

PRO COMP SUSPENSION

Suspension Systems that Work!

PN# 62150 97-04 Ford F150 / 1997-2002 Ford Expedition/ 04 Ford F150 Heritage 4WD 2 1/2" Torsion Bar Key Kit

This document contains very important information that includes warranty information and instructions for resolving problems you may encounter. Please keep it in the vehicle as a permanent record.

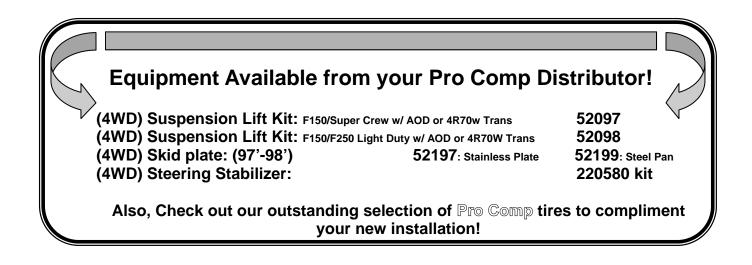
Part #	Description	Qty.
94-4270	TORSION BAR KEY	2

Warning!

Be extremely careful when unloading or loading the torsion bars on your vehicle. There is a tremendous amount of stored energy! Keep your hands and body clear of the adjuster arm assembly and puller tool in case anything slips or breaks!

NOTE: All part images may vary from catalog and instructions.

RECOMMENDED PRO COMP SHOCKS					
	<u>Front:</u>	<u>Rear:</u>			
F150:	917510	927510	<u>ES9000</u>		



Introduction:

- This installation requires a professional mechanic!
- We recommend that you have access to a factory service manual for your vehicle to assist in the disassembly and reassembly of your vehicle. It contains a wealth of detailed information.
- Prior to installation, carefully inspect the vehicle's steering and driveline systems paying close attention to the tie rod ends, ball joints, wheel bearing preload, pitman and idler arm. Additionally, check steering-to-frame and suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition. Repair or replace all worn or damaged parts!
- Read the instructions carefully and study the illustrations before attempting installation! You may save yourself a lot of extra work.
- Check the parts and hardware against the parts list to assure that your kit is complete. Separating parts according to the areas where they will be used and placing the hardware with the brackets before you begin will save installation time.
- Check the special equipment list and ensure the availability of these tools.
- Secure and properly block vehicle prior to beginning installation.
- <u>ALWAYS</u> wear safety glasses when using power tools or working under the vehicle!
- Use caution when cutting is required under the vehicle. The factory undercoating is flammable. Take appropriate precautions. Have a fire extinguisher close at hand.
- Foot pound torque readings are listed on the Torque Specifications chart at the end of the instructions. These are to be used unless specifically directed otherwise. Apply thread lock retaining compound where specified.
- Please note that while every effort is made to ensure that the installation of your Pro Comp lift kit is a positive experience, variations in construction and assembly in the vehicle manufacturing process will virtually ensure that some parts may seem difficult to install. Additionally, the current trend in manufacturing of vehicles results in a frame that is highly flexible and may shift slightly on disassembly prior to installation. The use of pry bars and tapered punches for alignment is considered normal and usually does not indicate a faulty product. However, if you are uncertain about some aspect of the installation process, please feel free to call our tech support department at the number listed on the cover page. We do not recommend that you modify the Pro Comp parts in any way as this will void any warranty expressed or implied by the Pro Comp Suspension company.

INSTALLATION INSTRUCTIONS:

1. Measure the vehicle from the center of the hub to the fender lip and record this measurement below.

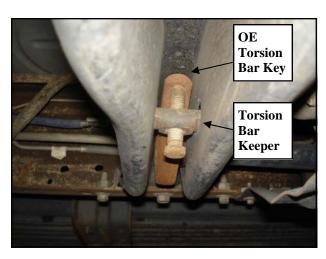
LF	 RF	:

LR:

- 2. Be sure you are working on a level surface. Block the rear tires and raise the front of the vehicle. Support the frame with jack stands.
- 3. Remove the front wheels.
- 4. Measure the torsion bar adjusting screw depths and record this dimensions for later use on reassembly. Mark the orientation of the torsion bar in relation to the front A-arm.

LEFT:

RIGHT:



 Starting on the driver's side, remove the torsion bar adjusting screw. Apply a small amount of lubrication grease to the torsion bar puller (67971is recommended), threads and the puller shaft-to-adjuster arm contact point. Load the puller and torsion adjuster arm until the torsion bar keeper can be removed from the cross member. Release the puller to unload the torsion bar.



- 6. Completely remove the torsion bar key bolt from the key assembly.
- 7. With the bar unloaded, slide it forward out of the **OE** torsion bar key and remove the key from the vehicle. *NOTE: If the bar seems stuck*,

NOTE: If the bar seems stuck, use a hammer and punch through the hole in the rear of the cross member to dislodge it.

8. Install the Pro Comp Forged torsion key (**94-4270**) and slide the torsion bar back into position. Be sure to line up the previously applied orientation marks.



IMPORTANT! Make sure Torsion Bar is extended at least ¼" inch through the Torsion Key.

- 9. Using the torsion bar unloading tool, apply pressure with the torsion key to allow the torsion key keeper to be reinstalled.
- 10.Reinstall the adjusting bolt to the keeper, and reset the torsion bar preload bolts using the measurements previously taken.

IMPORTANT!: Be sure that at least $\frac{1}{4}$ of bolt threads extend beyond torsion key keeper.

NOTE: Each ¼" of adjustment on the bolt equals 1" at the wheel.

11. Repeat steps 5 through 10 on the

Passenger Side of the vehicle.

- 12. Install the front tires/wheels and lower the vehicle onto the ground.
- 13. Check ride height of the vehicle by Measuring the distance between the tires and fenders making sure both sides of the truck are even. Adjust as needed.
- Torque all bolts to factory specifications. Re-torque all bolts after 500 miles.
- 15. Now would also be a good time to inspect the shocks for damage or fluid leakage. Replace if necessary.

NOTE: For improved performance Pro Comp shocks are recommended.

Bolt Torque and ID Decimal System Metric System All Torques in Ft. Lbs. Maximums Grade 5 Bolt Size Grade8 Bolt Size Class 9.8 Class 10.9 Class 12.9 5/16 15 20 M6 5 9 12 23 3/8 30 45 M8 18 27 7/16 45 60 M10 32 50 45 1/2 65 90 M12 55 75 90 9/16 95 130 85 120 145 M14 175 130 210 5/8 135 M16 165 280 3/4 185 170 240 290 M18 D G 1/2-13x1.75 HHCS Grade 8 M12-1 25x50 HHCS Grade 5 (No. of Marks+2) G = Grade (Bolt Strength) P = Property Class (Bolt Strength) D = Nominal Diameter (Inches) D = Nominal Diameter (Millimeters) T = Thread Pitch (Thread Width, mm) T = Thread Count (Threads per Inch) L = Length (Inches)L = Length (Millimeters)X = Description (Hex Head Cap Screw) X = Description (Hex Head Cap Screw)

Use this only as a guide for hardware without a called out torque specification in the instruction manual.

Notice to Owner operator, Dealer and Installer:

Vehicles that have been enhanced for off-road performance often have unique handling characteristics due to the higher center of gravity and larger tires. This vehicle may handle, react and stop differently than many passenger cars or unmodified vehicles, both on and off-road. You must drive your vehicle safely! Extreme care should always be taken to prevent vehicle rollover or loss of control, which can result in serious injury or even death. Always avoid sudden sharp turns or abrupt maneuvers and allow more time and distance for braking! Pro Comp reminds you to fasten your seat belts at all times and reduce speed! We will gladly answer any questions concerning the design, function, maintenance and correct use of our products.

Please make sure your Dealer/Installer explains and delivers all warning notices, warranty forms and instruction sheets included with Pro Comp product.

Application listings in this catalog have been carefully fit checked for each model and year denoted. However, Pro Comp reserves the right to update as necessary, without notice, and will not be held responsible for misprints, changes or variations made by vehicle manufacturers. Please call when in question regarding new model year, vehicles not listed by specific body or chassis styles or vehicles not originally distributed in the USA.

Please note that certain mechanical aspects of any suspension lift product may accelerate ordinary wear of original equipment components. Further, installation of certain Pro Comp products may void the vehicle's factory warranty as it pertains to certain covered parts; it is the consumer's responsibility to check with their local dealer for warranty coverage before installation of the lift.