



1999-2003 TOYOTA TUNDRA 2" COIL SPRING LEVELING KIT INSTALLATION INSTRUCTIONS KIT# PATL220PA

⚠WARNING

Read and understand all instructions, warnings, cautions, and notes in this sheet and in your owners manual before you begin the installation of this coil lift kit.

⚠WARNING

Proper installation of a Performance Accessories Group coil spring lift kit requires knowledge of the factory recommended procedures for disassembly and assembly of original equipment components. We recommend that the factory shop manual and any special tools necessary to your vehicle be on hand during the installation. Installation of this coil lift kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of your vehicle. We strongly recommend that a certified mechanic familiar with the installation of similar components install this coil lift kit.

⚠WARNING

Ensure that your vehicle tires are properly blocked and secured before you begin installation of this coil spring lift kit.

⚠CAUTION

It is the customer's responsibility to ensure that all mounting hardware is correctly tightened before, during and after use of coil spring lift kit. DO NOT EXCEED manufacturer's load specifications for your vehicle. Always operate your vehicle in a safe manner. If your vehicle is equipped with any type of extra duty suspension or special towing package, this coil lift kit may not fit properly. If your vehicle is equipped with any type of aftermarket springs, lift kits, or bushings, this coil lift kit may not fit properly.

⚠WARNING

Many states now have laws restricting bumper heights and vehicle lifts. Local laws should be consulted to determine if the changes you intend to make to your vehicle comply with state laws. Before combining a body lift with a suspension lift, consult an installation professional to see how this will affect your specific application.

⚠WARNING

This coil spring lift kit should only be installed on vehicles in good working condition. Before installation, the vehicle should be thoroughly inspected for evidence of corrosion or deformation. This coil lift kit should not be installed on any vehicle that is suspected to have been in a collision or misused. Failure to observe this warning may result in serious personal injury and/or severe damage to your vehicle.

⚠WARNING

To ensure the Supplemental Restraint System (SRS, or air bag) is not accidentally deployed during coil / shackle lift kit installation, always ground yourself and the vehicle. Do not use power or pneumatic tools. Exercise extreme caution while working near SRS sensors and wiring. Do not allow anyone near air bags during kit installation. Accidental deployment can result in serious personal injury or death.

⚠WARNING

Always wear eye protection when operating power tools.

⚠NOTE

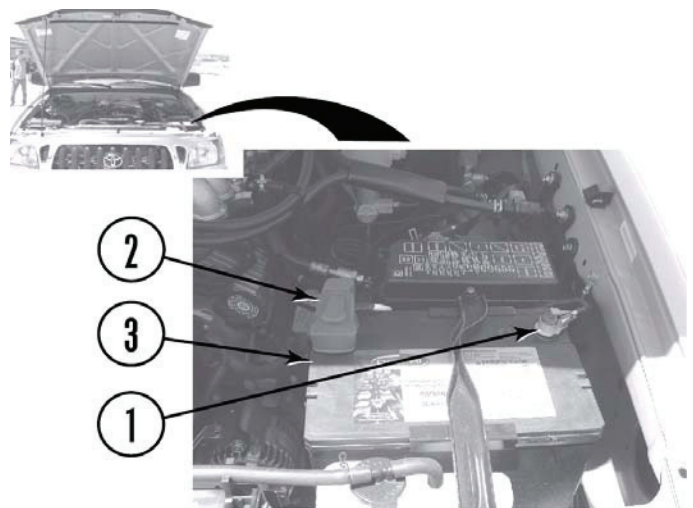
Performance Accessories Group recommends using the Loctite® supplied in the kit on all hardware unless noted in the instructions.

A. Before you start.

⚠NOTE

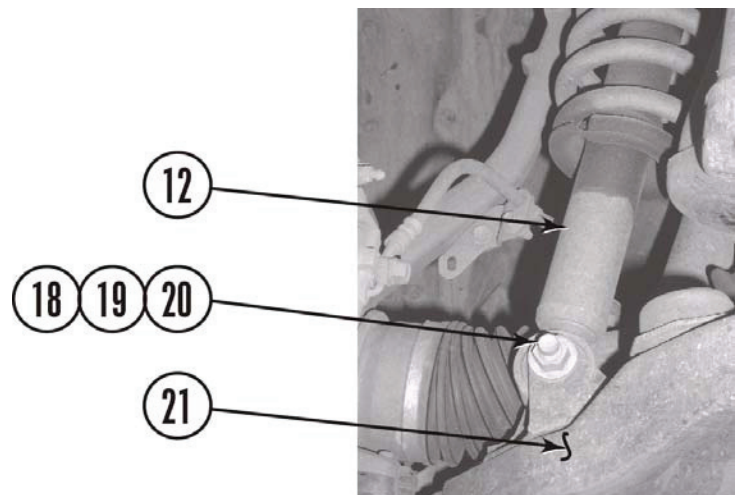
Keep track of hardware quantity and position. Kit parts are prefaced by the word *kit* in italics.

1. Read all warnings and instructions completely and carefully before you begin.
2. Check to make sure the kit is complete (refer to the Parts List at the end of this document).
3. Special tools, such as coil spring compressors, are required for installation of this coil spring lift kit.
4. Only install this kit on the vehicle for which it is intended. If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support.
5. Park the vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.
6. Disconnect both battery cables.
 - a. Disconnect the negative cable (1) first, then the positive cable (2) from the battery (3).



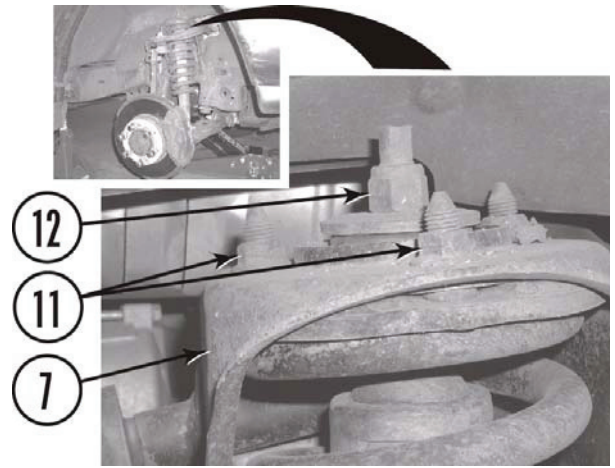
B. Get ready to install front axle coil spring lifts.

1. Lift front axle.
 - a. Remove two center wheel caps (4) from two front wheels (5).
 - b. Loosen five lug nuts (6) each from two front wheels (5).
 - c. Position hydraulic jack under axle frame cross-member, slowly lift front of vehicle so that two front tires (7) are three to five inches off of ground. Position jack stands under frame (8) just in front of transmission support cross member (9). Lower frame onto jack stands. Do not remove hydraulic jack and maintain some hydraulic jack pressure on vehicle.
 - d. Remove five lug nuts (6) each and two front wheels (5) from axles (10).



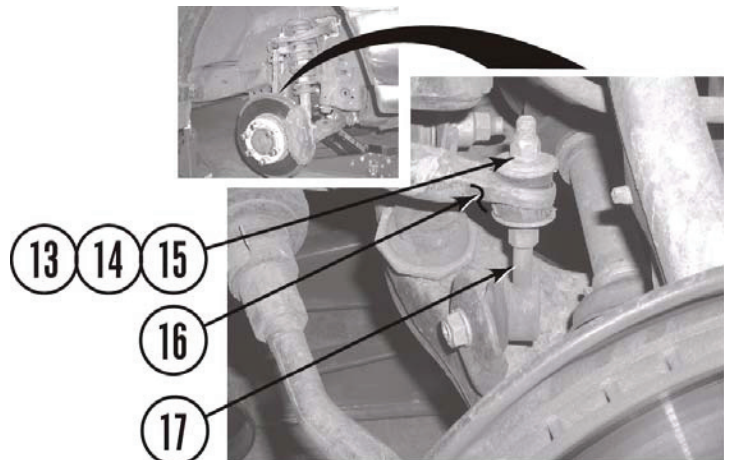
2. Remove passenger side shock/strut assembly.

- a. Remove three nuts (11) from shock/strut assembly (12) and frame (8).



- b. Remove nut (13), washer (14), bushing (15), and sway bar (16) from sway bar link (17).

- c. Remove nut (18), washer (19), and bolt (20) from lower a-arm (21) and shock/strut assembly (12).



- d. Remove four bolts (22), from lower a-arm (21) and spindle assembly (23).

- e. Remove shock/strut assembly (12) from vehicle.
- f. Mark shock/strut assembly (12) from top to bottom as shown for use later in these instructions.

NOTE

Step B.3.a below, requires the use of coil spring compressors. Note position of coil spring for installation later in these instructions.

3. Remove passenger side coil spring.

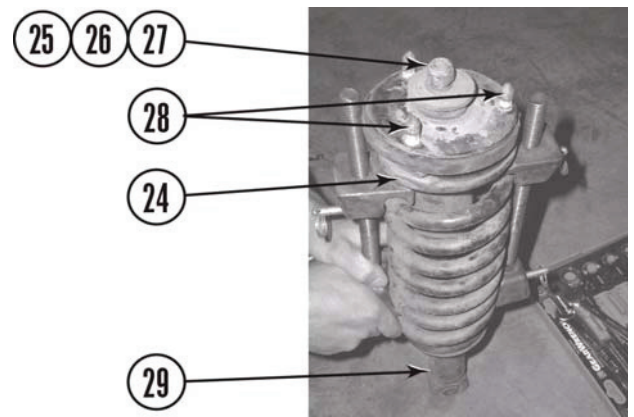
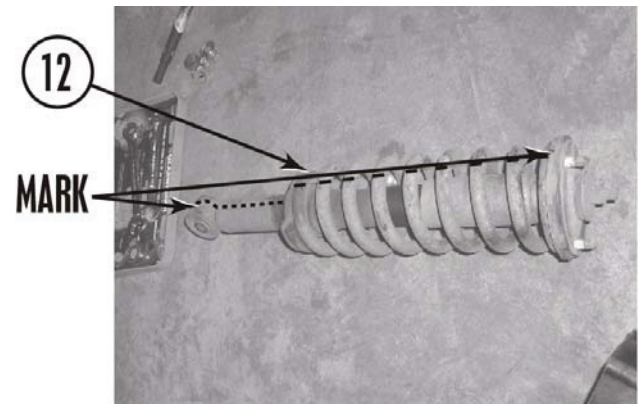
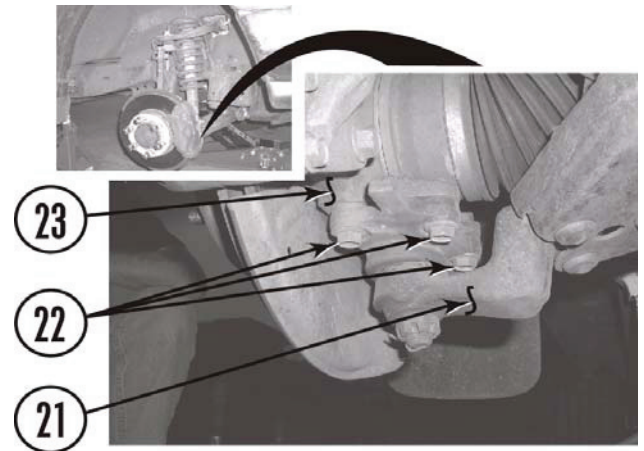
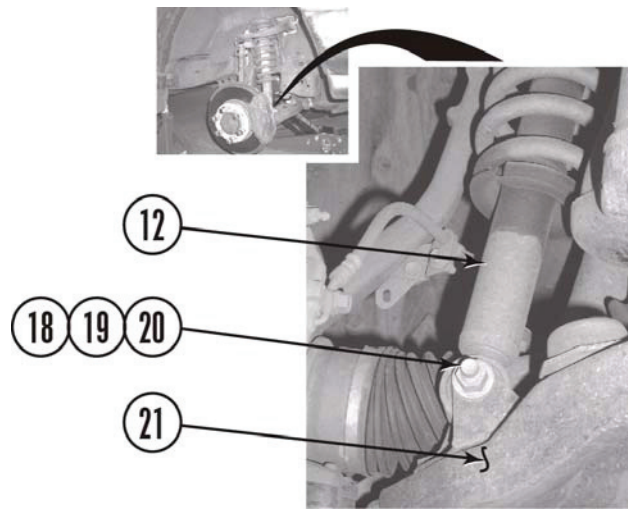
- a. Compress coil spring (24), remove nut (25), washer (26), bushing (27), and bolt plate (28) from compressed coil spring and shock/strut (29).

C. Install the kit.

1. Install passenger side *kit* coil lift spacer.

- a. Align the bolts on the bolt plate (28) and *kit* coil spacer (30), transfer locating mark from bolt plate to *kit* coil spacer.

- b. Install *kit* shock bushing (31) on shock/strut (29).



- c. Install *kit* coil spacer (30) on *kit* shock bushing (31), compressed coil spring (24), and shock/strut (29). Ensure *kit* shock bushing is in center hole of *kit* coil spacer. Be sure align all marks.
- d. Install *kit* shock bushing (31), washer (26), and nut (25) on *kit* coil spacer (30) and shock/strut (29).
- e. Remove coil spring compressors from coil spring (24).

⚠NOTE

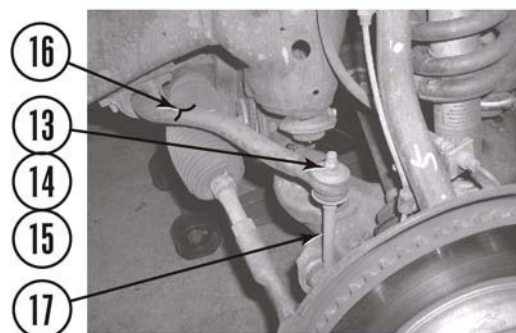
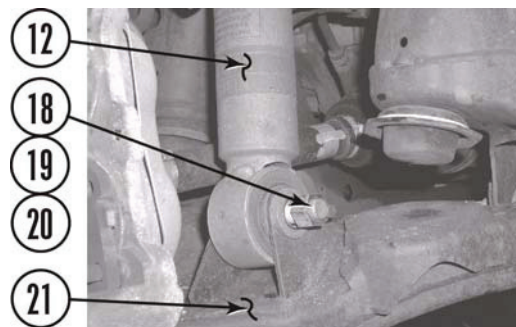
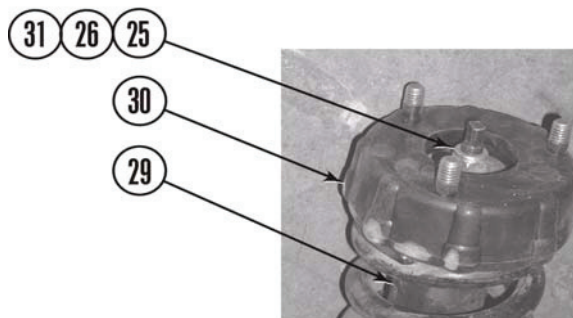
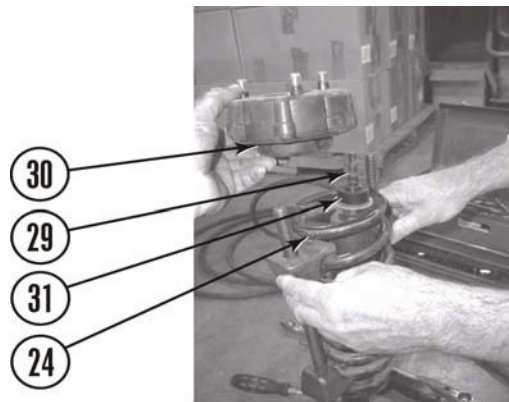
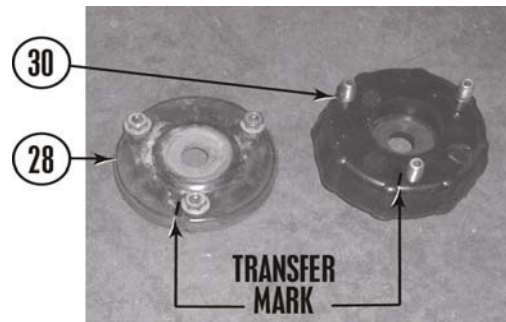
Performance Accessories Group recommends using Loctite® supplied in the kit for all mounting hardware.

⚠WARNING

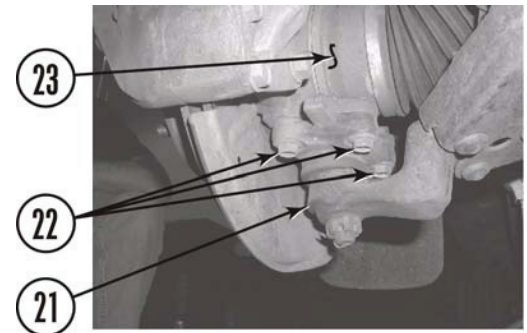
Ensure that all OEM or aftermarket bump stops are installed. Suspension over travel can result in serious damage or failure of OEM components and aftermarket equipment.

2. Install shock/strut assembly passenger side hardware.

- a. Install shock/strut assembly (12) on frame (8) with three *kit* 7/16" nylock nuts (32). Do not tighten.
- b. Install shock/strut assembly (12) on lower a-arm (21) with bolt (20), washer (19), and nut (18).
- c. Tighten nut (18) to 100 ft.-lb. and *kit* 7/16" nylock nuts (32) to 47 ft.-lb.
- d. Install sway bar (16) on sway bar link (17) with bushing (15), washer (14), and nut (13).

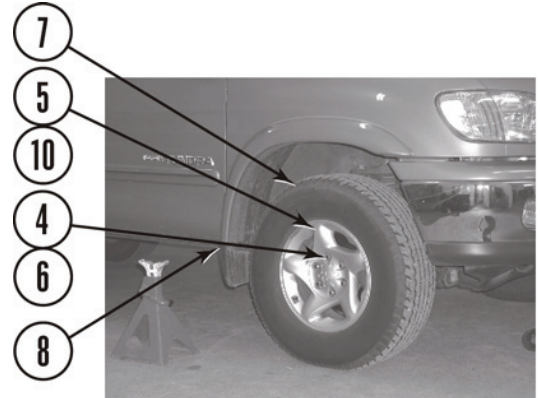


- e. Install lower a-arm (21) on spindle assembly (23) with four bolts (22). Tighten bolts to 59 ft.-lb.
- f. Repeat steps B.2.a. through C.2.d. for driver side shock/strut assembly.



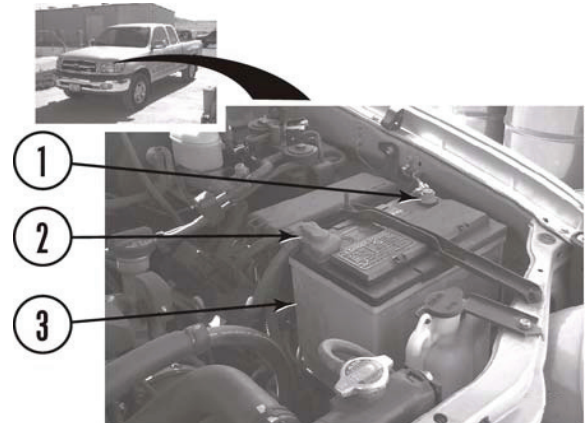
3. Finish front axle.

- a. Install two front wheels (5) on front axles (10) with five lug nuts (6) each.
- b. Using a hydraulic jack, slowly lift front of vehicle so that front tires (7) are three to five inches off of ground. Remove jack stands from frame (8). Lower vehicle to ground and tighten ten lug nuts (6) to 80 ft.-lb.
- c. Install two center wheel caps (4) on two front wheels (5).



4. Connect both battery cables.

- a. Connect the positive cable (2) first, then the negative cable (1) to the battery (3).



D. Finish the kit.

- 1. Double check the vehicle.

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

- a. Check all mounting hardware to ensure it is properly tightened.
- b. Start vehicle and check the steering in both directions to ensure that there is no bind. Check all steering connections. Ensure that the steering gear box has no interference and is in proper working condition.

- c. Check the operation of the brakes and the parking brake. Check brake lines for adequate travel. Ensure brake lines do not touch any surfaces, moving or otherwise. If necessary, adjust brake lines and or brake line brackets to eliminate all contact.
- d. Check clutch operation. Check both shift levers' operation. Ensure that there is proper engagement in all gears and 4 wheel drive ranges.
- e. Ensure that all OEM or aftermarket bump stops are installed. Suspension over travel can result in serious damage or failure of OEM components and aftermarket equipment.
- f. Test drive vehicle in all gears and 4 wheel drive ranges. Pay close attention to all vehicle systems. Check all hardware again in 500 miles and as part of your regular maintenance schedule.

E. Vehicle Alignment

1. Align vehicle to OE specifications. Retain alignment results.

E. 2" Coil Spring Parts List.

Callout	Quantity	Description
(30)	2	2" coil spacer lift bushings
(31)	4	Shock/strut bushings
	1	6ml bottle Loctite
	1	warning sticker
	1	logo sticker
	1	Bolt Pack
(33)	6	7/16" nylock nuts

⚠CAUTION

Performance Accessories Group does not recommend any particular wheel and tire combinations for use with its body lifts and cannot assume responsibility for the customer's choice of wheels and tires. Reference 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 with 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 his 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.

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