



F1222 Installation Instructions 2021-2025 Ford F-150 2wd 2" Strut / Preload Spacer 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

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

Send an e-mail to tech-zone@ridefox.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

Strut Compressor

Basic Hand Tools

Special Service Tool: 204-592 Separator

Tie Rod End Separator

Tire/Wheel Fitment

Tire:

33 x 12.50

Wheel:

stock to 5.5" B.S.

F1222 Kit Contents

Qty	Part
2	Strut Spacer
2	Preload Spacer
1	Bolt Pack 455
6	10mm-1.50 Top Lock Flange Nut, Class 10, Clear Zinc

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 5 Note:

Do not use power tools to remove the stabilizer bar link nut. Damage to the stabilizer bar link ball joint or boot may occur.

INSTALLATION INSTRUCTIONS

»» PRE-INSTALLATION NOTES

1. If desired the preload spacer can not be installed, this will result in around 3/4" lower ride height than the advertised 2".
2. Wider tires on stock wheels will need clearance checked to the steering knuckle / UCA.
3. To aid in alignment, Alignment Cam kits are recommended such as MOOG K100010.
4. Will fit models with 4 Auto that do not have the 4WD actuator hub assembly.

»» FRONT DISASSEMBLY

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 at the frame rails.
3. Remove the front wheels.
4. Disconnect the power steering control module connector (EPAS Electronic Power Assist Steering) to avoid arching of the contacts in the internal power relay from a hammer blow or impact wrench.
5. Disconnect the driver's and passenger's side front sway bar links from the steering knuckle. **Figure 1**

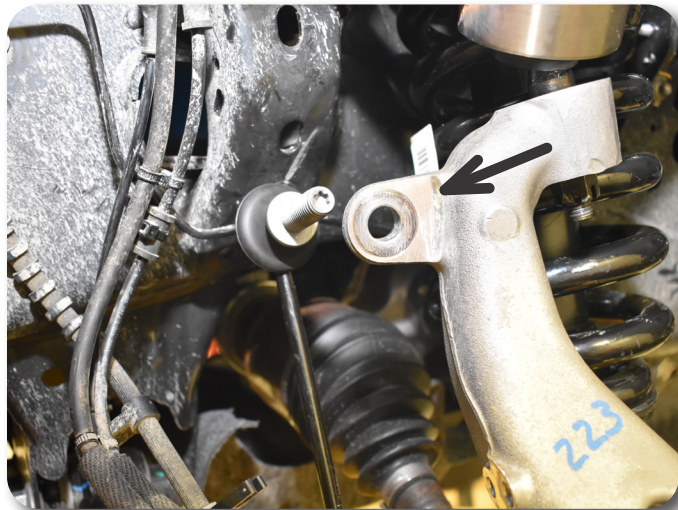


Figure 1

Complete this portion of the installation on one side at a time

6. Disconnect the front brake line and ABS line from the steering knuckle. **Figure 2**



Figure 2

7. Disconnect the front brake line from the frame. **Figure 3**

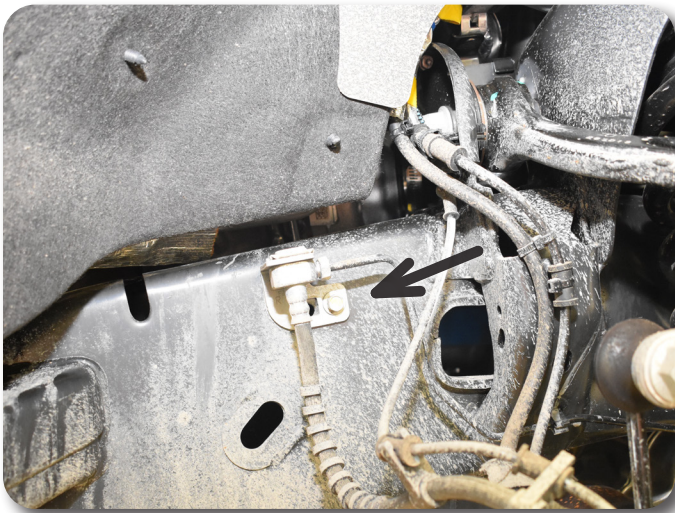


Figure 3

8. Remove the steering tie rod end nut from the tie rod end at the steering knuckle. Avoid hitting the aluminum steering knuckle, use appropriate tool to remove tie rod end from steering knuckle. Take care not to strike the tie rod end, or damage the threads **Figure 4**

Step 8 Note:

Use a tie rod end separator to release the taper from the steering knuckle.

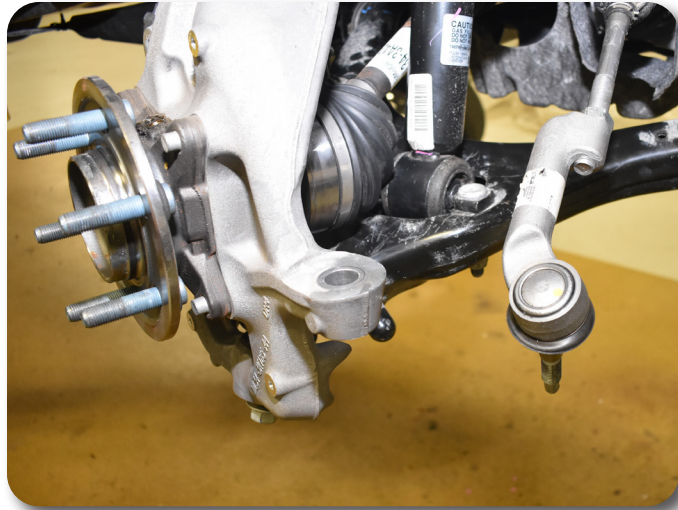


Figure 4

Step 9 Note:

Use Special Service Tool: 204-592 Separator to release the taper from the steering knuckle.

9. Unseat the upper ball joints from the knuckle, refrain from hitting the aluminum steering knuckle, use appropriate tool to separate ball joints, avoid damaging the threads. **Figure 5** Allow the knuckle to rest back away from the front strut.

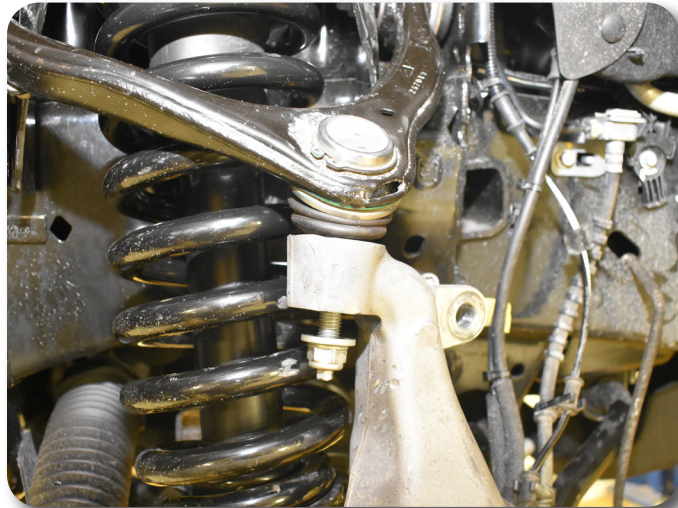


Figure 5

10. Support the lower control arm with an appropriate jack. Remove the three upper strut mounting nuts at the frame. **Figure 6** DO NOT remove the center strut rod nut. Discard nuts.



Figure 6

11. Remove the lower strut mount nuts at the lower control arm. Lower the control arm and remove the strut from the vehicle.

» STRUT SPACER INSTALLATION

12. Place alignment marks on the upper strut mount, isolator, spring, strut body and lower coil seat for reference when the strut is reassembled (Fig 7A, B, and C).

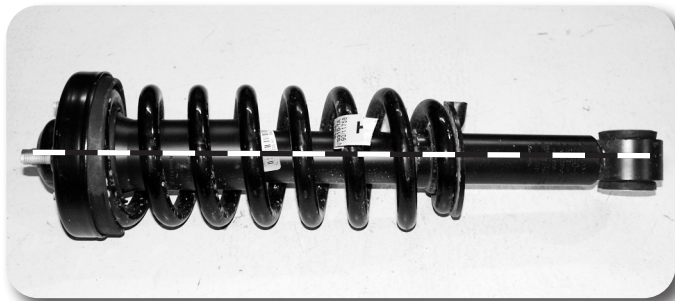


Figure 7A



Figure 7B



Figure 7C

13. Using an appropriate strut compressor, compress the coil spring and remove the upper strut nut. (Fig 8)



Figure 8

14. Remove the lower strut assembly from the strut compressor, the top hat and spring can remain in the strut compressor.
15. Remove the dust boot, bump stop, plastic ring, and the lower spring seat from the strut body (Fig. 9A and B). After fully disassembled the strut should be the same as Figure 9C.



Figure 9A

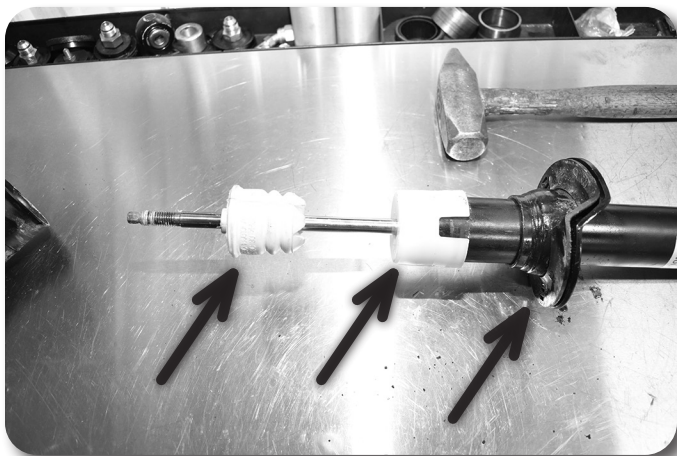


Figure 9B



Figure 9C

16. Install the preload spacer ring on the strut body such that the groove in the preload spacer goes over the snap ring on the strut body (Fig. 10.)

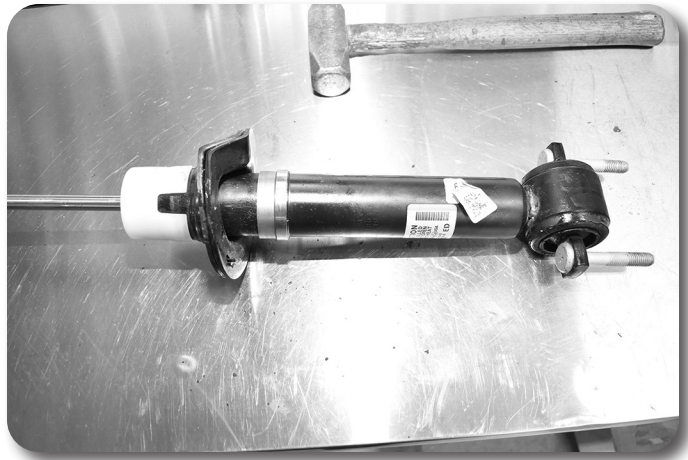


Figure 10

17. Reinstall the lower coil seat, plastic ring, bump stop, and dust boot in reverse order (Fig. 11).



Figure 11

18. Reassemble the strut. Make sure to line up all of the alignment marks. Fasten the strut rod with the original nut. Torque nut to 41 ft-lbs.
19. Install the upper strut spacer on the strut (Fig. 12).

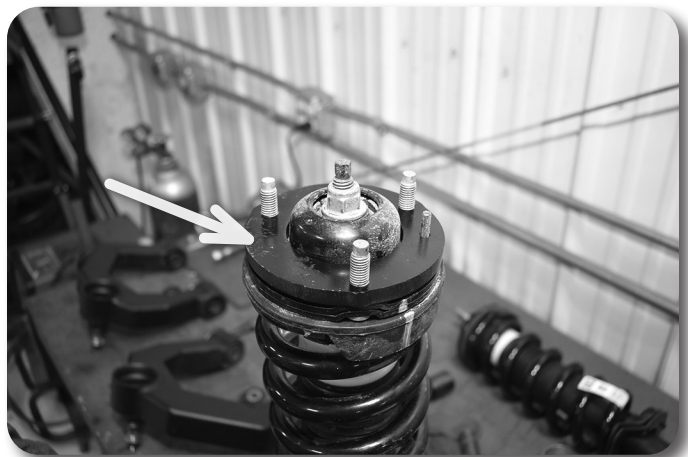


Figure 12

» STRUT INSTALLATION

20. Install the modified strut assembly into the upper frame mount by aligning the studs in the new spacer with the original mounting holes. Loosely fasten the strut with the provided 10mm nuts
21. Install the bottom of the strut back into the original mount with the factory hardware, torque to 66 ft-lbs. With the lower hardware installed, go back and torque the new upper strut hardware to **35 ft-lbs**. DO NOT EXCEED 35 ft-lbs when tightening the strut to the frame. DO NOT USE an impact to tighten the strut to the frame.
22. With the strut installed, reconnect the knuckle to the upper ball joint. Replace with factory hardware. Torque upper ball joint nut to 46 ft-lbs.

» FRONT ASSEMBLY

23. Reconnect the brake line and ABS line to the steering knuckle and replace with factory hardware. Torque brake line bolt to 22 ft-lbs and ABS line bolt to 106 in-lbs.
24. Attach the steering tie rod end to the steering knuckle and replace with factory hardware. Torque to 76 ft-lbs.
25. With both sides complete, reconnect the sway bar links to the knuckle and replace with factory hardware. Torque to 59 ft-lbs.
26. If equipped, re-connect EPAS control module connector.
27. Install the wheels and lower the vehicle to the ground. Torque lug nuts to 150 ft-lbs in a crossing pattern.
28. Check all hardware for proper torque.
29. Adjust head lights.
30. Check hardware after 500 miles.
31. The vehicle will need a complete front end alignment.

Step 20 Note:

Hardware for the strut spacer is in Bolt Pack 455

Step 25 Note:

Do not use power tools to attach the stabilizer bar link nut. Damage to the stabilizer bar link ball joint or boot may occur.

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.