



PAFL220PA
FORD F150
1997 - 2003
COIL SPRING SPACERS



Introduction



is your number one source for Made In The USA quality, Comfort Ride™ leveling kits. Now backed with our exclusive *Go Everywhere* ©. To assure your safety and

proper installation of this product, take a moment to read all instructions and Product Safety Information before trying to install your Performance Accessories® product. Current OEM suspension design is complex: meaning safe and proper installation requires understanding OEM service techniques for disassembly and assembly of the components indicated together with the instructions and warnings set out below and in the OEM service manual and your owner's manual. *Performance Accessories® strongly recommends seeking advice from or having this product installed by a professional mechanic who can inspect your suspension, confirm compatibility with your tire and wheel choice and, if needed, reset alignment to optimize your steering.*

Product Safety Information

Throughout these instructions important safety information is generally preceded by one of three signal words indicating the relative risk of injury. The signal words mean:

! WARNING A hazardous situation which, if not avoided, could result in death or serious injury. You can be Killed or Seriously Hurt if you don't follow instructions.

! CAUTION A hazardous situation which, if not avoided, could result in minor or moderate injury. You can be moderately HURT and also may suffer property damage if you don't follow instructions.

! NOTICE Careful attention is required to this instruction or operation

!WARNING

Familiarize yourself with all vehicle manufactures' and Performance Accessories warnings, instructions and limited warranties before driving your modified suspension vehicle. Also be aware many states / countries have laws governing on-road vehicle heights and modifications. You are responsible for assuring the safety and legality of your vehicle.

Tools Needed

Quantity	Description
1	Floor Jack
2	Jack Stands
2	Wheel Chocks
1	Lug Wrench
1	1/2" Drive Ratchet
1	1/2" Drive Socket Set
1	Wrench Set
1	Coil Spring Compressor
1	Ball Joint / Tie Rod Separator

Parts List

Quantity	Part Number	Description KIT NUMBER
1	M20602BK spacer	Kit PAFL220PA FORD
1	P21250-01	Instructions
1	P10474	Driver Warning Decal

Installation Instructions

!Warning: Always work with appropriate personal safety gear including safety glasses, gloves and hearing protection if using air powered tools.

Begin by inspecting the components & hardware for damage. Then compare components & hardware to the bill of materials for completeness. If anything is missing/damaged, do not proceed with the installation. Please, call Performance Accessories and we will send you the missing or damaged components free of charge.

!Caution: Vehicle front end must be raised to install leveling kit. Using a hydraulic chassis lift will greatly ease installation. If another jack is used, assure vehicle is level on a firm surface, in park (1st gear), rear wheels blocked and jack stands

IMPORTANT NOTE: The advertised amount of lift that this kit provides and the thickness of the spacers supplied will not be the same! For example, a 2-1/2" lift may only have 1-1/2" thick spacers. The reason for the difference between the spacer thickness and the amount of lift has to do with suspension geometry. There is a ratio involved, and it is this ratio that determines the thickness of the spacers. Rest assured, installing the spacer supplied will

1. Check to see that the spacer kit you purchased matches the year and model of your vehicle. Spacer kits two inches or taller may require a spring compressor to install. Ball joint and tie rod forks may also be useful.
2. A good portion of your front suspension will be disassembled so this would be a good time to replace any worn parts (i.e. tie rod ends, ball joints, idler arm and any bushings) Replace bushings with polyurethane replacement parts.

3. Jack up vehicle as high as possible using jack stands for support at all times.
4. With vehicle safely off the ground remove front tires. It is advisable to disassemble on side at a time so that you can use the other side as a reference for re-assembly .
5. Remove the brake caliper from the rotor (attached with 2 bolts inside the caliper or with press-in clips depending on the vehicle). Do not remove the brake line from the caliper unless you intend to bleed the brakes at this time. Set the caliper aside or tie it up to the frame rail. Avoid pinching the brake line.
6. Remove the tie rod from the spindle using the proper tools. Do not hit the tie rod itself or the nut on the threaded portion of the tie rod or it may cause damaged and need replacing.
7. Remove the anti-sway bar from the lower control arm. This would be a good time to replace the end link bushings with polyurethane replacement bushing.
8. If your vehicle is equipped with anti-lock brakes you must now disconnect the front rotor sensor from the dust shield or spindle and set it aside.
9. Disconnect your shock absorber completely from the vehicle whether it is mounted inside the coil spring or not.

10. Support the lower control arm with jack just touching the arm. This will prevent it from dropping when the ball joint is disconnected.
11. The use of a coil spring compressor is recommended before the following steps are taken. **CAUTION:** Spring will be under extreme compression use caution when removing.
12. Disconnect the upper ball joint from the top of the spindle using the proper tools. Do not hit the ball joint or the threaded end of the ball joint. Once the ball joint is free the spindle should move easily.
13. Be careful when lowering the lower control arm. The coil spring is under high compression and may shift when released. **CAUTION:** Do not stand near the side of the truck during this step. Lower the jack so that the lower control arm swings down. If the coil spring has not fallen out on it's own you may need to use a pry bar from the front of the vehicle to remove it.
14. **NOTICE:** Which end of the coil spring is "bottom" for installation. Also note the depression in the lower control arm. It is important that the last winding of the coil spring fit into the indentation completely so that the vehicle will sit level.
15. **NOTICE:** Do not switch coil springs from side to side as some vehicles have a specific "right" and "left" coil spring.
16. Check the coil spacer for proper fitment into the coil spring mount in the frame. The flat part of the spacer should face up and touch the top of the spring mount. Some vehicles have guiding

17. Install the coil spring with the spacer on top of it. If you used a coil spring compressor it should still be on the spring in a compressed state. If not you may need to compress the spring before re-installing. Make sure the spacer is centered in the upper mount and the bottom of the spring is properly nested in the receptor groove on the lower control arm. If you are installing a two-inch or taller spacer you may need a spring compressor. **CAUTION:** Follow all safety rules when installing the coil spring as it will be under extreme compression.

18. Raise the lower control arm with a jack once the coil spring and spacer are properly lined up. Raise until the spindle is high enough to bolt on the upper ball joint. Before bolting on the upper ball joint make sure the brake caliper and brake line are where they need to be since some brake lines run inside the spindle and outside the coil spring.

19. With the upper ball joint tight and a cotter pin re-installed you may now remove the jack from under the lower control arm.

20. Assemble all of the components previously removed (sway bar with new polyurethane bushings, tie rod ends with polyurethane grease boot, brake caliper and anti-lock sensor). Don't forget the shock with a new colored boot while it is off.

21. Repeat instructions for other side.

22. Then then double check the installation and torque all bolts to

23. Remove jack stands and lower the truck back on the ground. Remove all jacks and jack stands from under vehicle. Torque the lug nuts to 85 ft.lbs. using an X pattern

24. With the vehicle on the ground cycle the steering wheel side to side and inspect suspension components, brake lines and tires to ensure there are not any clearance issues. Jounce the suspension to assure front suspension operates freely, brake lines retain proper slack at full extension and that they remain clear of springs or other obstructions.

Your vehicle may sit too high at first because the suspension needs to settle. **NOTICE:** drive vehicle for at least 25 miles for suspension to settle in to proper ride height.

Caution: Have an alignment professional check and adjust the alignment to factory specifications.

25. Install “**Warning to Driver**” decal on the vehicle’s sun visor or dash. The decal must be placed in a conspicuous location. Anyone that operates the vehicle must be made aware of the changes made.

26. After 25 miles of driving re-torque the lug nuts to 85 ft.lbs.

27. After 500 miles of driving re-torque all of the hardware associated with the leveling spacer installation to factory specifications. Repeat torquing procedure as required.