

### PRO COMP SUSPENSION

**Suspension Systems that Work!** 

PN# 63155K
2000-2006 GM 1500 4WD
P/U 6-Lug, and ½ Ton SUV's
2wd/4wd w/ Torsion Bars
Front 2 1/2" Rear 1"
Leveling 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
94-4269	TORSION BAR KEY	2
<b>90-6643</b> 90-2863	HARDWARE PACK: Torsion bar TORSION BAR BOLT	<b>1</b> 2
94-8116	LOWER SHOCK BRACKET: 00-06 Classic truck and SUV only	2
90-6430 71-140802001000 .140CNUCZ 73-01410930	HARDWARE PACK: shock brkt: 00-06 Classic truck and SUV of 14mm X 2.0 X 80mm HEX BOLT 10.9 14mm-2.0 STOVER NUT GR. C 14mm FLAT WASHER	2 2 2 4
90-4298	REAR SPACER	2

IMPORTANT!: The supplied shock brackets (94-8116) are to be used with 2000-2006 classic truck and SUV models with original equipment shocks ONLY!

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

RECOMMENDED PRO COMP SHOCKS			
9000 & MX6 Front:		9000 & MX6 Rear:	
Avalanche 4WD:	917580, MX6037	925543, MX6112	
Avalanche 2WD:	917580, MX6037	925543, MX6112	
Silverado 4WD:	917580, MX6037	925543, MX6059	
Silverado 2WD:	917580, MX6037	925543, MX6061	
Sierra 1500 4WD:	917580, MX6037	925543, MX6059	
<u>Sierra 1500 2WD:</u>	917580, MX6037	925543, MX6061	
Suburban 1500 4WD:	917580, MX6037	925543, MX6112	
Suburban 1500 2WD:	917580, MX6037	925543, MX6048	
Tahoe 4WD:	917580, MX6037	925543, MX6112	
Tahoe 2WD:	917580, MX6037	925543, MX6112	

## **Equipment Available from your Pro Comp Distributor!**



Torsion Bar Removal/Installation Tool: 67971
99-07 4WD Silverado/Sierra 6" Suspension Lift Kit:51099/51099MX
99-07 4WD Silverado/Sierra 1500 6" Suspension Lift Kit:51020/51020MX
88-99 4WD K1500 Pick Up 6" Suspension Lift Kit:51088/51088MX
00-06 4WD Avalanche 6" Suspension Lift Kit:51021/51021MX
1500 Series Skid Plate: 51199 (Use With Suspension Lift Kit)

1500 Series Multiple Shock Hoop Kit: 51297 (Use With Suspension Lift Kit)

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.
- <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 <sub>:</sub>	
LR:	RR:	

- 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

LEFT:	RIGHT:
· · · ·	

bar in relation to the front A-arm.

5. Starting on the driver's side, remove the torsion bar adjusting screw. Apply a small amount of lubrication grease to the torsion bar puller threads (67971 is recommended) 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.

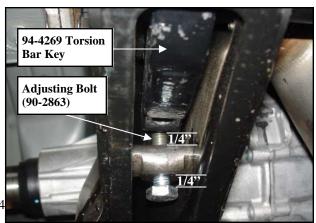
NOTE: If the bar seems stuck, use a hammer and punch through the hole in the rear of the cross member to dislodge it.

8. Install the Pro Comp Forged torsion key (94-4269) 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 1/4" 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.Install the supplied adjusting bolt (90-2863) to the keeper, and reset the torsion bar preload bolts using the measurements previously taken.

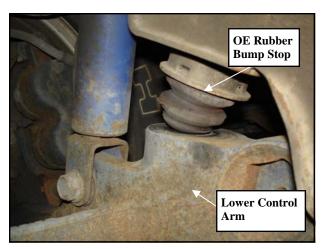
IMPORTANT!: Be sure that at least 1/4" of bolt threads extend beyond torsion key keeper.

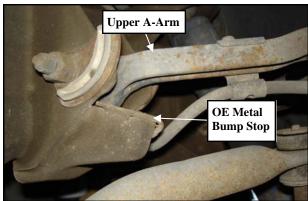


To avoid over-cranking the suspension and negatively affecting ride quality, perform steps 11 and 12.

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

11. Measure the distance between the lower A-arm and the rubber bump stop. The distance should be no more than 1/2".





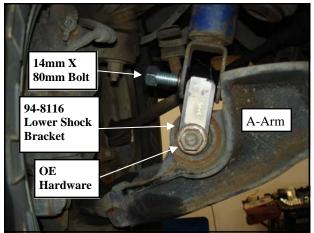
- 12. Measure the distance between the upper A-arm and the metal bump stop.

  The distance should be no less than 3/4".
- 13. Now would also be a good time to inspect the shocks for damage or fluid leakage. Replace if necessary.

# If reusing OE shocks or OE length shocks ONLY!.

IMPORTANT!: Shock brackets are to be used on 00-06 Classic truck and SUV only!

- A. Remove front lower shock mounting bolt from the A-Arm.
- B. Install the provided lower shock brackets (94-8116) using the previously removed **OE** hardware.
- C. Install the shocks to the lower shock mount using the supplied 14mm X
  80mm bolts and hardware.



NOTE: For improved performance Pro Comp shocks are recommended.

- 14. Repeat steps 5 through 13 and the shock box on the Passenger Side of the vehicle.
- 15.Install the front tires/wheels and lower the vehicle onto the ground.
- 16. 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.

17. Torque all bolts to factory specifications. Re-torque all bolts after 500 miles.

### **NOTES**:

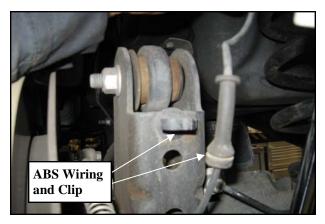
- ⇒ On completion of the installation, have the suspension and headlights re-aligned.
- ⇒ After 100 miles recheck for proper torque on all newly installed hardware.
- ⇒ Recheck all hardware for tightness after off road use.

#### **REAR INSTALLATION:**

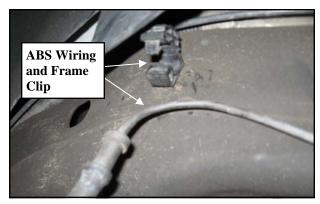
1. Prior to installing this kit, with the vehicle on the ground. Measure the height of your vehicle. This measurement can be recorded from the center of the wheel, straight up to the top of the inner fender lip. Record the measurements below.]

LF <u>:</u>	RF <u>:</u>	
LR:	RR:	

- 2. Block the front tires and raise the rear of the vehicle. Support the frame with jack stands forward of the rear springs.
- 3. Remove the rear wheels.
- 4. Unclip the ABS lines from the clips on the upper trailing arm mounts.

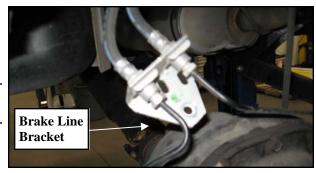


5. Unclip the ABS lines from the clips from the frame rails.

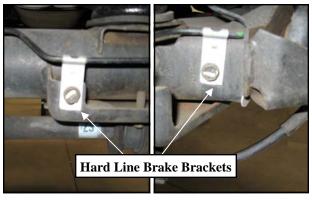


6. **For Vehicles Equipped with Autoride ONLY**, remove the autoride linkage from

- the upper trailing arm.
- 7. Unbolt the brake line bracket from the frame. Save the hardware for reuse.



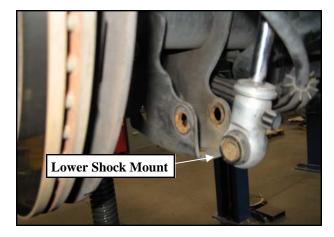
8. Unbolt the hard brake line brackets from the rear axle. Save the hardware for reuse.



- 9. Unbolt the emergency brake line support bracket from the passenger side frame rail. Save the hardware for reuse.
- 10. Unbolt the lower sway bar end link to sway bar hardware. Save hardware for reuse.



11. 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.



12. 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.

13. 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.





- 14. Reinstall the lower shock mounts using the previously removed **OE** lower bolts. Torque per **OE** specifications.
- 15. Reinstall the emergency brake line support using the previously removed **OE** bolt.
- 16. Reinstall the brake line bracket to the frame using the previously removed **OE** bolt.
- 17. Reinstall the hard brake line brackets from the rear axle using the previously removed **OE** bolt.
- 18. Reinstall the hard brake line brackets from the rear axle using the previously removed **OE** hardware.
- 19. For Vehicles Equipped with Autoride ONLY, re-attach the autoride linkage to the upper trailing arm.
- 20. Re-clip the ABS lines to the clips on the upper trailing arm mounts.
- 21. Re-clip the ABS lines to the clips from the frame rails.
- 22. 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.

23. Check all hardware at this time to ensure that everything is tight. Check for ade-

- quate clearance on all brake lines and emergency brake cables. Make sure you check with the suspension fully extended, and compressed.
- 24. Reinstall the wheels and lower the vehicle to the ground. Torque the lug nuts according to the wheel manufacturers recommendations.
- 25. Torque all bolts to factory specifications.

#### **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.

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			
			esin Ft. Lbs. N	/laximum:	S	
Bolt Size	Grade 5	Grade8	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
1/2-13x 1.75 HHCS Grade 5 Grade 8  (No. of Marks + 2)  G = Grade (Bolt Strength)  D = Nominal Diameter (Inches)  T = Thread Count (Threads per Inch)			M12-1.25x50 HHCS  D T L X  P = Property Class (Bolt Strength) D = Nominal Diameter (Millimeters) T = Thread Pitch (Thread Width, mm)			
L = Length (Inches)			L = Length (Millimeters) X = Description (Hex Head Cap Screw)			

#### 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.