



F1100 Installation Instructions 2021 Ford Bronco Sport - NON Badlands 1" 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. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
5. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
6. 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: 3-4 hours

Special Tools Required

Spring Compressor

Hammer

Pry Bar

Trim Removal Tool

Tie Rod End Separator (Recommended)

Tire/Wheel Fitment

245/65 w/ stock 17" Wheels

245/60 w/ stock 18" Wheels

245/65R17 w/ 17"x7" wide wheel w/5.5" BS

245/60R18 w/ 18"x7" wide wheel w/5.5" BS

See more information at end of instructions.

BS = Backspacing

F1100 Kit Contents - 1" Lift

Qty	Part
2	Front Upper Strut Spacer
2	Front Preload Spacer
2	Billet Lower Rear Spring Spacer
2	3/8" Upper Rear Spring Spacer
1	Bolt Pack 1018
6	5/16"-18 Prevailing Torque Nut
6	5/16" Washer

Important—measure before starting!

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

LF _____ RF _____

LR _____ RR _____

INSTALLATION INSTRUCTIONS

» 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 on the subframe.
3. Remove the front wheels.
4. Open and prop the hood
5. Remove the clips (6 total) that secure the cowl trim. **Figure 1**

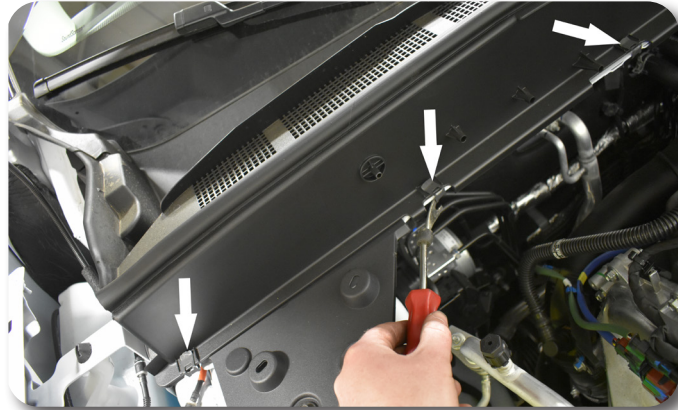


Figure 1

6. Pick up the cowl to access the rear bolt holding the strut top trim, carefully remove the 2 bolts and the trim piece covering the strut mounting bolts. **Figure 2**



Figure 2

7. Disconnect the driver's and passenger's side tie rod end from the knuckle.

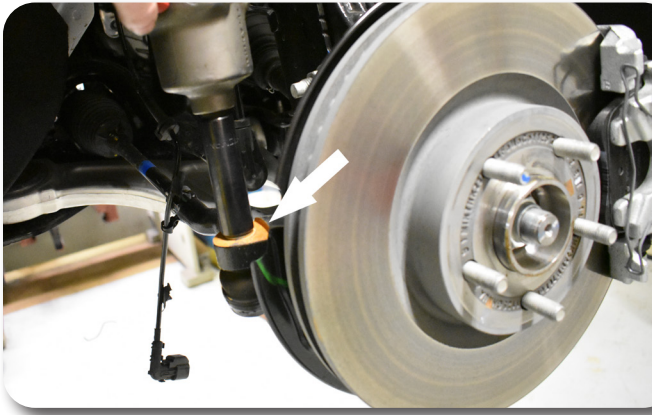


Figure 3

Step 7 Note:

It is recommended to use a tie rod separator tool to dislodge the tie rod end stud from the knuckle to prevent damaging the knuckle or stud.

8. Disconnect the driver's and passenger's side sway bar link from the strut. Do NOT use an impact to remove the sway bar link nut as this can cause damage to the joint and boot.



Figure 4

Step 8 Note:

It may be necessary to turn the front of the knuckle inward to make room to remove the swaybar link from the strut.

9. Disconnect the front brake line and ABS line from the strut and steering knuckle. Figure 5A/5B/5C

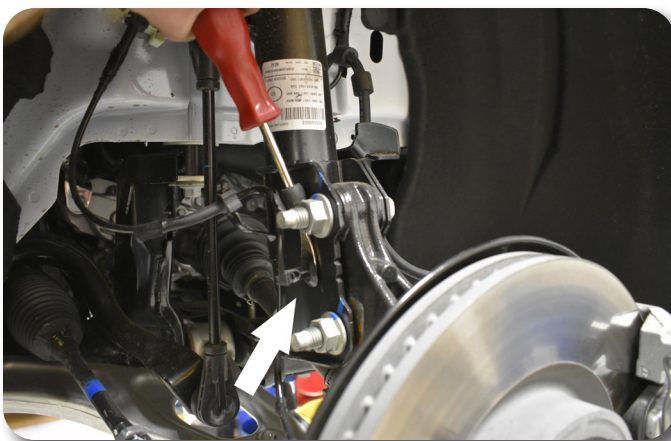


Figure 5A

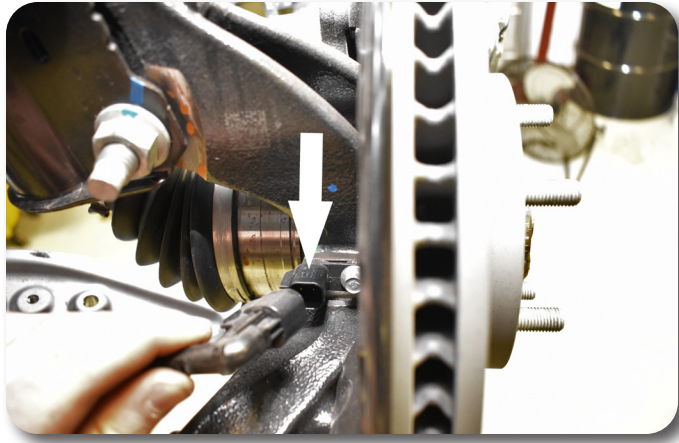


Figure 5B

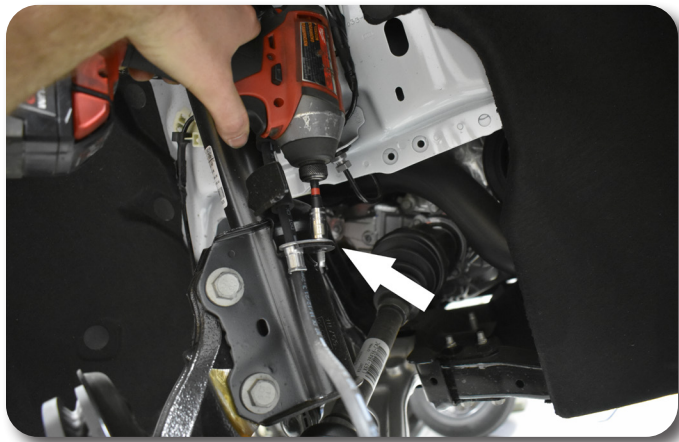


Figure 5C

10. Remove the lower mounting bolts from the strut using a hammer to dislodge bolts. Figure 6

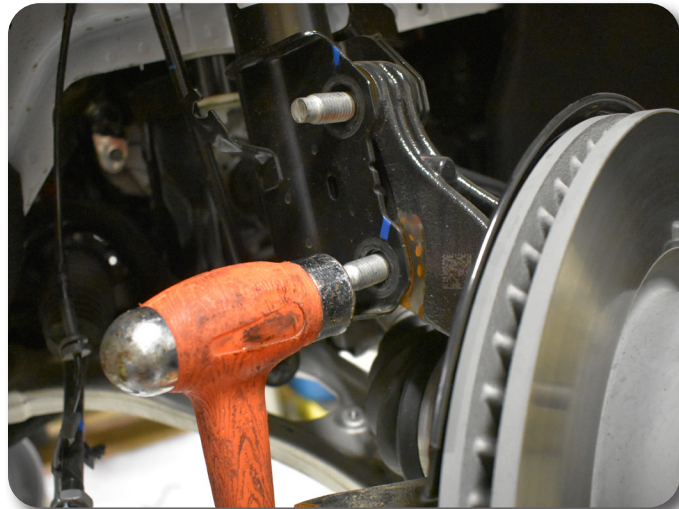


Figure 6

11. Once your ABS line, brake line and knuckle are disconnected from the bottom of the strut support the weight of the strut while you remove the 3 upper strut mounting bolts from under the hood. **Figure 7A/7B. DO NOT** remove the center strut rod nut.

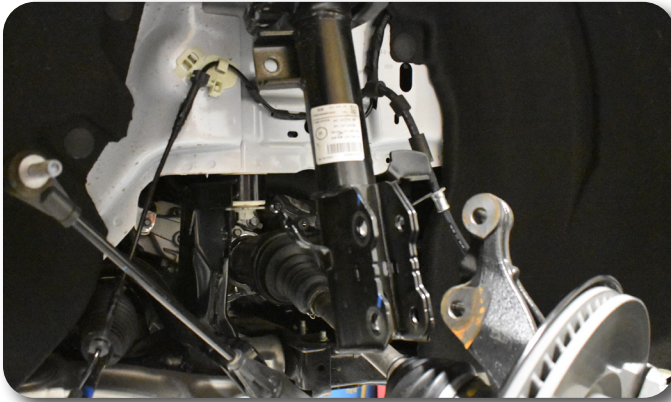


Figure 7A

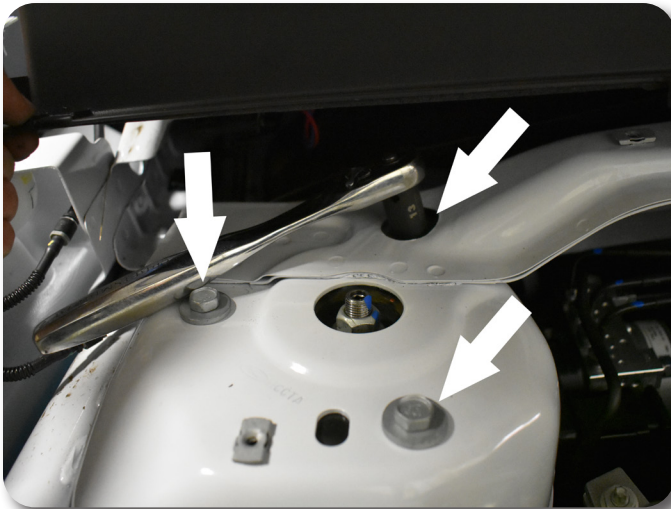


Figure 7B

12. Remove the strut assembly from the vehicle, align the tabs on the top hat bearing assembly, (The thin bottom tab moves when the wheel is turned) then use a paint marker to mark the orientation of the top hat, bearing, isolator spring, and strut body before disassembly to ensure it is re-installed in the correct orientation.

Figure 8

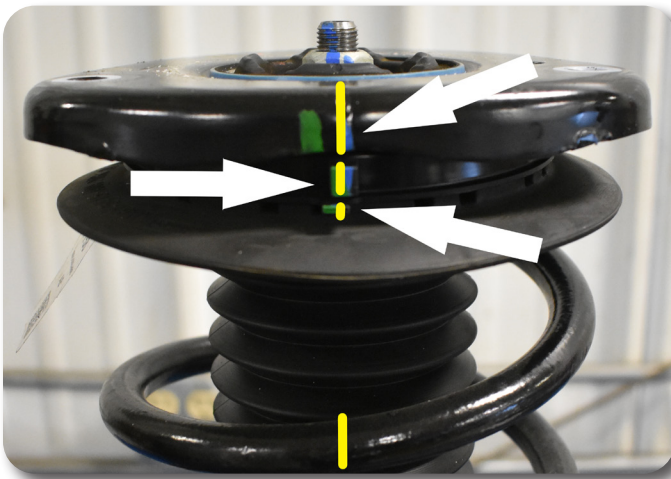


Figure 8

Step 12 Note:

It is important that the bearing/top hat assembly remains in the same rotational position on the strut when assembled because the spring seat is at an angle to set the alignment geometry.

» STRUT SPACER AND PRELOAD INSTALLATION

Step 13 Note:

! Caution Coil Spring is under extreme pressure. Improper removal/installation of coil spring could result in serious injury or death. Use only a high-quality spring compressor and carefully read and follow the manufacturer's instructions.

13. Once the strut has been removed and marked, use a high quality spring compressor to compress the spring while removing the top center nut and disassemble the strut. Figure 9



Figure 9

Step 14 Note:

Be sure to align the marked tabs on the strut bearing assembly with the mark on the top hat from step 12 when re-assembling strut with preload spacer and isolator

14. Remove the upper spring isolator from the strut bearing, and install the preload spacer with the welded side (larger ID plate) facing the tophat/bearing then reinstall the isolator. Figure 10A/10B

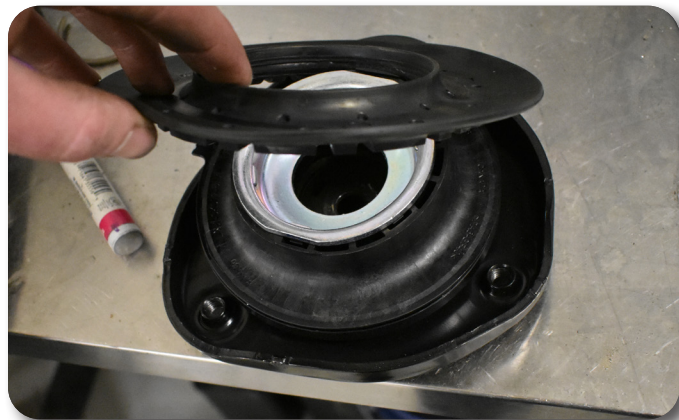


Figure 6



Figure 6

15. Reassemble the strut assembly with the top hat, bearing, isolator, spring and lower strut assembly all aligned as marked before disassembly. Figure 11



Figure 11

Step 15 Note:

It is critical that the bearing and top hat are aligned correctly relative to the bottom of the strut. Misalignment of these components could cause caster or camber to be out of spec causing poor driving feel and premature tire wear

16. With the strut assembly back together, install the top spacer on top of the strut using the factory mounting bolts. The top spacers are side specific, the notch on the top plate of the spacer should face towards the front of the vehicle when installed. Torque bolts to 26 ft-lbs Figure 12A/12B.

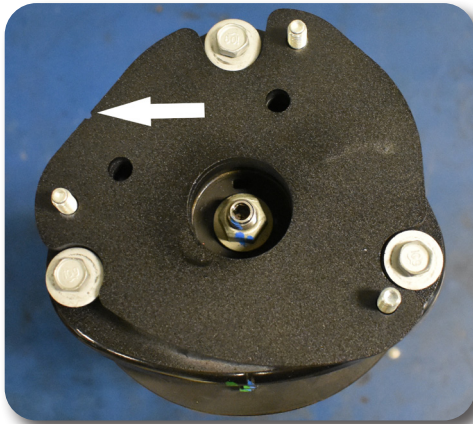


Figure 12A

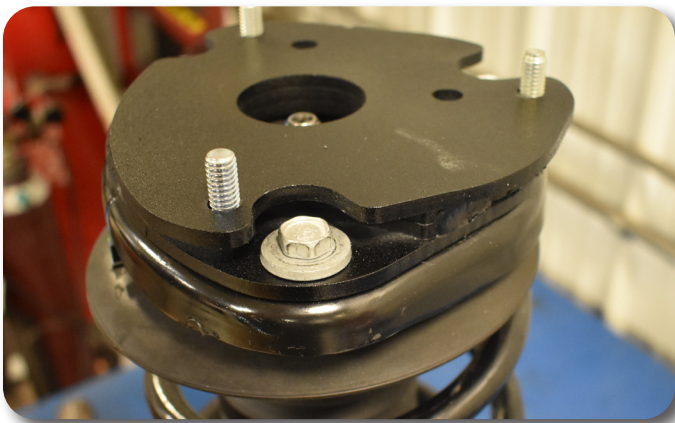


Figure 12B

» FRONT INSTALLATION

17. With the spacer installed on the strut install the strut assembly into the vehicle using the provided 5/16" washers and prevailing torque nuts **Figure 13**. Torque the strut mounting nuts to 26 ft-lbs.

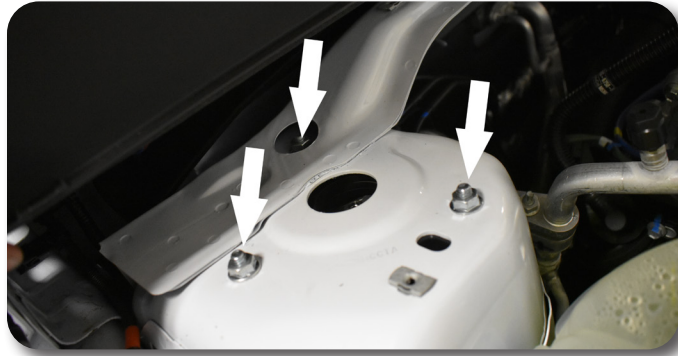


Figure 13

18. Once the strut is mounted on the top, install the knuckle into the bottom of the strut, insert factory lower strut bolts from front to back and use a hammer to fully seat the bolts into the strut. Install nuts and torque each nut to 103 ft-lbs, then tighten each nut another 120 degrees.
19. Reconnect the brake line bracket to the strut. **Figure 14** Torque to 97 in-lbs.

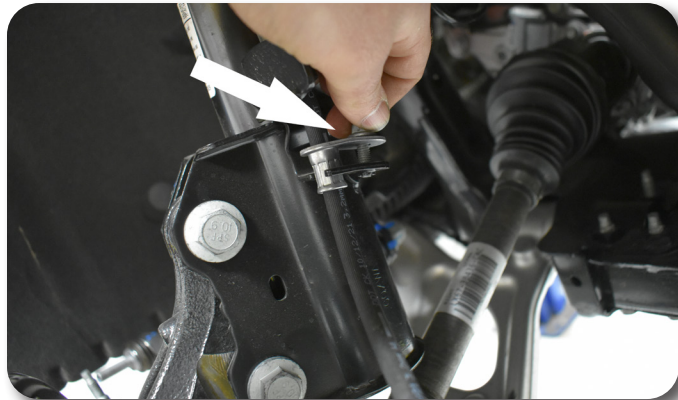


Figure 14

20. In some cases the brake line mounting tab on the body may need to be bent for extra slack in the line at droop. **Figure 15** Torque hardware to 97 in-lbs.

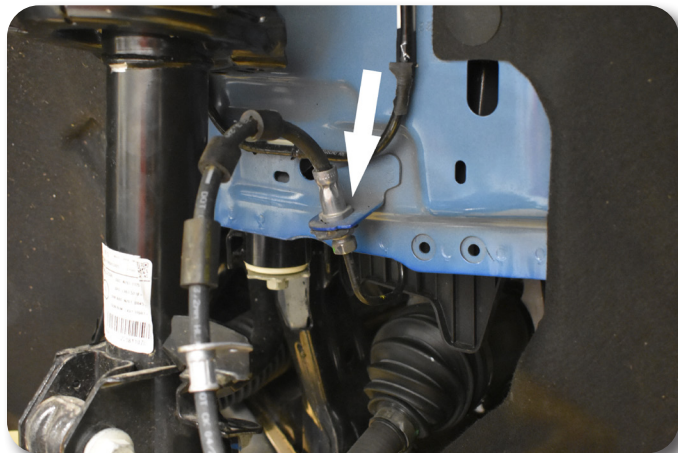


Figure 15

21. Reconnect sway bar links to the strut and replace with factory hardware. Torque to 81 ft-lbs.
22. Attach the steering tie rod end to the steering knuckle and replace with factory nuts. Torque to 35 ft-lbs.
23. Check all brake / ABS lines for proper routing and clearances.
24. Install the wheels and lower the vehicle to the ground. Torque lug nuts to 100 ft-lbs in a crossing pattern.
25. Re-install strut top trim and torque bolts to 13 in-lbs.
26. Re-install the cowl trim clips

» REAR DISASSEMBLY

1. Block the front wheels for safety.
2. Raise the rear of the vehicle and support with jack stands under the subframe allowing the suspension to fully droop
3. Remove the wheels.

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

4. While supporting the lower control arm with a hydraulic jack or screw jack remove the lower shock mounting bolt and lower knuckle mounting bolt.
Figure 16A. Lower the jack slowly until there is only an inch or so of gap between the lower control arm and the jack, then separate the control arm from the knuckle. You may need to use a pry bar to separate the knuckle bushing from the lower control arm. **Figure 16B**

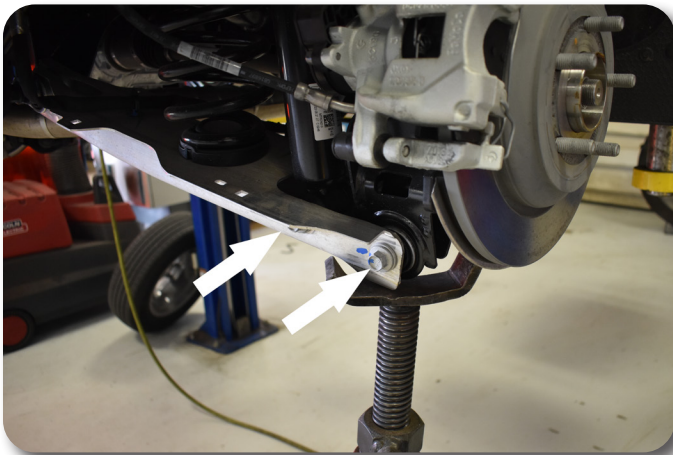


Figure 16A



Figure 16B

! Caution Step 4 Note:

When separating the lower control arm from the knuckle as the spring is compressed slightly at droop and will release with some force.

5. Once the lower control arm is released from the knuckle and shock, use one hand to pull the arm down far enough to remove the coil spring. Figure 17

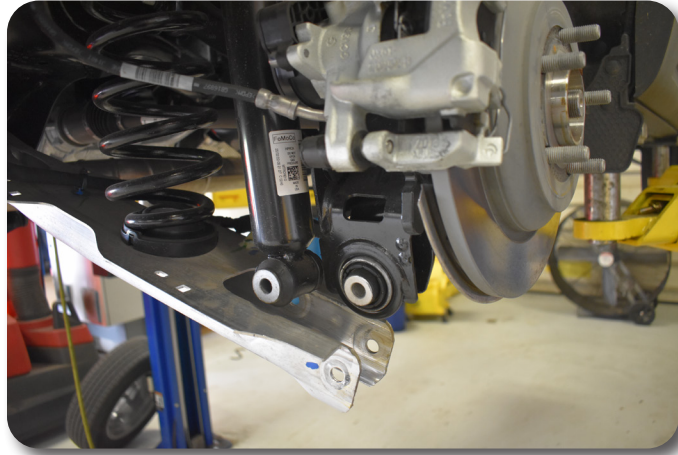


Figure 17

6. Once the spring is removed, use a paint marker to mark the orientation of the upper spring isolator. Remove both upper and lower isolators retain to reinstall with spacers. Figure 18A/18B



Figure 18A



Figure 18B

» REAR INSTALLATION

7. Install the upper spring spacer, then factory upper isolator being sure to align the marks made before removal and push the rubber isolator on until it is fully seated and holds itself and the spacer in position. **Figure 19**



Figure 19

8. Install the lower spring spacer aligning the pin with the hole in the arm for rotational alignment, then install the factory spring isolator inserting the alignment pin on the isolator in the hole on the spacer for correct alignment **Figure 20.**



Figure 20

9. Once the spacers and isolators are installed, the coil spring can be put in position. You will have to use one hand or a friend to pull the lower control arm down to make clearance for the spring to be installed. **Figure 21**

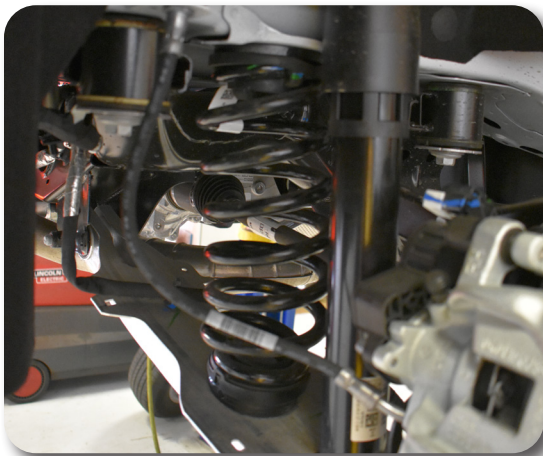


Figure 21

10. Once the spring is in, use a jack on the end of the control arm to push the arm up and align the holes to reattach the shock and knuckle to the control arm and replace with factory bolts and nuts. Leave the lower shock and knuckle bolt / nut loose. Since this is a rubber bushing this will be tightened with the weight of the vehicle on the ground. **Figure 22**



Figure 22

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. Check all brake / ABS lines for proper routing and clearances.
12. Install the wheels and lower the vehicle to the ground. Torque lug nuts to 100 ft-lbs in a crossing pattern.
13. Bounce the rear suspension to settle it. Tighten the two lower shock and knuckle bolts / nuts to 81 ft-lbs

»» FINAL INSTALLATION

14. Adjust head lights.
15. The vehicle will need a complete front end alignment.
16. Check all hardware for proper torque.
17. Check hardware after 500 miles.

Component	Torque (Ft-Lbs)
Strut Trim Plate Bolts	13 (in-lbs)
Brake Line Routing Bolt	97 (in-lbs)
Upper Strut Mounting Bolts	26
Lower Strut Mount Bolts	103 + 120°
Tie Rod End	35
Sway Bar Link Nut	81
Rear Lower Shock Mount	81
Rear Lower Knuckle Mount	81
Wheel Lug Nuts	100