A" in the shifter frame (see drawing). Insert the neutral alignment pin place (#4) through the shifter and all levers. This locks all the levers precisely at neutral.
4. Assemble transmission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

SHIFTING PATTERN



(PUSH DOWN HANDLE FOR REVERSE)

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

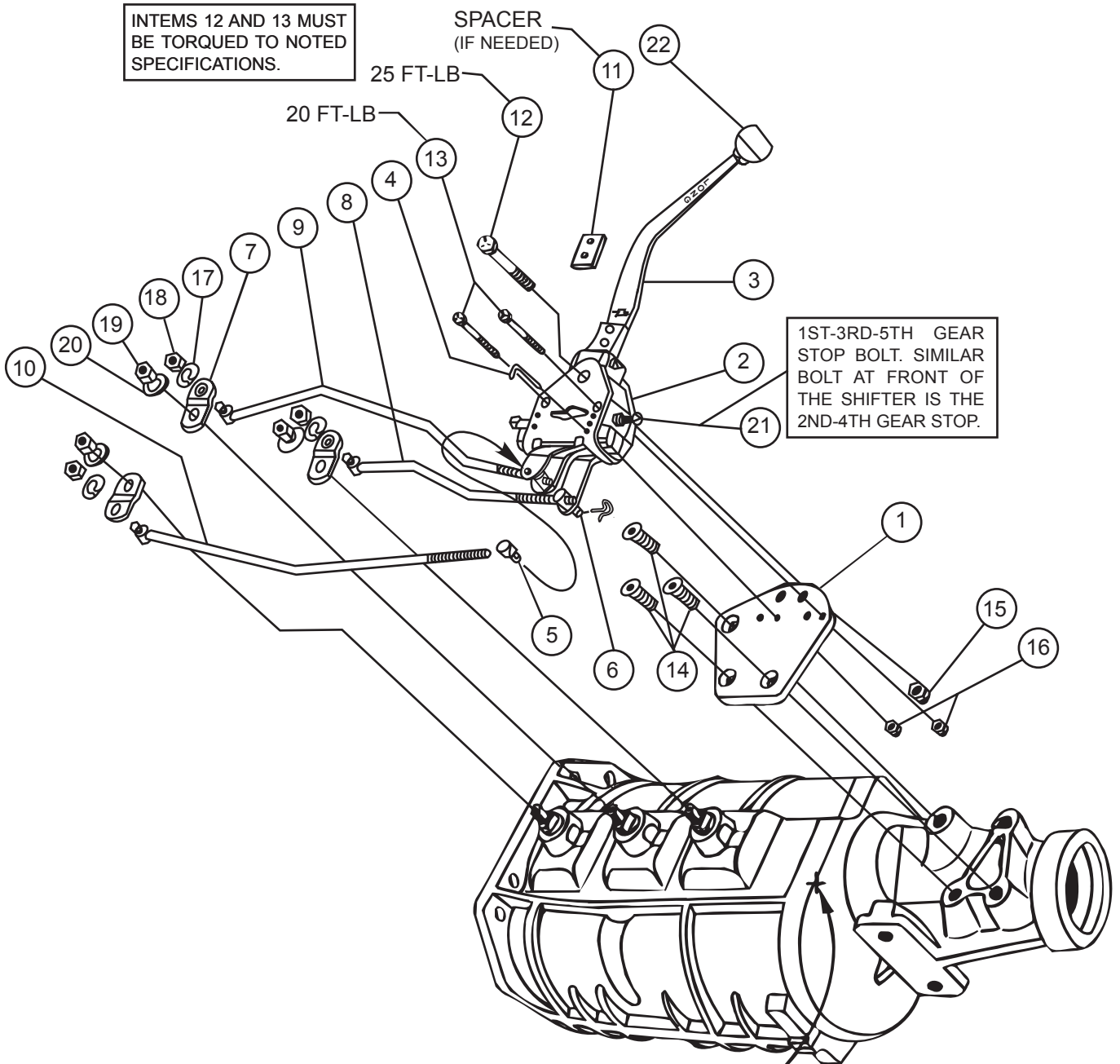
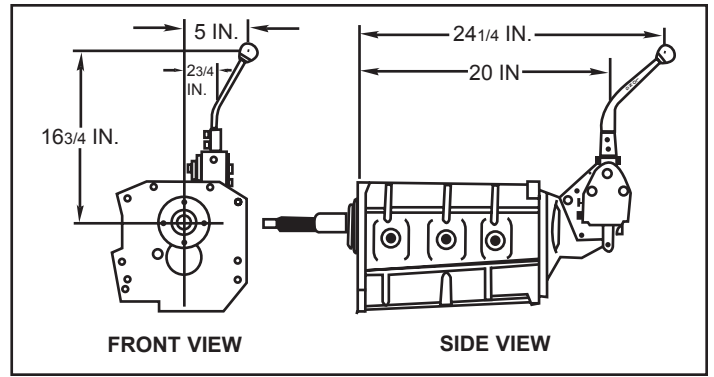
- | | |
|------------|---|
| 1. HN01 | MOUNTING PLATE |
| 2. HN02 | SHIFTER ASSEMBLY |
| *3. HN1012 | SHIFTER HANDLE (Optional handles available) |
| 4. HN04 | NEUTRAL ALIGNMENT PIN |
| 5. HN05 | ROD ADJUSTING BUTTON (3) |
| 6. HN06 | SPRING CLIP (3) |
| 7. HN07 | ARM (3) |
| 8. HN08 | ROD 1ST/2ND |
| 9. HN09 | ROD 3rd/4th |
| 10. HN10 | ROD 5th/REVERSE |
| 11. HN11 | SPACER |
| 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 LOCKWASHER (6) |
| 18. | 3/8-24 JAM NUT (5)) |
| 19. | 3/8-16 HEX NUT (3) |
| 20. | 3/8 FLATWASHER (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

HN-1000

FITS MOST APPLICATIONS

PATENT NUMBER 4,781,074



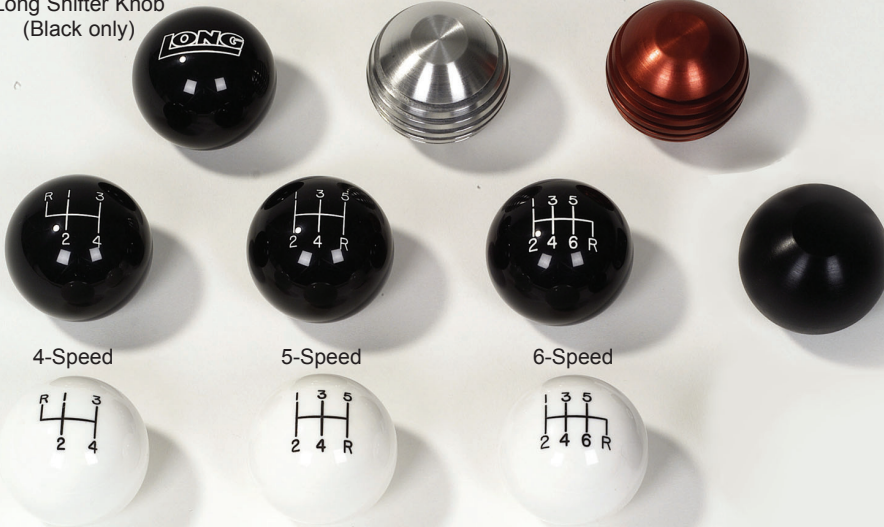
NOTE: WHEN SHIFTER IS INSTALLED IN THE FORWARD POSITION, YOU MAY HAVE TO GRIND THE EXTENSION SHAFT HOUSING AT THIS AREA TO GAIN CLEARANCE.

ACCESSORIES

SHIFTER KNOBS

Long Shifter Knob
(Black only)

Aluminum Knobs (Black or Red Anodize)

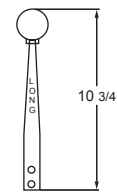


4-Speed

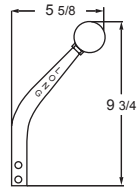
5-Speed

6-Speed

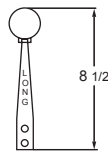
SHIFTER HANDLES



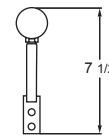
HN1010



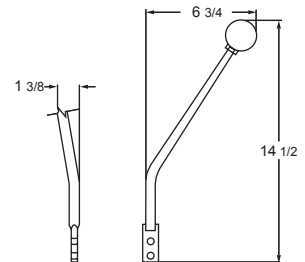
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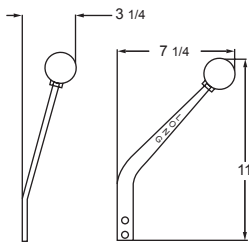
HN1075



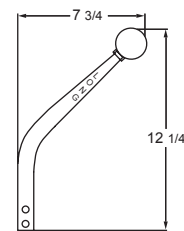
HR1085



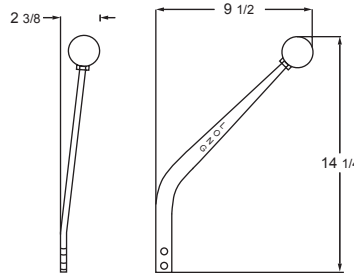
HN1015C



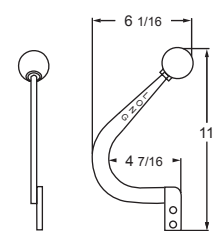
HN1012



HN1014



HN101B



HN1057



150 N. Grant Street
Cleona, PA 17042

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