# #J1410, J1411 Installation Instructions
# 2007-2012 Jeep JK
# 4" 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.

### Difficulty Level

easy 1 (2) 3 4 5 difficult

Estimated installation: 4-5 hours

### Tire/Wheel Fitment

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

### » Technical Support

***Live Chat*** provides instant communication with Zone tech support. Anyone can access live chat through a link on www.zoneoffroad.com .

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

Send an e-mail to ***tech@zoneoffroad.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.

***Important* Verify you have all of the kit components before beginning installation.**

## Kit Contents

| Qty | Part | |
|---|---|---|
| 2 | Front Coil Spring | |
| 2 | Rear Coil Spring | |
| 2 | 2" Bump Stop (frt) | |
| 1 | Bolt Pack 439 - Front Bump Stops | |
| | 2 | 3/8"-16 x 2-1/2" bolt grade 5 |
| | 2 | 3/8" USS flat washer |
| | 1 | 3/8"-16 x 1" self-tapping bolt |
| 4 | Front Track Bar Bushing | |
| 2 | Track Bar Sleeve - 0.750 x 0.095 x 1.610 | |
| 1 | Front Adjustable Track Bar Assembly | |
| 4 | LCA Cam Washer | |
| 4 | 9/16" SAE Washer | |
| 2 | 3" Bump Stop (rear) | |
| 1 | Bolt Pack 763 - Rear Bump Stop/Brake Line Drop | |
| | 2 | 5/16"-18 x 1-1/4" bolt |
| | 2 | 5/16"-18 x 7/8" bolt |
| | 4 | 5/16"-18 prevailing torque nut |
| | 8 | 5/16" SAE flat washer |
| | 2 | 1/4"-20 x 1" self tapping bolt |

| Qty | Part | |
|---|---|---|
| 1 | Bolt Pack 768 - Rear Brake Line | |
| | 2 | 1/4"-20 x 3/4" bolt |
| | 2 | 1/4"-20 nylock nut |
| | 4 | 1/4" USS flat washer |
| 2 | Rear Brake Line Bracket | |
| 2 | Rear Sway Bar Link w/Bushings | |
| 1 | Bolt Pack 758 - Rear Sway Bar Links | |
| | 2 | 12mm-1.75 x 60mm bolt |
| | 2 | 12mm-1.75 prevailing torque nut |
| | 4 | 1/2" SAE washer |
| 4 | Rear Sway Bar Link Sleeve - 0.625 x 0.075 x 1.375 | |
| 1 | Rear Track Bar Bracket | |
| 1 | Bolt Pack 563- Rear Track Bar Bracket | |
| | 1 | 9/16"-12 x 3" Bolt |
| | 1 | 9/16"-12 x 3-1/2" Bolt |
| | 4 | 9/16" SAE thru-hardened washer |
| | 2 | 9/16"-12 Prevailing torque nut |
| | 1 | 3/8"-16 x 1-1/4" bolt |
| | 2 | 3/8" SAE thru-hardened washer |
| | 1 | 3/8"-16 Prevailing torque nut |

# INSTALLATION INSTRUCTIONS

## Pre-installation notes

1. 2012 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 from the axle (passenger's side). Save mounting bolt. Figure 1

Figure 1

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. Remove the transmission skid plate. Save skid plate and hardware.
6. Disconnect the front brake line brackets from the frame rails. Save hardware.
7. *Rubicon Models*: Disconnect the front locker wire from the driver's side upper control arm.
8. Support the front axle with a hydraulic jack. Remove the front shocks from the vehicle. Save lower mounting hardware.
9. Disconnect the sway bar links from the axle and sway bar. Discard links and save hardware.
10. Disconnect the track bar from the frame mount and remove it from the vehicle Figure 2. Save mounting hardware.
11. Disconnect the steering drag link from the pitman arm Figure 2. 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.

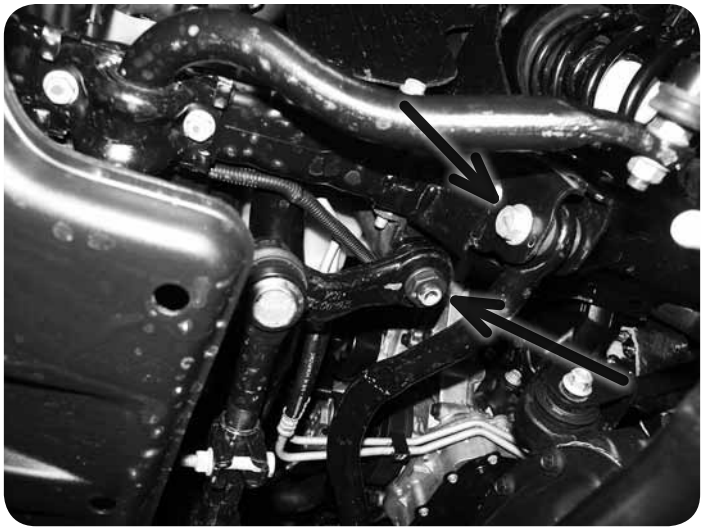

Figure 2

12. Lower the front axle and remove the coil springs from the vehicle.
13. With the axle still well supported, remove the bolt mounting the passenger's side lower control arm to the axle swing the control arm out of the pocket.
14. Locate the perforated section of the lower control arm pocket mounting hole **Figure 3A**. The rear portion of the perforated section must be removed. Using a rotary grinding tool or chisel, remove the perforated section in each (2) mounting hole.

## Step 13 Note

It may be necessary to loosen frame end of the lower control arm to allow it to swing down.

Figure 3A

15. With the lower control arm pocket modification complete, reattach the lower control arm to the axle with the factory hardware and two provided offset cam plates. The cam plates will fit between the cam stops on each bracket face and the hole in the cam should be offset toward the rear **Figure 3B**, where the perforated section was removed. Snug hardware just enough to keep the cam plates between the stops. The bolt will be torqued with the weight of the vehicle on the suspension.

Figure 3B

16. Repeat cam installation on the driver's side of the vehicle.

17. Make a mark in the center of the lower coil spring mount pad. Drill a 5/16” hole at the mark Figure 4. Using the provided 3/8" x 1" self-tapping bolt, tap the hole and remove the bolt. Repeat on the other side. This hole will be used to attach the provided bump stop extension to the axle after the coil spring is installed.

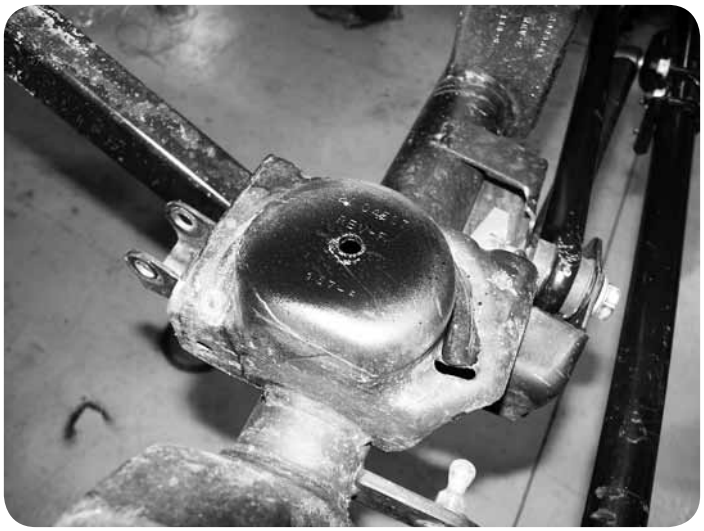

Figure 4

18. 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.

19. Attach the bump stop extension to the axle through the hole that was tapped earlier with a 3/8” x 2-1/2” bolt and 3/8 USS washer. Torque bolt to approximately 25 ft-lbs. Repeat the spring/bump stop installation on the other side of the vehicle.

20. 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.

## Step 17 Notes

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

## Step 18 Note

The taller coil springs are installed in the front..

## Step 19 Note

Hardware is located in pack #439.

## Step 21 Note

The track bar bushings are made with a high durometer (stiff) polyurethane. A bench vise, c-clamp, or similar tool will be necessary to install the sleeves in the bushings. Use plenty of grease to ease installation.

21. Locate the new adjustable front track bar assembly. Lightly grease and install the provided track bar bushings and sleeves (0.750 x 0.090 x 1.575) in each end of the track bar.

22. Install the non-adjustable end of the new track bar in the factory track bar frame mount with the factory hardware. Orient the track bar so that the bend is up. Figure 5 Leave hardware loose. The track bar will be adjusted and installed in the axle mount after the vehicles weight is on the suspension.

Figure 5

23. Reattach the drag link to the pitman arm with the factory tie rod end nut. Torque nut to 65 ft-lbs.

24. Reconnect the front brake line brackets to the original mounts on the frame rails with the factory bolts. Tighten bolts securely. 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 hardline at the frame down about 10-15 degrees to provide more slack in the line Figure 6a/b. Carefully bend the hard line with your hands. 2011 models: Trim the tab off the locating tab on the brakeline hardline. Drill a 7/32" hole 1" below the original brakeline mounting hole. Carefully reform the hardline and attach the brakeline to the frame rail with 1/4" self tapping bolt Figure 6c

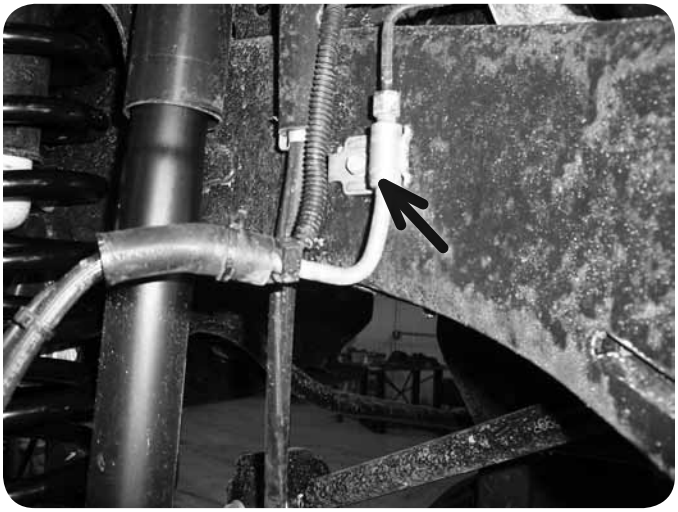

Figure 6A - Before

Figure 6B - After

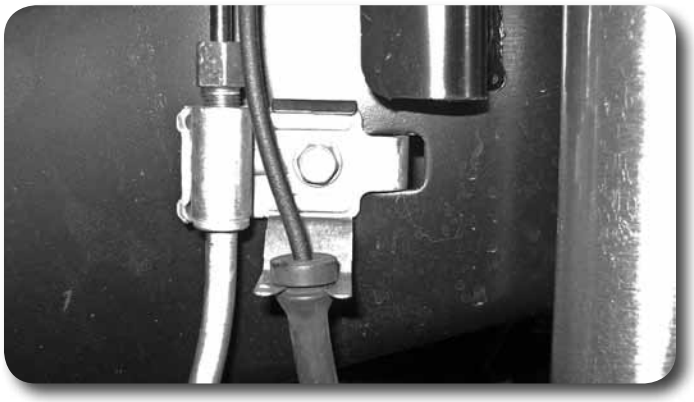

Figure 6C

25. Reattach the factory transmission skid plate to the transmission crossmember and frame rails with the factory hardware. At each frame rail mount, position two 9/16" washers between the frame and the skid plate before installing the mounting bolts **Figure 7**. This will ensure adequate driveshaft to skid plate clearance. Torque bolts to 55 ft-lbs.

Figure 7

26. Install the wheels and torque lug nuts to manufacturer's specifications.

27. Bounce the front of the vehicle to settle the suspension. Adjust the front track to align the hole in the axle mount with the end of the track bar. Install the track bar in the bracket with the factory hardware. Visually check the that axle is centered under the vehicle and adjust as necessary. Torque the track bar bolts at the frame and axle to 125 ft-lbs. Lock off the jam nut securely.

28. Torque the lower control arm bolts at the axle (and at the frame if they were loosened) to 125 ft-lbs.

## » Rear Installation

1. Block the front wheels for safety.

2. Disconnect the rear track bar from the frame (passenger's side). Save hardware. Figure 8

Figure 8

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. Disconnect the sway bar links from the sway bar and axle. Save lower hardware for installing the new links to the axle. Move the factory rear sway bar links (with upper mounting nut) to the front of the vehicle and install to the axle with the original front link hardware and to the sway bar with the factory nut Figure 9. Torque upper and lower hardware to 60 ft-lbs.

### Step 6 Note

Reminder: The ball joint end mounts to the outside of the sway bar and the bushing end mounts to the inside of the axle tab.

Figure 9

7. Disconnect brake line brackets from the frame, save bolts Figure 10

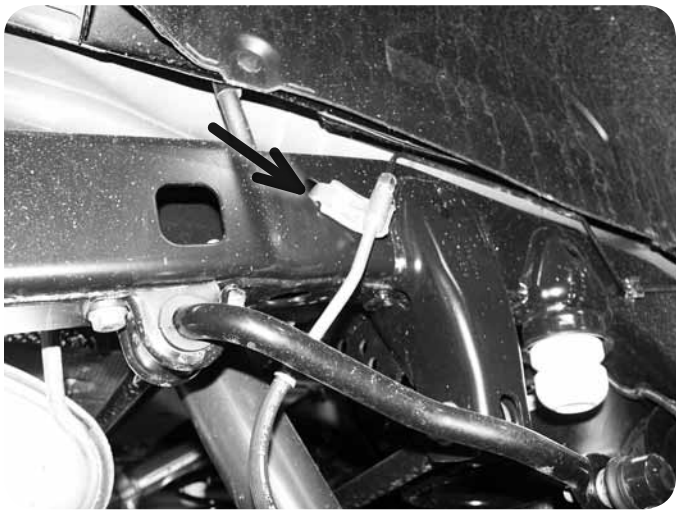

Figure 10

8. Disconnect the parking brake cable bracket from the underside of the cab Figure 11. Remove the cables from the bracket.

Figure 11

9. Lower the axle and remove the rear springs and upper spring isolators. Save isolators for installation with new springs.

## Step 9 Notes

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.

*Rubicon Models*: It will be necessary to remove the rear locker wire from the retaining clip at the top of the differential.

10. Note the orientation of the rear track bar (driver's versus passenger's side). Remove the track bar bolt from the axle mount and remove the track bar from the vehicle. Save track bar.

11. Locate the new rear track bar bracket. Install the bracket over the factory track bar mount at the axle Figure 12A. The support wing on the bracket will rest on the existing bump stop pad on the axle and align with the holes in the bracket. Align the original track bar mount hole with the hole in the bracket. Temporarily install a 9/16" x 3-1/2" bolt. Using the bracket as a guide, mark the top mounting hole to be drilled. Remove the bracket and drill a 7/16" hole at the mark.

**Step 11,12 Note**

All hardware needed for the rear track bar bracket installation is located in hardware pack #563.

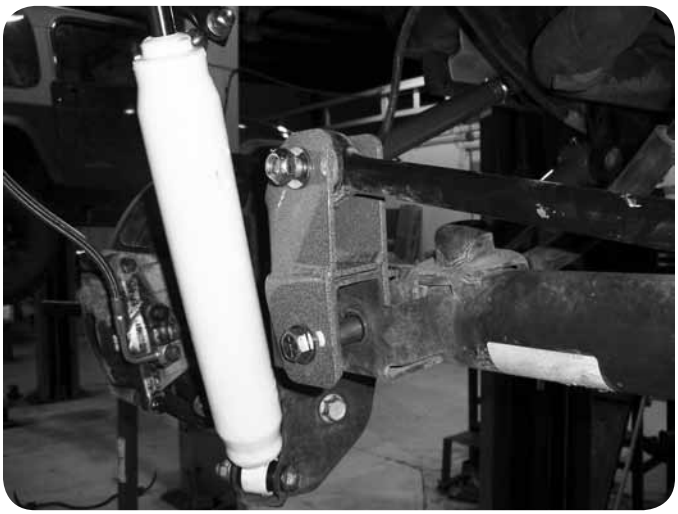

Figure 12A

12. Reposition the rear track bar bracket on the axle and place a 0.750 x 0.090 x 1.575 sleeve in the original track bar mount location. Fasten the new bracket to the factory bracket, through the sleeve with a 9/16" x 3-1/2" bolt, nut and washers. Fasten the bracket in the new upper hole with a 3/8" x 1-1/4" bolt, nut and washers. Leave hardware loose.

13. Position one of the new rear bump stop extensions over the support wing of the track bar bracket. Align the holes in the spacer and track bar bracket with the existing holes in the axle bracket. Fasten the parts together with 5/16" x 1-1/4" bolts, nuts and washers. Run the bolts from the bottom up and torque to 25 ft-lbs. Figure 12B

**Step 13 Note**

Hardware for the support/bump stop installation is located in pack #763

Figure 12B

14. With the support wing hardware tight, go back and torque the 9/16" (125 ft-lbs) and 3/8" (35 ft-lbs) track bar bracket hardware.

15. Install the factory rear track bar in the new axle bracket with a 9/16" x 3" bolt, nut and washers. The bolt must be run from the front to rear. This will ensure there is no contact between the bolt and coil spring. Leave bolt loose.

16. 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.

17. Install the new shocks with the factory hardware. Tighten upper mounting hardware to 30 ft-lbs, and lower hardware to 55 ft-lbs.

18. Install the remaining bump stop spacer on the passenger's side axle using the existing holes in the axle bump stop pad. Fasten the bump stop to the axle with 5/16" x 7/8" bolts, nuts and 5/16" SAE washers. Torque bolts to 20 ft-lbs. Figure 13

Figure 13

19. 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 14A/B. Torque hardware to 10 ft-lbs.

Figure 14A

## Step 15 Note

Make sure that the track bar is oriented correctly when installing in the new bracket.

## Step 17 Note

When installing the passenger's side shock make sure that the rear track bar is positioned above the shock so it can easily be installed in the frame mount later on in the installation.

## Step 18 Note

All hardware needed for the rear bump stop spacer installation is located in hardware pack #763.

## Step 19 Notes

All hardware needed for the rear brake line drop installation is located in hardware pack #768.

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 14B.

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.

## Step 20 Note

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

Figure 14B

20. 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.
21. Install wheels and torque lug nuts to factory specifications. Lower vehicle to ground.
22. Install the rear track bar in the factory frame mount with the original hardware. Torque bolt to 125 ft-lbs.

## Step 22 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.

## » Post-Installation

1. Double check all hardware for proper torque..
2. Check all fasteners after 500 miles and at regularly scheduled maintenance intervals.