



ROUSH Short Throw Shifter Kit

Part Number: R15040014

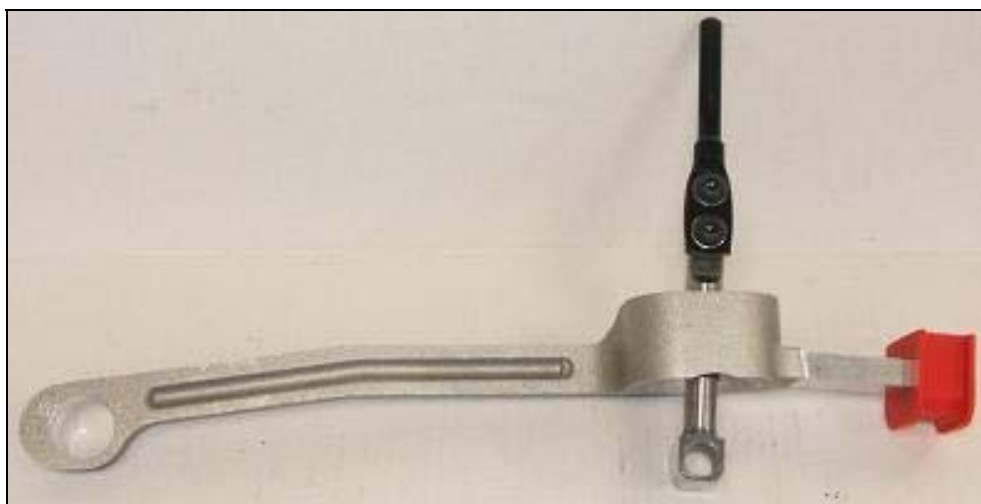
Application: 2005-09 Ford Mustang GT

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 Complete ROUSH Short Throw Shifter Kit **Part # R15040014**

Description	ROUSH Part Number	Qty
2005 - 09 Short Throw Shifter Kit	R15040014	1
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	R15040020	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 driver
 White Lithium Grease

Recommended Supplies

Loctite 242 Medium Strength Thread Locker
 Small pry bar
 Aerosol glass cleaner



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. Block the front and rear tire surface 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. Keeps 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 VEHICLE. Never get near or underneath 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.

Disassembly (FACTORY SHIFTER REMOVAL)

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 neutral position.
3. Work the upper part of the shift boot out of the shifter knob retainer groove and slide the boot down onto the stick. Refer to Figure 1



Figure 1

4. Remove the factory shifter knob from the shifter stick by grasping and turning counter-clockwise. Refer to Figure 2.



Figure 2

5. Remove the shifter boot by placing your finger tips underneath the inside edge of the shifter boot flange. Pull straight up to release the shifter boot from the center console. Slide the boot up and over the shifter stick and remove the shifter boot. Refer to Figure 3.



Figure 3

6. Remove the large dust boot by pulling it out of transmission tunnel opening. Refer to Figure 4.

Note: Some later model Mustangs may have an insulating pad inside the center console. It is very flexible and can be removed and installed through the shifter boot opening.



Figure 4

7. 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.

8. From underneath the car, use a 13 mm 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 5.



Figure 5

9. Using a 10 mm wrench, remove the front bolt that secures the shifter assembly arm to the transmission. Refer to Figure 6.



Figure 6

10. Using a 10 mm wrench or 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. Refer to Figures 7 & 8. Remove the rear saddle bracket and set aside for reuse.



Figure 7



Figure 8

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

TRANSFER SHIFTER PARTS

12. 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 Figures 9 & 10.



Figure 9



Figure 10

Note: Glass Cleaner can be used as a lubricant to aid installation.

13. 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 Figures 11 & 12.



Figure 11



Figure 12

INSTALLATION

14. Carefully maneuver the ROUSH Shifter up into the opening in the floor tunnel.

15. 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 13.



Figure 13

16. 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 14. Torque the two (2) nuts to 10Nm (8 lb-ft).



Figure 14

(Right side shown, Left side out of view)

17. Using a 10 mm wrench, tighten the hex bolt that secures the front shifter arm to the transmission. Torque to 40Nm (30 lb-ft). Refer back to Figure 13.

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18. 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 15. 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 16.

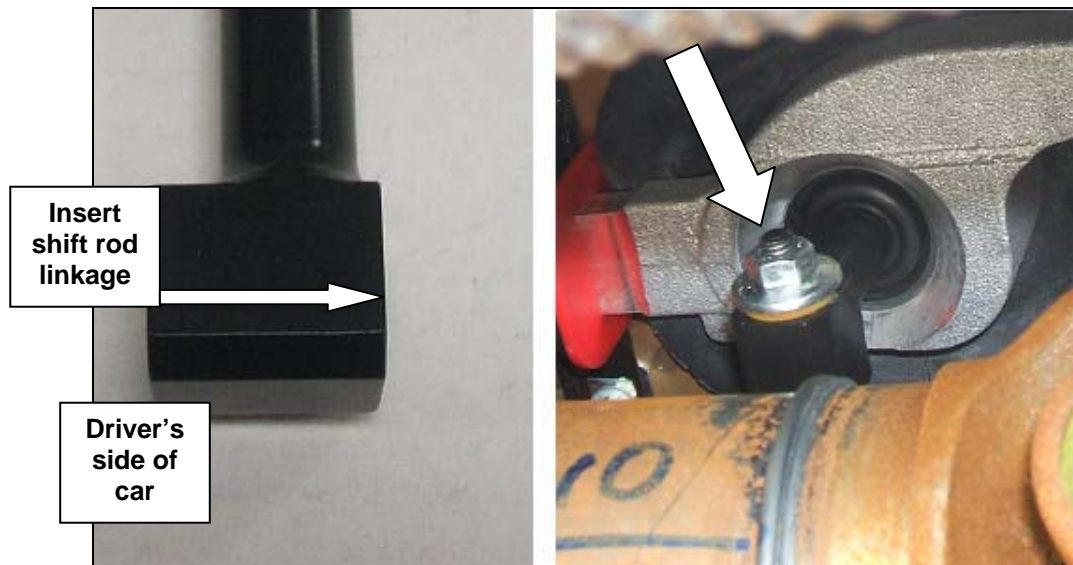


Figure15

Figure16

19. Ensure all fasteners are tightened and torqued. Lower the vehicle to the ground.
20. 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 17. **Important: Be sure that serrations on upper stick engage serrations on stick bottom.** Using a 7/32" hex key wrench, torque bolts 35 Nm (25 lb-ft).



Figure 17

21. **IMPORTANT!** Test shifter operation. Move shifter through entire gearshift pattern making sure that it engages each gear fully and that stick moves freely from side to side in “neutral” position.

22. Replace the large rubber dust boot onto the ROUSH shifter assembly. Align the boot so that the arrows are facing the front and rear. Ensure that the groove in dust boot is seated properly into floor tunnel opening. Slide the center of the boot down over the bolts for the upper stick. Refer to Figure 18.



Figure 18

23. Replace the insulation pad if equipped. Refer to Figure 19.

24. Place the shifter boot over the shifter stick. Align the boot to the console opening. Press the outer edges down and ensure the retainer clips snap firmly into place. Refer back to Figure 3.



Figure 19

25. 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. Work the shift boot top onto the base of the shift knob. Refer to Figure 20.



Figure 20



Congratulations!!! You have completed the installation of the ROUSH Performance Products, Short 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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