TRAIL FORTRESS

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Rough Country 100354WC Installation Instructions

4-Inch Lift Air Spring Kit with Compressor, Ram 1500 4WD

Part number: 100354WC

trailfortress.com/4-inch-lift-air-spring-kit-rough-country-100354wc

Scan for fitment, price and install help

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ROUGH COUNTRY
SUSPENSION SYSTEMS®

RAM 2019-22 1500 NON-CLASSIC AIR BAG KIT

Thank you for choosing Rough Country for all your vehicle needs.

Please read instructions before beginning installation. Check the kit hardware against the kit contents shown below. Be sure you have all needed parts and know where they go.
If question exist, please call us @1-800-222-7023. We will be happy to answer any questions concerning this product.
Check all fasteners for proper torque. Check to ensure for adequate clearance between all components.

⚠NOTICE Airbags will not increase the maximum load capacity.

⚠NOTICE Must maintain 1/2” clearance around airbag at all times.

Air Bag Kit



6” Spacer



4” Spacer



Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16”	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8”	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16”	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2”	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16”	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8”	135ft/lbs	175ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4”	185ft/lbs	280ft/lbs	18MM	170ft/lbs	240ft/lbs

RC ROUGH COUNTRY

trailfortress.com/4-inch-lift-air-spring-kit-rough-country-100354wc

KIT CONTENTS:
2 - Cable Tie
20’ - 1/4” DOT Air Line
2 - Upper Frame Bracket
2 - Upper Air Bag Plate
1 - Dr. Side Lower Air Bag Mount
1 - Pass. Side Lower Air Bag Mount
2 - Air Bag

HARDWARE INCLUDED:
10035Bag1
- 4 - Flag Nuts
- 4 - 3/8” x 1 1/4” Bolt
- 4 - 3/8” Flat Washer
- 4 - 3/8” Lock Washer
- 1 - Spacer
- 1 - 8mm x 35mm Bolt
- 1 - 8mm Flat Washer
- 6 - Cable Tie

10032Bag1
- 2 - 90° Air Fitting
- 2 - Inflation Valve
- 4 - 3/8” x 1” Bolt
- 4 - 3/8” Flat Washer
- 4 - 3/8” Lock Washer
- 12 - 3/8” Flange Nut
- 4 - 3/8” x 1” Self-Tapping Screw
- 2 - 8mm x 20mm Socket Head
- 2 - 8mm Flange Nut
- 12 - 3/8” x 1” Carriage Bolt
- 4 - 3/8” x 3/4” Button Head Bolt
- 6 - Cable Tie

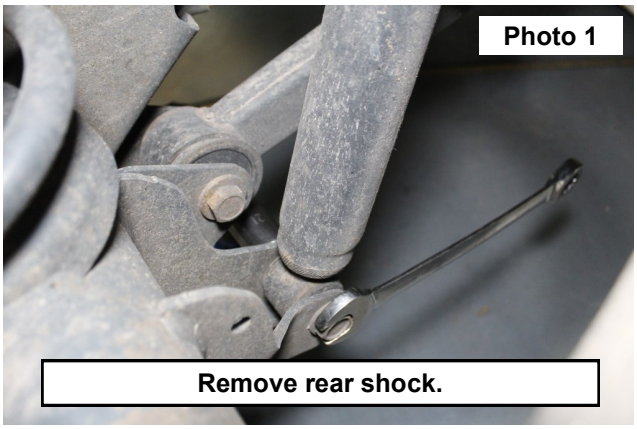
TOOLS NEEDED:
21mm Socket and Wrench
18mm Socket or Wrench
Reciprocating Saw
Metal Cutting Blade
11/32 Drill
9/32 Drill
14mm Wrench
7/32 Allen Wrench
9/16” Wrench
1/2” Nut Setter
9/16” Wrench (Spacer Combo)
Air Line Cutter (Included)

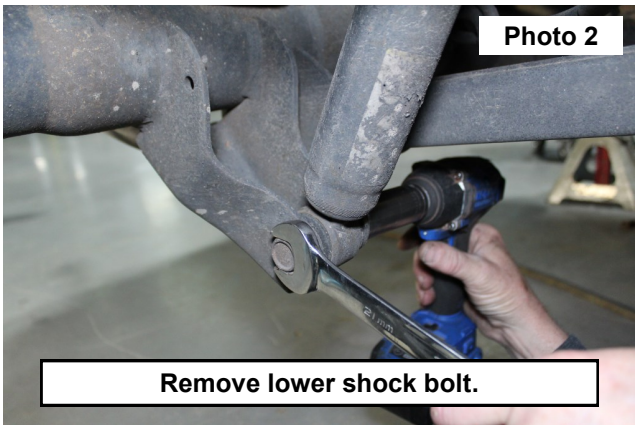
KIT CONTENTS (Spacer Combo):
Spacer x2

HARDWARE INCLUDED (Spacer Combo):
3/8” Flange Nut x8
3/8” Flat Washer x4
3/8” Lock Washer x4
3/8”x1” Hex Head Bolt x4
3/8” x 1 1/4” Carriage Bolt x4 (Not in 4” Lift Spacer Kit)

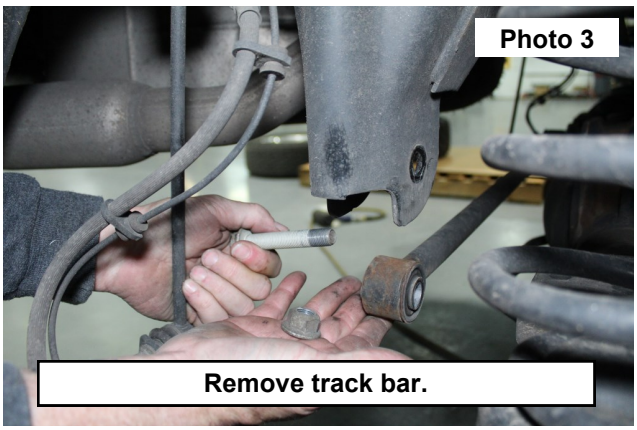
INSTALLATION INSTRUCTONS

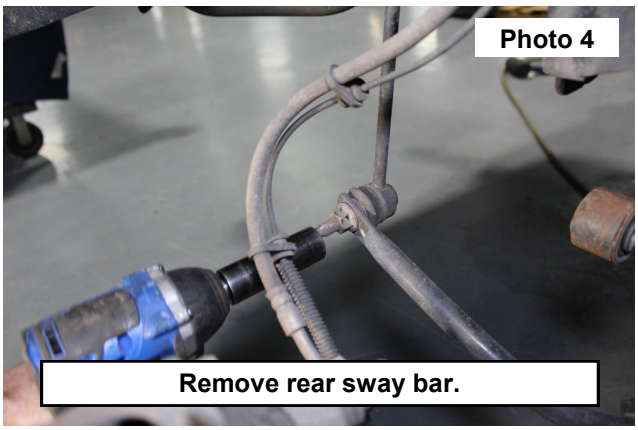
1. Chock the front wheels. Jack up the rear of the vehicle and place on jack stands. Remove rear tires. **NOTE:** It may be necessary to lower the axle to free the rear coil spring.
2. Using a 21mm wrench and socket, remove the lower shock bolt. Retain hardware for reuse. **See Photo 1 and Photo 2.**





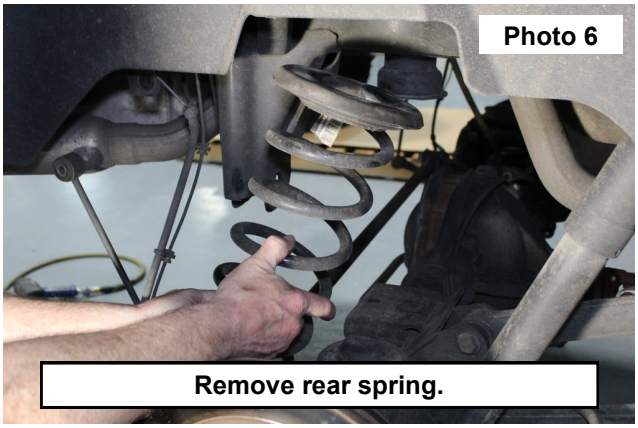
3. Use a 21mm wrench and socket to remove track bar. Retain hardware for reuse. **See Photo 3.**
4. With an 18mm wrench or socket, remove the rear sway bar. Retain hardware for reuse. **See Photo 4.**



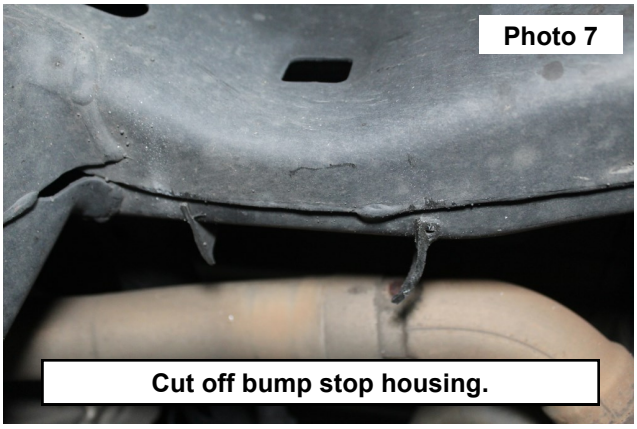


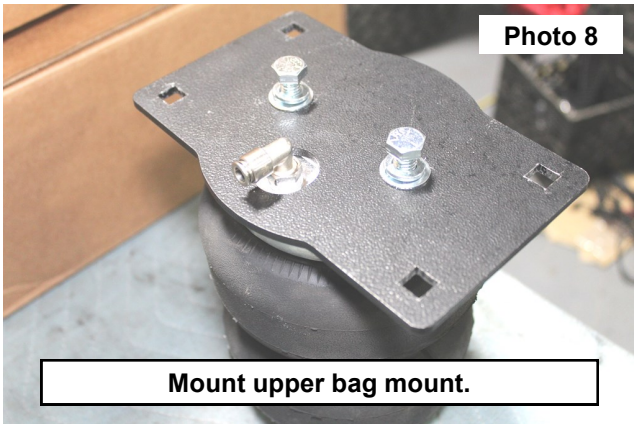
5. Remove factory bump stop. **See Photo 5.**
6. Pull out factory spring. Retain for reuse. **See Photo 6.**



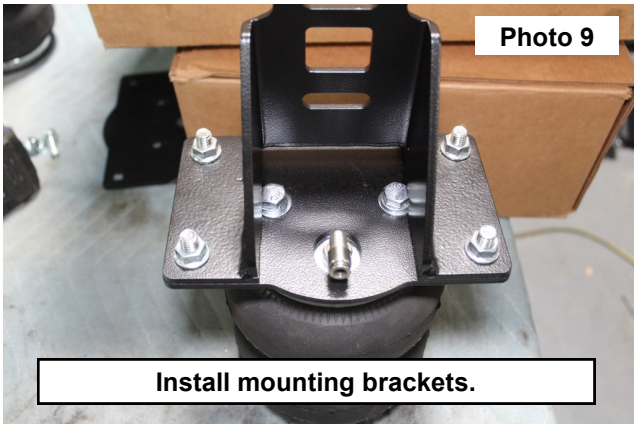


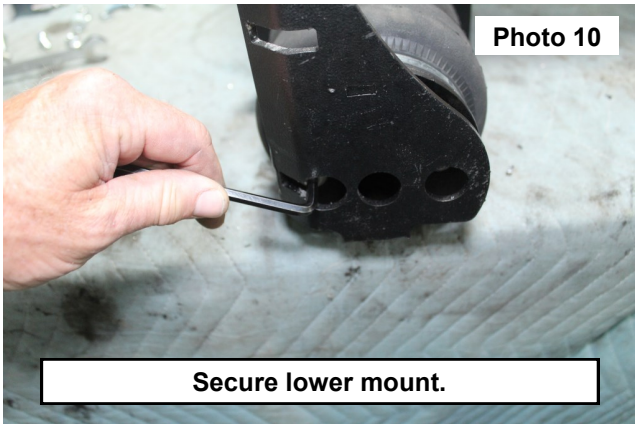
7. Use a reciprocating saw with appropriate metal cutting blade to remove factory bump stop housing from the frame of the vehicle. **See Photo 7.**
8. Sand and paint exposed metal to reduce risk of rust.
9. Place upper air bag mount on top of air bag. Use thread tape and secure 90° degree air fitting to top of air bag. With a 9/16” wrench, secure 3/8” x 1” bolt, 3/8” lock washer, and 3/8” flat washer to top of air bag. **See Photo 8.**



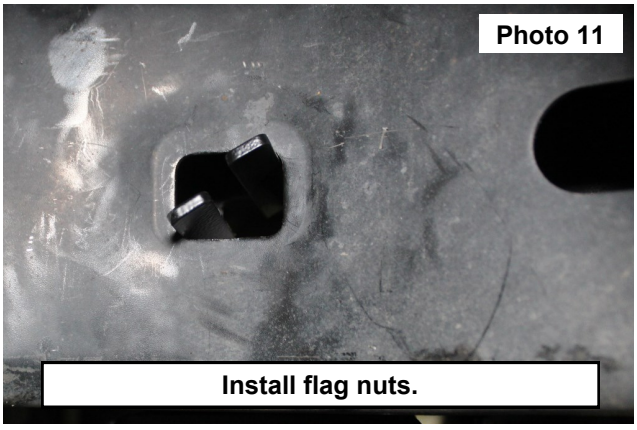


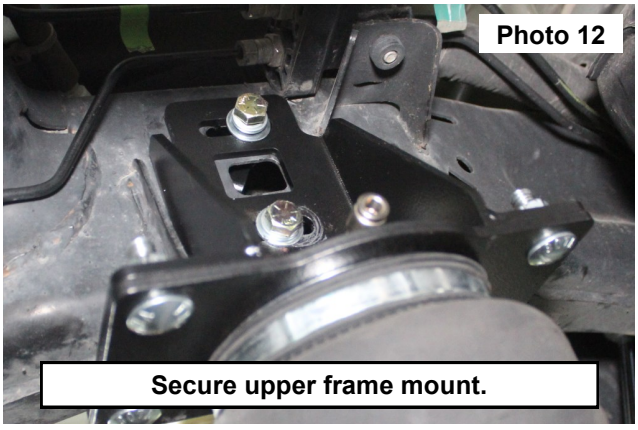
10. Install the top mounting brackets to the upper bag mount using (4) supplied 3/8” carriage bolt and (4) flanged lock nut. Tighten with a 9/16” wrench. **See Photo 9.**
11. LIFTED TRUCKS ONLY: Refer to back page for spacer installation.
12. Install the lower bag mounts to the air bag using (2) supplied 3/8” button head bolts. **NOTE:** Apply blue thread locker to button head bolts before installing. Tighten with a 7/32” Allen wrench. **See Photo 10.**



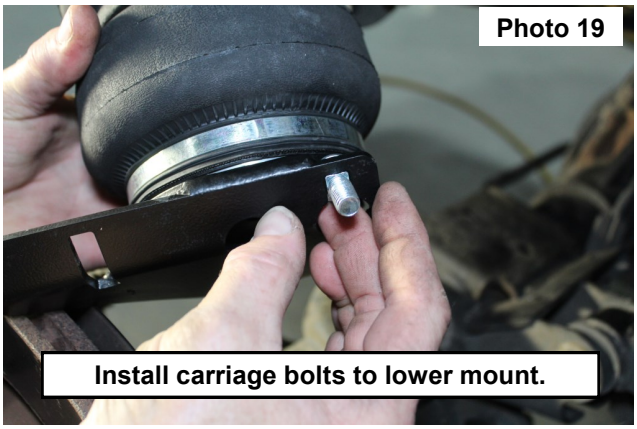


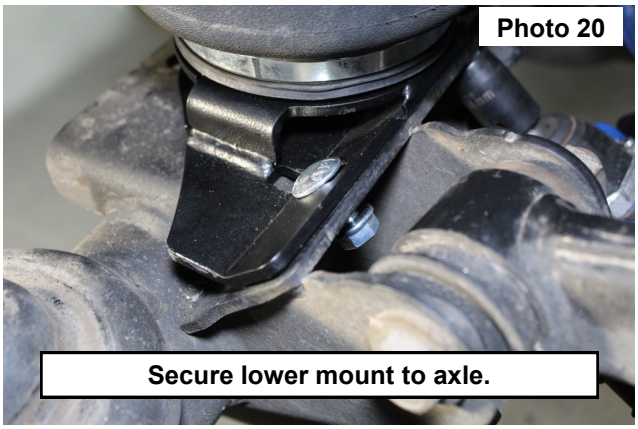
13. Place (2) supplied flag nuts into the square hole of the vehicle frame. **See Photo 11.**
14. Secure upper mount to frame with (2) supplied flat 3/8” flat washers, (2) 3/8” lock washers, and (2) 3/8” bolts. Tighten into previously installed flag nuts with a 9/16” socket. **See Photo 12.**



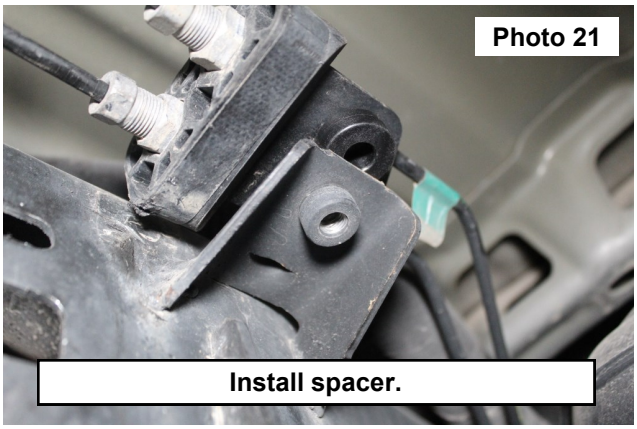


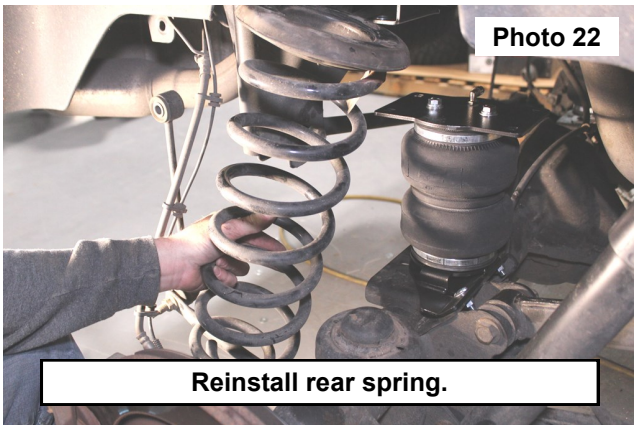
15. Install (2) supplied 3/8” carriage bolts into the lower bag mount. **See Photo 19.**
16. Secure lower mount to axle bracket using (2) supplied 3/8” flange lock nuts. Tighten with 9/16” wrench. **See Photo 20.**





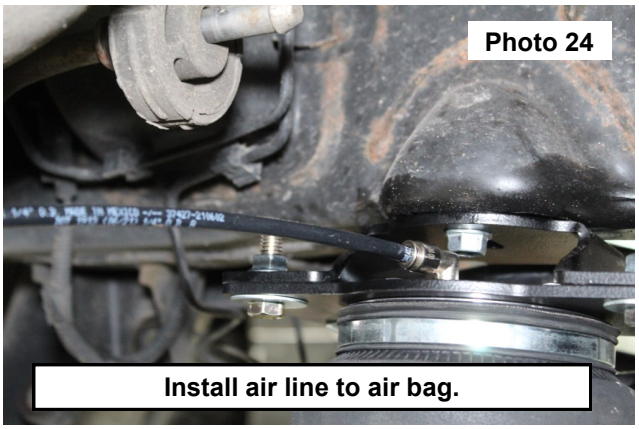
17. Unbolt factory brake line bracket with a 14mm wrench and retain the bolt. Install the spacer underneath the brake line bracket and then install the supplied 8mm x 35mm bolt and 8mm washer. **See Photo 21.**
18. Reinstall track bar, rear sway bar, and shock in reverse order of disassembly. Repeat for other side of vehicle.
19. Reinstall factory rear spring then lower truck **See Photo 22.**





20. Reinstall rear wheels and lower truck.
21. Install inflation valves in license plate screw locations. **See Photo 23.**
22. Run DOT 1/4” air line from inflation valve to air bag. **See Photo 24. NOTE:** Be sure to avoid kinks and pinch points when routing air line.





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SPACER INSTALLATION INSTRUCTONS

1. Place spacer on top of bottom air spring mount. **See Photo 1.** Use 3/8” button head bolt (from air spring kit) and 3/8” flange nut from spacer kit to install spacer to bottom air spring mount. Tighten with 7/32” Allen wrench and 9/16” wrench. **See Photo 2. NOTE:** Spacer will angle in towards vehicle.

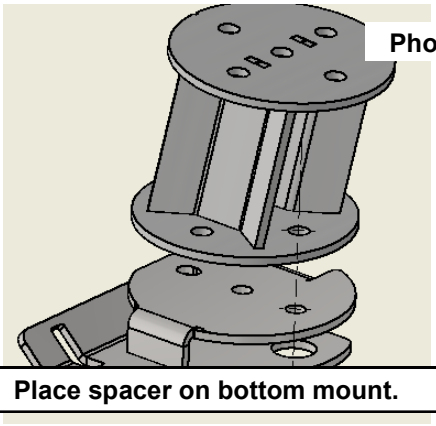

Photo 1

Place spacer on bottom mount.

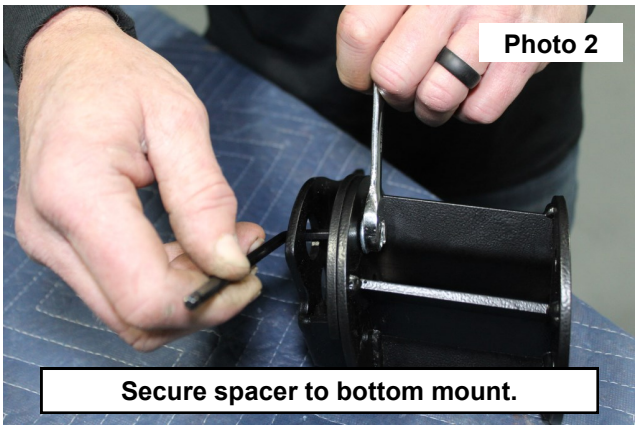

Photo 2

Secure spacer to bottom mount.

2. Install bottom air spring mount to axle of truck with supplied 3/8” x 1 1/4” carriage bolts and flange nuts from air spring kit. **See Photo 3 and Photo 4**. **NOTE:** Only 6” lift kits will need 3/8” x 1 1/4” carriage bolts. Others can use carriage bolts supplied with air bag kit.

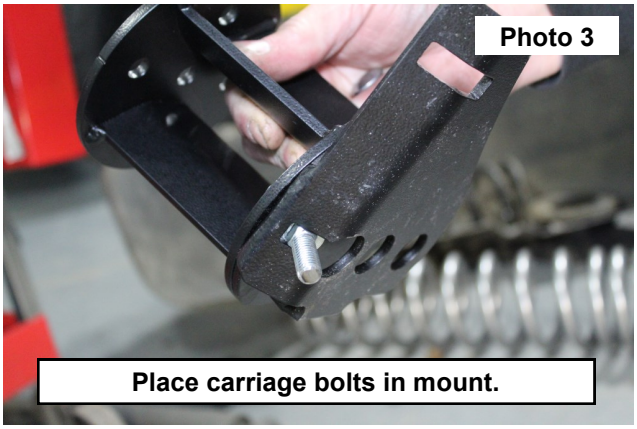

Photo 3

Place carriage bolts in mount.

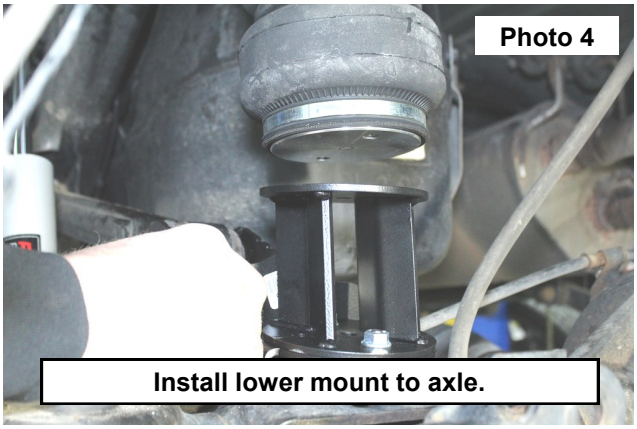

Photo 4

Install lower mount to axle.

3. **FOR 6” LIFT ONLY**: Mount extended track bar bracket to axle before installing the lower mount and spacer assembly. **See Photo 5.**
4. Assemble supplied 3/8” hex head bolt, 3/8” lock washer, and 3/8” flat washer as shown below and install into lower air bag. Tighten with 9/16” wrench. **See Photo 6.**

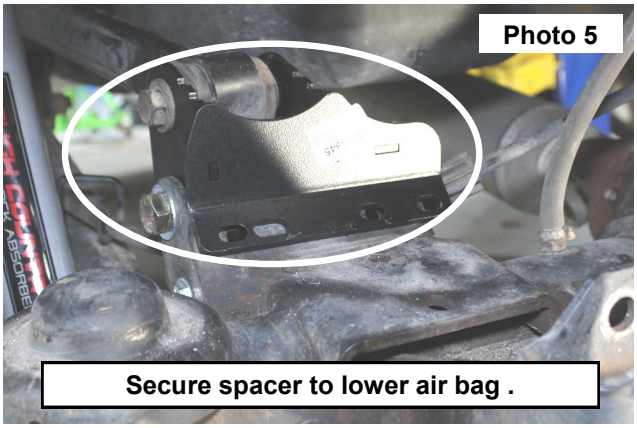

Photo 5

Secure spacer to lower air bag .

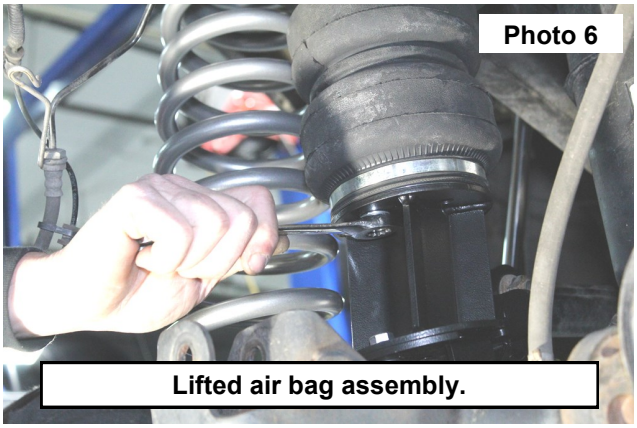

Photo 6

Lifted air bag assembly.