



## # F1211 Installation Instructions 2005-2015 Ford F250 Super Duty 4WD 2" Lift Kit

### 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

*Live Chat* provides instant communication with Zone tech support. Anyone can access live chat through a link on [www.zoneoffroad.com](http://www.zoneoffroad.com).

[www.zoneoffroad.com](http://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](mailto: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.

#### Difficulty Level

easy 1 (2) 3 4 5 difficult

Estimated installation: 2-3 hours

#### Special Tools Required

None

#### Tire/Wheel Fitment

2": 35x12.50 tire

17x9 wheel, 4.5" BS

## Kit Contents

Qty	Part
2	Coil Spring Spacer
1	Bolt Pack - Coil Spacer
2	Ball Joint Cams
2	4" Rear Lift Block
4	5/8" x 3-1/8" x 14" U-bolt
1	Loctite

## PRE-INSTALLATION INSTRUCTIONS

1. As a result of the location of the long radius arm suspension, support locations are limited. Use your best judgment while supporting the vehicle with sufficient strength stands at appropriate locations. The radius arm suspension will need to move freely during this installation.
2. This installation can be performed easiest by disconnecting the front track bar from the frame mount. *HOWEVER*, the track bar bolt at the frame requires 400 ft-lbs of torque to be reinstalled properly. If you **do not** have the means of producing this much torque to correctly tighten the track bar bolt then proceed without disconnecting the track bar. If you **do** have the proper tools to correctly retorquer this bolt, remove the bolt before raising the vehicle.

## INSTALLATION INSTRUCTIONS

3. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
4. Raise the front of the vehicle and support under the frame rails with jack stands.
5. Remove the front wheels.
6. Support the front axle with a hydraulic jack. With the axle supported this installation can be performed on both sides at the same time.
7. Disconnect the sway bar links from the axle mounts. Retain hardware.
8. Remove the factory shock. Retain lower mounting hardware.
9. Remove the ABS line from the metal retaining tab on the radius arm (Fig 1). Pull the plastic retaining clip free from the radius arm (Fig 2).

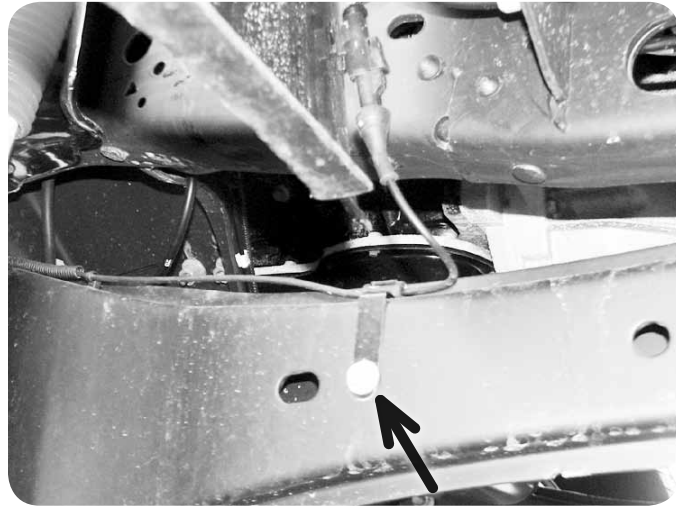


Figure 1

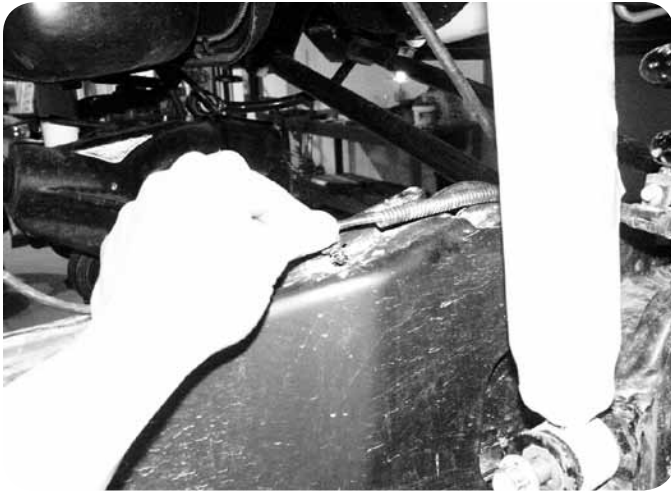


Figure 2

10. Remove the two bolts mounting the plastic ABS wire clips to the back side of the coil perch (Fig 3). Retain hardware.



Figure 3

11. Disconnect the brake line bracket from the front of the coil perch (Fig 4). Retain hardware.



Figure 4

### Step 11 Note

Take care not to over-extend the brake lines when lowering the axle.

- Free the hub vacuum line from the axle (Fig 5, 6).

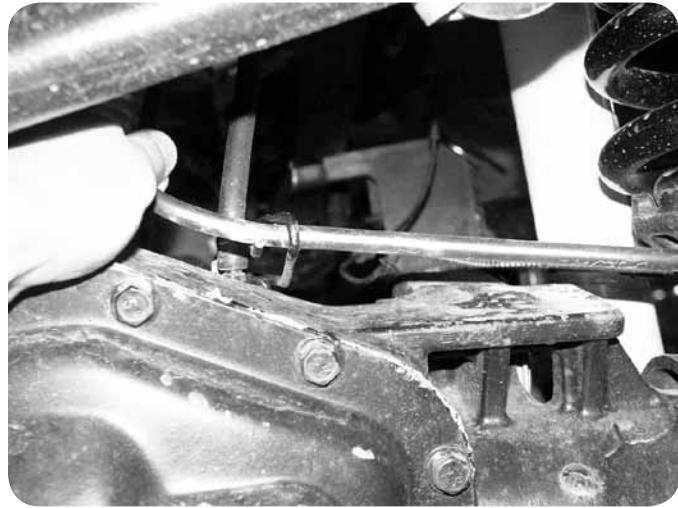


Figure 5



Figure 6

- Lower the axle until the spring is free and remove the spring from the vehicle.
- Remove the bolt mounting the coil perch to the axle and remove the perch from the vehicle.

### **Ball Joint Cam Installation:**

- Remove the cotter pin from the upper ball joint.
- Loosen the upper ball joint stud until the nut is level with the top of the stud. Strike the axle "ear" near the upper ball joint to release the ball joint to sleeve taper.
- Remove the OE ball joint sleeve from the axle using the appropriate removal tool (SPC #41550 or equivalent).
- Install the new sleeve with the arrow on the top of the sleeve pointing toward the front of the vehicle. Using the old sleeve, pound down on the new sleeve to seat it on the ball joint taper. Make sure that the flat of the sleeve is flush with the flat of the axle.
- Install and torque the OE ball joint nut to 120 ft-lbs. Install the cotter pin. Note: Do not loosen the nut to install the cotter pin.

#### **Step 16 Note**

The top of the stud can also be struck using a soft blow hammer to aid in loosening the taper. Take care not to damage the stud/nut threads.

## Spacer Installation:

20. Apply thread locker to the supplied 14mm bolt. Install the factory coil perch in conjunction with the new spacer (Fig 7) on the axle. The chamfer in the block goes toward the outside and the upper tabs nest in the recesses in the coil perch. Fasten the assembly with the 14mm x 100mm bolt and 9/16" SAE flat washer. Torque hardware to 95 ft-lbs.

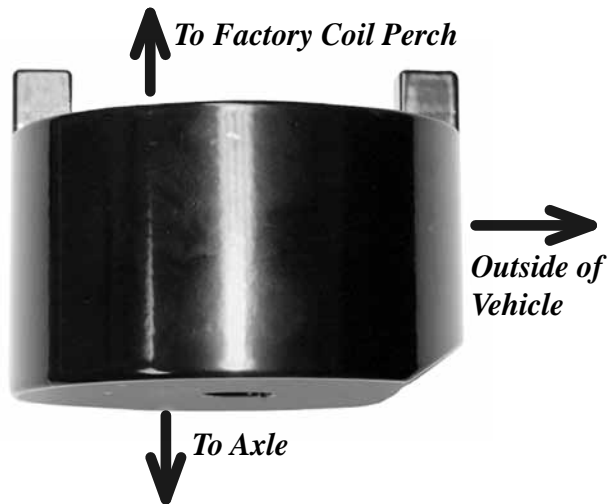


Figure 7

21. Reinstall the factory coil and index it correctly in the coil perch.
22. Install new shocks, use the factory lower hardware and new provided upper hardware. Torque the lower bolt to 55 ft-lbs and tighten the upper hardware until the bushings begin to swell.
23. Reattach all brake, ABS and vacuum lines to the original locations with the factory mounting hardware.
24. Reattach the sway bar links to the axle with the factory hardware and tighten securely.
25. Install the wheels and lower the vehicle to the ground.
26. If the track bar was disconnected, reattach it now with the factory hardware. Have an assistant turn the steering wheel to aid in aligning the track bar in the bracket. Torque hardware to 400 ft-lbs.
27. Check all hardware for proper torque.
28. Adjust steering wheel.

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## » REAR INSTALLATION

29. Block the front wheels for safety.
30. Raise the rear of the vehicle and support with jack stands under the frame rails just ahead of the spring hangers.
31. Remove the wheels.
32. Support the axle with a hydraulic jack.
33. Remove the factory shocks. Retain all mounting hardware.
34. Disconnect the passenger's side spring u-bolts. Figure 8.

### Step 20 Note

The factory coil perch is labeled "FRT" for the front side. Make sure it is oriented properly when installed.

### Rear Installation Note

The factory rear block will vary depending on the vehicle model. F-250s will have a 1-7/8" block and F-350s will have a 3-3/4" block. In both cases, replacing the factory block with the new provided block will net the same level stance regardless of vehicle model.



Figure 8

35. Remove the factory lift block. It will not be reused.
36. Lower the axle enough to place the provided 4" lift block between the axle and the leaf spring. Position the block so the bump stop wing faces inward.
37. Raise the axle to engage the block spring alignment pin. **Figure 9** Fasten the entire assembly with the provided u-bolts, high nuts and washers. Snug but do not torque the u-bolts at this time.



Figure 9

38. Repeat block installation of the driver's side. Take care not to over extend the brake lines.
39. If more parking brake cable slack is needed, remove the cable from the rear-most retaining bracket on the frame. **Figure 10**



Figure 10

40. The brakelines may require additional slack. Located the factory bracket on the axle. Using an adjustable wrench, carefully bend the bracket so the fittings are positioned vertical to allow more slack. Figure 11

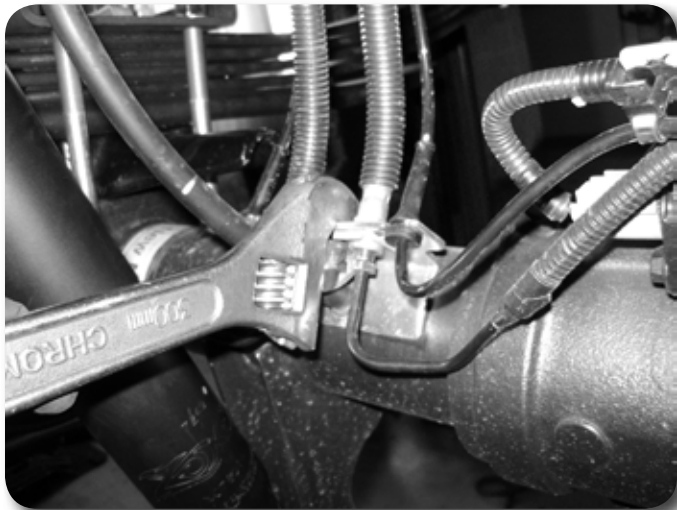


Figure 11

41. Install the new shocks with the original mounting hardware. Tighten to 55 ft-lbs.
42. Install wheels and lower the vehicle to the ground.
43. With the weight of the vehicle on the axle, torque the u-bolts to 130-150 ft-lbs.

## »» POST INSTALLATION

1. Check all hardware for proper torque. Check hardware after 500 miles.
2. The steering wheel will need to be re-centered. This is done by adjusting the drag link collar near the passenger's side steering knuckle. Torque clamps to 41 ft-lbs. Thread the collar to lengthen the drag link.
3. Adjust headlights.

## 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.