



F1102 Installation Instructions

2021 Ford Bronco 2 Door / 4 Door

1" Strut Spacer Leveling 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

Cut Off Wheel
Air Hammer (Preferred)
Basic Hand Tools
35mm Axle Nut Socket

Tire/Wheel Fitment

35 x 12.50 w/ Stock to 5.5" BS

Important—measure before starting!

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

LF _____ RF _____

LR _____ RR _____

F1102 Kit Contents

Qty	Part
2	Lower Strut Spacer
2	Upper Strut Spacer
1	Bolt Pack 367
4	14mm-2.00 x 80mm Bolt, Class 10.9, Clear Zinc
4	14mm-2.00 Prevailing Torque Nut, Clear Zinc
8	14mm Washer, Clear Zinc
6	10mm-1.50 Top Lock Flange Nut, Class 10, Clear Zinc

INSTALLATION INSTRUCTIONS

»» PRE-INSTALLATION NOTES

1. This kit is designed to lift the front of the vehicle 1". Can be used with stock Bilstein or black body (base model) struts.
2. Can be used with Sasquatch Package vehicles.
3. CV axle nut may need to be loosened and tightened on the ground with the weight the vehicle.

»» 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 arcing 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. Save sway bar link nuts. **Figure 1**

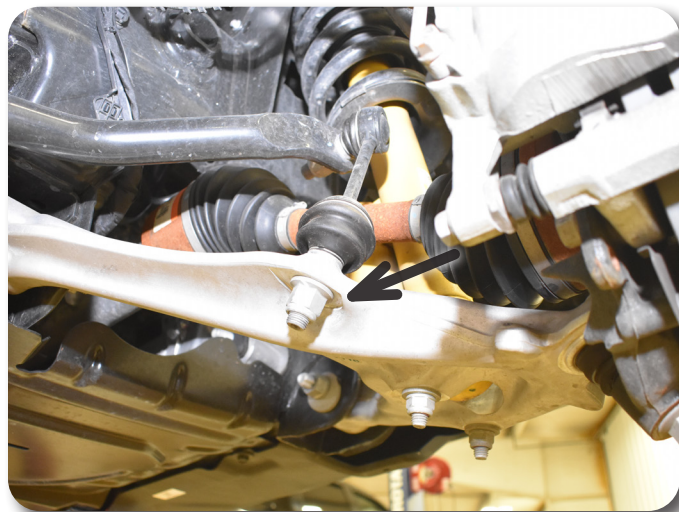


Figure 1

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. Save bolts. **Figure 2**

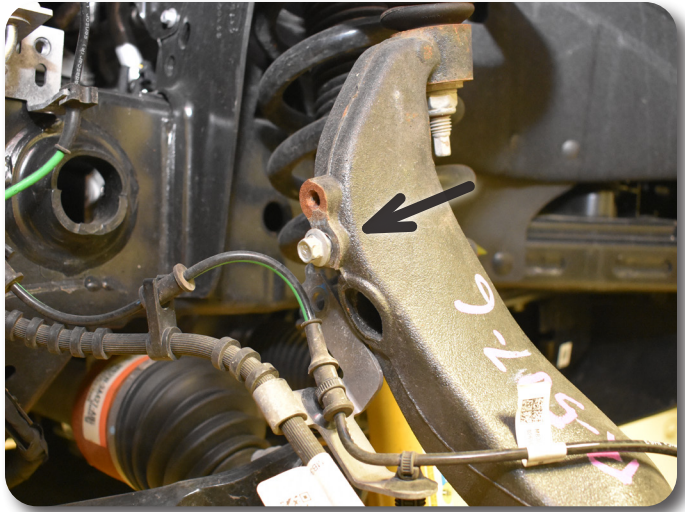


Figure 2

7. Disconnect the front brake line from the frame. Save bolts. Figure 3

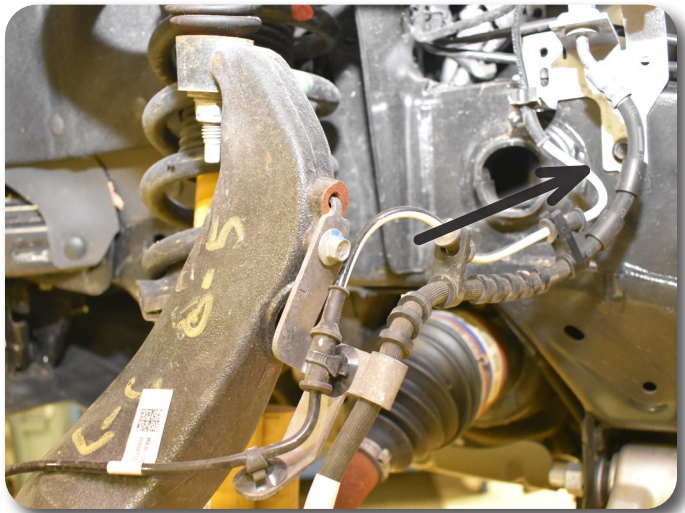


Figure 3

8. Remove the CV retaining nut. Save nut. Figure 4

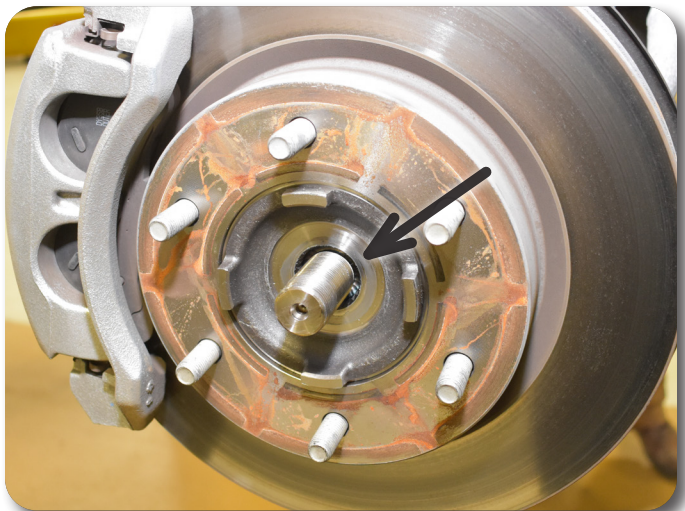


Figure 4

9. Remove the steering tie rod end nut from the tie rod end at the steering knuckle. Thread the nut back on a couple of turns by hand. Strike the knuckle near the tie rod end to dislodge it from the knuckle. **Figure 5** Remove the nut and remove the tie rod end from the knuckle. Save nut.



Figure 5

10. Remove the upper ball joint nut and thread back on a couple of turns by hand. Strike the knuckle near the ball joint to dislodge it from the knuckle. **Figure 6** Remove the nut and remove the ball joint from the knuckle. Save nut. Allow the knuckle to rest back away from the front strut.

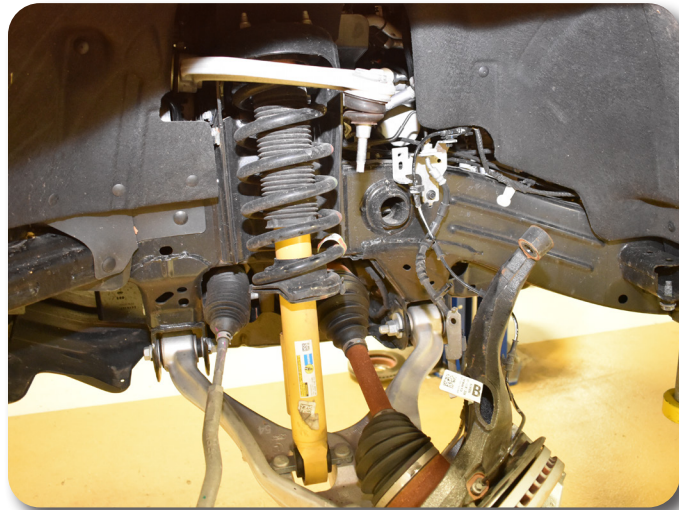


Figure 6

Step 11 Note

A punch and hammer can also be used to dislodge the CV shaft from the hub..

11. Use an air hammer to dislodge the CV shaft from the hub. Be careful not to hit the threads on the CV shaft **Figure 7**.

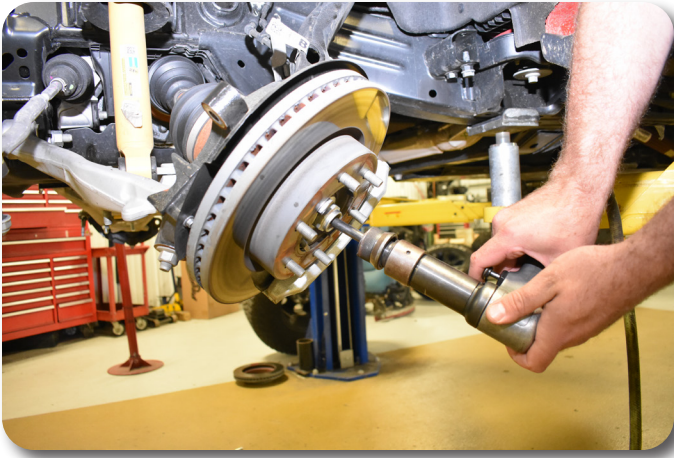


Figure 7

12. Support the lower control arm with an appropriate jack. Remove the lower strut mount nuts at the lower control arm. Use the air hammer to dislodge the strut studs in the lower strut mounts **Figure8**. Discard the lower strut studs and nuts.

Step 12 Note

A punch and hammer can also be used to dislodge the studs from the lower strut mount.



Figure 8

Fig 8 Note

Picture is shown with the strut removed from the vehicle. For ease of disassembly remove the lower strut studs when the strut is in the vehicle. This will make it easier to remove the strut from the vehicle.

13. Remove the three upper strut mounting nuts at the frame. **Figure 9** DO NOT remove the center strut rod nut. Discard the nuts.

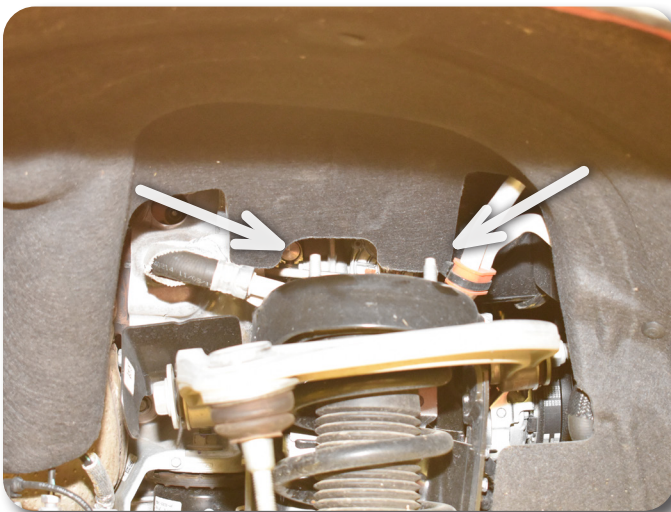


Figure 9

- Using the jack, lower the lower control arm / knuckle assembly and remove the strut from the vehicle Figure 10.

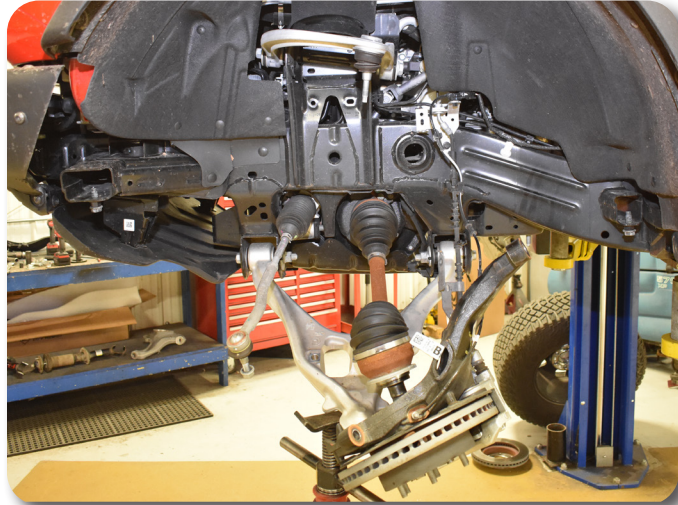


Figure 10

» STRUT SPACER INSTALLATION

- Install the upper strut spacer on the strut Figure 11. The strut spacer will only install one way with the alignment pin on the strut.



Figure 11

Step 16 & 17 Note

Hardware for the upper strut mounts is in Bolt Pack 367.

- Reinstall the strut assembly into the upper frame mount by aligning the studs in the new spacer with the original mounting holes. Loosely fasten the strut to the upper frame mount with the provided 10mm nuts.
- Line up the bottom mount of the strut with the lower control arm mount holes and sandwich a lower strut spacer between the two Figure 12 & 13. Attach using two 14mm bolts, washers, and nuts.



Figure 12



Figure 13

18. With the lower hardware installed, go back and torque the new upper 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.
19. Tighten the 14mm lower strut hardware 120 ft-lbs.

» FRONT ASSEMBLY

20. With the strut installed, reconnect the knuckle to the upper ball joint with the original nut. While connecting the upper ball joint, be sure that the CV shaft properly aligns into the hub Figure 14. Torque the upper ball joint nut to 46 ft-lbs.

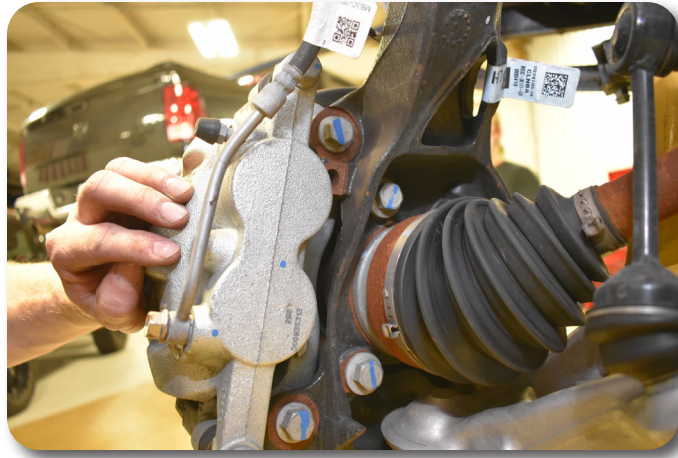


Figure 14

Step 21 Note

CV axle nut may need to be torqued on the ground with the weight of the vehicle.

21. Be sure the CV is properly seated in the hub and reinstall the original CV axle nut. Torque the CV axle nut to 221 ft-lbs.
22. Reconnect the brake line bracket and ABS line to the steering knuckle and frame with the original bolts and nut. Torque hardware to 159 in-lbs.
23. Attach the steering tie rod end to the steering knuckle with the original nut. Torque to 35 ft-lbs.
24. Complete installation of strut spacers on both sides of the vehicle.

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.

» FINAL FRONT ASSEMBLY

25. With both sides complete, reconnect the sway bar links to the sway bar with the original hardware. Torque to 85 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 100 ft-lbs in a crossing pattern.
28. Adjust head lights.
29. The vehicle will need a complete front end alignment.
30. Check all hardware for proper torque. Check hardware after 500 miles..