



## PRO COMP SUSPENSION

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*Suspension Systems that Work!*

**PN# 63165K  
2007-2013  
GM SUV 1500 6-Lug  
2WD/4WD Tahoe,  
Avalanche, Yukon,  
2 1/4" Front and 1 1/2"  
Rear Spacer 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.

<b>Part #</b>	<b>Description</b>	<b>Qty.</b>
90-4183m	UPPER STRUT SPACER	2
90-6638m	HARDWARE PACK 10MM - 1.25 10.9 METRIC FLANGE NUTS	1 6
90-4265	LOWER STRUT MOUNT SPACER	2
90-4267	REAR SPACER	2

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

**RECOMMENDED PRO COMP SHOCKS**

**Front:**

**618253 (strut)**

**Rear:**

**925543**

**ES9000**

**MX6061**

**MX-6**

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

**4WD SUSPENSION LIFT KIT W/ DRIVSHAFT: 51907B Tahoe, 51017B Silverado**

**4 WD SUSPENSION LIFT KIT W/O DRIVSHAFT: 51947B Tahoe, 51007B Silverado**

**2WD SUSPENSION LIFT KIT: 51927B Tahoe, 51227B Silverado**

**4WD/2WD MX-6 COIL OVER UPGRADE KIT: 51207BMX Tahoe**

**4WD/2WD MX-6 COIL OVER UPGRADE KIT: 51957BMX Silverado**

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.

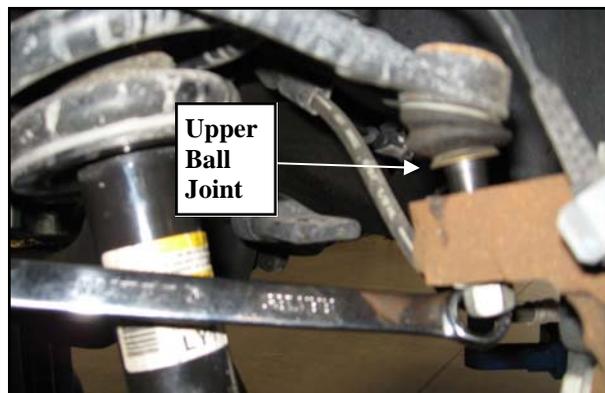
LF: \_\_\_\_\_ RF: \_\_\_\_\_

LR: \_\_\_\_\_ RR: \_\_\_\_\_

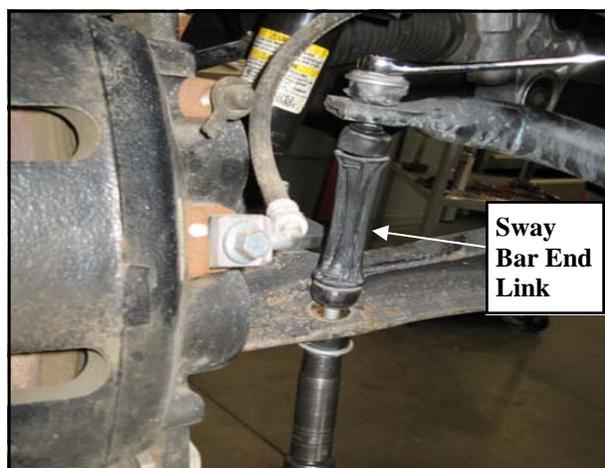
3. Unbolt and remove the skid plate from the vehicle. Save for reinstallation.
4. Place the vehicle in neutral. Place your floor jack under the crossmember and raise the vehicle. Place jack stands under the frame rails and lower the frame onto the stands. Remove the jack and place the vehicle back in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



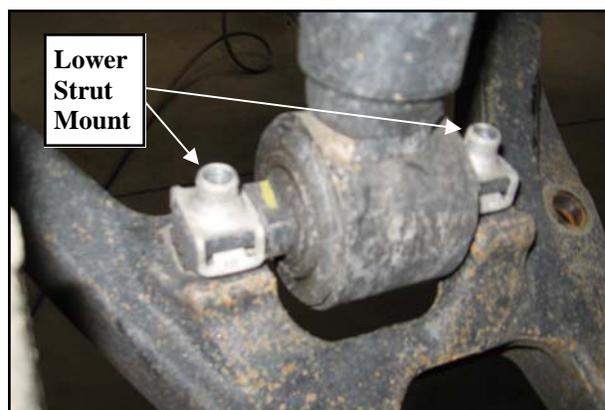
6. Unbolt the brake line bracket from the upper A-arm.
7. Using the proper tool carefully separate the upper ball joint from the knuckle. Loosen but ***DO NOT*** remove the retaining nut from the upper ball joint.



8. Unbolt and remove the sway bar end links from the vehicle.

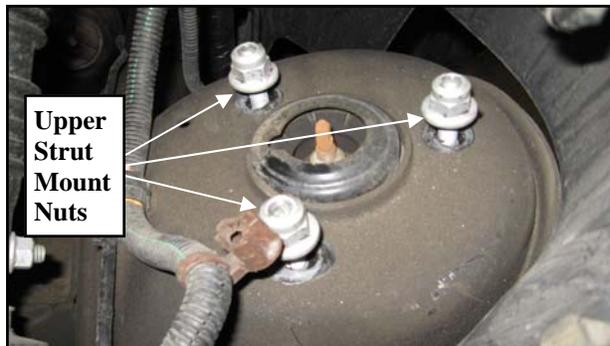


9. Support the lower control arm with a jack and unbolt the lower strut mounting bolts from the lower control arm mount.



10. Unbolt the nuts on the upper strut mounting studs. Carefully remove the strut from the vehicle.
11. Install the upper strut spacer (**90-4183m**)

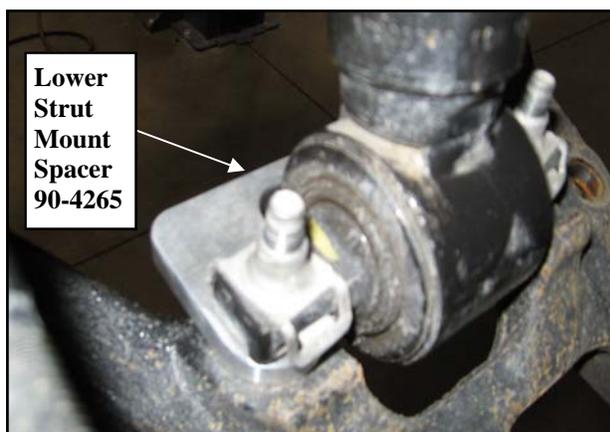
onto the **OE** studs on the strut.



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



12. Install the strut assembly into the strut tower and secure using the supplied **10mm** flange nuts. Leave the bolts hand tight only at this point.
13. Place a jack the lower control arm with and raise it up. Install the **3/8"** lower strut mount spacer (**90-4265**) over the factory lower shock mount holes.



14. Install the strut and nut clips over the spacer and secure the lower strut to the control arm using the previously removed **OE** hardware.
15. Torque the upper and lower strut mounting hardware to manufacturers specifications.
16. Reinstall the spindle to the upper ball joint. Torque the upper ball joint nut to manufacturers specifications.  
**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.
17. Reinstall the sway bar end link to the lower control arm and secure top the sway bar. Torque according to manufacturers specifications.
18. Reinstall the brake line bracket to the control arm using the previously removed hardware.
19. Reinstall the wheel speed sensor cables into the factory harnesses.
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. Reinstall the **OE** skid plate to the vehicle using the previously removed **OE** hardware.
23. 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!**

## Fender Modification for clearance of 285/70/R17 Tires mounted on a 17x8 wheel with 4.5" of backspacing.

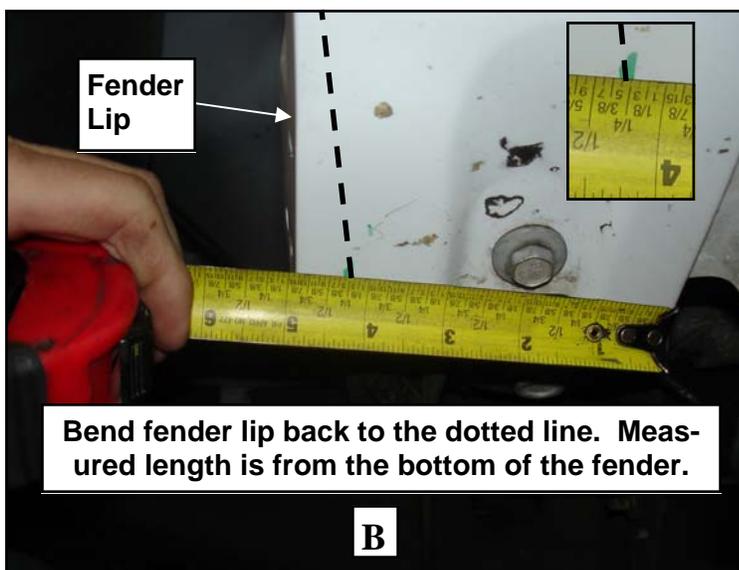
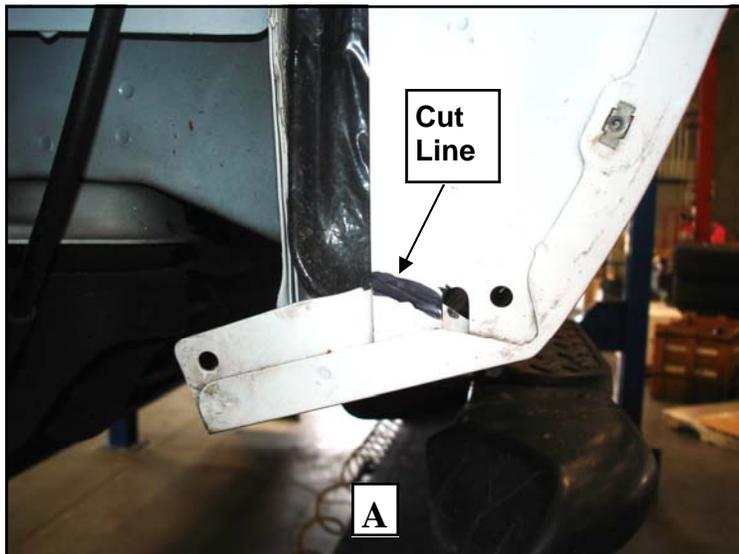
1. Position truck on a flat surface and lift vehicle by the frame so that the front wheels are off the ground using a floor jack and jack stands or a (2) two post lift if available.
2. Remove (2) OE screws and (2) plastic push pin retainers located on the bottom of the front fender rear plastic liner.
3. Using a cut of wheel or another suitable tool, trim the fenders along the cut line in picture A.
4. Using a plastic or rubber mallet, **CAREFULLY** bend the inside of the fender lip back to provide tire clearance. Use the measurement and dotted line in picture B as a guide line for bending. See Picture B.

**NOTE: The dotted line is only to be used as a guide line and the fenders may require additional modification.**

**IMPORTANT!: Make sure the bottom fender bolt is tight prior to flattening the inside fender to avoid movement.**

**IMPORTANT!: Pay close attention to the spacing between the fenders and the front doors prior to flattening the inner fender. Make sure you haven't reduced this spacing, while flattening out the inner fender, or the doors will make contact with the fenders when opened.**

5. Mask any painted areas of the fender. Prep the trimmed or modified areas for paint and using a paint primer, prime the prepared area and let dry. Undercoat the primed area of the fender. Let undercoating dry properly before removing the masking and reinstalling the plastic inner fender liner back onto the lower portion of the fender using the previously removed OE hardware.

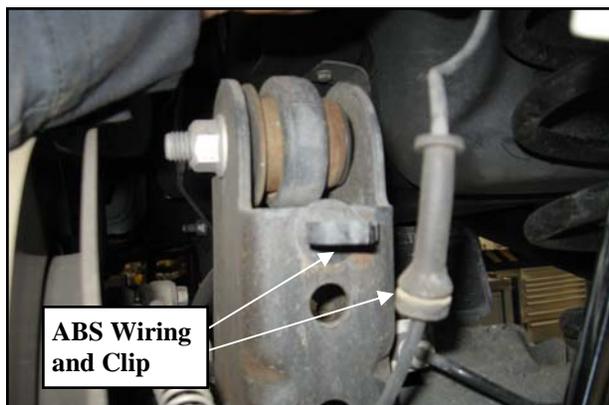


### Disclaimer:

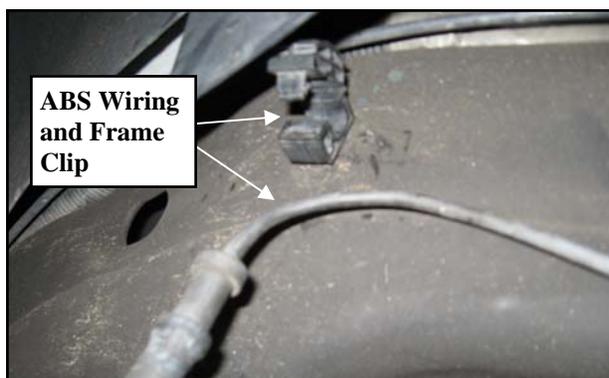
It is the vehicle owner's sole responsibility to ensure that all precautions are taken when performing any body or mechanical work. These instructions are only recommendations and not requirements. This type of work should only be performed by a licensed professional. Pro Comp assumes no responsibility and/or liability for any modification to your vehicles inside fender well/wells.

## REAR INSTALLATION:

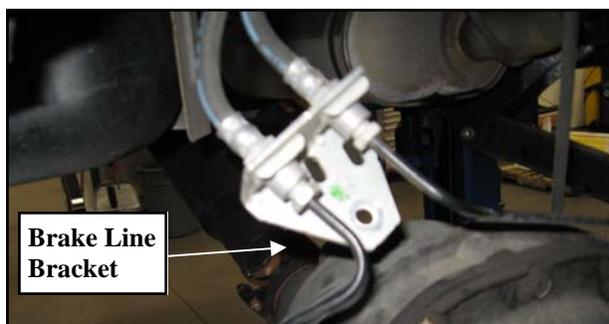
1. Block the front tires and raise the rear of the vehicle. Support the frame with jack stands forward of the rear springs.
2. Remove the rear wheels.
3. Unclip the ABS lines from the clips on the upper trailing arm mounts.



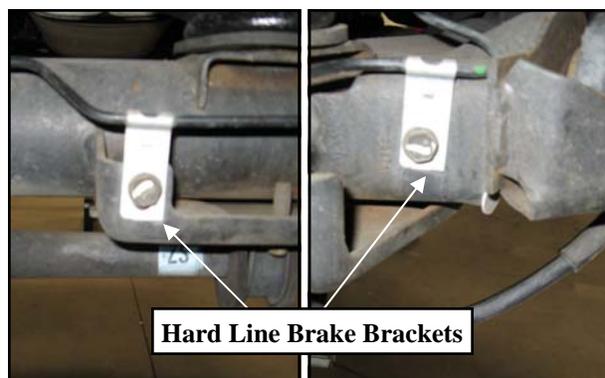
4. Unclip the ABS lines from the clips from the frame rails.



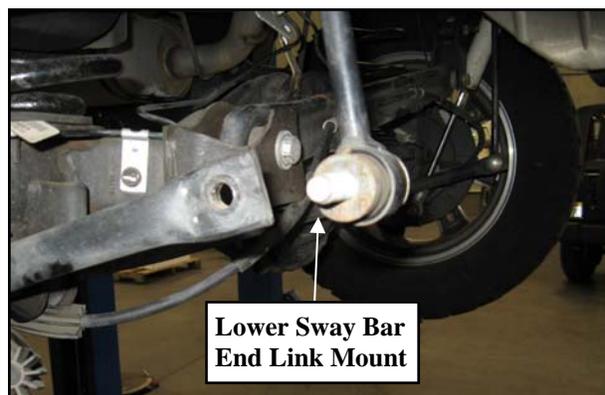
5. **For Vehicles Equipped with Autoride ONLY**, remove the autoride linkage from the upper trailing arm.
6. Unbolt the brake line bracket from the frame. Save the hardware for reuse.



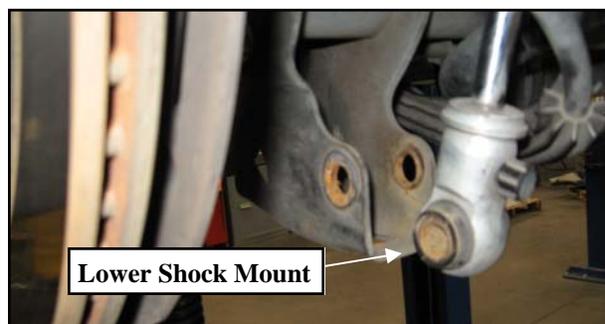
7. Unbolt the hard brake line brackets from the rear axle. Save the hardware for reuse.



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



10. 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.

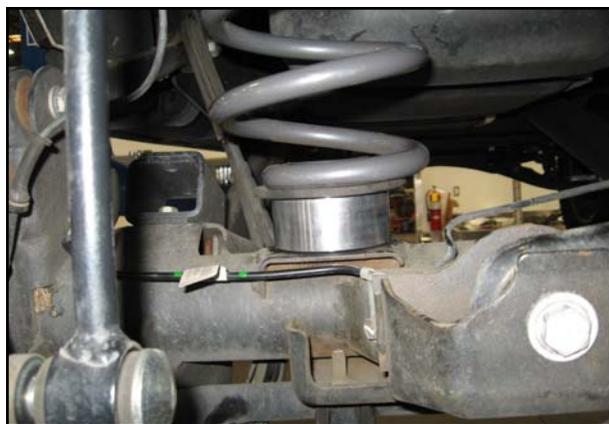


11. Lower the rear axle enough to remove the coil springs from the front spring pockets. Save the factory isolators for re-use.

**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.**

12. Carefully lower the rear end to ease in the new coil spring installation. Reinstall the **OE** coil springs, coil spacer (**90-4267**) 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.



13. Reinstall the lower shock mounts using the previously removed **OE** lower bolts. Torque per **OE** specifications.
14. Reinstall the emergency brake line support using the previously removed **OE**

bolt.

15. Reinstall the brake line bracket to the frame using the previously removed **OE** bolt.
16. Reinstall the hard brake line brackets from the rear axle using the previously removed **OE** bolt.
17. Reinstall the hard brake line brackets from the rear axle using the previously removed **OE** hardware.
18. **For Vehicles Equipped with Autoride ONLY**, re-attach the autoride linkage to the upper trailing arm.
19. Re-clip the ABS lines to the clips on the upper trailing arm mounts.
20. Re-clip the ABS lines to the clips from the frame rails.
21. 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.**
22. 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.
23. Reinstall the wheels and lower the vehicle to the ground. Torque the lug nuts according to the wheel manufacturers recommendations.
24. Torque all bolts to factory specifications. Re-torque all bolts after 500 miles.

Revisions Page:

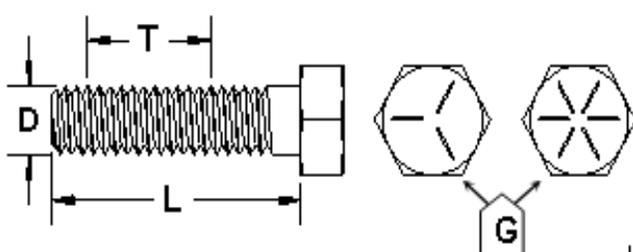
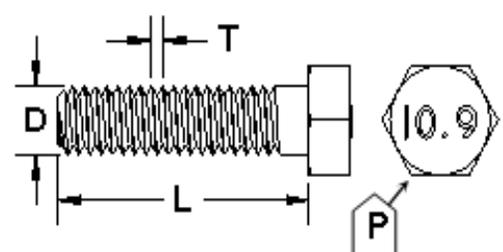
**10.29.2011:** Updated kit fitment to include 2012.

**8.27.2012:** updated kit fitment to include through 2013.

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

<b>Bolt Torque and ID</b>						
<b>Decimal System</b>			<b>Metric System</b>			
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</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">D</div> <div style="border: 1px solid black; padding: 2px;">T</div> <div style="border: 1px solid black; padding: 2px;">L</div> <div style="border: 1px solid black; padding: 2px;">X</div> </div>	<p>Grade 5    Grade 8</p> <p>(No. of Marks+2)</p>	<p>M12-1.25x50 HHCS</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">D</div> <div style="border: 1px solid black; padding: 2px;">T</div> <div style="border: 1px solid black; padding: 2px;">L</div> <div style="border: 1px solid black; padding: 2px;">X</div> </div>
<p>G = Grade (Bolt Strength)</p> <p>D = Nominal Diameter (Inches)</p> <p>T = Thread Count (Threads per Inch)</p> <p>L = Length (Inches)</p> <p>X = Description (Hex Head Cap Screw)</p>		<p>P = Property Class (Bolt Strength)</p> <p>D = Nominal Diameter (Millimeters)</p> <p>T = Thread Pitch (Thread Width, mm)</p> <p>L = Length (Millimeters)</p> <p>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.