BAJA KITS
BY BRENTHEL INDUSTRIES

INSTALLATION MANUAL

Vehicle: 2019-2024 Chevrolet Silverado 1500 4WD & GMC Sierra 1500 4WD

Kit Part # BJK1149001 - Shock Tower Brace Kit

Level 2 of 5 Install

Install Time: 2-3 hours

**NOTE: Read through entire installation manual including the pre-install notes before deciding whether to attempt the procedure. Do not attempt if you do not possess the proper know-how and tools necessary to complete the installation.

FOR ANY TECHNICAL QUESTIONS OR SUPPORT, PLEASE CONTACT BAJA KITS

Contact: Tel: 949.566.8615 • Tech-Baja@ridefox.com

REV071224

BEFORE YOU START

Baja Kits 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.

FOR YOUR SAFETY

Certain Baja Kits 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. Baja Kits 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.

BEFORE INSTALLATION

- Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- Secure and properly block vehicle prior to installation of Baja Kits components. Always wear safety glasses when using power tools.
- 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.

BEFORE YOU DRIVE

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.

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. Longer replacement hoses, if needed can be purchased from a local parts supplier.

Perform head light check and adjustment.

Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

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Minimum Required Tool List:

- Wrench and Socket Set
- Ball Joint Removal Tool
- Die Grinder (Milwaukee 2485-20 or similar)
- Torque Wrench
- Cut Off Tool (Milwaukee 2522-20 or similar)

BJK1149001 Box Kit Components		
Part #	Quantity	Description
B1610	1	Bag Kit - Dual Shear Mount
BP1048	1	Bolt Pack- Dual Shear Mount
15700143	4	Cable Tie 6" with Oval Fir Tree
05393	1	2019+ GM 1500 Shock Tower Brace Mount BRKT - DRV
05394	1	2019+ GM 1500 Shock Tower Brace Mount BRKT - PASS
05395	1	2019+ GM 1500 Shock Tower Brace Tube - DRV
05396	1	2019+ GM 1500 Shock Tower Brace Tube - PASS

PRE - INSTALLATION / FITMENT NOTES

1. This dual shear mount has only been tested to fit 5.3 and 6.2 engine models. Will work with Whipple Super Charger equipped vehicles.
2. Can work with any after market suspension systems as long as the upper control arm bushing width matches the OE bushing width.
3. In order to work properly, before installing, check to make sure the the strut or coil-over studs on the frame side have a minimum of 1/4" of threads showing past the nut. This will ensure the dual shear mount can be bolted to the upper strut mount.
4. Make sure there is a minimum of 1/4" of thread showing past the nuts on the upper control arms. If there is not, new / longer hardware is needed for installation.

FRONT DISASSEMBLY

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. At ride height, measure strut length from mounting face on the frame to the mounting location on the control arm. This will be a reference measurement for setting control arm position later in the install.

   Record this measurement here: _____
3. Raise the front of the vehicle with a hydraulic jack and support the frame with jack stands. Remove the wheels.
4. Remove front tie rod retaining nut. Save the tie rod nut for later installation.

FIGURE 1

1. Use hammer to strike bottom of tie rod to separate tie rod from steering knuckle.

FIGURE 2

2. Remove the brake line retaining bracket and bolt from the knuckle. Save hardware.

FIGURE 3

3. Remove the ABS line retaining bracket and bolt from the front side of the knuckle. Save hardware.

FIGURE 4

4. Remove the ABS line bracket from the upper control arm. Save hardware.

   Note: OE UCA pictured, if combining with an aftermarket UCA, the bracket / retaining style may be different, but still must be saved to be re-used.

FIGURE 5

5. Remove the ABS line bracket and bolt from the upper part of the knuckle. Save hardware.

FIGURE 6

6. Remove the ABS sensor from the knuckle. Taking care not the damage the sensor. Save hardware.

FIGURE 7

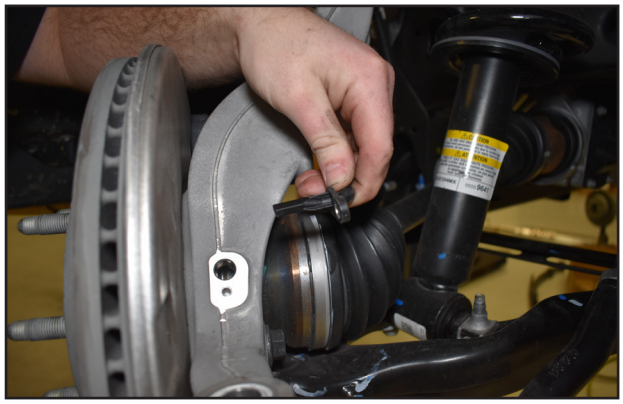

FIGURE 8

7. Loosen the upper ball joint nut, do not remove.

FIGURE 9

8. Strike knuckle to separate the ball joints tapered rod from knuckle. Remove the upper ball joint nut and separate the knuckle from the upper control arm. Save hardware.

FIGURE 10

9. Remove nut to disconnect sway bar from lower control arm. Save hardware.

FIGURE 11

10. Support the lower control arm assembly from falling. Remove both lower strut or coil-over mount attachment. Save hardware.

FIGURE 12

11. Remove strut or coil-over from strut tower by removing the (3) nuts on top of the strut tower. The rear strut nut can be accessed from the engine bay with an extension. Save hardware. Swing the lower control arm down and remove the strut or coil-over from the vehicle.

Note: On the drivers side strut tower the wiring harness retainer will need to be pried off of the rear strut bolt to gain access to the rear strut nut. On the passengers side the wiring harness box will need to need to be pried off of the strut bolt to gain access to the strut nut.

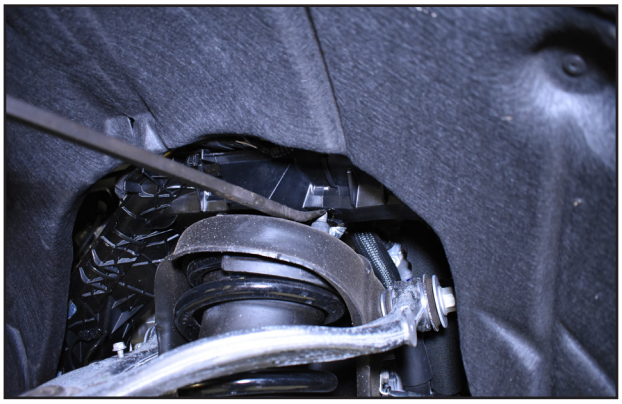

FIGURE 13

FIGURE 14

12. Remove the upper control arm by removing the control arm bolts and nuts. Save hardware.

STRUT TOWER BRACE AND UPPER CONTROL ARM INSTALLATION

1. On the passenger side, cut all the zip ties in the shown area of the wire harness retainer. This will free the wire harness from the retainer.

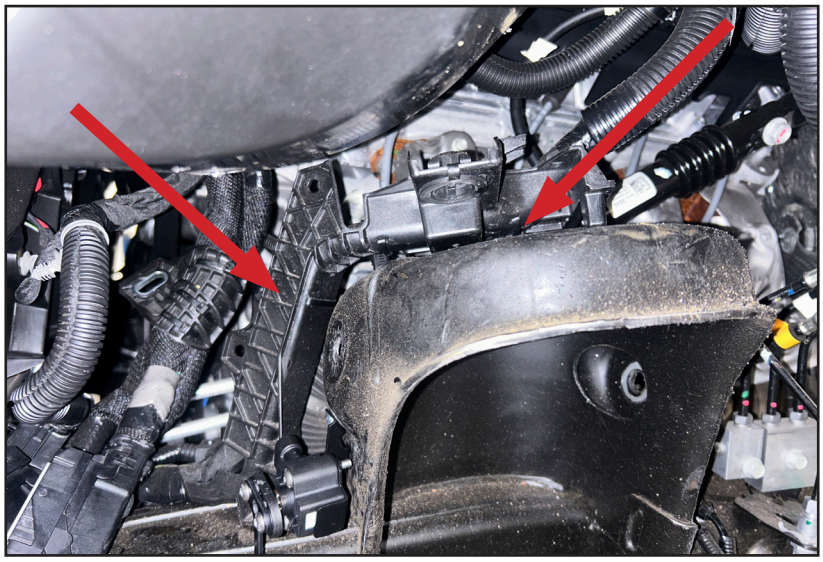

FIGURE 15

2. Cut the plastic wire tray at the doted lines shown below. This will allow the upper mount to install on top of the strut tower.

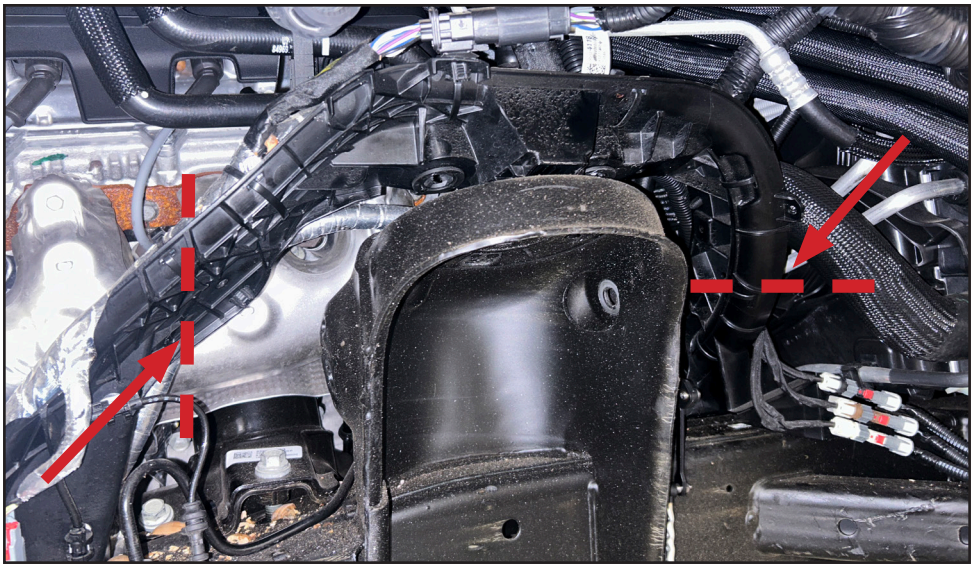

FIGURE 16

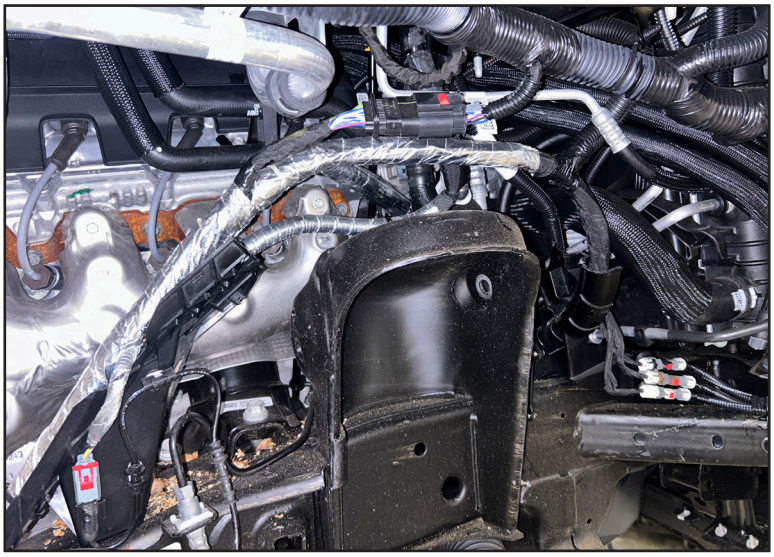

FIGURE 17

3. The strut tower brace brackets are side specific to line up with the upper control arm holes. Place the strut tower brace bracket on top of the strut mount lining up the holes for where the strut mounts to the frame and where the upper control arm mounts to the frame. Verify on the passenger side the wire harness retainer does not contact the strut tower brace bracket. Additional trimming may be required to ensure the wire harness retainer does not contact the strut tower brace bracket.

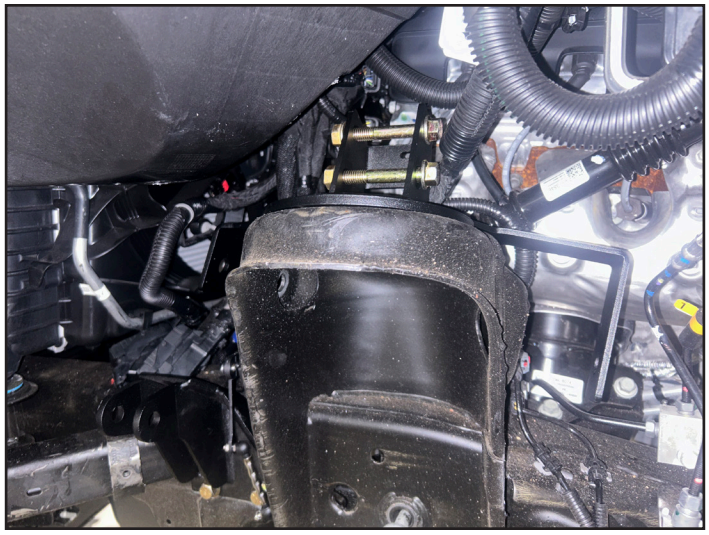

FIGURE 18

4. Attach the loose wire harnesses to the back side of the strut tower brace using the provided oval "Christmas" tree zip ties.

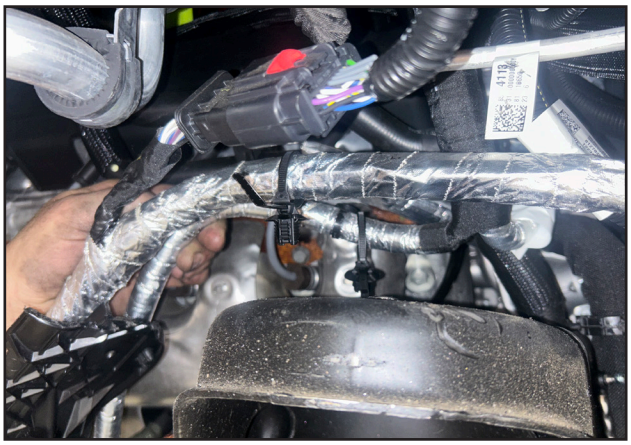

FIGURE 19

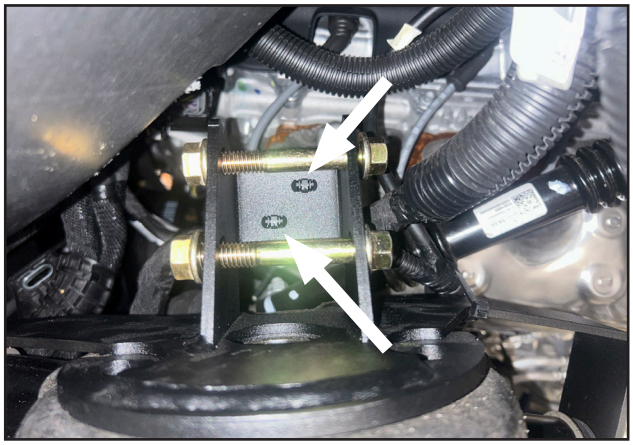

FIGURE 20

5. Re-install the upper control arm with the hardware saved previously. Run the hardware from the inside of the strut bucket outwards through the strut tower brace. Leave hardware loose.

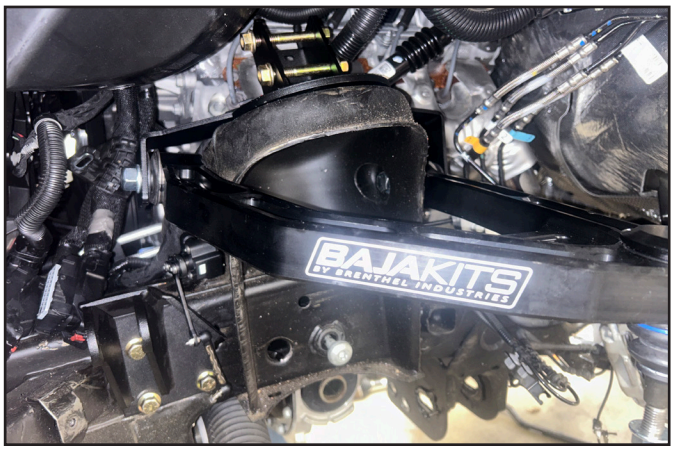

FIGURE 21

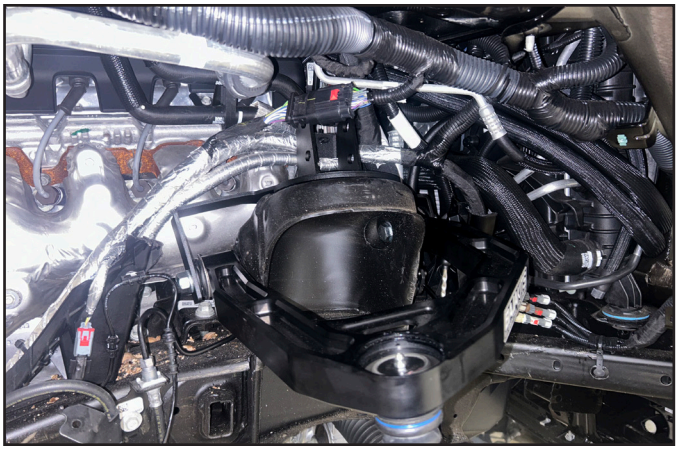

FIGURE 22

6. Attach the upper control arm to the steering knuckle temporarily. Snug up the upper ball joint nut at this time.

FIGURE 23

7. Support the lower control arm and set the height from the strut mount face on strut tower to the center of the coil-over mount hole or strut mount on the lower control arm to approximately ride height measured at the first step.

FIGURE 24

FIGURE 25

8. Ensure proper hardware length is used for the hardware such that the hardware is into the locking feature of the nut. Torque the upper control arm frame mount bushing hardware to 126 ft-lbs.

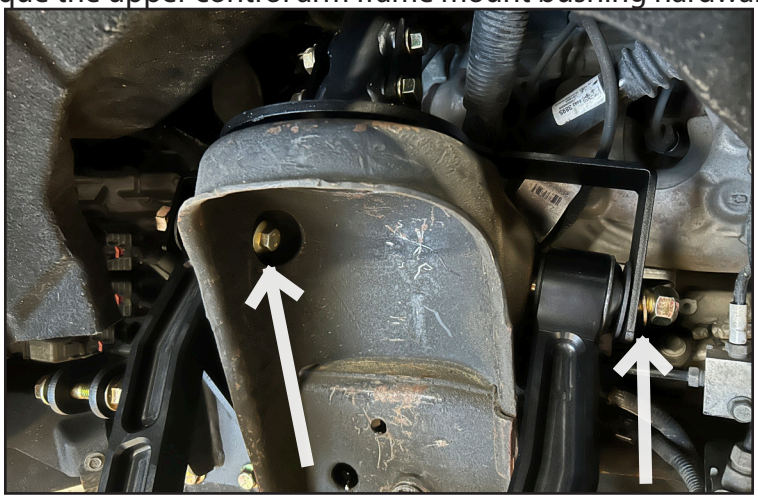

FIGURE 26

9. Remove the upper ball joint nut and dislodge the steering knuckle from the upper control arm. Save hardware

FRONT COIL-OVER INSTALLATION

1. Droop out the front suspension such that the CV shaft does not pull out and the front coil-overs or struts can be installed.
2. Install the front coil-over or strut to the frame mount using the provided hardware. Note the holes in the dual shear mount on the frame may be shifted from the upper control arm installation and need to be clearanced out with a die grinder for coil-over or strut installation. Torque the hardware for the upper strut mount to the recommended amount per the application.
3. Attach the front coil-overs or struts to the lower control arm. Torque to the recommended amount per the application.

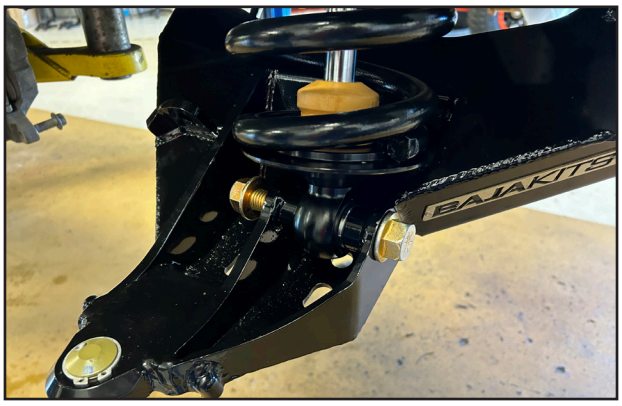

FIGURE 27

4. Reattach the upper ball joint to the steering knuckle using the hardware saved previously.. Torque the upper ball joint nut on the first pass to 26 ft-lbs and a final pass of 85-95 degrees.

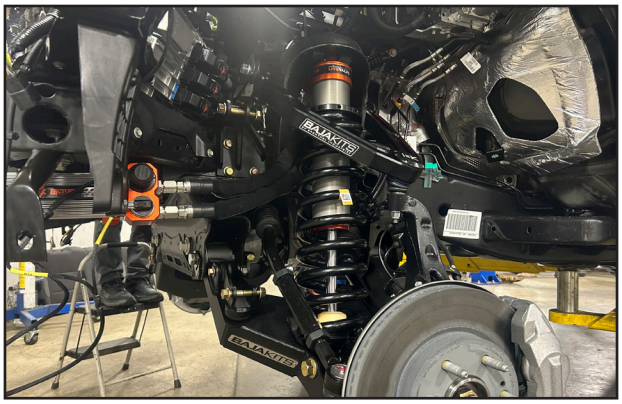

FIGURE 28

5. Attach the outer tie rod joint to the steering knuckle. Torque with a first pass to 26 ft-lbs and a final pass of 85-100 degrees.

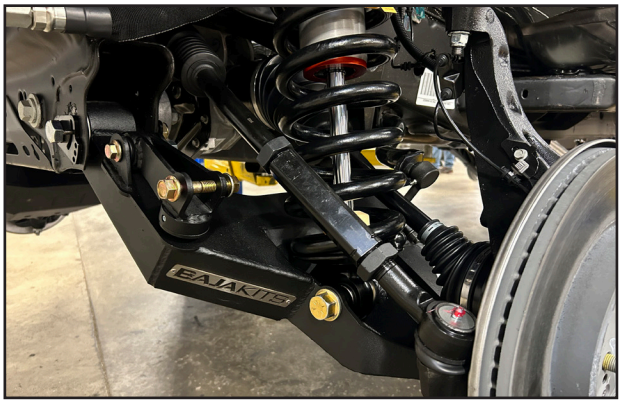

FIGURE 29

FIGURE 30

6. Attach the OE ABS line brackets to the steering knuckle using the OE hardware with thread locker. Torque to 80 inch-lbs.

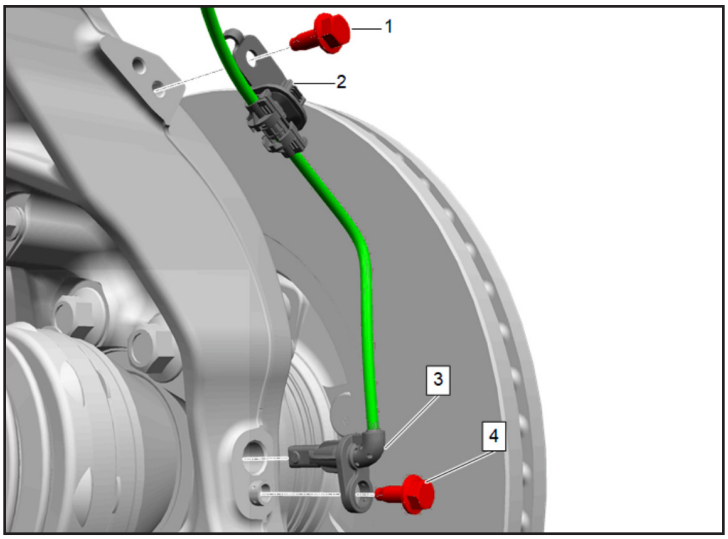

FIGURE 31

7. Attach the brake line bracket to the steering knuckle with the OE hardware with thread locker. Torque to 80 inch-lbs.

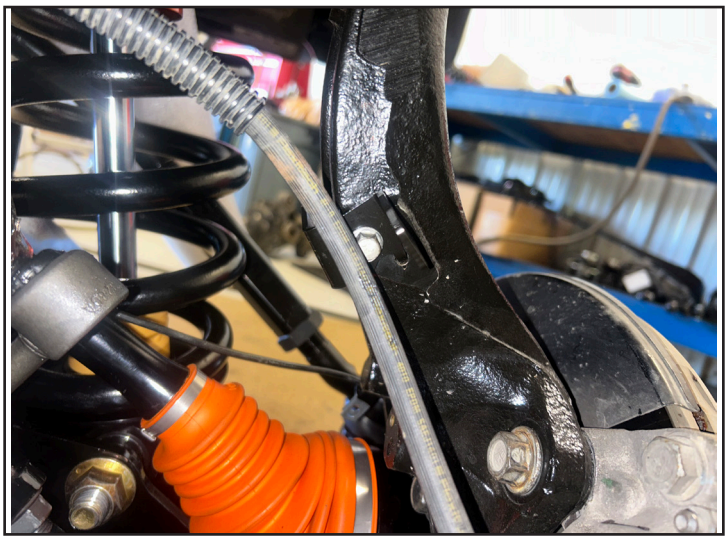

FIGURE 32

STRUT TOWER TUBES

1. Install the tubes for the strut tower. The tubes are side specific as shown in the figure below.

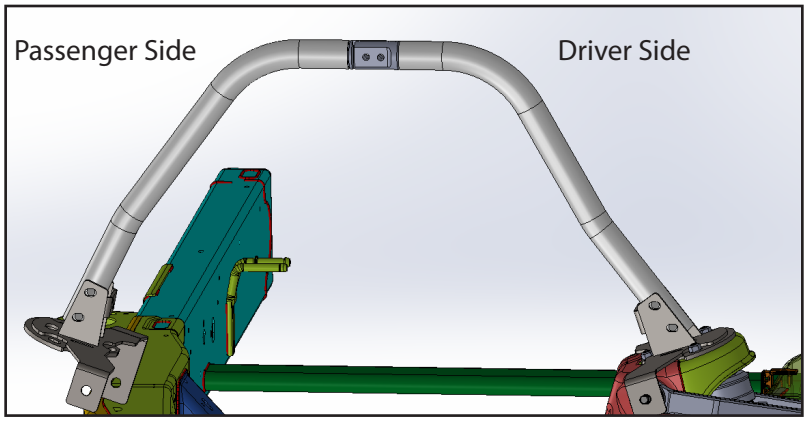

FIGURE 33

2. Attach the driver side tube to the strut tower brace brackets using the provided 7/16" flange head bolts and flange nuts from Bolt Pack BP1048. Leave hardware loose.

FIGURE 34

3. Attach the passenger side tube to the strut tower brace brackets using the provided 7/16" flange head bolts and flange nuts from Bolt Pack BP1048. Leave hardware loose.

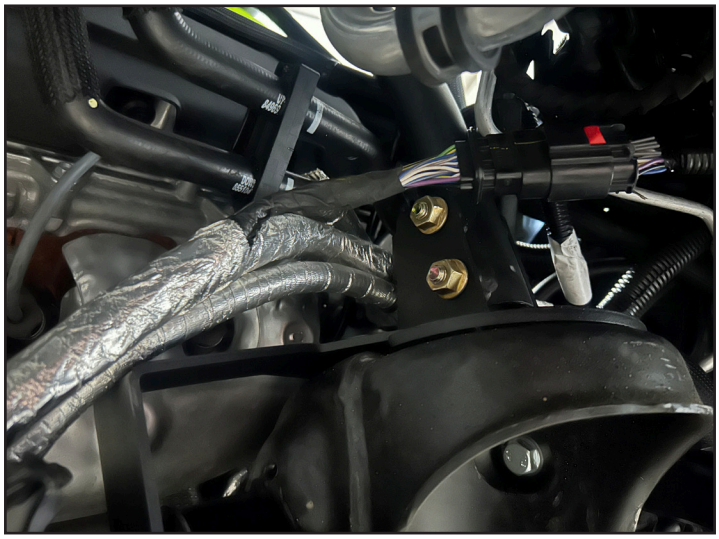

FIGURE 35

4. Attach the center mounts of the two tubes using the provided 3/8" flange head bolts and flange nuts from Bolt Pack BP1048. Tighten the 3/8" hardware to 37 ft-lbs.

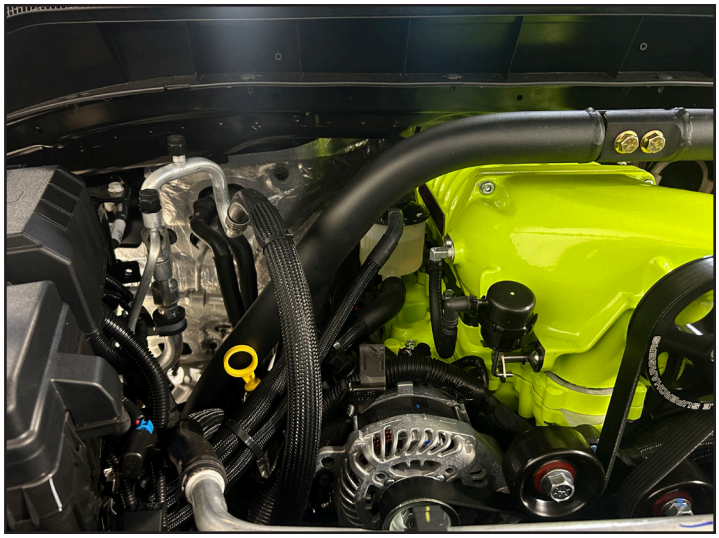

FIGURE 36

FIGURE 37

5. Tighten the (4) 7/16" hardware locations to 59 ft-lbs.

FIGURE 38

FINAL INSTALLATION

6. Reinstall wheels and tires onto the vehicle.
7. Torque lug nuts to OE specifications.
8. Lower vehicle to the ground.
9. Roll vehicle forward and rearward to settle the suspension.
10. Although not required, since the upper control arm was removed, an alignment is recommended to make sure it is within specification.