



PRO COMP SUSPENSION

[Suspension Systems that Work!](#)

**PN# 63215K
2002-2009
Chevy Trailblazer/
GMC Envoy 2wd/4wd
Front and Rear
Spacer Kit
*Non Airbag Suspensions**

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.
94-8118m	FRONT STRUT SPACER	2
90-6317m .100FNFLZ	HARDWARE PACK: Strut Spacer 10mm-1.25 SERRATED FLANGE NUT 6	1
90-4298	REAR COIL SPACER	2

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

Call for PRO COMP shock listings.

Optional Equipment Available from your Pro Comp Distributor!

**PRO COMP LIGHTS,
PRO COMP WHEELS,
PRO COMP TIRES,
Call for availability**

Also, check out our outstanding selection of Pro Comp tires to
compliment your new installation!

Introduction:

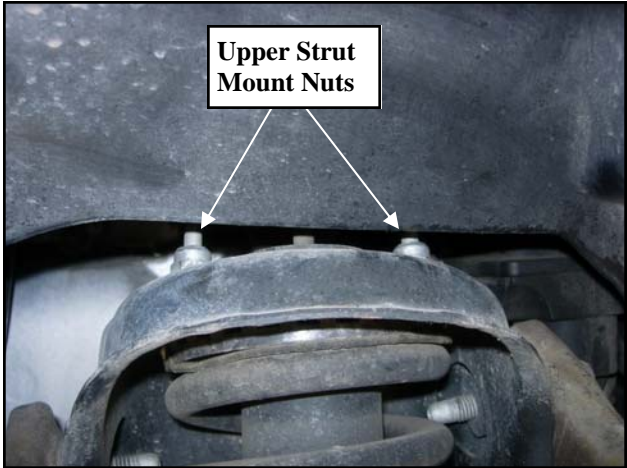
- ◆ This installation requires a professional mechanic!
- ◆ We recommend that you have access to a factory service manual for your vehicle to assist in the disassembly and reassembly of your vehicle. It contains a wealth of detailed information.
- ◆ Prior to installation, carefully inspect the vehicle's 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.
- ◆ ALWAYS 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.**

FRONT INSTALLATION:

1. Position your vehicle on a smooth, flat, hard surface (i.e. concrete or asphalt). Block the rear tires and set the emergency brake.
2. Measure and record the distance from the center of each wheel to the top of its fender opening. Record below.

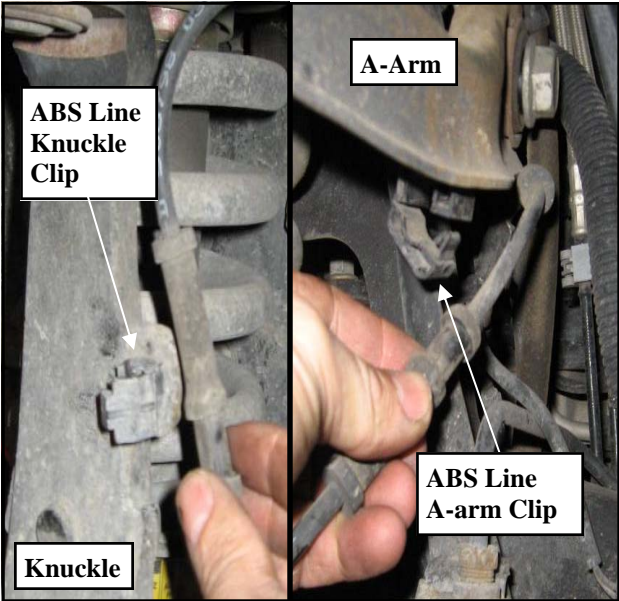
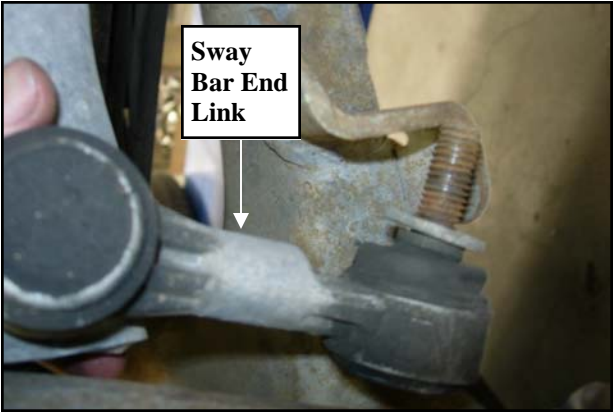
LF: _____ RF: _____

LR: _____ RR: _____

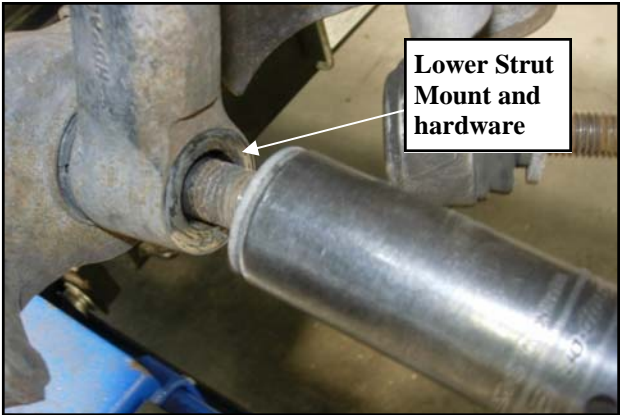


3. Place the vehicle in neutral. Place your floor jack under the crossmember and raise the vehicle. Place jack stands under the frame rails and lower the frame onto the stands. Remove the jack and place the vehicle back in gear, set the emergency brake, and place blocks both in front and behind the rear wheels.
4. Unbolt and remove the skid plate from the vehicle. Save for reinstallation.
5. Disconnect the ABS lines from the retainers on the control arms and the knuckles.

7. Unbolt the lower sway bar end links from the A-arm.

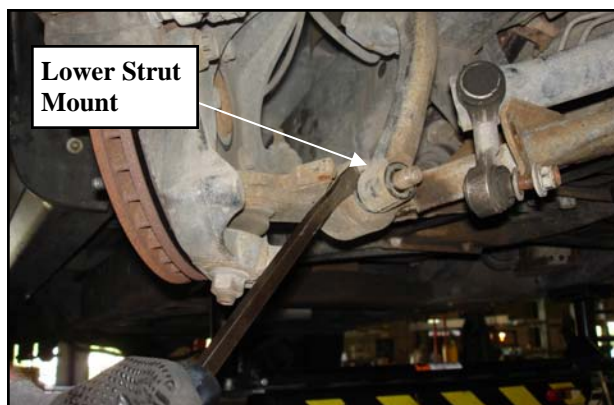


8. Loosen, but ***DO NOT*** remove the lower strut mounting bolt.



6. Loosen, but ***DO NOT*** remove the (2) upper strut mounting studs.

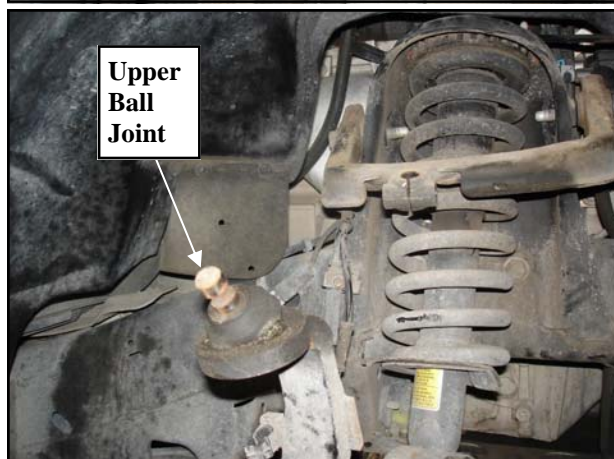
9. Using the proper tool carefully separate the lower strut mount.
NOTE: You can use a hammer to strike and free the lower mount while prying on it.



10. Support the control arm with a jack. Remove the (2) upper strut mounting nuts and remove the strut from the vehicle.

11. Unbolt and remove the retaining bolt from the upper ball joint. Use the proper tool carefully separate the upper ball joint

NOTE: You can use a hammer to strike and free the upper ball joint.



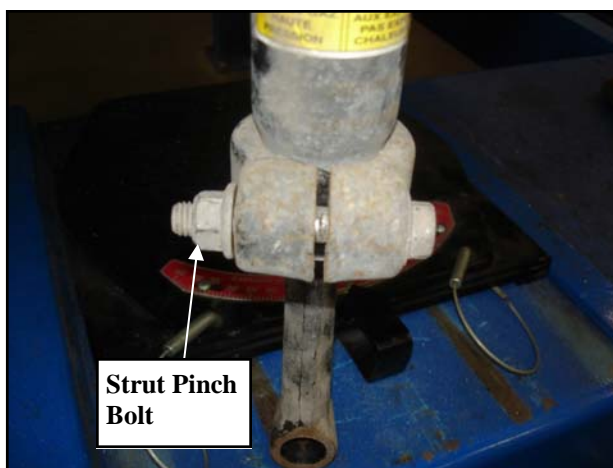
12. Install the upper strut spacer (94-8118m) onto the OE studs on the strut. Torque

the OE hardware to 42 ft./lbs.

NOTE: Because this kit retains the use of the OE studs the vehicle can easily be returned to it's stock form.



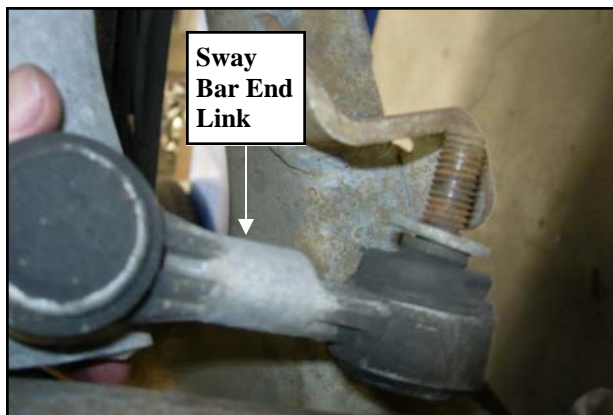
13. Loosen, but *DO NOT* remove the strut arm pinch bolt. This will allow the strut to rotate around upon reinstallation.



14. Install the strut assembly into the strut tower and secure using the supplied 10mm flange nut. Leave the bolts hand tight only at this point.



15. Reinstall the lower mount and nut, but ***DO NOT*** tighten. Tighten the strut arm pinch bolt.
16. Reinstall the sway bar end link to the lower control arm.



17. Reinstall the spindle to the upper ball joint. Torque the upper ball joint nut to 42 ft./lbs.
NOTE: It may be necessary to pry the upper control arm down, using a pry bar inserted into the coil spring, to force the ball joint stem into the spindle.
18. Torque the upper strut mounting hardware to 42 ft./lbs. Torque the lower sway bar end link nut to 74 ft./lbs.
19. Reconnect the ABS line to the upper control arm and the knuckle.
20. Repeat the steps 5 Through 19 on the remaining side of the vehicle.
21. Install the front tires/wheels and lower the vehicle onto the ground.
22. Torque the lower strut mounting hardware to 175 ft./lbs.
23. Reinstall the **OE** skid plate to the vehicle using the previously removed **OE** hardware.
24. Torque all bolts to factory specifications. Re-torque all bolts after 500 miles.

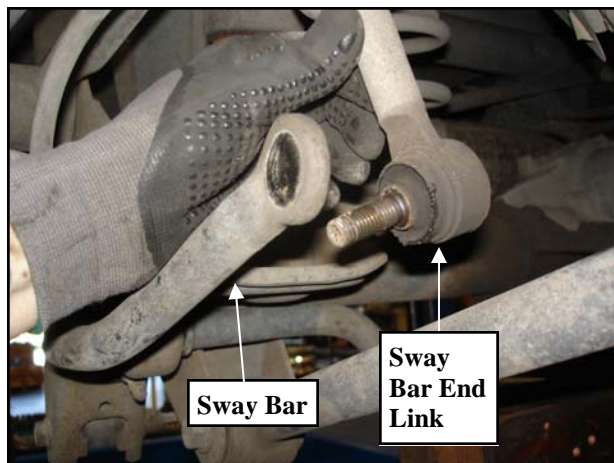
IMPORTANT! BE SURE TO BRING THE VEHICLE IMMEDIATELY TO A REPUTABLE ALIGNMENT SHOP TO BE ALIGNED!

NOTES:

- ⇒ **On completion of the installation, have the suspension and headlights re-aligned.**
- ⇒ **After 100 miles recheck for proper torque on all newly installed hardware.**
- ⇒ **Recheck all hardware for tightness after off road use.**

REAR INSTALLATION:

1. Block the front tires and raise the rear of the vehicle. Support the frame with jack stands forward of the rear springs.
2. Remove the rear wheels.
3. Unclip the ABS lines from the clips from the frame rails.
4. Unbolt the lower sway bar end link to sway bar hardware. Save hardware for reuse.



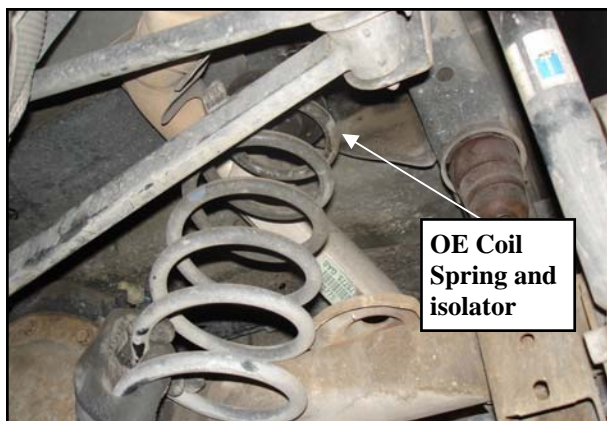
5. Unbolt the lower shock mount bolts on both sides of the vehicle. It may be necessary that you slightly raise the axle to unload the shocks for removal.



6. Lower the rear axle enough to remove the coil springs from the front spring pockets. Save the factory isolators for re-use.

NOTE: Be sure to support the axle while the springs and shocks are removed.
NOTE: Be sure not to over extend

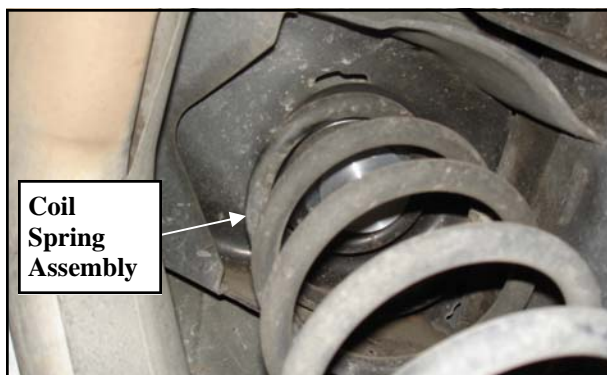
the rear brake line and rear axle vent line.



7. Install the coil spacer (90-4298) and factory isolator onto the top of the coil spring.



8. Carefully lower the rear end to ease in the new coil spring installation. Reinstall the OE coil springs, coil spacer (90-4298) and OE isolators into the spring buckets. Raise the rear axle into place making sure the coil spring seats properly on the lower spring perch.





NOTES:

- ⇒ **On completion of the installation, have the suspension and headlights re-aligned.**
- ⇒ **After 100 miles recheck for proper torque on all newly installed hardware.**
- ⇒ **Recheck all hardware for tightness after off road use.**

9. Now would 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. See the box on page 2 for applications.

10. Reinstall the lower shock mounts using the previously removed **OE** lower bolts. Torque per **OE** specifications.
11. Reattach the upper sway bar end link to sway bar using the previously removed **OE** hardware.
12. Re-clip the ABS line to the clips from the frame rail.
13. Repeat the steps 3 Through 12 on the remaining side of the vehicle.
14. Check all hardware at this time to ensure that everything is tight. Check for adequate clearance on all brake lines and emergency brake cables. Make sure you check with the suspension fully extended, and compressed.
15. Reinstall the wheels and lower the vehicle to the ground. Torque the lug nuts according to the wheel manufacturers recommendations.
16. Torque all bolts to factory specifications. Re-torque all bolts after 500 miles.

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

Bolt Torque and ID						
Decimal System			Metric System			
All Torques in Ft. Lbs. Maximums						
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 9.8	Class 10.9	Class 12.9
5/16	15	20	M6	5	9	12
3/8	30	45	M8	18	23	27
7/16	45	60	M10	32	45	50
1/2	65	90	M12	55	75	90
9/16	95	130	M14	85	120	145
5/8	135	175	M16	130	165	210
3/4	185	280	M18	170	240	290

<p>1/2-13x1.75 HHCS Grade 5 Grade 8 (No. of Marks+2)</p> <p> </p>	<p>M12-1.25x50 HHCS</p> <p> </p>
<p>G = Grade (Bolt Strength) D = Nominal Diameter (Inches) T = Thread Count (Threads per Inch) L = Length (Inches) X = Description (Hex Head Cap Screw)</p>	<p>P = Property Class (Bolt Strength) D = Nominal Diameter (Millimeters) T = Thread Pitch (Thread Width, mm) L = Length (Millimeters) X = Description (Hex Head Cap Screw)</p>

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.