

# #J1310, J1311 Installation Instructions 2007-2014 Jeep JK 3" Suspension Lift

# Read and understand all instructions and warnings prior to installation of product and operation of vehicle.

Zone Offroad Products recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

#### >> PRODUCT SAFETY WARNING

Certain Zone Suspension Products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. Zone Offroad Products does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

#### >>> TECHNICAL SUPPORT

*www.zoneoffroad.com* may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to tech-zone@sporttruckusainc.com detailing your issue for a quick response.

*888.998.ZONE* Call to speak directly with Zone tech support.

#### »Pre-Installation Notes

- 1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- 2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- 3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
- 4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
- 5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
- 6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
- 7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

Difficulty Level

easy 1  $\begin{pmatrix} 2 \\ 2 \end{pmatrix}$  3 4 5 difficult Estimated installation: 4-5 hours

#### **Tire/Wheel Fitment**

35x12.50 tire/16x8, 4.5" BS wheel

#### \*Important\* Verify you have all of the kit components before beginning installation. **Kit Contents** Qty Part Qty Part 2 Rear Sway Bar Link w/Bushings 2 Front Coil Spring 4 Sleeve - Sway Bar Link - 0.625 x 0.075 x 1.375 2 Rear Coil Spring 1 758 Bolt Pack - Rear Sway Bar Links 2 2" Front Bump Stop Extension 2 12mm-1.75 x 60mm bolt 1 439 Bolt Pack - Front Bump Stops 2 12mm-1.75 prevailing torque nut 2 3/8"-16 x 2-1/2" bolt 2 12mm-1.75 prevailing torque nut 2 3/8" USS flat washer 4 1/2" SAE washer 1 3/8"-16 x 1" self-tapping bolt 1 Rear Track Bar Bracket 2 2" Rear Bump Stop Extension 1 748 Bolt Pack - Rear Track Bar Bracket 1 764 Bolt Pack - Rear Bump Stop/Brake Line 9/16"-12 x 3" bolt 1 4 5/16"-18 x 7/8" bolt 2 9/16" SAE washer 4 5/16"-18 nylock nut 1 9/16"-12 prevailing torque nut 1/4"-20 x 3/4" bolt 2 2 7/16"-14 x 1-1/4" bolt 2 1/4"-20 nylock nut 3 7/16" SAE washer 14 1/4" USS flat washer 1 7/16" USS washer 2 1/4"-20 x 3/4" self-tapping bolt 2 7/16"-14 prevailing torque nut 2 Rear Brake Line Bracket 1 Crush Sleeve - Rear Track Bar Bracket



# **INSTALLATION INSTRUCTIONS**

#### **PRE-INSTALLATION NOTES**

2012-2018 JK models will require exhaust extension kit, part number J5305 for proper driveshaft to exhaust clearance once this system is installed. See kit specific instructions for exhaust extension installation procedure.

#### >> FRONT INSTALLATION

- 1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
- 2. Disconnect the front track bar (21mm) from the axle. Save mounting bolt. Figure 1



Figure 1 - Left Hand Drive Shown

- 3. Raise the front of the vehicle and support the frame with jack stands behind the front lower control arm pockets.
- 4. Remove the wheels.
- 5. Disconnect the front brake line brackets from the frame rails (10mm). 2011 models; disconnect the brakelines from the axle below the coil spring. Save hardware.
- 6. *Rubicon Models*: Disconnect the front locker wire from the driver's side upper control arm.
- 7. Support the front axle with a hydraulic jack. Remove the front shocks from the vehicle using a 16mm wrench for the top and 18mm for the bottom. Save lower mounting hardware.
- 8. Disconnect the sway bar links from the axle and sway bar. Discard links and save hardware.
- 9. Disconnect the steering drag link from the pitman arm. Remove the tie rod end nut and dislodge the tie rod end from the pitman arm with the appropriate puller or pickle fork. Save tie rod end nut.
- 10. Lower the front axle and remove the coil springs from the vehicle.
- 11. Make a mark in the center of the lower coil spring mount pad. Drill a 5/16" hole at the mark Figure 2. Using the provided 3/8" x 1" self-tapping bolt, tap the hole and remove the bolt. This hole will be used to attach bumpstop extension later.

# Important—measure before starting!

Measure from the center of the wheel up to the bottom edge of the wheel opening

LF	RF
LR	RR

#### **Step 11 Note**

Be sure to drill the hole with a 5/16" drill bit to ensure that the bolt can cut the threads properly. Hard-ware for bump stop installation is located in hardware pack #439.



Figure 2

#### Step 12 Note

The new front coil springs are taller than the new rear springs.

- 12. Place a provided bump stop extension inside one of the new front coil springs and install the spring in the vehicle. Make sure the spring is seated properly in the axle mount.
- 13. Attach the bump stop extension to the axle through the hole that was made earlier using the provided 3/8" x 2-1/2" bolt and washer. Torque bolt to approximately 25 ft-lbs. Repeat the spring/bump stop installation on the other side of the vehicle.
- 14. Install the new shocks with the factory lower hardware and new upper bushings/ hardware. Torque the lower bolt to 60 ft-lbs and the upper nut until the bushings begin to swell.
- 15. Reattach the drag link to the pitman arm with the factory tie rod end nut. Torque nut to 65 ft-lbs.
- 16. Go to the rear of the vehicle and remove the rear sway bar links from the axle and sway bar (18mm). Save lower hardware for the rear link installation. Install the factory rear sway bar links to the inside face of the front axle mount tab with the original front link hardware. Attach the ball joint end of the link to the outside face of the sway bar with the original nut Figure 3. Torque upper and lower link hardware to 55 ft-lbs.



Figure 3

17. 2011 and newer model years will require the brakeline at the frame to be lowered 1": Trim off the locating tab on the brakeline. Disconnect the brakeline from the frame. Drill a 7/32" hole 1" below the original mounting hole and attach the brakeline with 1/4" self tapping bolt. Tighten to 10-15 ft-lbs. It will be necessary to gain extra slack in the hardlines in order for the slight drop. Reattach the brakeline to the axle below the coil spring with factory hardware. Tighten to 15 ft-lbs. (Fig 4a)



Figure 4a

18. 07-10 model years: Reconnect the front brake line brackets to the original mounts on the frame rails with the factory bolts. Tighten bolts securely

All model years: Check the slack in the brake lines by turning the wheels from lock-to-lock. It may be necessary to slightly reform the brake line hard-line at the frame down about 10-15 degrees to provide more slack in the line **Figure 4b/c.** Carefully bend the hard line with your hands.



Figure 4b - Before



Figure 4c - After

- 19. Install the wheels and torque lug nuts to manufacturer's specifications.
- 20. Reattach the front track bar to the axle with the factory hardware. Have an assistant turn the steering wheel to aid in aligning the track bar bolt. Torque the track bar bolt to 100 ft-lbs.

#### >> REAR INSTALLATION

- 1. Block the front wheels for safety.
- 2. Disconnect the rear track bar from the frame (Left hand drive shown). Save hardware. Figure 5



Figure 5

- 3. Raise the rear of the vehicle and support the frame with jack stands in front of the lower control arm mounts.
- 4. Remove the wheels.
- 5. Remove the shocks. Save the upper and lower mounting hardware.
- 6. *Rubicon Models*: Disconnect the rear locker wire plastic retainer clip from the bracket at the top of the differential.



Figure 6

- 7. Disconnect brake line brackets from the frame (10mm), save bolts Figure 6
- 8. Lower the axle and remove the rear springs.
- 9. Install the new rear springs in the vehicle, making sure the factory upper rubber isolator is in place. Raise the axle to slightly compress the spring.
- 10. Install the new shocks with the factory hardware. Tighten upper mounting hardware to 30 ft-lbs, and lower hardware to 55 ft-lbs.
- 11. Install the provided bump stop spacers on the axle using the existing holes in the axle bump stop pad. Fasten the bump stop to the axle with the holes on the large face of the blocks using 5/16" x 7/8" bolts, nuts and 5/16" SAE washers. Torque bolts to 20 ft-lbs. Figure 7



Figure 7

- 12. Temporarily install the new track bar bracket into the factory frame bracket with the new provided 9/16" hardware. On right hand drive vehicles the bracket mounts to the back and outside faces of the factory mount and against the front inside surface. On left hand drive vehicles the bracket mounts to the front and outside face of the factory mount. Figure 8a, 8b.
- 13. Using the bracket as a template, mark the outside hole to be drilled. Remove the bracket and drill a 1/2" hole at the mark Figure 8.

#### **Step 8 Note**

Do not over-extended the ABS lines when lowering the axle. It may be necessary to temporarily remove the plastic retaining clip at the frame to allow for enough slack.

#### Step 11 Note

All hardware needed for the rear bump stop spacer installation is located in hardware pack #764.

#### Step 12 Note

All hardware needed for the rear track bar bracket installation is located in hardware pack #748.



Figure 8a - LHD Shown



Figure 8b - RHD Shown

14. Reinstall the track bar bracket with the 9/16" hardware along with the provided 0.750" x 1.520" crush sleeve inside the factory mount. Run the bolt through the new bracket, factory mount and sleeve Figure 9. Leave hardware loose.



Figure 9 - LHD Shown

15. Fasten the new bracket to the frame through the outer holes using the provided 7/16" hardware. The bottom hole uses the larger diameter USS washer on the inside to go against the slot in the frame. Torque 7/16" hardware to 40 ft-lbs Figure 10.



Figure 10 - LHD Shown

- 16. Locate the new rear sway bar links with preinstalled bushings. Lightly grease and install 0.625 x 0.075 x 1.375 sleeves in each bushing. Attach the sway bar links to the outside of the axle mount with the original hardware and to the outside of the sway bar with 12mm x 60mm bolts, nuts and washers. Run the upper bolts from the outside in. Torque all sway bar link hardware to 60 ft-lbs.
- 17. Install brakeline relocation brackets to the original brake line mounting point on the frame. Attach the bracket with the factory bolt. Attach the brake line to the INSIDE surface of the drop bracket with a 1/4" x 3/4" bolt, nut and washers Figure 11A/B. Torque hardware to 10 ft-lbs.



Figure 11A

## Step 16 Note

All hardware needed for the rear sway bar link installation is located in hardware pack #758.

#### **Step 17 Notes**

All hardware needed for the rear brake line drop installation is located in hardware pack #764.

The factory brake line bracket must be mounted to the inside of the new drop bracket to provided enough clearance between the brake line and the sway bar. See Figure 11B.

The hardline portion of the brake line (below the mounting tab) can be straighten slightly for more slack and better clearance between the sway bar if necessary.



Figure 11B

- 18. Reinstall wheels and torque to factory specifications. Lower vehicle to ground.
- 19. Install the rear track bar into the new relocation bracket with the original track bar hardware. An assistant may be needed to push on the body of the vehicle to help align the track bar in the bracket.
- 20. With the track bar installed, torque the 9/16" bracket hardware and factory track bar hardware to 110 ft-lbs.

#### >> Post-Installation

- 21. Double check all hardware for proper torque..
- 22. Check all fasteners after 500 miles and at regularly scheduled maintenance intervals.

#### Step 19 Note

It may be necessary to slightly compress the rear suspension by pushing down on the bumper to aid in installing the track bar bolt.

## Post-Installation Warnings

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. Perform head light check and adjustment.

4. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.