

FORD F-250, F-350, 4WD 2" COIL SPRING LEVELING KIT INSTALLATION INSTRUCTIONS 2008-2016 KIT# PAFL223PA

∆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.

MWARNING

Proper installation of a Performance Accessories coil spring lift kit requires knowledge of the fac-tory 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.

MWARNING

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

<u>Performance Accessories recommends</u> using the Loctite® supplied in the kit on all hardware unless noted in the instructions.

Before Starting Installation

⚠ 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.

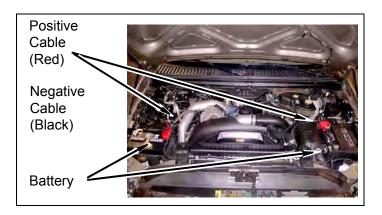
△ NOTE

If parts are missing from kit, please be prepared to provide the following information:

- 1. **Name** of purchase location
- 2. Bar Code on side of box
- 3. Date above bar code
- 4. Date inside box cover
- 5. Inspector # from inside box cover
- 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.
- 4. Special tools needed:
 - a. Coil spring compressors.
- 5. Park vehicle on a clean, dry, flat, level surface and block rear tires so vehicle cannot roll in either direction.

Engine Compartment

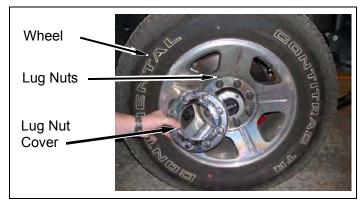
1. Disconnect negative cable first, then positive cable from both batteries.



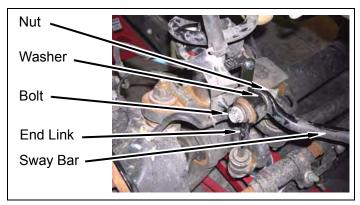
Prepare to Install Kit

Front of Vehicle

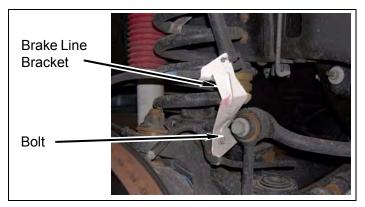
- 1. Front axle
 - a. Remove lug nut covers from two front wheels.
 - b. Loosen eight lug nuts each from two front wheels.



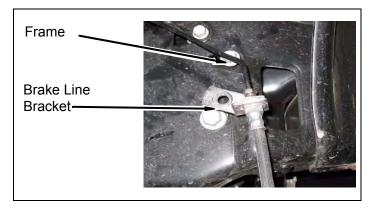
- c. Position hydraulic jack under front axle, slowly lift front of vehicle. Position jack stands under frame behind tracking bar mounts. Lower vehicle onto jack stands. Using jack, keep hydraulic pressure beneath axle.
- d. Remove eight lug nuts each and two front wheels from vehicle.
- e. Remove front wheels from vehicle.
- 2. Sway bar
 - a. Support axle with hydraulic jack.
 - b. Remove bolt, nut and washer from sway bar and sway bar link.



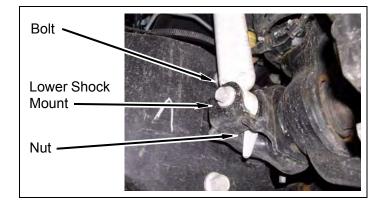
3. Remove bolt and brake line bracket from lower spring perch.



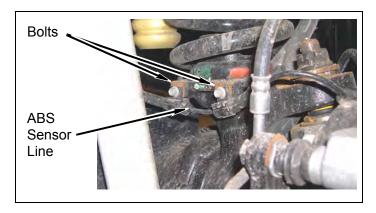
- 4. Brake lines
 - a. Unbolt bracket securing brake line to frame located in front of coils.



- 5. Shock
 - a. Remove factory bolt, nut and shock from axle.



6. Remove two bolts and ABS sensor line from lower spring perch.

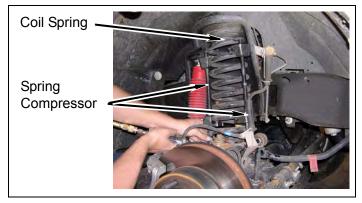


7. Coil spring

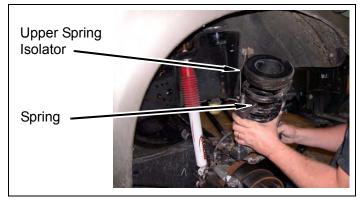
AWARNING

The steps below, require the use of coil spring compressors. Coil spring compressors can be unreliable and in some cases dangerous. Ensure the coil spring compressors used are in good working order to avoid a severe mishap.

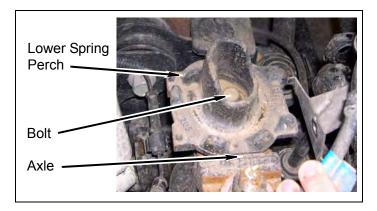
a. Compress spring with spring compressors.



- b. Lower axle to provide clearance to remove spring.
- c. Remove spring from vehicle.

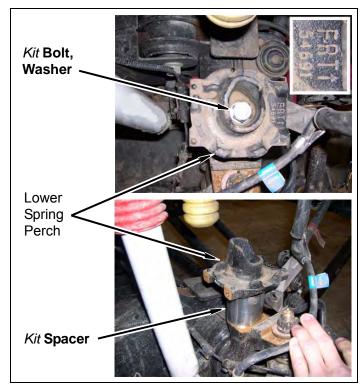


8. Remove bolt and lower spring perch from axle.



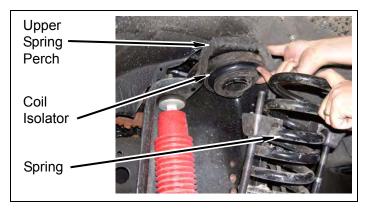
Install Kit

- 1. Passenger side
 - a. Install lower spring perch and kit spacer on axle. Apply a few drops of kit Loctite® to threads and install kit bolt (M14-2.0 x 110mm) and kit washer (14mm). Ensure lower spring perch is pointing forward.

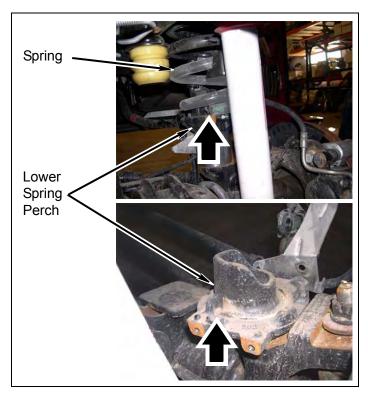


2. Passenger coil spring

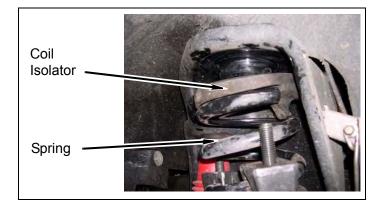
a. Remove upper spring isolator from spring and push up into upper spring perch.



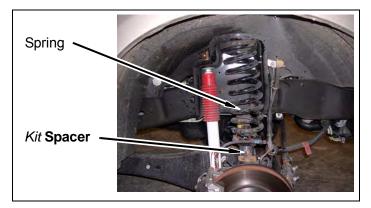
b. Install spring into lower spring perch and align end of coil with stop on spring perch.



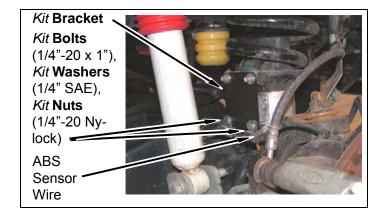
c. Align upper spring isolator to coil spring.



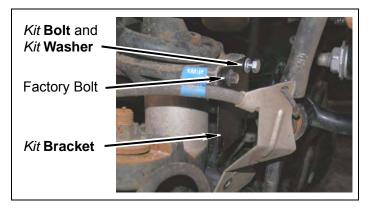
- d. Raise axle with hydraulic jack to compress spring.
- e. Remove spring compressors slowly and ensure both top and bottom of spring are located in upper and lower perches properly.



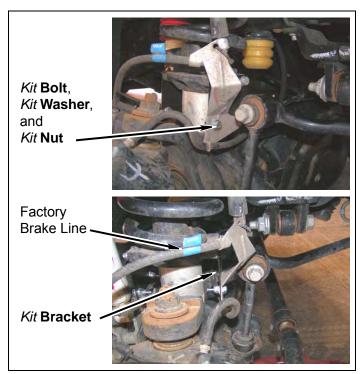
- 3. Passenger ABS sensor wire
 - a. Apply a small amount of kit Loctite® to threads of factory bolt and install kit bracket (ABS line) to rear of lower spring perch with factory bolts, washers and two kit washers (1/4" SAE).
 - b. Install ABS sensor line to *kit* bracket with *kit* bolt (1/4-20" x 1"), *kit* nut (1/4-20" Nylock) and two *kit* washers (1/4" SAE).



- 4. Passenger brake line on axle
 - a. Apply a small amount of kit Loctite® to threads of factory bolt and install kit bracket (brake line) to front of lower spring perch with factory bolt, and kit bolt (M8 x 20mm) and kit washer (8mm).

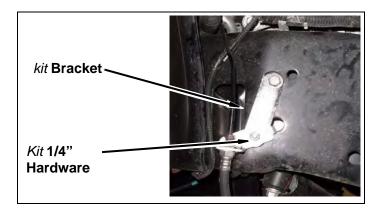


b. Install factory brake line bracket to *kit* bracket with *kit* bolt (1/4-20" x 1"), *kit* nut (1/4" Nylock) and two *kit* washers (1/4" SAE).

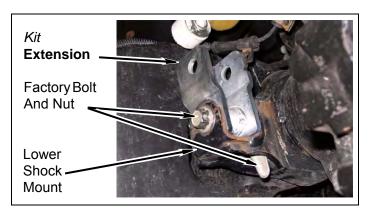


5. Passenger brake line at frame

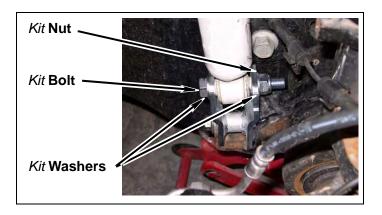
f. Relocate factory brake line lower on frame using kit brakeline bracket. Secure using O.E. bolt from bracket to frame at top. Secure brake line to kit brakeline bracket using kit bolt (1/4" x 1"), Washers (1/4" Flat), Nut (1/4" Nylock) on bottom.



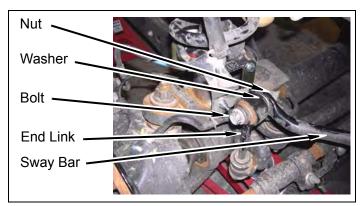
- 7. Passenger shock
 - a. Position kit extension in lower shock mount.



- b. Apply a small amount of *kit* **Loctite**® to threads of factory bolt and install *kit* **extension** with factory lower shock mount bolt and nut.
- c. Install shock into *kit* **extension** with *kit* **bolt** (M14-2.0 x 80mm), two *kit* **washers** (14mm) and *kit* **nut** (14mm Nylock).



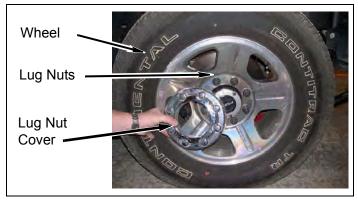
- 8. Passenger sway bar
 - a. Support axle with hydraulic jack.
 - b. Install sway bar to sway bar link with factory bolt, nut and washer.



- 9. Repeat the previous steps for driver side of vehicle.
- 10. Check all fasteners.

Front of vehicle

- 1. Install wheels.
 - a. Raise axle with hydraulic jack until wheels can be installed onto axles.
 - b. Install wheels with eight lug nuts on each side. Snug all lug nuts. Do not tighten.



- c. Raise front of vehicle until jack stands can be removed from under frame.
- d. Remove jack stands.
- e. Lower front of vehicle onto ground.

- f. Tighten lug nuts according to factory specifications.
- g. Install lug nut covers on each wheel.

After completing installation

Engine compartment

1. Connect both battery cables to both batteries. Connect positive cables first, then negative cables.

Miscellaneous

- 1. Check all mounting hardware to ensure it is properly tightened.
- Start vehicle and check steering in both directions to ensure that there is no bind. Check all steering connections. Ensure steering gear box has no interference and is in proper working condition.
- Check the operation of brakes. 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.
- 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.
- 5. Adjust the headlights.
- 6. Check alignment. Align to factory specifications, if required.

A. Dynamic Vehicle Check

1. Test-drive vehicle. Check steering in both directions to ensure that there is no bind. 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 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.

△CAUTION

Performance Accessories 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.

ACAUTION

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.

ANOTE

All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the <u>vehicle owner</u>. 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.

Qty Description

- 8 **Bolt** (1/4-20" x 1")
- 2 **Bolt** (M8 x 20mm)
- 2 **Bolt** (M14-2.0 x 80mm)
- 2 **Bolt** (M14-2.0 x 110mm)
- 4 **Bracket** (brake line & ABS sensor)
- 2 **Bracket** (Upper brake line @ Frame)
- 1 **Extension** (shock, driver)
- 1 **Extension** (shock, passenger)
- 1 **Label** (logo)
- 1 **Label** (warning)
- 1 **Loctite**® (6ml bottle)
- 6 **Nut** (1/4-20" Nylock)
- 2 **Nut** (14mm Nylock)
- 2 **Spacer** (spring)
- 24 **Washer** (1/4" SAE)
- 2 Washer (8mm)
- 4 Washer (14mm)