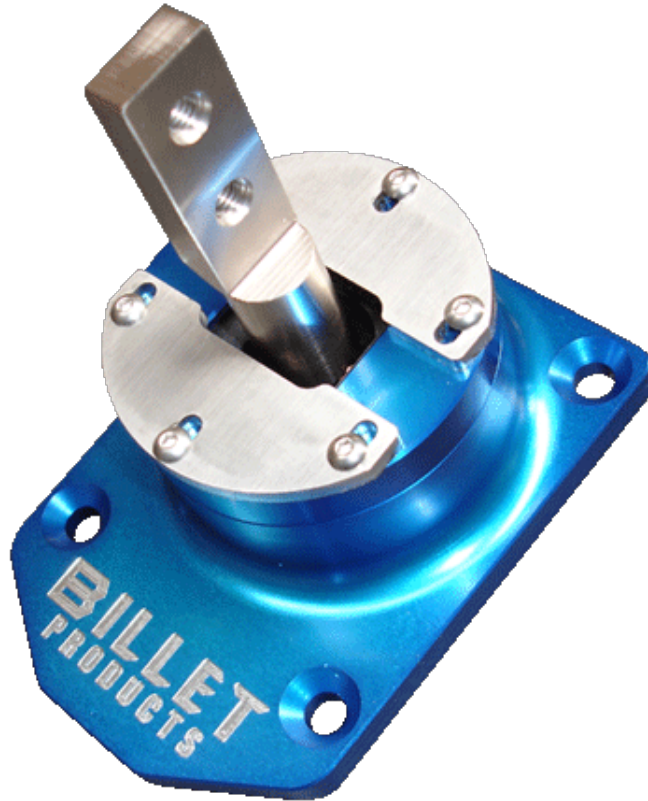


## ***Billet Pro Series shifter installation***

***Ford Falcon BA-BF 5spd / 6spd***



6spd model pictured

### **Kit contents:**

Along with the assembled shift body, you should also find the following contents in each box:

- 1 x shift lever
- 4 x M8 mount bolts
- 1 x rubber boot

### Tools and other items required for installation

- Car ramps or jack and stands
- 13mm spanner (ratcheting spanner if available)
- 8mm spanner or socket
- 16mm socket
- 13mm socket
- 1/2" socket
- 1/2" spanner
- 5mm allen key
- 2.5mm allen key
- Blade
- RTV sealant (Permatex Ultra blue or any other high temp engine construction sealant is recommended)
- Blue or Red Locktite

## *Stage 1 - Interior Dissassembly*

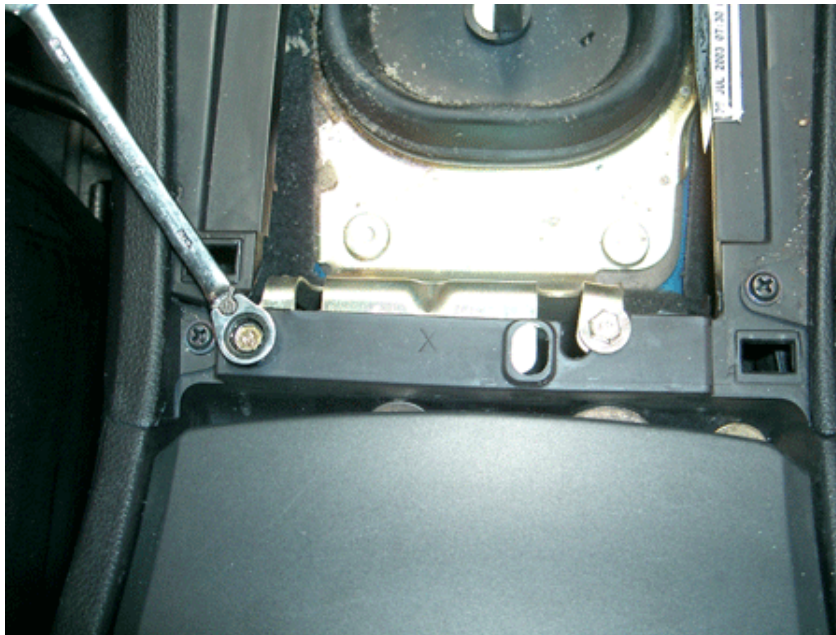


**Step 1:** With the gearbox in neutral, jack the vehicle up and support with jackstands under chassis rails, or alternatively drive your vehicle onto ramps. Safety is always the key, so please double check your jack stands and vehicle are on stable ground.

Carefully grasping the gearstick console surround, pull upwards to unclip this section.



**Step 2:** Using a 13mm spanner or socket, remove the bolt and nut from the gear lever connection to the factory shifter. (Note: It is easier to remove the lever with the gearknob and gearboot still in place).



**Step 3:** With an 8mm spanner, remove the two gold bolts holding the gold factory boot frame to the interior console piece

### *Stage 2 - Undercar*



**Step 4:** You will need to lower the gearbox cross member to allow more room above the gearbox to get to the shifter. Locate your jack under the gearbox, in order to support the weight of the box when loosening off the gearbox cross member bolts to aid in installation.

Using a 13mm socket and ratchet, remove the cross member bolts carefully allowing the jack to take the weight of the gearbox so as to know completely hang.

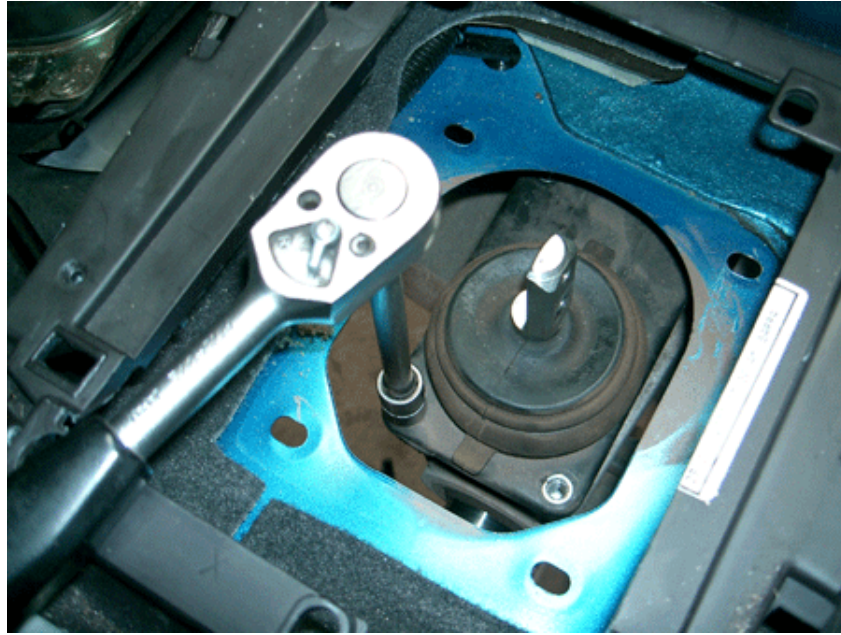


**Step 5:** With a 13mm spanner remove the 4 bolts around the top of the shifter on the gearbox tunnel which retain the factory rubber boot frame as seen earlier in the car.

### *Stage 3 - Inside car shift removal preparation*

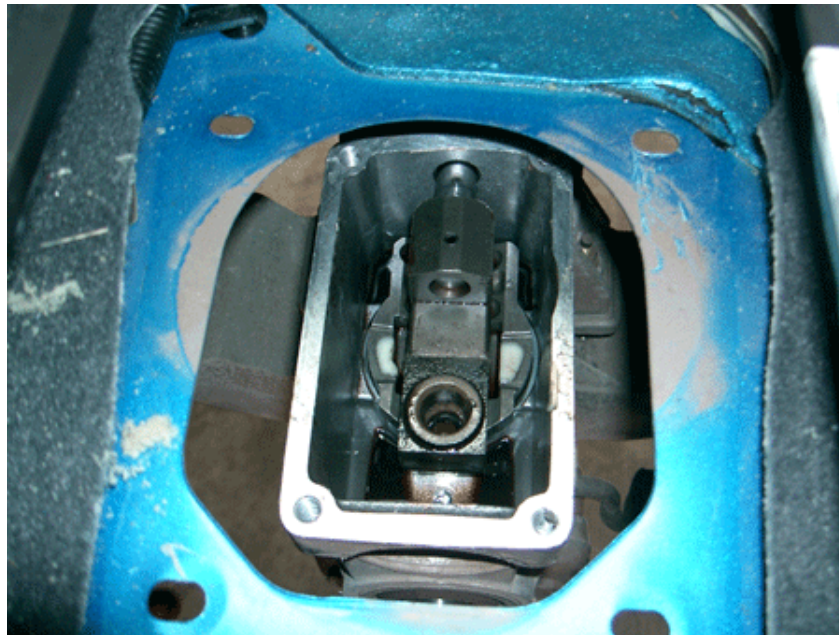


**Step 6:** With all the bolts retaining the boot frame now removed from under the car, carefully lift this up and remove it from the car. This is a little tricky, and tight to work with, but patience and careful maneuvering is the key. If needed, removing some of the plastic console surround parts may make this step easier for some.



**Step 7:** Using a 1/2" socket and ratchet, remove the rear two shift mount bolts. Then, with a 1/2" spanner, you can remove the front mount bolts, this can be done from underneath if you find it easier.

#### *Stage 5 - Installation of Billet Pro Shifter*



**Step 8:** Ensuring the shifter is in neutral, remove the factory shifter from the gearbox ensuring that the pivot cup remains in the selector arm in the gearbox. With the shifter removed, using a blade scrape away any left over sealant that may have remained on the mating surface of the shifter on the gearbox. Be mindful not to let any of the excess sealant to fall into the gearbox.

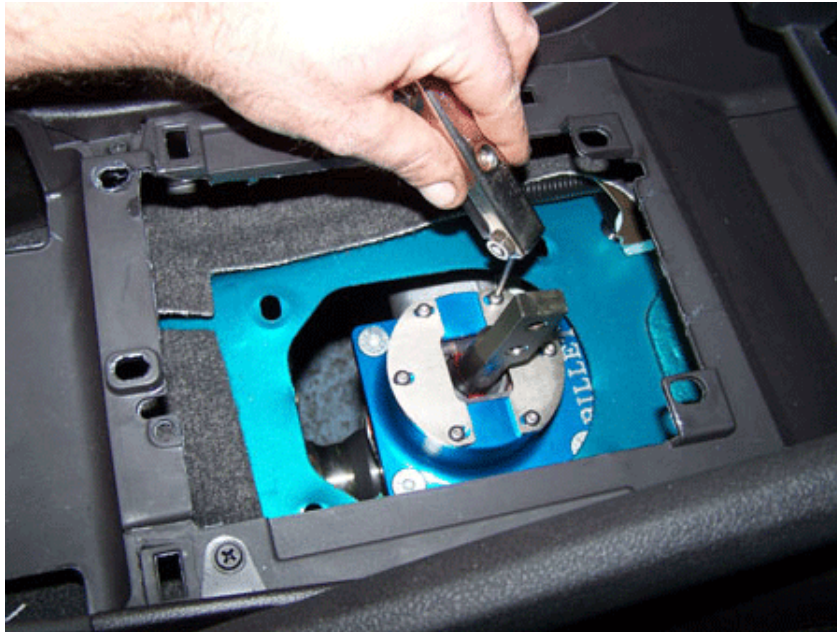


**Step 9:** Using some degreaser, or solvent based cleaner, clean the mating surface thoroughly to ensure its very clean. Once the surface is prepared, apply a liberal amount of high temperature silicone engine building sealant to the mating surface ensuring there is no gaps in the bead.



**Step 10:** With the sealant applied, take your new Billet Pro Series shifter and position it carefully in place without disrupting the bead of silicone on the mating surface. Take the 4 M8 countersunk bolts included in the kit and apply locktite to the threads before fastening the shifter to the gearbox with a 5mm allen key. As best as possible, try to achieve an even pressure is placed on the tension of each bolt.

## ***Stage 6 - Adjustment of positive stops***



**Step 11:** The positive stops will need to be adjusted now before the fitment of the rubber boot included with your Billet Pro Series shifter. With a 2.5mm allen key, loosen off all the cap screws enough so as to allow movement of the two positive stop brackets.

The stops need to be set in 3rd and 4th gears respectively. With the shifter pushed into 3rd gear, slide the front positive stop until it touches the shaft, now slide the plate away from the shaft leaving around a 0.5mm gap (you may use feeler gauges to get this clearance perfect). Once the position is set and that it is evenly located, carefully tighten the 3 retaining cap screws with the 2.5mm allen key without moving the position of the stop.

This process needs to be repeated for the rear stop with 4th gear selected.



**Step 12:** You can now slide the rubber boot included in the shifter package into position as pictured.

## *Stage 6 - Final vehicle assembly*



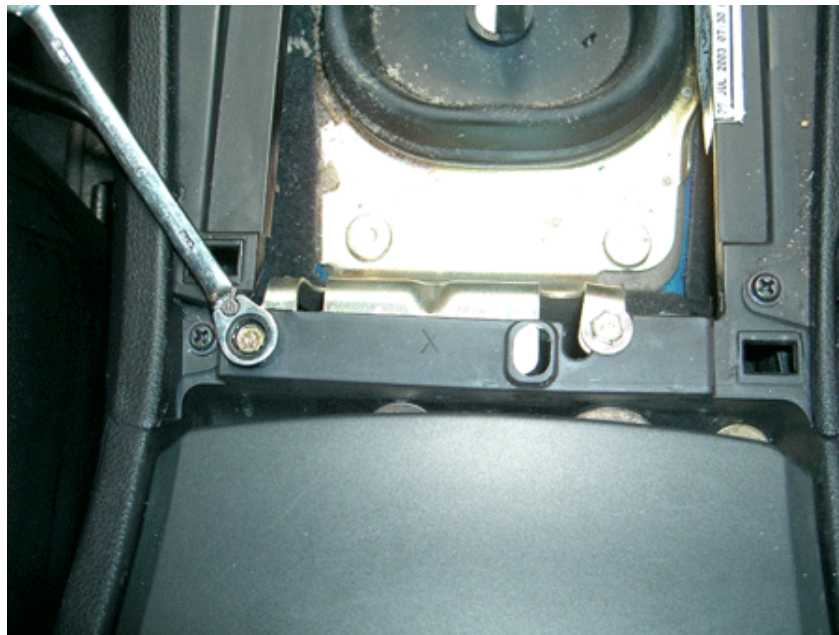
**Step 13:** Start the re-assembly by installing the gold frame with the factory gear boot as pictured above. Remembering this is a little tricky and requires patience so as to not scratch or damage any interior parts.



**Step 14:** You will need to go back under the vehicle to fit and tighten the four nuts that fasten the boot frame to the gearbox tunnel with a 13mm spanner.



**Step 15:** Jack the gearbox back up into place and tighten the four gearbox cross member bolts using a 13mm socket and ratchet.



**Step 16:** Using an 8mm spanner re-fit the two screws that fasten the console to the boot frame.



**Step 17:** You will now notice that the factory boot sits slightly higher than previous and may hinder the location of the gear lever to the shaft. With a sharp blade, carefully trim the loop off the factory boot as pictured below.



**Step 18:** With a 13mm spanner, apply locktite to the bolts and re-fit the gear lever into position.

**\*\*Important Note:** Due to the variance of gearbox specifications that Ford does not have document of prouduction dates for, some vehicles have a threaded lower hole on the lever, and some don't. If yours is not threaded and has a sted pressed into the lower hole of the gear lever, simply hit this stuf out with a hammer and fit a 13mm bolt and nut which matches the thread of the bolt in the upper hole.\*\*



**Step 19:** You can now take the final console surround and clip it back into place.

Your new Billet Pro series shifter is now installed and ready for the test drive to check the shifter is selecting correctly, and also to check for any gearbox fluid leaks around the mating surface of the shifter and gearbox. It's now time to enjoy your new Billet Pro Series shifter, and to transform your slow, sloppy shifts into Billet Pro shifts.

**Thank you for choosing Billet Products!**