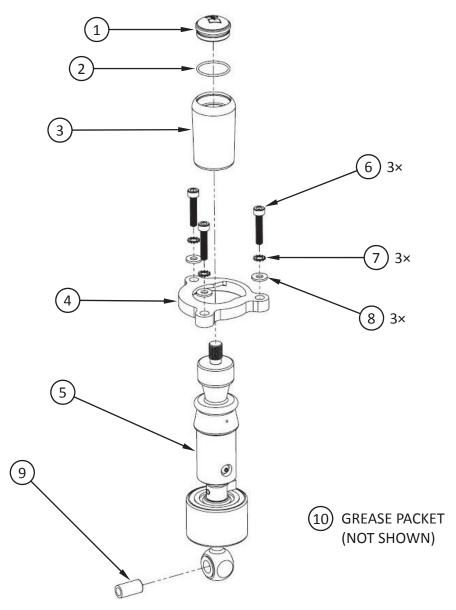


Installation Instructions for

3916044

BILLET/PLUS® SHIFTER for 2003–2018 NISSAN 350Z / 370Z and 2003–2013 INFINITI G35 / G37



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	1360021	CAP, KNOB, W / HURST EMBLEM	1
2	4100517	O-RING, -021 N70 0.938" ID × 0.063" T	1
3	1638907	KNOB, CYLINDRICAL, BLACK POLYCARBONATE, 12MM-1.25	1
4	3286044	PIVOT RETAINER, 350Z/370Z/G35	1
5	N/A (SHIPS ASSEMBLED)	SHIFT LEVER ASSEMBLY	1
6	3401305	SCREW, SOCKET HEAD CAP, M6 × 30MM	3
7	3401441	LOCK WASHER, M6 EXTERNAL SERRATED	3
8	3401339	FLAT WASHER, 0.562" OD × 0.051" THICK × 0.25" ID	3
9	4100994	SLEEVE, 350Z/G35 STS	1
10	4100448	GREASE PACKET, 3/8 OZ (NOT SHOWN)	1

3916044 Page 1 of 9

REQUIRED SUPPLIES

 Medium strength thread-locking fluid (Permatex Blue or equivalent)

REVIEW THE INSTRUCTIONS AND VERIFY THE KIT CONTENTS

 Take a moment to read and understand these instructions before installing your Hurst Billet/Plus® shifter.

WARNING

Do not attempt to disassemble the shift lever, as it has been assembled by Hurst to precise tolerances. ATTEMPTED DISASSEMBLY OF THE SHIFT LEVER VOIDS THE WARRANTY.

NOTES

- Installation of this kit requires permanent modification of some stock parts.
- If you are unsure whether or not you can install this kit yourself, seek the assistance of a qualified technician.
- We highly recommend that you retain all factory parts.



2. Use the parts drawing and list (front page) to verify your kit's contents. In the unlikely event that any parts are missing, please contact Hurst Technical Support for replacements.

REMOVE THE STOCK SHIFTER

CAUTIONS

- Perform the installation on a clean, level surface.
- Set the parking brake to prevent the vehicle from rolling when the gearshift is manipulated.
- Turn the engine off and allow the exhaust system to cool down.
- Use jack stands, wheel ramps or a hoist to access the underside of the shifter. Ensure the vehicle is securely supported. NEVER WORK UNDER ANY VEHICLE SUPPORTED BY A JACK ALONE.
- TO AVOID BODILY INJURY OR DAMAGE TO VEHICLE, DO NOT BEGIN WORK UNTIL YOU ARE CERTAIN THAT THE VEHICLE IS SECURELY SUPPORTED AND WILL NOT MOVE.



Use a trim removal tool to separate the shifter panel from the center console. Then grasp the boot ring through the leather and lift the panel straight up to release it from the console.





 Lift the shifter panel to expose the middle of the shift lever. It is necessary to push the top of the rubber boot down on some vehicles (350Z and similar) to expose the shift lever.

3916044 Page 2 of 9



5. Hold the shift lever stationary with locking pliers. Use a rag to avoid marring the shaft.



8. Disconnect all electrical connectors, and remove the shifter panel from the vehicle.



6. While holding the shift lever stationary, remove the shift knob with a strap wrench. Use a rag to avoid marring the knob.



9. Remove the plastic ring from the leather boot. Some models (370Z and similar) require cutting a cable tie. Use care to avoid tearing the leather.



7. Carefully lift the assembled boot and shifter panel off of the shift lever.



10. If your vehicle's boot includes a small, coneshaped piece of leather, remove it from the boot. Use care to avoid tearing the leather.

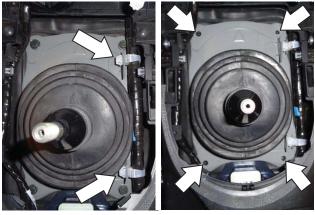
3916044 Page 3 of 9



11. **On 350Z and similar:** Lift the insulating pad over the shift lever. Then remove and retain the 4 screws from the outer dust boot and metal frame.



14. Pull the inner dust boot off of the shifter plate and lift it over the shift lever.



12. On 370Z and similar: Carefully release the 2 wire loom clamps from the brackets on the metal dust boot frame. Then remove and retain the 4 dust boot screws.



15. Underneath the vehicle, expose the shift link bolt by pulling the lower dust boot off of the shifter housing and pushing it forward.



13. Lift the dust boot and metal frame off of the shift lever.



16. Remove and retain the shift link bolt.

3916044 Page 4 of 9

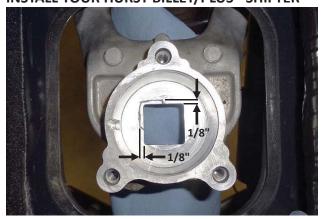


17. CAUTION: SHIFTER PLATE IS UNDER SPRING TENSION. Carefully remove the 3 shifter plate screws, then remove the shifter and plate. Retain the shifter plate for re-use.



18. Remove and retain the spring.

INSTALL YOUR HURST BILLET/PLUS® SHIFTER



19. Mark the front left corner of the opening in the shifter housing as shown for the removal of 1/8" of material. Tuck a rag in between the shifter housing and the dust boot and linkage below.





20. Use a file to remove 1/8" of material from the front left corner of the opening.





21. Apply a thin layer of grease (10) to the bottom and sides of the shifter housing. Then reinstall the spring.



22. Place shift lever assembly (5) on top of the spring.

3916044 Page 5 of 9



23. Slip the pivot retainer (4) over the lever and place it on the pivot bearing. Note the orientation of the reverse pin cutout.



24. Slip the shifter plate over the lever and place it on the pivot retainer. Note the orientation arrow and the reverse lockout guide (raised curve).



25. Apply medium strength thread-locking fluid to the 3 screws (6). Then install the screws, lock washers (7), and flat washers (8). Do not tighten the screws yet; leave them just loose enough to allow side-to-side adjustment of the shifter plate.



26. Apply a thin layer of grease to the outside of the sleeve (9). Then underneath the vehicle, install the sleeve in the bore at the bottom of the shift lever assembly.



27. Align the shift lever bore with the shift linkage and install the shift link bolt. Torque the bolt to **9–11 lb-ft.**



28. Shift the transmission into 6th gear. Adjust the position of the shifter plate so that the reverse pin just touches the rear of the reverse lockout guide, then just snug (but do not tighten) the right rear screw.

3916044 Page 6 of 9



29. Shift the transmission into 5th gear. Adjust the shifter plate so that the reverse pin just touches the front of reverse lockout guide, and snug the front screw. Then torque all 3 screws to **75–88 lb-in.**



32. Reinstall the lower dust boot on the shifter housing.



30. Shift the transmission up and down through the gears several times. VERIFY THAT, WHEN SHIFTING BETWEEN 5TH AND 6TH GEARS, THE REVERSE PIN JUST TOUCHES THE REVERSE LOCKOUT GUIDE. If not, repeat steps 28 and 29.



33. Push the inner dust boot down over the shift lever and re-attach it to the shifter plate.



31. Shift the transmission into Reverse.

UNDERNEATH THE VEHICLE, VERIFY THAT THERE IS CLEARANCE (NO CONTACT) BETWEEN THE SHIFT LEVER AND THE SHIFTER HOUSING. If not, remove the shifter, file the opening as required, perform Steps 22–30 again.



34. On 370Z and similar: Observe the "Forward" orientation arrow on the dust boot frame, and push the dust boot down over the shift lever. Push the boot opening all the way down to just below the step on the shaft.

3916044 Page 7 of 9



35. **On 370Z and similar:** Install the 4 dust boot screws, and torque them to **45–56 lb-in.** Then push the 2 wire loom clamps into the brackets on the dust boot frame.



36. **On 350Z and similar:** Note the "Forward" orientation arrows on the outer dust boot and metal frame.



37. On 350Z and similar: Push the outer dust boot over the shift lever, all the way down to just below the step on the shaft. Then install the metal frame and 4 screws, and torque the screws to 45–56 lb-in.



38. **On 350Z and similar:** Place the insulating pad over the shift lever.





39.Reconnect all electrical connectors to the shifter panel.



40. Move the shifter panel to over the shifter, and use the tabs on the leather boot to carefully pull the boot opening down over the lever. The tops of the tabs should end up just below the lip on the shift lever.

3916044 Page 8 of 9



41. Snap the shifter panel back into place in the center console.



42. Apply medium strength thread-locking fluid to the first 4 or 5 threads on the shift lever. Then install the shift knob (3) hand-tight.



43. Lightly grease the O-ring (2) and install it on the cap (1). Then align the Hurst logo as desired, and press the cap into the knob.



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

IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

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

