



Installation Instructions
3915020
1988-11 FORD RANGER
5-SPEED TRANSMISSION
Billet/Plus™ Shifter

OVERVIEW:

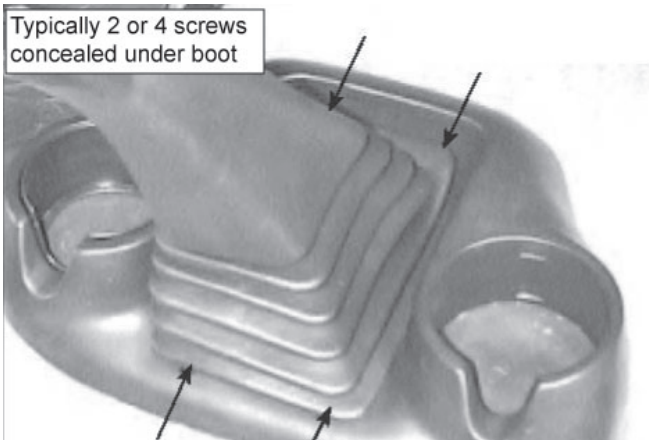
1. Please take a moment to read and understand these instructions before installing your Hurst Billet/Plus Shifter.

WARNING:

For maximum safety, perform this installation on a clean, level surface with engine turned off. Chock wheels and do not attempt installation until you are confident your vehicle will not move.

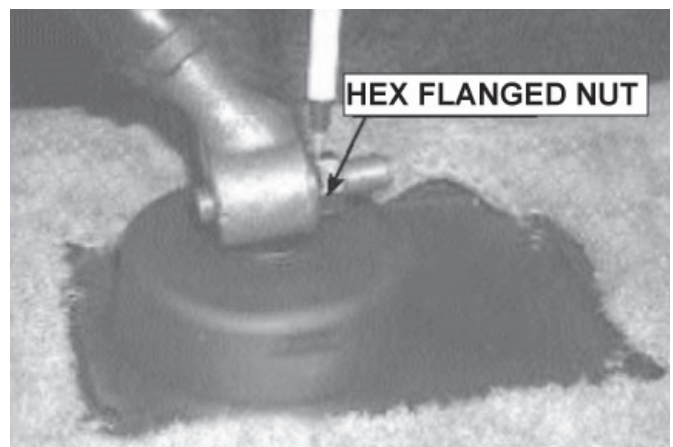
FACTORY CONSOLE SHIFTER REMOVAL:

2. Place shifter into neutral position.



3. Remove screws securing console and shift boot to floor tunnel.

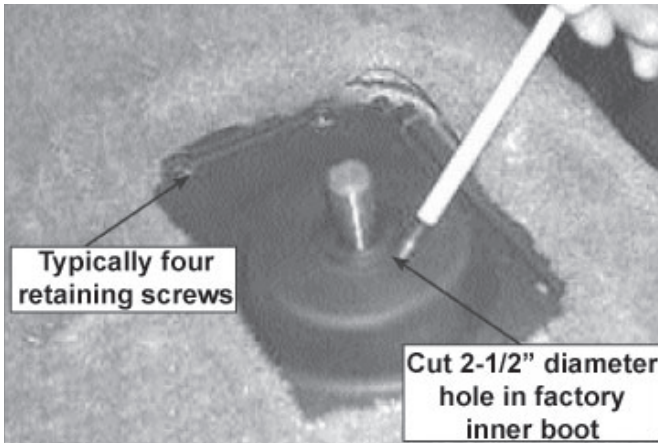
NOTE: Depending on model year, there are typically (2-4) screws concealed under boot to be removed.



4. Pull console and boot up onto shifter stick exposing shifter stick attachment.



5. Remove shifter stick from shifter mechanism by removing hex flanged nut then installing it on opposite side. Tighten nut to draw out stud, then pull shifter stick up and off.



6. Remove factory inner boot and plate assembly from floor tunnel by removing (x4) screws.

NOTE: On some model years, rear screws are located under floor covering.



7. Remove (x3) screws securing shifter base to transmission and remove shifter mechanism by pulling up and out.

CAUTION: Cover shifter opening on transmission to avoid something accidentally falling into it.

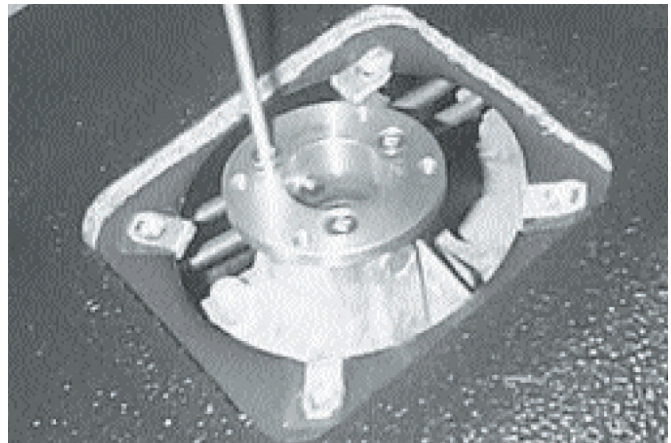
BILLET/PLUS SHIFTER INSTALLATION:

CAUTION: Compare bottom length of factory stick to Hurst stick before installing shifter. Measure from underside of shifter-mounting flange to bottom of selector stub. If factory stick bottom is 1/4" shorter than Hurst stick bottom, use spacer and longer bolts (Step 12 & 14 Note:).

8. Remove (x4) hex socket bolts from Hurst shifter top and separate bottom mounting plate from shifter body. Take care not to damage rubber oil control seal.

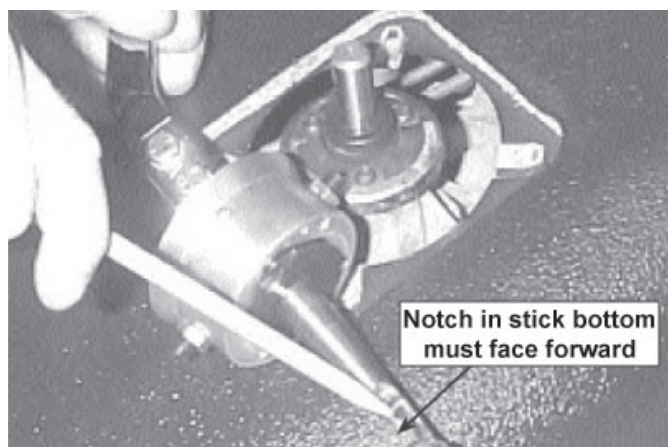
9. Install 3-hole gasket onto bottom side of shifter mounting plate and align gasket holes with mounting plate bolt holes.

10. Position Hurst shifter mounting plate and gasket onto transmission-mounting flange, aligning 3-bolt holes and locating pin notches. Gently tap mounting plate down into place.

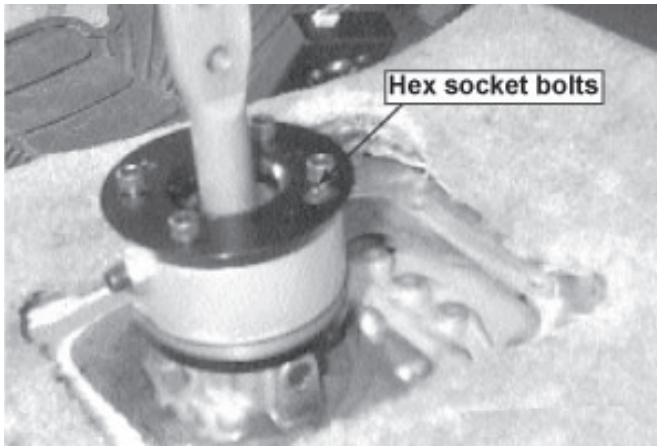


11. Install (x3) flat head countersunk screws and tighten securely using 3/32" hex key wrench.

12. On installations requiring 1/4" spacer, carefully remove rubber oil control seal from shifter bottom and place it onto mounting plate. Then place 1/4" spacer onto seal and mounting plate, making sure holes are aligned.



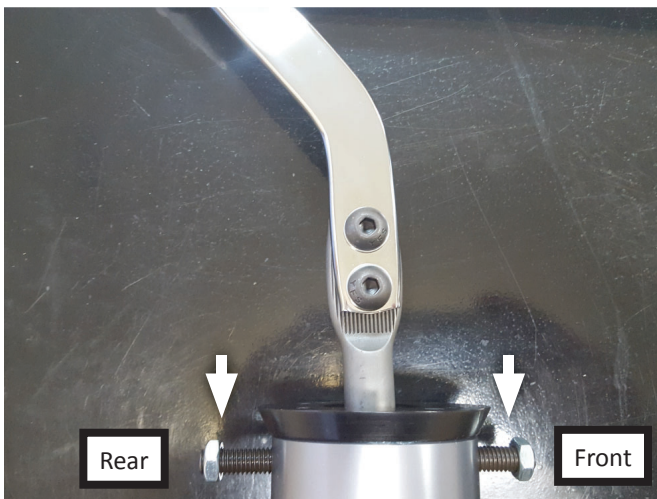
13. Position Hurst shifter assembly onto mounting plate with notch in stick bottom facing forward.



NOTE: If your vehicle required a spacer (step 12) use (x4) longer bolts now in place of bolts removed step 8.

14. Make sure shifter stick bottom engages properly into transmission and shifter body sits flush onto mounting plate. Align (x4) bolts (removed step 8) with holes in mounting plate then tighten them.
15. Test shifter operation. Move shifter through entire gearshift pattern, engaging each gear fully. Also ensure stick moves freely from side to side in "neutral" position.

STOP SCREW/NUT ADJUSTMENT:



16. Loosen front and rear stop screws and nuts from shifter body.
17. Push stick forward into 3rd gear. Tighten front set screw so it presses against stick, enough to eliminate play (see step 19) but not interfere with gear function. Then hold front set screw in place with wrench while you tighten nut against shifter body.

18. Pull stick backward into 4th gear. Tighten rear set screw so it presses against stick, enough to eliminate play (see step 19) but not interfere with gear function. Then hold front set screw in place with wrench while you tighten nut against shifter body.
19. Once you ensure that each gear can engage fully, test drive your vehicle to verify proper stop screw/nut adjustment. While driving in 3rd and 4th gear, listen for a rattling or buzzing sound coming from shifter, if you hear this, it means your stop screw/nuts need further adjustment. Again, just make sure each gear engages properly.

FACTORY INNER BOOT MODIFICATION:

20. Carefully cut a 2½" diameter hole in factory inner boot. This allows a tight fit around Hurst shifter body for proper sealing.
21. Replace factory inner boot and plate assembly over shifter and secure to floor tunnel with screws (removed step 6).
22. At this point, you must decide if you want to use Hurst Superboot with polished metal trim ring by drilling holes (x8) into floor tunnel and fastening it down with screws, or making a slight modification to Hurst boot so it can be used with factory console as listed below.

HURST SUPERBOOT INSTALLATION (WITHOUT FACTORY CONSOLE):

23. Insert polished metal decorative center plate into Hurst Superboot. Slide boot over shifter stick to floor. Place polished metal trim ring over boot and align trim plate mounting holes with boot holes. Use boot and trim plate as template to drill ⅛" holes into floor. Fasten boot to floor tunnel with supplied screws.

NOTE: Remove protective paper on polished side of trim ring before installing.

FACTORY CONSOLE INSTALLATION (WITH HURST SUPERBOOT MODIFICATION):



24. To re-install factory console, remove factory boot by snapping off small plastic pins securing boot to underside of console.



25. Carefully cut flange (directly below bottom fold) off of Hurst Superboot.

NOTE: In older model vehicles, leave 6 rubber folds for proper boot fit. In newer vehicles, 5 rubber folds will fit and look better once installed.

26. Use bottom fold as flange, tucked up into console.

NOTE: It is important to trim excess rubber away from console screw hole areas so they are not obstructed with material from rubber boot.

27. From factory console underside, pull top 4 or 5 rubber convoluted folds up and through console, making minor adjustments for desired look.

28. After boot is trimmed and positioned into factory console, insert polished metal decorative center plate into top of Hurst Superboot.



29. Place factory console and Hurst boot assembly over chrome plated shifter stick and re-attach to original location on floor using screws (removed step 3).

30. Install shifter knob onto stick, turn to correct position and tighten jam nut against knob with a $\frac{9}{16}$ " open-end wrench.

TROUBLESHOOTING:

31. Some vehicles may require a different order of installation steps. console, shifter, boot then shifter knob as shown below.



32. First, re-install console, then shifter as shown.



33. Modify as necessary, then install boot.



34. Install shifter knob onto shifter stick.



Congratulations, the installation of your Hurst Billet/Plus Shifter is now complete!