

Installation Instructions

Short Throw Shifter

1983-2003 Mustang with T-5 w/OD/T-5/T-45

Part Number 45050

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This **B&M Short Throw Shifter** is designed for use on most 1983 to 2003 Ford Mustangs with the Borg Warner T-5 w/OD, T-5 or T-45 manual transmission. This shifter gives shorter throws than stock and uses the stock Ford knob, or any replacement knob with a M12-1.75 thread. **Note:** If this shifter is being installed in a custom application such as a street rod, the stick may be reversed by removing the four hold-down bolts and turning the shift rod assembly 180° and reinstalling the four bolts.

INSTALLATION

Step 1. Unscrew the knob from the stock shifter. Remove the boot and cover plate from the console. The clips that retain the cover plate are quite strong, so you may have to pull rather hard. Unbolt the stock stick from the lower part of the shifter. Remove the rubber boot that is attached to the floor pan with four screws. Save the screws for re-installing this boot. You will have to work at getting the boot plate out through the hole in the console.

When removing the Ford rubber boot from the floor pan, the front two hex head screws may be hard to get at. It may help if you use a swivel socket on an extension. There were changes in the opening in the plastic of the console for different model years, Printed in the **U.S.A.**

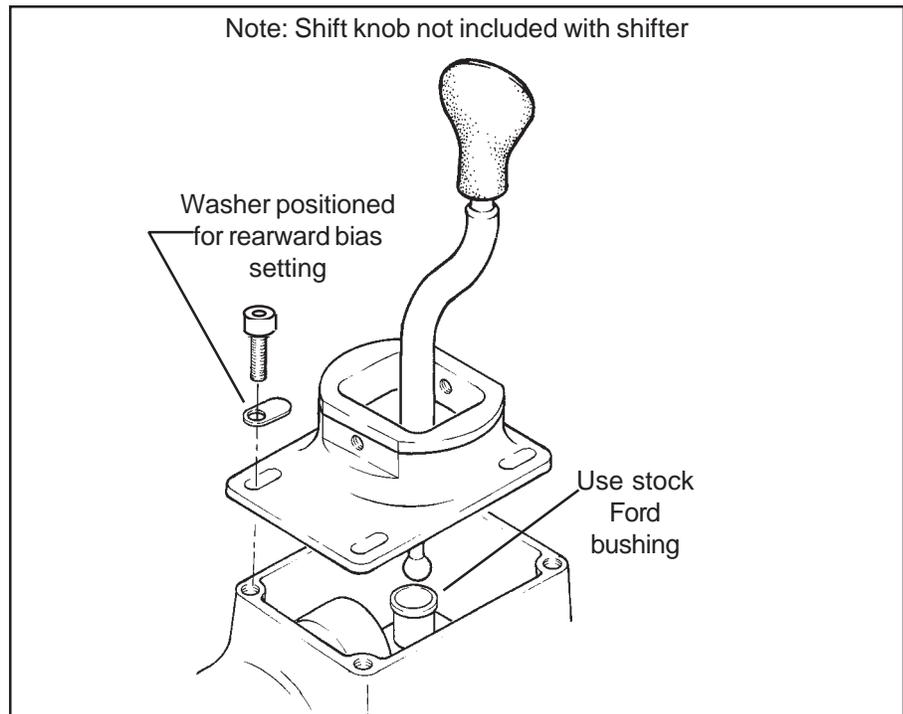


Figure 1

and some years are easier than others to remove the boot and mounting ring. The two rear screws are easy to get out. When removing this boot and the stamped ring that holds it in place, try not to break the rubber boot loose from the stamped steel mounting ring. They are originally held together by steel staples through the rubber into the steel. The rubber of the boot may be stuck tight to the floor pan. If it is, gently pry it away from the floor pan

before trying to remove the whole part from the console.

After this rubber boot and steel mounting ring have been removed from the car, look at the condition of the rubber and how well it is attached to the steel. If it is badly torn, you may want to get a new Ford boot (#E7ZZ-7277-B).

Run a small bead of weather strip adhesive around the bottom of the steel mounting ring and press the rubber of

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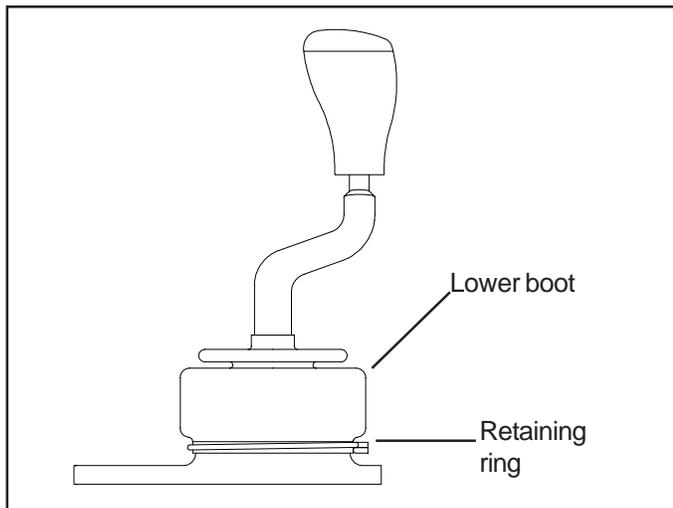


Figure 2

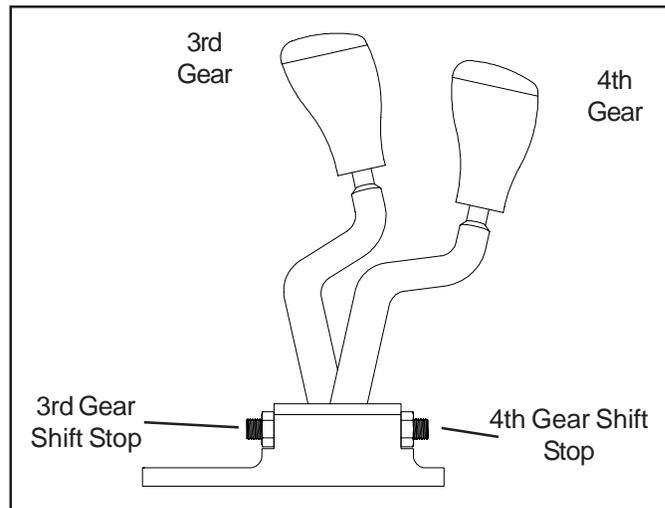


Figure 3

the boot against it and let the adhesive set. Also check the condition of the sponge rubber gasket that is on the bottom side of the rubber boot. If it is torn stick it back to the rubber boot with the weather seal adhesive.

Step 2. Remove the four screws that secure the stock shifter to the top of the transmission. You will have to work the shifter loose, because of the factory RTV sealer. It may help to reinstall the stock shifter stick and work it back and forth while pulling on the stick.

Step 3. Remove and inspect the plastic cup shaped plastic bushing that receives the ball end of the shifter. If it is worn or damaged replace it with a stock Ford bushing.

Step 4. Before you put the shifter into the car, remove all traces of the original sealer from the shifter mounting surface. **Note:** Since the shifter “neutral position” is adjustable, you may wish to test fit the shifter first to determine which location you prefer. By installing the adjustment washers with the hole towards the rear, you keep the approximate stock location. By installing the washers with the hole towards the front, you can give a slight rearward bias to the shifter (**See Figure 1**). Put new RTV sealer on the top surface of the transmission and install the **B&M Short Throw Shifter**. Use the four supplied M8-1.25 x 25mm socket head bolts and adjustment washers to secure the shifter to the transmission (**See Figure 1**). (Do not use the stock bolts). Tighten the screws to 12-15 lb-ft.

Step 5. Check the operation of the shifter. Install the new lower boot supplied with the shifter. First put the retaining ring around the bottom of the shifter, below the stop screws holes. Then install the boot over the shifter. Squeeze the retaining ring with your fingers and put it around the lower part of the boot (**See Figure 2**). This lower boot must be used to keep dirt and water out of the shifter mechanism.

Step 6. Replace the stock rubber boot that attaches to the floor pan. Once you get it through the hole in the console and in approximately the correct position, put the two rear screws in about halfway. Then use a screwdriver to push down on the front side of the boot mounting plate so you can install the two front screws. You may need to use a punch to help align the holes. While doing this be sure that the rubber boot is not pulling away from the steel mounting plate. Once the four screws are started, tighten them until the boot is seated. Be sure that the rubber does not pull away and that it seals the opening in the floor. If it is too difficult to get these front screws in, you can drill two holes along the side of the steel mounting ring and use small sheet metal screws to help hold down the boot. Replace the original interior boot and console cover plate. Tap the cover plate back into the stock clips. Replace the stock shifter knob or use a replacement knob with a M12-1.25 thread.

SHIFT STOPS

After extensive testing with various race

teams, as well as continuing development with the original transmission Engineering group, B&M Racing and Performance Products LLC has determined that the “shift stop” feature is redundant on the T-Series of Borg-Warner (Tremec) transmissions. Because of this, B&M is phasing out the use of shift stops. If you feel that your style of driving requires the use of shift stops, install the supplied threaded stops and nuts and **adjust exactly as described or internal transmission damage could occur!**

Adjusting the shift stops. Pull the shifter back into fourth gear. Turn the shift stop in with your fingers until it contacts the lower shifter stick. Turn the shift stop out 1/2 of a turn. Hold the shift stop with a 7/32" Allen key and tighten the jam nut securely with an 11/16" box or open end wrench. Push the shifter firmly into third gear and repeat the process with the front shift stop and lock it in place with the jam nut (**See Figure 3**).

Parts List

- 1 B&M Short Throw Shifter
- 1 Shifter Boot and Ring
- 4 M8-1.25 x 25mm Allen Bolts
- 4 Offset Washers
- 1 Instruction Sheet
- 2 7/16 Shift Stop
- 2 7/16 Shift Stop Nut

Tool List

- Allen Head Wrenches
- Socket, Drive, Extension & Swivel
- Screwdrivers
- Punch
- RTV Sealer