



**ROUGH
COUNTRY**
SUSPENSION SYSTEMS

09 Ford F150 2" Leveling 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 parts list and kit contents. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have needed tools.

PRODUCT USE INFORMATION

As a general rule, the taller a vehicle is, the easier it will roll. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

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 increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

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

If question exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

Due to differences in manufacturing, dimension and inflated measurements, tire and wheel combinations should be test fit prior to installation. For this application we recommend a 18" or larger wheel not to exceed 9" in width with a maximum backspacing of 6.0" and a min of 5.5". Additionally a quality tire of radial design is recommended, not exceeding actual diameter of 33.5" tall and 12.5" wide. Larger diameter tires will require modification to the front bumper.

NOTICE TO DEALER AND VEHICLE OWNER

Any vehicle equipped with any Rough Country product should have a "Warning to Driver" decal installed on the inside of the windshield or on the vehicle's dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

INSTALLING DEALER - 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

Kit Contents:

4-Upper Strut Spacers
2 Lower Strut Spacers
1-Poly Bag:
6-3/8" x 2.25" Bolt
6-3/8" Lock-washers
6-3/8" Nuts

Tools Needed:

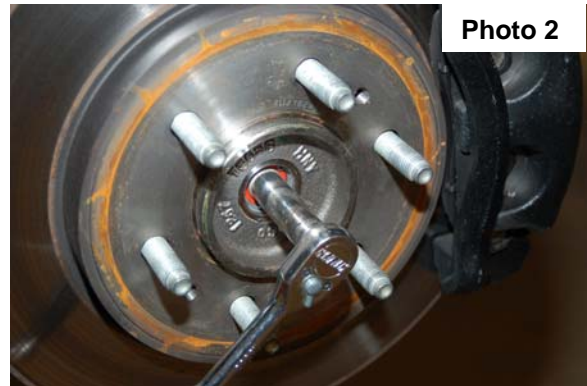
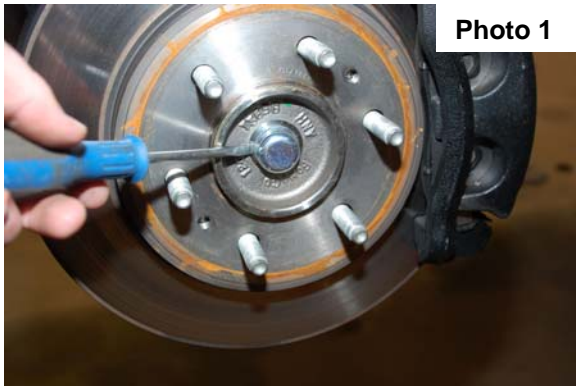
15mm Wrench
15mm Socket
29mm Socket
1 1/16" Wrench
21mm Wrench
16 mm Wrench
21 mm Wrench
3/8" mm Wrench
9/16" Wrench
Hammer
Floor Jack
Jack Stands

Torque Specs:

Size	Grade 5	Grade 8
3/8"	30 ft/lbs	35 ft/lbs
7/16"	45 ft/lbs	60 ft/lbs
1/2"	65 ft/lbs	90 ft/lbs
9/16"	95 ft/lbs	130 ft/lbs
5/8"	135 ft/lbs	175 ft/lbs
3/4"	185 ft/lbs	280 ft/lbs
	Class 8.8	Class 10.9
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs
16MM	130ft/lbs	165ft/lbs
18MM	170ft/lbs	240ft/lbs

INSTALLTION INSTRUCTIONS

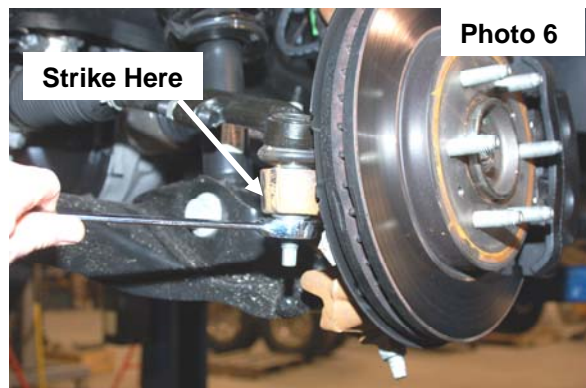
1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground
2. Remove the front tires/wheels.
3. Remove dust cap with a screw driver. **See Photo 1.**
4. Using a 13mm deep well socket remove the axle nut. **See Photo 2.** This will allow hub assembly to move on splines instead of pulling CV axle apart when it is pulled down to remove and re-install strut assembly.



5. Remove the sway bar nut from lower control arm using a 18mm socket on both sides. Retain factory hardware. **See Photo 3.**
6. Using a 15mm wrench, remove the nuts on the upper strut tower that holds the assembly in place. **See Photo 4.**



7. Using a 30mm socket, and 1 1/16", wrench, remove the strut bolt nut from the lower control arm. Retain the factory hardware for reassembly. **See Photo 5.**
8. Using a 21mm wrench remove the nut from the steering linkage. Using a hammer hit on the side of the knuckle where the steering linkage is connected and remove from knuckle. Push linkage forward to make room for installation. Retain factory hardware. **See Photo 6.**



9. Supporting the assembly with a suitable jack. Loosen the nut on the ball joint, using a 21 mm wrench. Using a hammer hit the knuckle as shown to allow the ball joint to separate from the upper control arm. Remove the nut after breaking loose. **See Photo 7 and 8.** Do not allow the knuckle to pull out far enough that it pulls the shaft out of the differential.

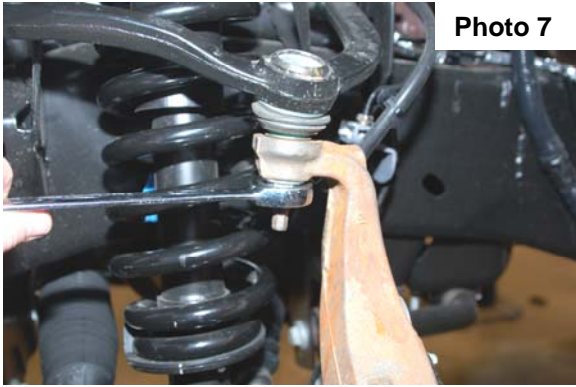


Photo 7

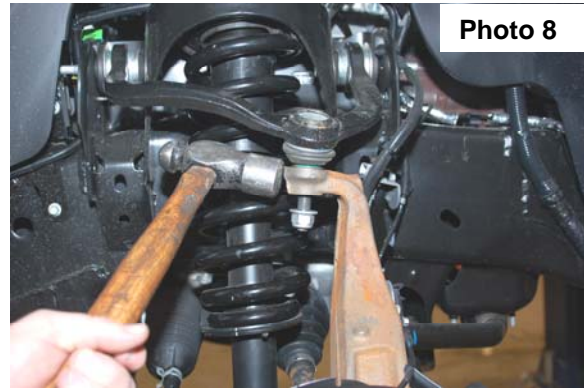


Photo 8

10. Pull the knuckle back just far enough to allow the removal of the lower strut bolt and assembly. Note the direction of the bolt for reassembly. Remove the strut from the vehicle.
11. After removing the strut from the vehicle; compress the strut using a suitable strut compressor and remove the upper strut nut and strut mount using a 17mm and 8mm wrench.
12. Remove the 3 pressed in studs from the upper strut isolator by gently hitting them with hammer. **See Photo 9.**
13. Install the lower 1/2" thick spacer into the bottom of the strut mount using the three 3/8" by 2.25" bolt making sure the hex head of the bolt recess into the slots of the lower strut spacer by aligning the bolt holes with the holes in the strut mount. **See Photo 10.**



Photo 9

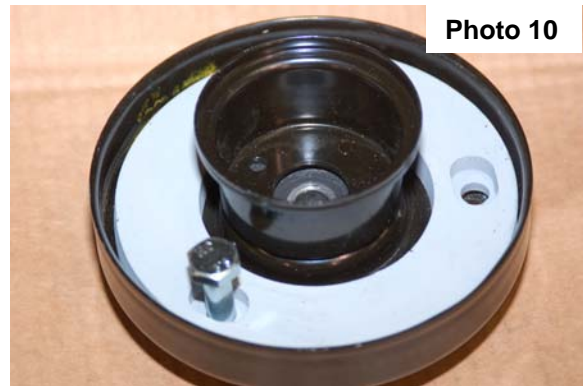


Photo 10

14. Using coil spring isolator to hold nut in place turn over assembly and place the 2 3/8" upper strut spacer on assembly. **See Photo 11.**
15. Place the assembled strut mount and spacer assembly on the strut shaft and install the upper strut mounting nut.
16. Decompress the coil spring, making sure the coil springs seats correctly on the upper and lower mounts.
17. Install the strut assembly into the strut tower and secure with the supplied 3/8" lock-washers, flat washers & 3/8" nuts using a 9/16" wrench. Make sure the bottom of strut is properly aligned. **See Photo 12.**



Photo 11



Photo 12

18. Jack up the lower control arm and install the lower strut bolt in the original position that it was removed. Using a 30mm socket, and 1 1/16" wrench, torque to factory specs.
19. Re-install axle nut and dust cover.
20. Using a floor jack to position the knuckle, connect the upper ball joint on the upper control arm to the spindle. Using a 21mm wrench, torque to manufacturer specs. If ball joint turns while tightening, use a 3/8" wrench to hold the ball joint.
21. Reinstall the steering linkage nut using a 21mm wrench.
22. Repeat steps on opposite side of vehicle.
23. Using a 15mm wrench, reinstall sway bar bushings and nut using factory hardware. Torque to factory specs.
24. Install the wheels / tires, using a 21mm deep well socket.
25. Jack up the vehicle and remove the jack stands. Lower the vehicle to the floor and torque all bolts to factory specifications.

POST INSTALLATION INSTRUCTIONS

1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.
2. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure.
3. On some vehicles the front lower skirting will need to be trimmed if using certain wheel /tire combinations and with heavy offset wheels. Trim only as needed.
4. Activate four wheel drive system and check front hubs for engagement.
5. Have a qualified alignment center align the vehicle immediately. Realign to factory specifications. Perform head light check and adjustment to proper settings.
6. Check and retighten wheels at 50 miles and again at 500 miles.
7. All kit components must be retightened at 500 miles and then every three thousand miles after installation. Periodically check all hardware for tightness.
8. Install "Warning to Driver" decal on sun visor

Note: Installation of larger tires will require speedometer recalibration.



Thank you for purchasing a Rough Country Suspension System.

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