



# ROUSH Short Throw Shifter Kit

Part Number 1310R7400

Application: 2010 Ford Mustang GT

## Installation Instructions

Before installing your ROUSH Performance Product(s), read through the entire installation procedure and check to make sure all items are present. Contact ROUSH Customer Service at 1-800-59-ROUSH, 9:00 AM to 5:00 PM EST, weekdays, for any questions regarding fit, missing parts or instructions that are unclear to you.



(Shifter shown assembled)



(Shifter shown assembled)

## Packaging List for ROUSH Short Throw Shifter Kit

Description	ROUSH Part Number	Qty
<b>2010+ Short Throw Shifter Kit</b>	<b>1310R7400</b>	<b>1</b>
Shifter Assembly	R15040015	1
Isolator - Shifter rear		1
Bolts - 3/8-24 x 1" Button Head Cap Screw		2
Lock Washer - 3/8" ID, Int. Tooth		2
Upper Stick - Short	R15040018	1
Installation Instructions - Shifter	1310R7400IM	1

### Equipment and Supplies Required

- 10mm wrench
- 10mm Deep Well Socket and matching drive/extensions
- 13mm Wrench or Socket and matching drive/extensions
- 7/32" hex Wrench
- 7/32" hex Socket
- White Lithium Grease
- Small Screw Driver
- Loctite 242 Medium Strength Thread Locker
- Small pry bar
- Electrical Tape or Wire Tie



## **LIMIT OF LIABILITY STATEMENT**

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. ROUSH Performance Products (RPP) reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

## **SAFETY REQUIREMENTS**

**STOP! READ IMPORTANT SAFETY CAUTIONS AND WARNINGS BEFORE PROCEEDING.**

### **IMPORTANT SAFETY NOTICE**

Appropriate disassembly, assembly methods and procedures are essential to ensure the personal safety of the individual performing the kit installation. Improper installation due to the failure to correctly follow these instructions could cause personal injury or death. Read each step of the installation manual carefully before starting the actual installation.

1. Always wear safety glasses for eye protection.
2. Place ignition switch in the OFF position.
3. Always apply the parking brake when working on a vehicle.
4. Chock the front and rear tires to prevent unexpected vehicle movement.
5. If working without a lift, always consult vehicle manual for correct lifting specifications.
6. Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
7. Do not smoke or use flammable items near or around the fuel system.
8. Use chemicals and cleaners in well-ventilated areas.
9. Batteries produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks or flammable substances to come near the battery.
10. Keep hands and any other objects away from the radiator fan blades.
11. Keep yourself and your clothing away from moving parts when the engine is running.
12. Do not wear loose clothing or jewelry that can get caught in rotating parts or scratch surface finishes.
13. Allow the engine, cooling system, brakes and exhaust to cool before working on a vehicle.

### **WORK SAFELY!**

Perform this installation on a good clean level surface for maximum safety and with the engine turned off.

**USE EXTREME CAUTION WHEN WORKING UNDERNEATH A VEHICLE.** Never get near or underneath a vehicle until you are confident that it is safely supported and will not move or fall from its raised position.

## **DO NOT USE A BUMPER JACK!**

**NOTE!** There is a limited amount of working space underneath the car around the transmission and floor pan area while replacing and installing the shifter assembly, however, shifter removal and replacement can be performed without removal of drive shaft. If drive shaft is removed to facilitate the installation, consult the manufacturer's service manual for correct procedure.

## **Removing the Ford Shifter**

1. Apply the emergency brakes or block two wheels to avoid vehicle movement while the vehicle is on the ground.
2. Place the shifter in the neutral position.
3. Remove the shifter knob. Grasp the knob by hand and turn counterclockwise to unthread the knob from the shifter stick.
4. Open the cup holder door and the rear console door. Grasp the center console top from behind the open cup holder door and the thin section next to the e-brake lever and pull straight up to disengage the five (5) spring clip retainers. Refer to Figure 1. Lift the rear of the center console top and pull rearward to remove the two (2) front pins from the dash panel.



Figure 1

5. Raise the front of the console top. Press the release tab and disconnect the black electrical connector to the multi-function switch. Refer to Figure 2.
6. Raise the rear of the console top. Press the release tab and disconnect the green electrical connector on the bottom of the console top. Refer to Figure 3.



Figure 2



Figure 3

7. Press the release tab and disconnect the gray electrical connector on the bottom of the console top. Refer to Figure 4.
8. Using a small screw driver, disengage the locking tab and push the connector rearward to remove the connector from its retainer. Refer to Figure 5.



Figure 4



Figure 5

9. Remove the center console top from the vehicle.



10. Pull the wire harness retainer from the stud shown. Refer to Figure 6.
11. Remove the foam insulating pad from the transmission tunnel. Refer to Figure 7.



Figure 6



Figure 7

12. Remove the shifter grommet. Grasp and pull the grommet straight up. Refer to Figure 8.



Figure 8

13. Raise the vehicle to an adequate height using an appropriate lifting device to gain access to the underside of the shifter assembly. Support the vehicle using automotive approved support stands having adequate load capacity.

**CAUTION: To avoid any possibility of bodily injury or damage to vehicle, do not attempt shifter installation until you are confident that vehicle is safely secured and will not move or fall from its raised position.**

14. From underneath the car, use a 13mm wrench to remove the hex nut that secures the transmission linkage rod to the bottom of the factory shifter. Disconnect the rod by pulling it out of the shifter stick bottom. Refer to Figure 9.



Figure 9

15. Using a 10mm wrench, remove the front bolt that secures the shifter assembly to the transmission. Refer to Figure 10.



Figure 10

16. Using a 10 mm deep well socket, remove the two (2) hex nuts that secure the rear mount of the shifter assembly to the floor pan and set aside for reuse. Refer to Figure 11. Remove the rear saddle bracket and set aside for reuse.

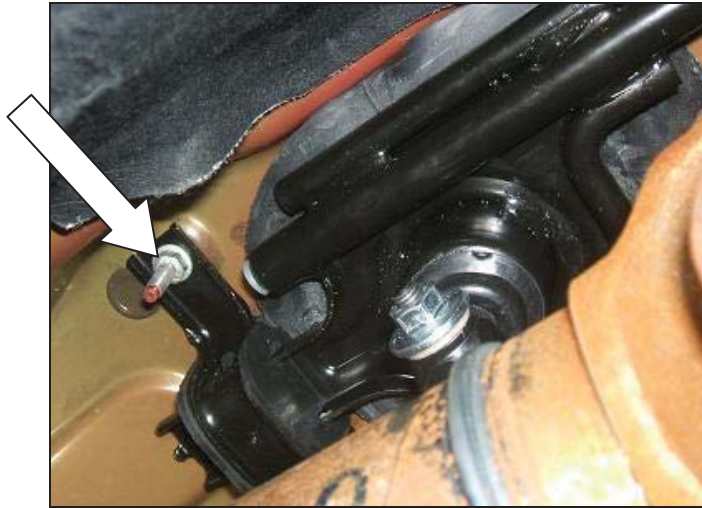


Figure 11  
(Right side shown, left side out of view)

17. Carefully slide the shifter out of the car by maneuvering it between the floor and the transmission/driveshaft.

## **Transfer components from the Ford shifter**

18. Place the factory shifter on a workbench. Remove the metal-flanged sleeve and the two (2) black rubber insulators from the front of the Ford shifter assembly. Transfer these three (3) parts to the ROUSH Shifter and install the metal-flanged sleeve as shown. (The same way it came off the Ford shifter) Refer to Figure 12.



Figure 12



19. Remove the two (2) nylon bushings from the shifter arm. Transfer the two (2) nylon bushing to the ROUSH Shifter Arm as shown. Refer to Figure 13.

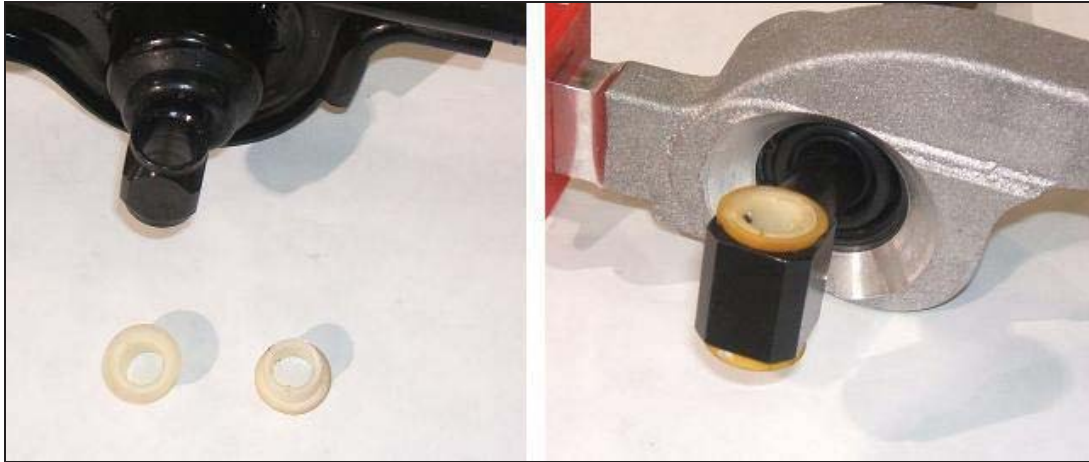


Figure 13

## **Install the ROUSH Short Throw Shifter**

20. Carefully maneuver the ROUSH Shifter up into the opening in the floor tunnel.
21. Apply Loctite 242 or equivalent to the take out front shifter arm bolt. Install the front shifter arm to the transmission but do not tighten. Refer to Figure 14.



Figure 14

- Using the take off saddle bracket, attach the rear isolator of the shifter assembly to the floor pan studs. Slide the red isolator on the arm as required. Install the two (2) hex nuts previously removed. Refer to Figure 15. Torque the two (2) nuts to 10Nm (8 lb-ft).



Figure 15  
(Right side shown, left side out of view)

- Using a 10mm wrench, tighten the hex bolt that secures the front shifter arm to the transmission. Torque the bolt to 40Nm (30 lb-ft). Refer back to Figure 14.
- Insert the shift rod linkage through the bushings in the shifter stick bottom. **Important: The offset (long side) side of connector located on the stick bottom must be positioned to the left (driver) side.** Refer to Figure 16. Apply Loctite 242 or equivalent to the shift rod linkage threads. Install the hex nut, previously removed, and torque to 25Nm (18 lb-ft). Refer to Figure 17.

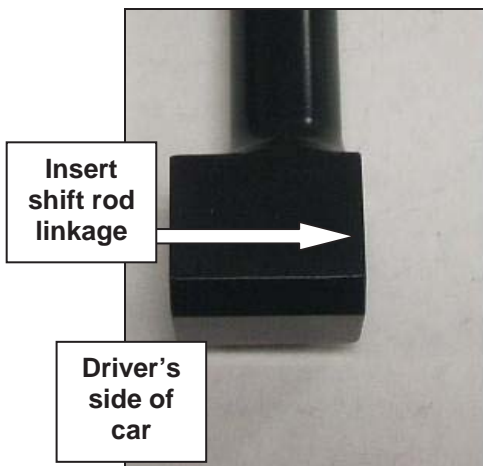


Figure 16



Figure 17

- Ensure all fasteners are tightened and torqued. Lower the vehicle to the ground.

## Reinstall the Center Console

26. From inside the car, attach the ROUSH upper stick to the stick bottom with the two (2) button head socket bolts and star tooth lock washers supplied. Refer to Figure 18. Using a 7/32" hex key socket, torque the bolts to 35 Nm (26 lb-ft).

**Important: Be sure that serrations on upper stick engage serrations on the lower stick.**



Figure 18

27. **IMPORTANT!** Test the shifter operation. Move the shifter through its entire gearshift pattern making sure that it engages each gear fully. Ensure that the shifter stick moves freely from side to side in "neutral" position.
28. Reinstall the large rubber dust boot. Align the boot so that the arrows are facing the front and rear. Stuff the outer edge of the dust boot into the tunnel opening. Carefully pull up on the rubber boot as needed to seat the grommet in the tunnel opening. Slide the center of the dust boot down over the bolts of the upper stick. Refer to figure 19.



Figure 19

29. Seal the dust boot to the shifter stick with electrical tape or a wire tie.
30. Reinstall the foam insulating pad and wire harness retainer. Refer back to Figures 7 & 6.
31. Carefully install the center console top by passing the shifter stick through the opening on the top of the shifter boot.
32. Reconnect the gray electrical connectors. Ensure they are fully inserted and snap into place. Slide the connector back onto its retainer and snap into place. Refer back to Figures 4 & 5.
33. Reconnect the green electrical connector. Refer Back to Figure 3. Ensure it is fully inserted and snaps into place.
34. Reconnect the black electrical connector to the multi-function switch. Refer back to Figure 2. Ensure it is fully inserted and snaps into place.
35. Align the two (2) pins on the front of the center console top to the openings in the dash panel. Refer to Figure 19. Align the five (5) retainers on the center console top to the openings in the lower center console. Press the center console top to the lower center console ensuring the five (5) retainer clips are fully engaged. Close the rear console door and the cup holder door.



Figure 19



36. Reinstall the Ford shifter knob. The fit is tight in order to keep the shift knob from loosening while in operation. Turn the knob clockwise (on) to thread the knob onto the Shifter Upper Stick. Once you have it threaded fully onto the upper stick, turn the knob counterclockwise (off) just enough to straighten the shifter knob text / shift pattern. Refer to Figure 20.



Figure 20

**Congratulations!!!** You have completed the installation of the ROUSH Performance Products, Short Throw Shifter Kit. It is recommended that you save all parts removed from your vehicle during the installation of this kit.





## WARRANTY

All retail parts carry a 90-day warranty from the date of purchase. This warranty covers defects in materials or workmanship, and does not include (i) normal wear and tear, environmental conditions, improper installation; (ii) road hazards, misuse, abuse, neglect, accidents, collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking the vehicle; (iii) misusing the vehicle, such as driving over curbs, overloading, racing, or using the vehicle as a stationary power source; (iv) altering, disassembling or modifying the parts; (v) defects caused or induced by failures, breakdowns, or damage by other parts, components or the vehicle; (vi) subjecting the parts to excessive moisture or water or any motor vehicle fluids (e.g.: oil, anti-freeze, battery acid, brake fluid, etc.); (vii) acts of God, natural disasters and other similar causes beyond the reasonable control of ROUSH; or (viii) application of chemicals that affect the parts. This Limited Warranty does not cover surface deterioration of paint, trim, and appearance items that result from use and/or exposure to the elements, such as stone chips, scratches, bird droppings, lightning, hail, windstorm, dings, dents, earthquake, road salt, tree sap, water or flood.

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