

Jeep Wrangler JK 2.5" Suspension Lift Installation Instructions #18401.50 / 18415.50

Congratulations on your purchase of a Rugged Ridge™ suspension kit. To fully enjoy and understand this product we ask that you take a few moments to read through these instructions. Before beginning the installation, read these instructions and the enclosed driver's "WARNING NOTICE" thoroughly and completely. Also affix the "WARNING" decal in passenger compartment in clear view of all occupants. If any of these items are missing from this instruction packet, do not proceed with installation, but call Omix-Ada to obtain needed items. If you have any questions or reservations about installing this lift kit, call Omix-Ada at 770-614-6101 for Technical Assistance or Customer Service departments.

A FEW WORDS ABOUT SAFETY:

Your safety and the safety of other motorists is very important. As the owner of a modified suspension vehicle you are the person choosing the combination of suspension, wheels, tires and drive train that best fit your intended use. Likewise, you are the person responsible for the safety and legality of the vehicle you modify. In modifying your vehicle's suspension, balance your off-road capabilities against how the vehicle may actually be used off-road and on-road.

It is not practical or possible to warn about all hazards associated with modifying your suspension for improved off road capabilities. To help you make informed decisions about safety, we have provided certain information in the form of "Notices" and "Warnings". This information alerts you to potential hazards that could hurt you or others.

Notice: This is a caution against anything which may cause damage to the vehicle or its equipment if the caution is ignored. The Notice includes information about how you can avoid or reduce those risks.

Warning: This is a signal telling you that you CAN be KILLED or SERIOUSLY HURT if you don't follow the Warning. The Warning includes information about what you must or must not do in order to reduce the risk of injury to yourself and others.

The following Warning label is included with your Rugged Ridge™ suspension kit and should be placed on the vehicle visor or other conspicuous location after installation:





The suspension of this vehicle has been modified by the owner to improve off-road capabilities. As a result, this vehicle may handle differently than as factory equipped including increased ride-height; reduced lateral stability and risk of roll-over or other accident. Also, owner's choice of larger tire and wheel combinations may require additional braking force or increased stopping distances.

- Failure to drive this vehicle safely may result in serious injury or damage. Avoid Sharp Turns or abrupt maneuvers. Do not drive the vehicle under any speed or maneuvering conditions which may cause the vehicle to trip, roll, lose traction or compromise your ability to safely brake in an emergency.
- Familiarize yourself with all vehicle manufacturers and Rugged Ridge™ warnings, instructions and limited warranties before driving this modified suspension vehicle.
 Follow recommended maintenance procedures and routinely inspect your vehicle components for unusual wear or off-road damage.
- Always wear seat belts and/or appropriate off-road restraints, reduce your speed, tread lightly[®] and safely enjoy your off-road vehicle.

PRE-INSTALLATION NOTES:

Notice: This kit should only be installed by a professional mechanic or individual with significant automotive experience.

- Refer to parts list and inventory your kit to insure all parts and hardware pieces are available before beginning installation.
 Contact your independent dealer immediately if parts are missing.
- Installed lift will vary depending on vehicle options and configuration. As a reference and important guide should technical assistance be required, establish base ride-height measurements before beginning installation. Park vehicle on hard, level surface. Carefully measure the four corners of the vehicle (front and rear –both sides) from the ground up to the center of the fender opening above the axle. Record below and save.

Driver Side Front:	Passenger Side Front:	
Driver Side Rear:	Passenger Side Rear:	

RECOMMENDED TOOLS:

! Warning: Improper use of air and power tools can cause serious injury. Familiarize yourself with tool manufacturers warnings and instructions before use. Always wear approved safety glasses.

COMPONENT BOX LISTING:

Two 2" Lift Bump Stop Spacer
One 2-4" Lift Rear Track Bar Relocation Bracket
Two 2.5" Lift Rear Bump Stop Bracket
One Rear Track Bar Brace, Dana 44
One 2.5" Lift Hardware Bag

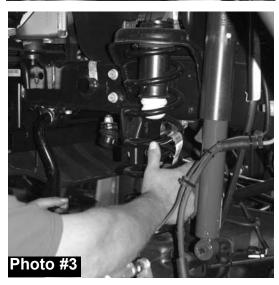
Installation:

- 1. Park the vehicle on flat, level ground and set emergency brake.
- 2. Raise the front of the vehicle and support frame rails using jack stands.
- 3. Disconnect the front sway bar end links using a 18mm socket. Disconnect front track bar using a 21mm socket. (See Photo #1)
- 4. If installing Rugged Ridge Steering Stabilizer, Remove factory steering stabilizer using 18mm socket. (See Photo #2)
- 5. Disconnect front shocks using a 18mm socket. Remove front tires/wheels and remove front coils. (See Photo #3) Remove front Shocks.
- 6. Locate new front bump stop. Place bump stop on the center of the bump stop pad located on the front axle. Mark and drill using a 25/64" drill bit. (See Photo #4).
- 7. Place bump stop in coil spring, and install coil spring. Attach bump stop to axle using the 3/8 x 2 3/4" button head bolts with one washer under the 3/8" nut. (See Photo #5)
- 8. Let the weight of the frame down on to the new coils. Re-Attach front drive shaft, end links, track bar, etc.
- 9. If installing Steering Stabilizer, install at this time. (See Photo Below).
- 10. Install new Front shocks using hardware supplied. (See Photo #6). Install tires/wheels.







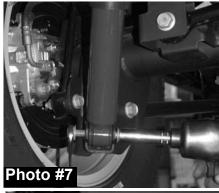








- 11. Raise rear end and properly support frame rails using jack stands. Remove rear shocks using 16mm socket. (See Photo #7)
- 12. Disconnect rear track bar bracket from the axle using 21mm socket. (See Photo #8). Disconnect rear sway bar end links using 18mm socket.
- 13. Disconnect ABS line from frame and disconnect brake line from frame. (See Photo #9) Lower axle down and remove factory rear coils.
- 14. Place rear Track Bar relocation bracket over factory bracket on the axle. With bracket seated flush, mark and drill the new center mounting holes using a 15/32" drill bit. (See Photo 10)
- 15. Install the supplied 7/16 x 1" fine thread bolt and fine thread nyloc nut. Use one 7/16" washer under the nut. (See Photo #11). Tighten nut at this time.
- 16. It will be necessary to drill through the driver side bottom of the OEM bracket and through the bracket. Drill using a 17/32" drill bit. Once drilled, install the supplied 1/2" x 1 1/4" fine thread bolt and nyloc nut. Use one washer under the bolt. Install factory bolt and nut at the bottom location being sure to use the supplied crush sleeve. (See Arrow in Photo #12) Tighten all track bar bracket hardware at this time.
- 17. Install new rear coils. (See Photo #13). Be sure to re-use the upper OE Rubber isolator pad.







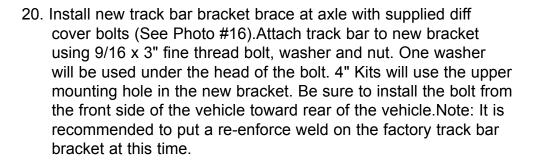








- 18. Attach new rear bump stops to the factory location on the axle using the 5/16 x 1" fine thread bolts, washers and nuts supplied. (See Photo #14) Be sure to install the bump stop so that the angled end is towards the rear.
- 19. Let weight on coil springs and re-attach sway bar end links, brake line and ABS lines. Attach factory track bar to the new bracket in the lower mounting hole in the new bracket. Upper hole is used on 4" kits. Attach using the 9/16 x 3" fine thread bolt, washer and nut. Washer will be used under the nut.



- 21. Install new rear shocks. (See Photo #15)
- 22. Install tires/wheels and lower vehicle to the ground.

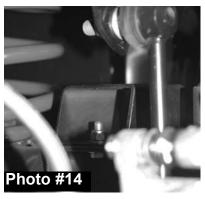






Photo #16

POST INSTALLATION CHECKS/ALIGNMENT:

- After installation is complete, double check that all nuts and bolts are tight. (Do not retighten nuts and bolts where Loctite was used.) Check to ensure there is adequate clearance between all rotating, mobile and fixed members.
- A transfer case lowering kit is available if a drive shaft vibration is present.
- Rotate driveshafts and check for interference at differential yoke and cardan joint. If necessary, lightly dress casting(s) and/or U-joint tabs in order to eliminate binding.
- Check clearance between inner side wall of tires and links. It may be necessary to adjust steering stops.

Notice: Adjust drag link so that steering wheel remains centered and wheel sweep from side to side remains equal. Failure to do so may cause computer errors, odd handling characteristics and poor performance. Have a <u>qualified</u> alignment center check and realign to factory specifications.

Notice: With vehicle securely elevated, carefully inspect and adjust to assure adequate clearance between tires (inner side wall), body and suspension components throughout range of steering and suspension travel. Additionally, carefully inspect and adjust to maintain clearance between suspension components, wiring harnesses, exhaust, brake and fuel lines, fuel tank, floorboards and body panels. Complete by properly torquing all fasteners.

Notice: With vehicle now on floor, again check clearances, cycle steering lock to lock and test proper brake operation. Raised vehicle height requires realigning headlights. Consult your state's lighting regulations. Wheels must be realigned by qualified service center to factory specifications.

Notice: Re-torque fasteners after 500 miles. Thereafter, regularly inspect and re-torque as needed. Follow vehicle manufacturer's recommended maintenance procedures and routinely inspect your vehicle components for unusual wear or off-road damage.

Warning: Avoid compromising vehicle handling and safety (including roll over risk) by NOT adding, combining or fabricating additional lift devices (ex. body lifts) with this product. Also be aware that most states have restrictions on height modifications for vehicles used on-road. Consult your vehicle owners manual, the instructions and warnings accompanying this product and state law before undertaking these modifications or using your modified suspension vehicle on-road. A summary of current regulations affecting modified suspension vehicles is available from www.SEMA.org.

TECHNICAL ASSISTANCE: Contact Rugged Ridge™ at 770/614-6101 if you have remaining questions about this product or its installation.

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