

2004-2008 Ford F150 2WD 3"/5" Lowering Kit

Thank you for choosing Rough Country for all your suspension needs.

Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read instructions before beginning installation. Check the kit hardware against the kit contents list on the back page. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have the tools needed to install the kit.

AWARNING

PRODUCT USE INFORMATION

Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. Do not add, alter, or fabricate any factory or after-market parts to decrease vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

Rough Country makes no claims regarding lowering devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

Always inspect (replace if necessary), bearings, ball joints, tie rods and ends as well as steering components before installation is completed.

We will be happy to answer any questions concerning the design, function, and use of our products.

A NOTICE NOTICE TO DEALER AND VEHICLE OWNER

INSTALLING DEALER / OWNER - It is your responsibility to install the warning decal and forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service life.

20+or larger wheels must be used with Rough Country drop spindles. If 20+wheels are used, you will use the supplied nuts and lock washers on the lower ball joints. Also, lower ball joint will need to be trimmed after ball joint nut is torqued to 95 ft-lbs. See 92800000 instructions. Factory ball joint hardware will be used with wheels larger than 20+. Kit Includes:

Tools Needed:

1726BOX1

1801BOX

U-bolts

(2) Shackles

Hardware Bag

21mm Wrench 36mm Socket 18mm Socket/Wrench 7/8+Socket 24mm Socket 10mm Socket/Wrench Hammer 29mm Socket 8mm Socket 17mm Wrench 15mm Wrench 13mm Wrench 1 1/16+Wrench Needle Nose Pliers Impact Torque Wrench Cut Off Tool Floor Jack Jack Stands



(2) Lowering Spindles (2) Drop Spring Seats (2) Upper Spring Plates (2) Lower Spring Plates (2) Shock Relocation Brkts (2) Rear Shocks



FRONT INSTALLATION INSTRUCTIONS

1. Use lowering spindle instructions (92800000), included in 1726BOX1, steps 1. 17 to remove factory spindle.



- 2. Using 15mm wrench, loosen and remove upper strut nuts. See Photo 1.
- 3. Using a 1 1/16+wrench and a 29mm socket, remove the lower strut bolt and nut. Save for reuse. See Photo 2.





- 4. Remove factory strut assembly. See Photo 3.
- 5. Compress factory strut in strut press. See Photo 4.



- 6. Use a 8mm socket to hold the strut shaft and a 17mm wrench to remove the top nut. See Photo 5.
- 7. Remove strut from press and remove the strut hat and coil spring.
- 8. Remove the factory bump stop. See Photo 6.



- 9. Remove the strut cap. See Photo 7.
- 10. Remove the factory coil seat. See Photo 8.



- **11.** Cut the bottom section off of the factory bump stop. **See Photo 9.**
- 12. Install the Rough Country dropped coil seat onto the factory strut. See Photo 10.



- 13. Install the factory strut cap, you will need lightly tap the strut cap with a hammer to get it completely seated. See Photo 11.
- **14.** Install the modified factory bump stop with the smaller end down. **See Photo12**.







- **15.** Re-install the factory coil and strut hat onto the strut and place in strut press. **See Photo 13.**
- 16. Using a 17mm wrench and 8mm socket, tighten the strut hat nut to factory spec. See Photo 14.



- **17.** Place the assembled strut into the factory location on the vehicle. **See Photo 15.**
- 18. Place factory bolt through the mount in the lower control arm and the strut. Tighten to factory spec. See Photo 16.



19. Using a 15mm wrench, tighten the upper strut bolts to factory spec. **See Photo 17.**



20. Refer to Spindle instructions (**92800000**), included in 1726BOX1, for proper installation of Rough Country 2+drop spindles.



Rear Installation



21. Using a 15mm socket and 18mm wrench, remove the upper shock bolt and save for reuse. See Photo18.22. Using a 15mm socket and 18mm wrench, remove the lower shock bolt and save for reuse. See Photo 19.





23. Support the rear axle with jack stands before continuing. See Photo 20.
24. Remove the emergency brake cable from the factory clamp. See Photo 21.



25. Completely remove the emergency brake cable from rear brake and secure out of the way. See Photo 22.26. Using a 10mm wrench, remove the emergency brake cable bracket. See Photo 23.



- 27. Using a flat screw driver, pry the pin out hold the ABS wiring. See Photo 24.
- 28. Move wiring to allow access to clamp. See Photo 25.



29. Using a 13mm wrench, remove clamp from rear differential. See Photo 26.30. Using a 10mm socket, remove the bolt from the muffler hanger. See Photo 27.





- **31.** Using a 15mm socket, loosen the exhaust clamp. **See Photo 28.**
- 32. Using a 10mm socket, remove the bolt from the exhaust hanger. See Photo 29.







33. Using a 21mm socket and 18mm wrench, remove the spring nuts and bolts from the shackle and save for reuse. **See Photos 30 & 31.**



- **34.** Using a 21mm socket, remove the factory u bolts. **See Photo 32.**
- 35. Using a 13mm socket, remove the factory bump stop. See Photo 33.



- 36. Using a 24mm Socket and 1 1/16+wrench, remove the front spring bolt and save for reuse. See Photo 34.
- 37. Using a 10mm socket, remove the brake line bracket from the frame. See Photo 35.
- **38.** Use caution to not bend metal brake line.







39. Install supplied bushings and sleeves into Rough Country shackles. See Photos 36 & 37.



- 40. Place the leaf spring under the axle and install the front leaf spring bolts into the leaf spring and hanger. Do not tighten. See Photo 38.
- 41. Install shackle and bolts into the leaf spring and hanger. Do not tighten. See Photo 39.







- 42. Place the lower leaf spring saddle between the axle tube and the leaf spring. Make sure the holes in the saddle are aligned with the leaf spring pins. See Photo 40.
- **43.** Place the supplied socket head cap screws through the upper u bolt plate. Note the direction of the bolts and plate. See Photo 41.



44. Using a 3/8+Allen and a 3/4+socket, tighten the bolts in the upper u bolt plate. See Photo 42.45. Place upper u bolt plate on top of axle, aligning bolts with holes in the old spring perch. See Photo 43.





- 46. Place supplied u bolts onto upper u bolt plate as shown in Photo 44.
- **47.** Place lower u bolt plate under the springs. **See Photo 45.**







48. Place supplied nylon lock nuts and flat washers on the u bolts and tighten with a 7/8+socket. See Photos 46 & 47 .





49. Install emergency cable bracket and tighten using 10mm socket. See Photo 48.50. Reconnect the emergency brake cable and install back in to the holder. See Photo 49.





- 51. Place supplied lower shock mount onto factory mount as shown. See Photo 50.
- 52. Place supplied sleeve into factory mount, use supplied 3/8+hardware for upper mount and 12mm through sleeve. Do not tighten at this time. See Photo 51.





53. Using factory hardware, attach Rough Country shocks and tighten with a 15mm socket and 18mm wrench. **See Photos 52 & 53.** ****N2.0 shocks shown. Perf2.2 shocks install with the shock body up.****



- **54.** Using a 9/16+socket and wrench tighten the upper bolt in the lower rear shock brackets. **See Photo 54.** Using 18mm socket and wrench, tighten lower shock relocation bolt.
- 55. Using 21mm socket and 18mm wrench, tighten the front spring bolts. See Photo 55.





56. Using 21mm socket and 18mm wrench, tighten the rear spring and shackle bolts. See Photos 56 & 57.





57. Apply thread locker to supplied bump stop and install bump stop into factory location. See Photos 58 & 59.





- **58.** Install and tighten clamp on rear differential and brake line bracket with 10mm wrench.
- 59. Using 15mm and 10mm sockets, tighten exhaust hanger brackets.
- **60.** Install wheels and tires, remove jack stands and lower the vehicle to the ground.

POST INSTALLATION

- 1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.
- 2. Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance.
- 3. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
- 4. Adjust headlights to proper settings and take truck in for a front-end alignment to a qualified alignment professional.
- 5. Have vehicle alignment performed by qualified alignment shop immediately.

Shock Mounting** If installing kit with rear shocks, follow these steps below.

N2.0 shocks. Part number 658695. Install sleeves into shock bushings. Shocks will mount with the body down.

Perf2.2 Shocks. Part number 660576. Install sleeves into shock bushings. Shocks will mount with the body up.



Alignment Slot Instructions

- 1. Using a 21mm wrench and 27mm socket, remove the lower control arm bolts and pull the lower control arms down.
- 2. Insert the stock bolt into the slot and slide to the inside of the slot. See Photo 1.
- 3. Using the bolt flange as a guide, mark the inner side of the flange. See Photo 2.



- 4. Using a die grinder with a carbide bit, remove the metal out to the lines marked in step 3. See Photo 3.
- 5. Repeat this process for all 8 lower control arm slots. Remove any burrs. Install lower control arms into stock locations with stock hardware.





Kit Contents



Alignment Specifications

2004-2005 F150 2wd

Front	←	→□←	\rightarrow
Total Toe	-0.20°	+0.00°	+0.20°
Front Camber	-0.95°	-0.20°	+0.55°
Caster	+3.60°	+4.60°	+5.60°
Rear			
Total Toe			
Rear Camber			
Thrust Angle	-0.25°	+0.00°	+0.25°

2006-2007 F150 2wd

Front	←	→□•	\rightarrow
Total Toe	-0.20°	+0.00°	+0.20°
Front Camber	-0.65°	-0.05°	+0.55°
Caster	+3.30°	+4.30°	+5.30°
Rear			
Total Toe			
Rear Camber			
Thrust Angle	-0.25°	+0.00°	+0.25°

2008 F150 2wd

Front	←	→□←	\rightarrow		
Total Toe	-0.20°	+0.00°	+0.20°		
Front Camber	-0.95°	-0.20°	+0.55°		
Caster	+3.40°	+4.40°	+5.40°		
Rear					
Total Toe	-0.10°	+0.00°	+0.10°		
Rear Camber					
Thrust Angle	-0.25°	+0.00°	+0.25°		

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