



#F5101 Installation Instructions 1999-2004 Ford F-250/350 Super Duty 4wd 1" Front Shackle 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

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.

Difficulty Level

easy (1) 2 3 4 5 difficult

Estimated installation: 1 hour

» 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.

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Kit Contents

Qty	Part
2	Shackles
2	Support Sleeve - 0.875 x 0.120 x 3.500
1	Bolt Pack

INSTALLATION INSTRUCTIONS

»» PRE-INSTALLATION NOTES

1. These vehicles, especially diesel models, are very heavy. Be sure that proper jacks/stands are used that are rated to handle the weight of the vehicle. Ensure that the vehicle is well supported before beginning the installation.
2. The addition of these shackles will typically increase the front caster by 1 to 1.5 degrees.
3. Net lift height will vary depending on the type of springs installed on the vehicle (stock or lifted). These instructions outline the installation on a stock height vehicle and may vary slightly depending on different non-factory suspension setups.

»» INSTALLATION

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Raise the front of the vehicle and support with jack stands under the frame rails behind the front leaf spring shackles.
3. Remove the front wheels.
4. Disconnect the sway bar links from the sway bar. Save hardware. **Figure 1**



Figure 1

5. Loosen but do not remove all shackle bolts. **Figure 2**



Figure 2

6. Support the axle with an appropriate jack. Do not compress the springs, just support the weight of the axle.
7. Remove the shackle hardware and the shackles from the vehicle.
8. Lower the axle enough to install the new provided shackles to the frame and leaf springs. Loosely fasten with the factory hardware. **Figure 3**



Figure 3

9. Install the provided center support sleeve in the shackles with the provided 5/8" hardware. Leave loose. **Figure 4**

Step 8 Note

In some cases the front shocks will need to be disconnected to allow the axle to lower enough to install the new shackles. If that is the case, reattach when the shackles are installed and torque hardware to 70 ft-lbs.



Figure 4

10. Reattach the sway bar links to the sway bar. Run the bolts from outside in to clear the leaf spring. **Figure 5** Torque sway bar link bolts to 70 ft-lbs.



Figure 5

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.

11. Reinstall the wheels and lower the vehicle to the ground. Torque lug nuts to 165 ft-lbs.
12. Bounce the front of the vehicle to settle the suspension. Torque the factory shackle bolts and new 5/8" center bolts to 150 ft-lbs.
13. Check all hardware for proper torque.