



F2303 Installation Instructions 2021-22 Ford Bronco Adventure Series Upper Control Arm

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

OTC 204-592 Ball Joint Separator

Tire/Wheel Fitment

Stock wheels and stock tires can be installed. Taller tires on stock wheels may contact the UCA. 4.5" to 5" back spacing wheels is recommended for most clearance to the UCA. 5.5" back spacing on a 35" tire will be close to the UCA at full steering lock.

F2303 Kit Contents

<i>Qty</i>	<i>Part</i>
1	DRV Arm Assembly
2	Rubber Bushing
1	Ball Joint
1	Zone UCA Badge
1	PASS Arm Assembly
2	Rubber Bushing
1	Ball Joint
1	Zone UCA Badge
2	Ball Joint Caps
2	O-Rings
1	Grease Packet

»» PRE-INSTALLATION NOTES

1. The ball joint position is indexed and relocated to correct for alignment and range of motion for 1"-4" of lift. When used with 1" of lift, caster will be at the high end of the specification.
2. Will work with Sasquatch, Badlands, or Base model Broncos.
3. Does not fit Bronco Sport models.
4. Do NOT hit the aluminum knuckle with a hammer to separate the ball joint. Use appropriate ball joint separation tool (OTC 204-592).
5. Will not work with models with a height sensor attached to the UCA.
6. Fox Coilovers (883-06-195 & 883-06-192) will work with these UCAs
7. Stock height Bilstein Sasquatch or Badlands and black body struts without a spacer will work with these Zone UCAs.
8. Zone UCAs will work with certain spacer leveling kits, such as ZONF1102, ZONF1220, ZONF1301, ZONF1302, ZONF1430, and ZONF1431.

»» INSTALLATION INSTRUCTIONS

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. Complete this portion of the installation on one side at a time
5. Starting on the passenger side, remove the upper arm shield bolt. Remove the shield from vehicle and save for later installation **Figure 1**.

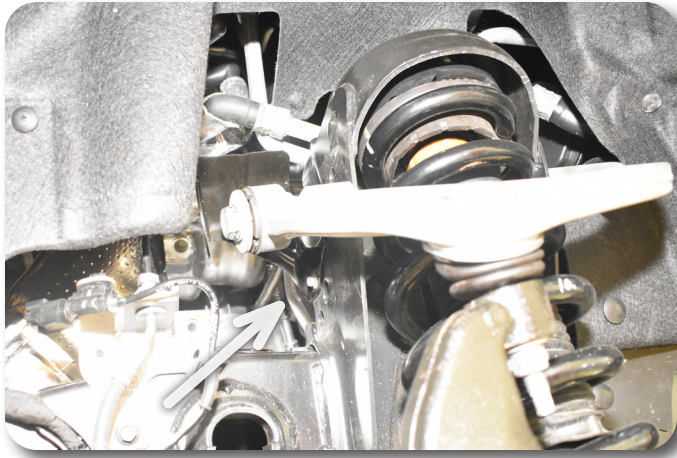


Figure 1

6. Support the knuckle assembly so that the CV shaft and ABS / brake lines are not overextended when removing the UCA.
7. Remove the upper ball joint nut.

Step 7 Note:

Use the hex holding feature to prevent the stud from turning while removing the nut.

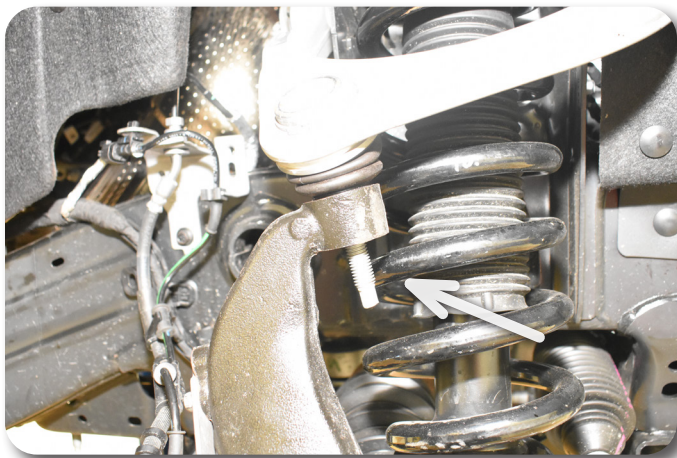


Figure 2

8. Using an appropriate separator, dislodge the upper ball joint from the steering knuckle Figure 3.

Step 8 Note:

Special service tool OTC 204-592 is recommended to dislodge the ball joint taper.

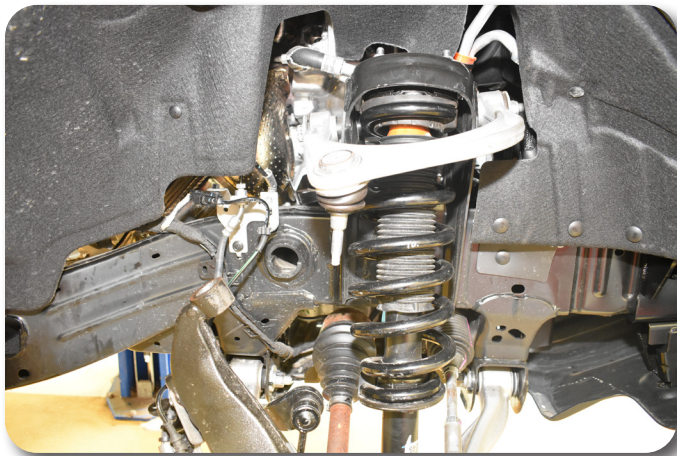


Figure 3

9. Remove the long upper control arm bolt attaching the upper control arm to the vehicle Figure 4.

Step 9 Note:

When removing the upper control arm bolt on the driver side the steering linkage most likely will need to be disconnected. Make sure when removing the bolt the steering wheel does not rotate and the joint is connected together at the same position. Damage to the clock spring may result.

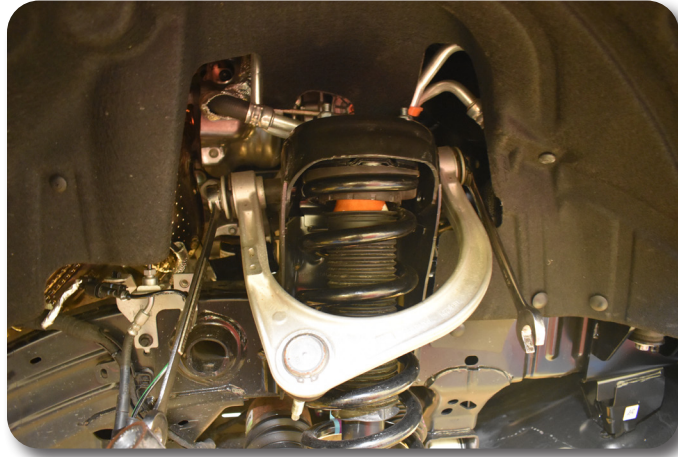


Figure 4A

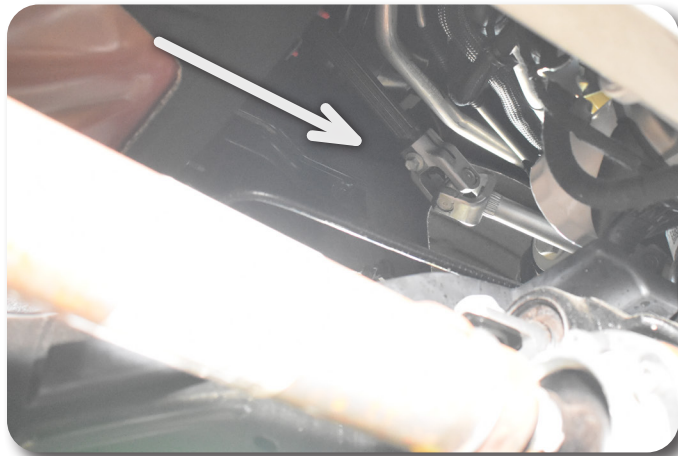


Figure 4A

» ZONE CONTROL ARM INSTALLATION

10. Install new Zone Offroad upper control arm. Replace with factory hardware. Do not tighten the bushing hardware at this time Figure 5.

Step 10 Note:

On the driver side, make sure to re-connect the the bolt for the steering shaft. Ensure again that the steering wheel does not rotate and the joint is connected together at the same position. Damage to the clock spring may result.



Figure 5

11. Attach the upper ball joint to the steering knuckle with factory hardware. Torque the upper ball joint nut to 46 ft-lbs Figure 6.

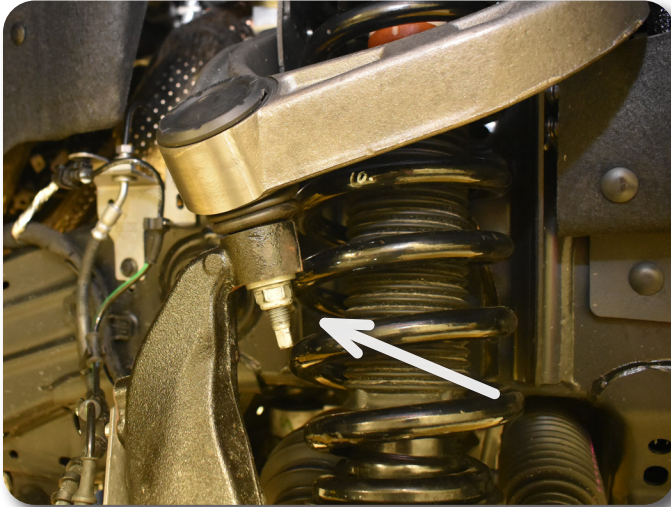


Figure 6

12. Use the included grease packet to lube the o-ring. Install o-ring onto the cap and install cap into the arm Figure 7.

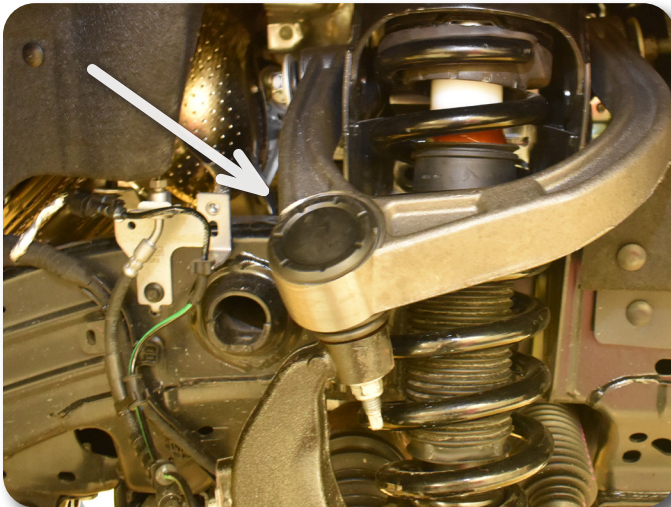


Figure 7

13. Reinstall the upper arm shield on the passenger side. Replace with a factory bolt and tighten to 80 in-lbs.
14. Install the wheels and lower the vehicle to the ground. Torque lug nuts to 100 ft-lbs in a crossing pattern.
15. Bounce the front of the vehicle to settle the suspension.
16. Torque upper control arm bushing hardware to 122 ft-lbs Figure 8.

Step 11 Note:

Use the hex holding feature to prevent the stud from turning while removing the nut.

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.

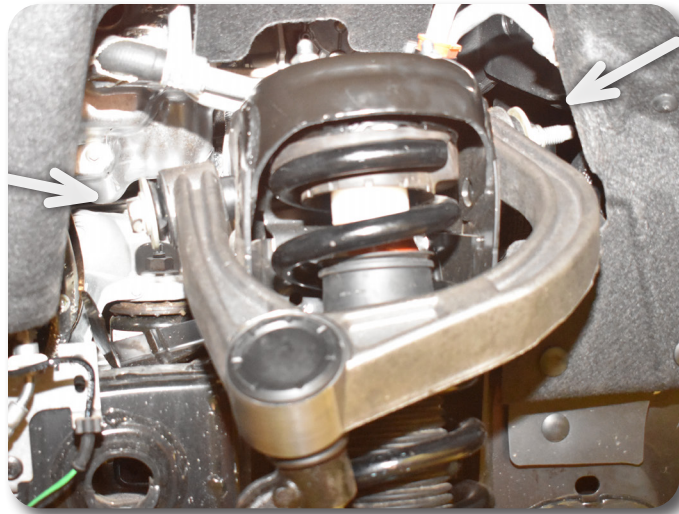


Figure 8

17. Check all hardware for proper torque.
18. Recheck hardware after 500 miles.
19. The vehicle will need a complete front end alignment.

» POST-INSTALLATION

20. Check all hardware for proper torque.
21. Reconnect the positive and negative battery cables if removed.
22. The vehicle will need a complete front end alignment.
23. Check all hardware after 500 miles.
24. Adjust headlights as necessary

Recommend Alignment Specifications

CASTER

$3.18^{\circ} \pm 0.60^{\circ}$

CAMBER

$+0.20^{\circ} \pm 0.50^{\circ}$

TOE

$+0.10^{\circ} \pm 0.15^{\circ}$