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TOYOTA TACOMA

(ALL 4WD, 2WD PRERUNNER, & 2WD TRD MODELS)

1.5" LEVELING LIFT KIT

INSTALLATION INSTRUCTIONS

2005-2016 KIT# PATL224PA

⚠ WARNING
Installation of a Performance Accessories Group suspension lift kit will change the vehicle's center of gravity and handling characteristics both on- and off-road. You must drive the vehicle safely! Extreme care must be taken to prevent vehicle rollover or loss of control, which could result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers and always make sure all vehicle occupants have their seat belts fastened.

⚠ CAUTION
Proper installation of this kit requires knowledge of the factory recommended procedures for removal and installation of original equipment components. We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of the vehicle. We strongly recommend that a certified mechanic familiar with the installation of similar components install this kit.

⚠ WARNING
This kit should only be installed on a vehicle that is in good working condition. Before you install the kit, thoroughly inspect the vehicle for corrosion or deformation of the sheet metal. If the vehicle is suspected to have been in a collision or misused, do not install this kit. Off-road use of your vehicle with this kit installed may increase the stress applied to the factory components. Failure to observe this warning may result in serious personal injury and/or severe damage to your vehicle.

⚠ WARNING
Many states and municipalities have laws restricting bumper heights and vehicle lifts. Consult state and local laws to determine if the changes you intend to make to the vehicle comply with the law.

⚠ WARNING
The installation of larger tires may reduce the effectiveness of the braking system.

⚠ WARNING
Always wear eye protection when operating power tools.

⚠ WARNING
Before you install this kit, block the vehicle tires to prevent the vehicle from rolling.

⚠ WARNING
We strongly recommend using the Performance Accessories Group shocks that were engineered to be used with this system. If you use other shocks, they must match the full extended and full collapsed lengths of the Performance Accessories Group units exactly. The use of longer or shorter shocks than recommended may cause damage to the vehicle suspension and could result in sudden loss of control of the vehicle and personal injury. Contact Performance Accessories Group for the lengths of the front and rear shocks that must be used with this suspension system.

NOTE
Performance Accessories Group recommends using the Loctite® supplied in the kit on the threads of all kit nuts and bolts unless specified otherwise in these instructions.

NOTE
Installation of a suspension lift will change the driveline angles which may cause a noticeable vibration in the vehicle. See the troubleshooting section at the end of these instructions.

⚠ WARNING
DO NOT combine suspension, body, or other lift devices. Use of vehicle with combined lifts may result in unsafe and/or unexpected handling characteristics.

NOTE
Lift height may vary depending on vehicle configuration, engine size, additional accessories, the factory suspension package, and vehicle's condition.

⚠ WARNING
Before you install this kit, read and understand all instructions, warnings, cautions, and notes in this instruction sheet and in the vehicle owner's manual.

Before Starting Installation

center of the axle straight up (vertical) to the fender lip. Record this measurement for all four wheels.

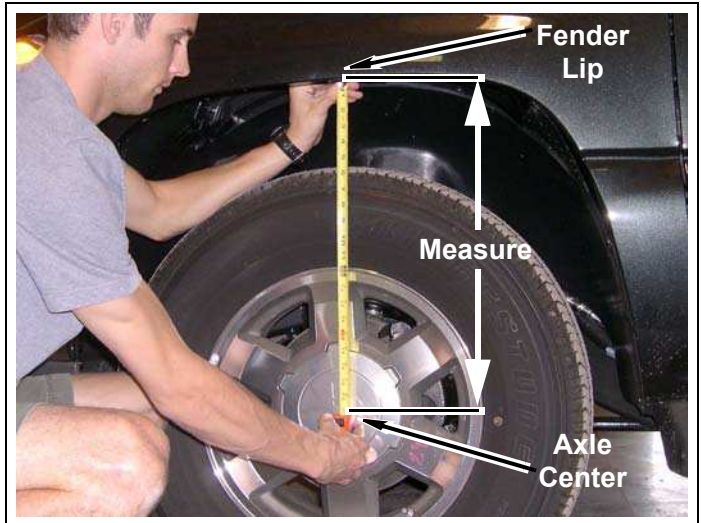
NOTE
Kit parts are prefaced by the word *kit* and appear in **bold** print.

1. Carefully read all warnings and instructions completely before beginning.
2. Verify all parts have been received in this kit by checking the parts list at the end of this document.
3. **Only install this kit on the vehicle for which it is specified.** If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support at (928) 636-7080.
4. Special tools needed:
 - a. Coil spring compressor
5. Park vehicle on a clean, dry, flat, level surface and block tires so vehicle cannot roll in either direction.

NOTE
Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the factory service manual. When re-assembling the vehicle it is recommended by the vehicle manufacturer that certain fasteners are replaced in order to maintain proper retention characteristics. This system may not include all replacement hardware as recommended by the factory service manual. Additional replacement hardware should be obtained prior to installation of this system to meet the requirements of the factory service manual.

Ride Height

1. Measure ride height with the vehicle supporting its own weight on level ground. To settle the suspension, the vehicle should be driven forward at least 10 feet immediately prior to taking these measurements. Ride height is the measurement from the



Wheel & Tire Requirements

The factory wheel and tire combination will fit once this kit is installed. The following are specifications for choosing a proper wheel tire:

Maximum tire diameter = 285 75 R16 or equivalent diameter and width

NOTE
Minor trimming of the front bumper valence may be required for proper clearance of the above mentioned tire dimensions.

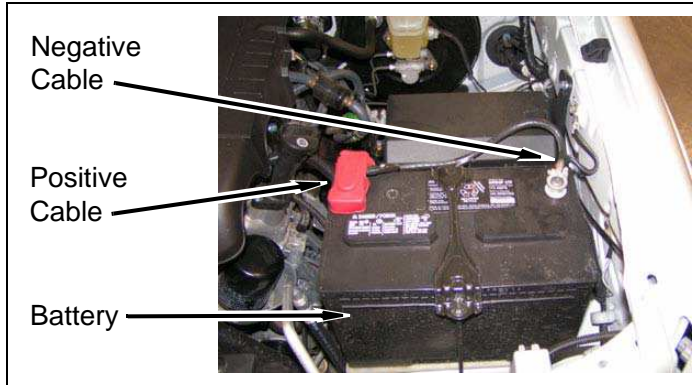
Torque Specifications

1. See factory service manual for torque values when re-using OE fasteners.

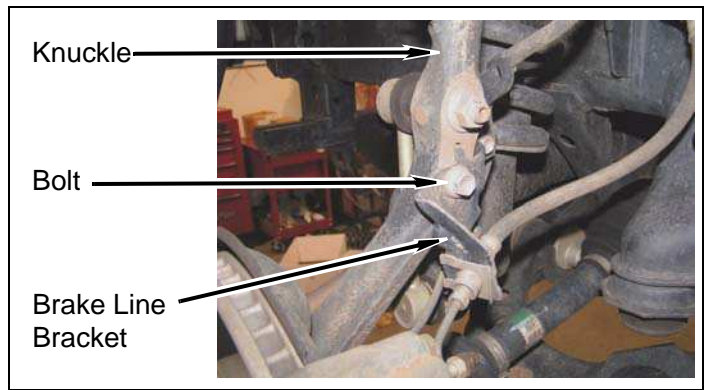
| Bolt Size | Grade 5 (ft.-lbs.) | Grade 8 (ft.-lbs.) |
|------------------|---------------------------|---------------------------|
| 1/4"-20 | 10 | 10 |
| 1/4"-28 | 10 | 12.5 |
| 5/16"-18 | 17 | 22.5 |
| 5/16"-24 | 20 | 25 |
| 3/8"-16 | 30 | 40 |
| 3/8"-24 | 35 | 45 |
| 7/16"-14 | 50 | 65 |
| 7/16"-20 | 55 | 70 |
| 1/2"-13 | 75 | 100 |
| 1/2"-20 | 55 | 70 |
| 9/16"-12 | 105 | 135 |
| 9/16"-18 | 115 | 150 |
| 5/8"-11 | 150 | 195 |
| 5/8"-18 | 160 | 210 |
| 3/4"-16 | 175 | 225 |

Engine Compartment

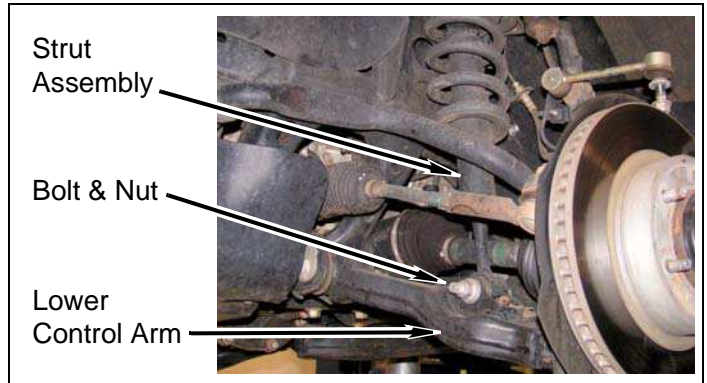
1. Disconnect both battery cables. Disconnect negative cable first, then positive cable.



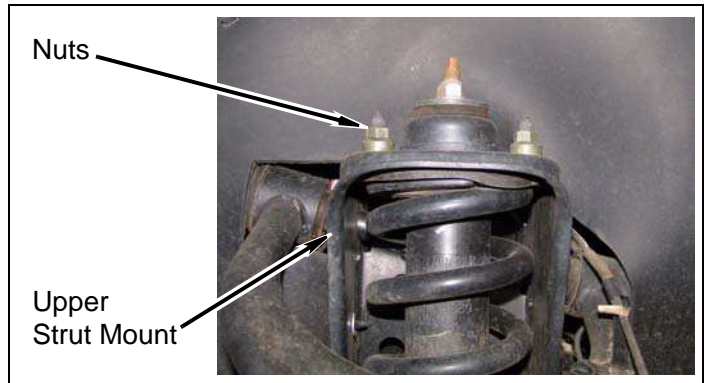
- b. Remove bolt and brake line bracket from knuckle.



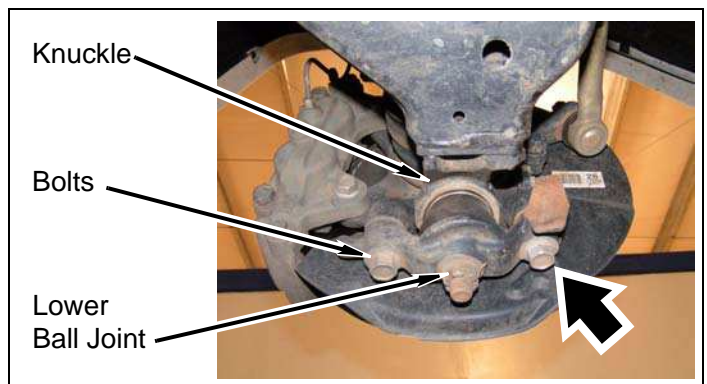
- c. Remove lower nut and bolt from lower control arm and strut assembly.



- d. Remove three nuts from upper strut mount.



- e. Remove two bolts and lower ball joint from knuckle.



Prepare to Install Front Suspension

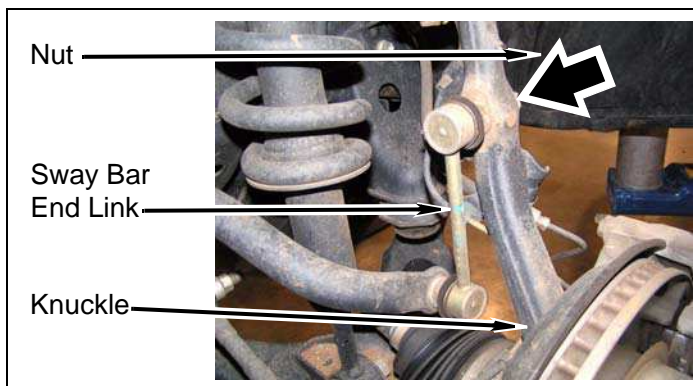
Front Suspension

1. Loosen, but do not remove, lug nuts on each front wheel.
2. Using a hydraulic floor jack, slowly lift front of vehicle until front tires are 3-5" off ground. Position jack stands under frame. Lower vehicle onto jack stands while maintaining hydraulic jack pressure underneath front axle.

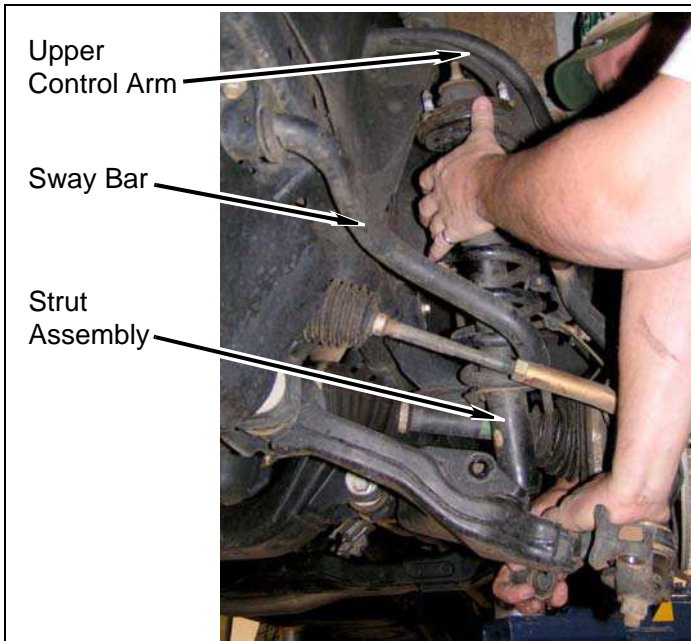
⚠ WARNING

Use extreme caution when lifting vehicle from ground. To prevent serious personal injury, ensure the lifting device is securely placed.

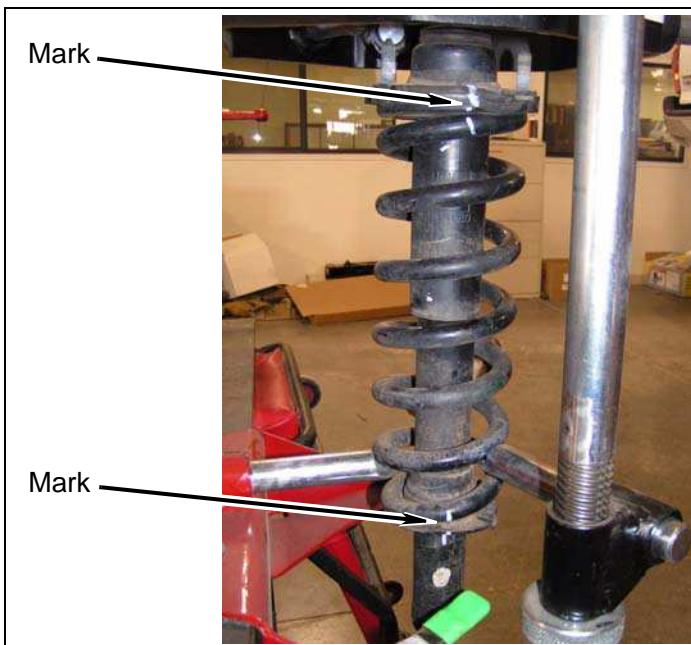
3. Remove lug nuts and front wheels from vehicle.
4. Driver side strut assembly
 - a. Remove nut and sway bar end link from knuckle.



f. Remove strut assembly from vehicle.



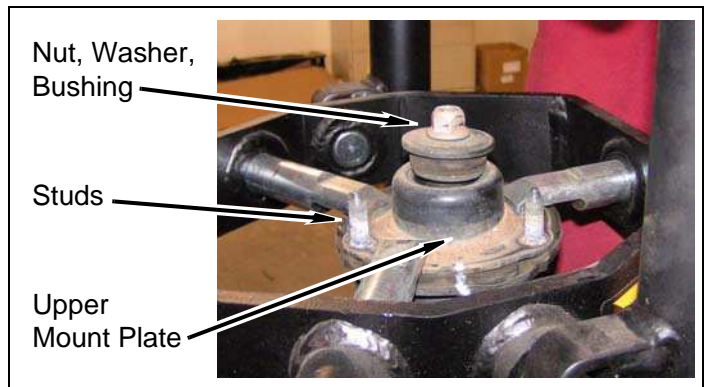
g. Mark strut, upper mount, and coil spring with an alignment mark to ensure proper re-assembly.



⚠ WARNING
Compressed coil springs can expand violently causing serious personal injury. Use caution when using coil spring compressors.

h. Using spring compressors, compress coil spring until strut is loose on coil spring. DO NOT uncompress coil spring.

i. Remove nut, washer, bushing, and upper mount plate from strut assembly.



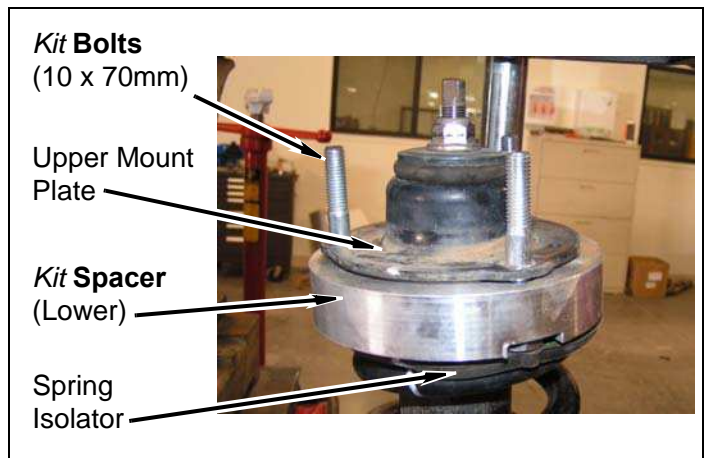
j. Remove three studs from upper mount plate.

k. Repeat above steps for passenger side strut assembly.

Install Front Suspension

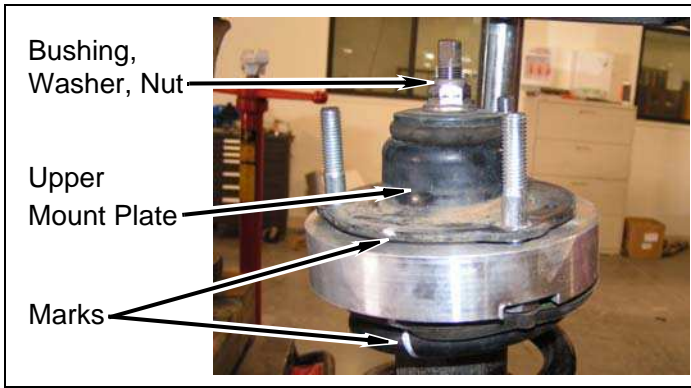
1. Driver side strut assembly

a. **From TL2 24BAG:** Position three *kit bolts* (10mm x 40mm) into *kit spacer* (lower).

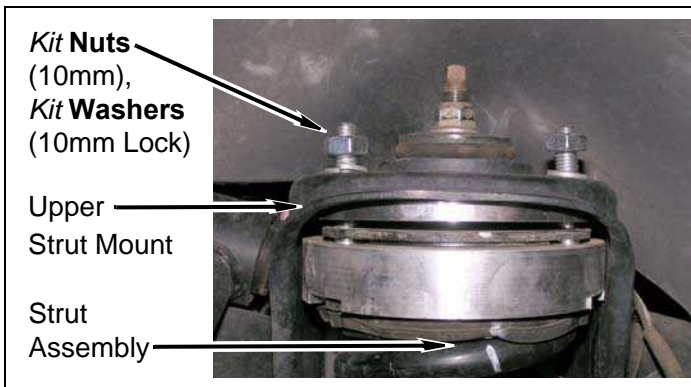


b. Position *kit spacer* (lower) between spring isolator and upper mount plate onto strut assembly.

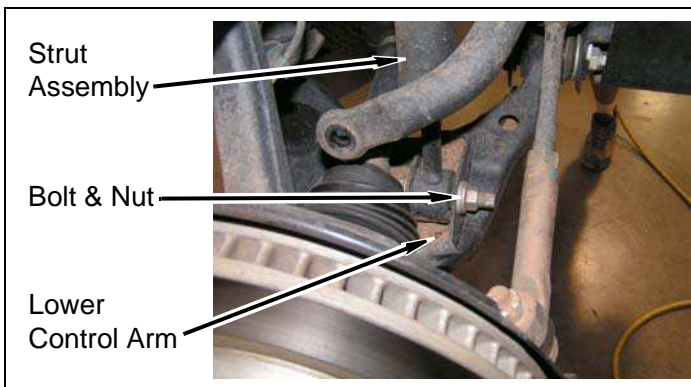
- c. Align marks on strut, coil spring, and upper mount. Install bushing, washer, and nut onto strut assembly.



- d. Uncompress coil spring.
- e. **From TL224BAG:** Apply a small amount of *kit* **Loctite®** onto threads of three *kit* **bolts** (10mm x 70mm) and install strut assembly into upper strut mount with three *kit* **washers** (10mm, lock) and three *kit* **nuts** (10mm). **DO NOT TIGHTEN** *kit* **nuts** (10mm).

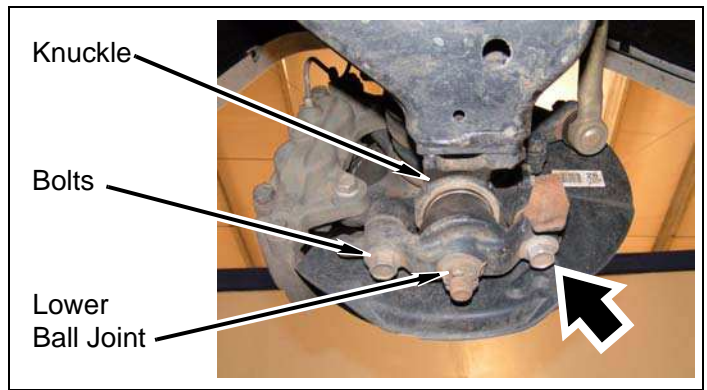


- f. Install strut assembly onto lower control arm with nut and bolt. **DO NOT TIGHTEN.**

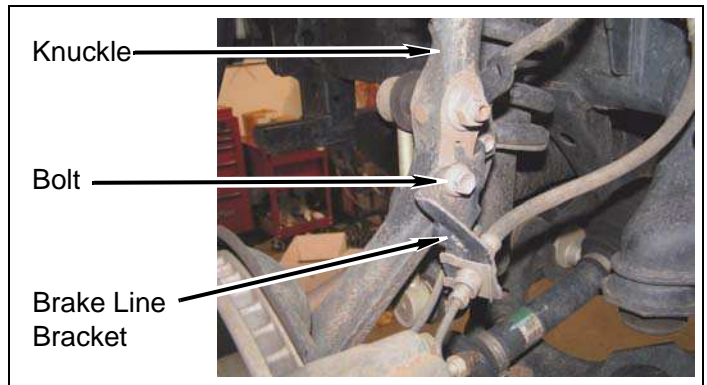


- g. **TORQUE** lower strut nut and bolt to OE specification.
- h. **TIGHTEN** three *kit* **nuts** (10mm) on upper strut mount.

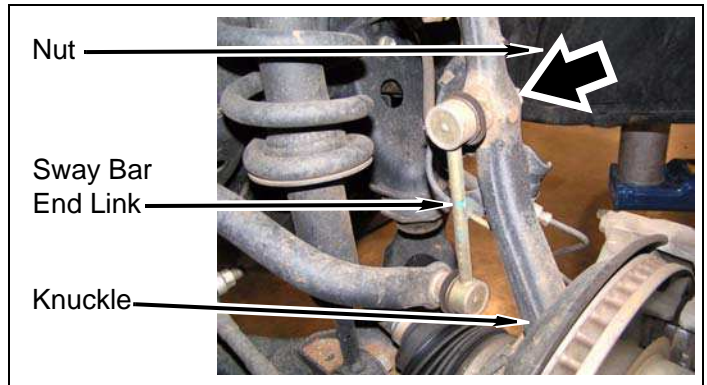
- i. Install lower ball joint onto knuckle with two bolts. **TORQUE** two bolts to OE specification.



- j. Install brake line bracket onto knuckle with bolt.



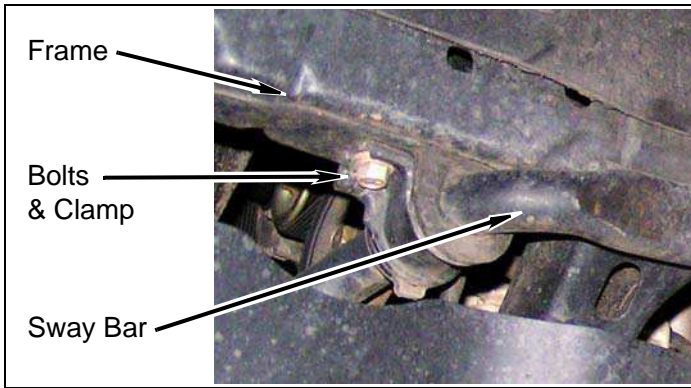
- k. Install sway bar end link onto knuckle with nut. **TORQUE** nut to OE specification.



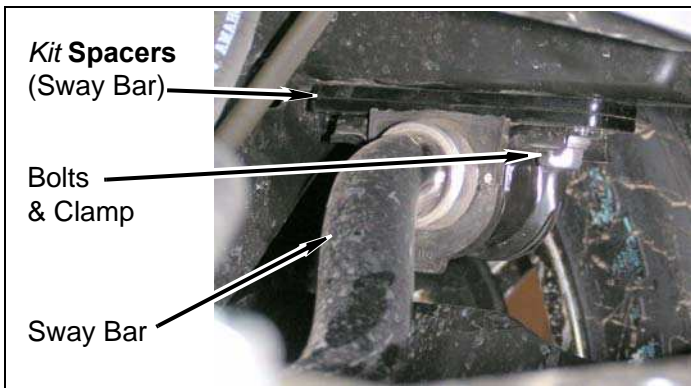
- l. Repeat above steps for passenger side strut assembly.

2. Sway bar frame mounts

- a. Remove four bolts, two clamps, and sway bar from frame rails.



- b. Apply a small amount of *kit* **Loctite**® onto threads of O.E. bolts and install two *kit* **spacers** (sway bar), driver clamp, and sway bar onto frame with two bolts. **DO NOT TIGHTEN.**



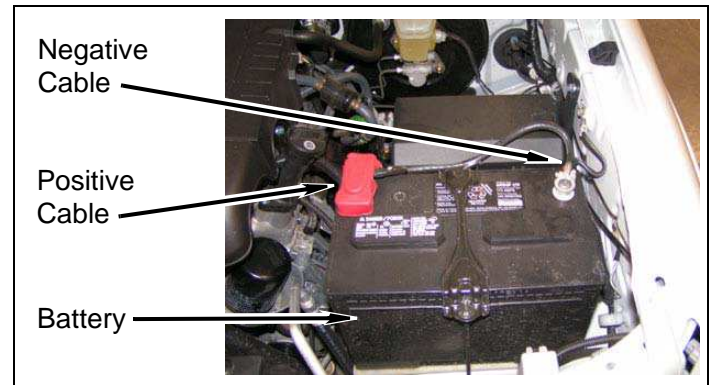
- c. Repeat above substep for passenger sway bar mount.

3. Install two front wheels onto vehicle with lug nuts. Snug, but **DO NOT TORQUE** lug nuts.
4. Using hydraulic floor jack, raise front of vehicle and remove two jack stands.
5. Lower vehicle onto ground and **TORQUE** lug nuts to specification.

After Completing Installation

Engine Compartment

1. Connect both battery cables. Connect positive cable first, then negative cable.



Miscellaneous

1. Apply *kit* **label** (warning) onto dashboard in plain sight of all vehicle occupants.
2. Adjust headlights.
3. Check all fasteners to ensure they are tight.
4. Ensure all wires, hoses, cables, etc. are properly connected and there is ample slack.
5. Align vehicle to OE specifications. Retain alignment results.

Dynamic Vehicle Check

1. Check steering and suspension in all positions to ensure that there is no bind and adequate clearance between all moving, fixed, and heated members. Check operation of clutch, brake system, and parking brake. Check operation of transmission and transfer case. Ensure there is full engagement in all gears and 4WD ranges. Check battery connections and electrical component operations. Test-drive vehicle.

⚠WARNING

Retorque all fasteners after 500 miles and after off road use. All suspension lift components should be visually inspected and fasteners retorqued during routine vehicle servicing.

⚠CAUTION

Performance Accessories Group does not recommend any particular wheel and tire combinations for use with its suspension lifts and cannot assume responsibility for the customer's choice of wheels and tires. Refer to your owner's manual for recommended tire sizes and warnings related to the use of oversized tires. Larger wheel and tire combinations increase stress and wear on steering and suspension components, which leads to increased maintenance and higher risk for component failure. Larger wheel and tire combinations also alter speedometer calibration, braking effectiveness, center of gravity, and handling characteristics. Consult an experienced local off road shop to find what wheel and tire combinations work best with your vehicle.

NOTE

All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the vehicle owner. Information contained in the instructions and on the warranty card will be required for any warranty claims. The vehicle owner needs to understand the modifications made to the vehicle and how they affect vehicle handling and performance. Failure to provide the customer with this information can result in damage to the vehicle and severe personal injury.

Kit Parts List

Qty. Description

| | |
|----------|---|
| 1 | Instruction sheet |
| 1 | Label (logo) |
| 1 | Label (warning) |
| 1 | Loctite® (6ml bottle) |
| 2 | Spacer (compression) |
| 4 | Spacer (sway bar) |
| 1 | <u>TL224BAG (Hardware Bag Kit)</u> |
| 6 | Bolt (10mm x 40mm) |
| 6 | Nut (10mm) |
| 6 | Washer (10mm, lock) |