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REQUIRED TOOL LIST:

- * Metric and Standard wrenches and sockets
- * Allen Wrenches
- * Assorted Drill Bits
- * Floor Jack
- * Jack Stands
- * Measuring Tape
- * Torsion Bar Tool
- * Torque Wrench
- * Transmission Jack
- * Reciprocating Saw
- * Grinder

99-02 Chevy/GMC K1500 4x4 6" Suspension lift Installation Instructions Part # C9661K, C9661KS



Before beginning the installation, read these instructions and the enclosed driver's WARNING NOTICE thoroughly and completely. Also affix the WARNING decal in passenger compartment in clear view of all occupants. If any of these items are missing from this instruction packet, do not proceed with installation, but call SKYJACKER[®] to obtain needed items. If you have any questions or reservations about installing this lift kit, call SKYJACKER[®] at 318-388-0816 for Technical Assistance or Customer Service departments.

Make sure you park the vehicle on a level concrete or asphalt surface. Many times a vehicle is un level (side-to-side) from the factory, but usually not noticed until a lift kit has been installed which makes the difference more visible. Using a measuring tape, measure the front and rear (both sides) from the ground up to the center of the fender opening above the axle. Record below for future reference.

Driver Side Front: _____

Passenger Side Front:_____

Driver Side Rear:

Passenger Side Rear:

IMPORTANT NOTES:

- Please refer to Parts List to insure that all parts and hardware are received prior to disassembly of vehicle. If any parts are found to be missing, contact your dealer as soon as possible.
- If larger tires (10% more than stock diameter) are installed, speedometer recalibration is necessary (see GM dealer or Tire Store). Larger tire will not fit on factory wheel. Contact your Dealer for details.
- This lift is determined from the front while only lifting the rear to a position level with the front.
- After installation occurs, a qualified alignment facility is required to align the vehicle to factory specs.

I-C966 10-07

Kit Box Breakdown:

C9661A:

ITEM#	DESCRIPTION	QTY
C966L	GM 1/2T,6 LUG,LEFT KNUCKLE	1
C966R	GM 1/2T,6 LUG,RIGHT KNUCKLE	1
C966SKD-S	GM 1/2T SKID PLATE, MAIN	1
C966SPD-S	GM 1/2T SIDE SKD PLT, DRIVER	1
C966SPP-S	GM 1/2T SIDE SKD PLT, PASSEN	1
C966TBD-S	GM 1/2T TORSION BAR DROP BK	2
HB-C966-SP	HDWR BAG/SKID PLATES GM 1/2	1
HB-C966-TBB	HDWR BAG:TORSION BAR BRKTS	1
5MMX12SHB	5MM X 12MM80 SKT HEAD C/S	2
I-C966	INSTR:99-02 GM 1/2TN 4WD 6"	1

Hardware Bag Breakdown:

HB-C966-SP	Skid	Plates

ITEM#	DESCRIPTION	QTY
38X1FTB	3/8 X 1 FINE THREAD BOLT	8
38X1TCFB	3/8 X 1 THRD-CUTTER FLG BLT	3
38X112CTB	3/8 X 1 1/2 CRSE BLT/GRD 8	8
38CTN	3/8-16 COARSE N/I LOCK NUT	8
38FTN	3/8-24 FINE N/I LOCK NUT	8
38SAEW	3/8 SAE WASHER	32
HB-C966-TBB	Torsion Bar Brackets	
ITEM#	DESCRIPTION	QTY
12X112FTB	1/2 X 1 1/2 FINE THRD BOLT	8
12FTN	1/2-20 FINE N/I LOCK NUT	8
12SAEW	1/2 SAE WASHER	16
SP3445	GM 1/2T,3/4T TORSION BUSHG	4
TBBS1590	TORSION BAR SLEEVE,1.590"L	2

Kit Box Breakdown:

C9661B:

ITEM#	DESCRIPTION	QTY
C966FCM-S	GM 1/2T FRONT CROSS MEMBER	1
C966RCM-S	GM 1/2T REAR CROSS MEMBER	1
C966PS-S	GM 1/2T DIFF DROP BKT, PASSENGER	1
C966DSO-S	GM 1/2T OUTER DRIVER SHACKLE	1
C966DSI-S	GM 1/2T INNER DRIVER SHACKLE	1
C966DSS-S	GM 1/2T SLEEVE DRIV SHACKLE	1
C966CVS-D	C966 AXLE SPACER, DRIVER, 3.35"W	1
C966CVS-P	C966 AXLE SPACER, PASSENGER 1.175"W	1
RB55	5.5 REAR BLOCK	2
916X212X1312U	9/16 X 2 1/2 X 13 1/2 U-B Square U-bolt	4
R1115S	SINGLE ADD-A-LEAF	2
3806	3/8 X 6 TIE BOLTS,PAIR W/NUTS	1
HB-C966-CM	HDWR BAG/X-MEMBER GM 1/2TON	1
HB-C966-DB	HDWR BAG/DIFF.BRKTS GM 1/2T	1
HB-C966-CVS	HDWR BAG/CV SPACERS GM 1/2T	1
HB-C966-SBL	HDWR BAG/SWAY BAR LKS GM1/2	1
HB-916	HDWR BAG: 9/16 NUTS For U-Bolts	1

Hardware Bag Breakdown:

HB-C966-CM	Front and Rear Cross Member			
ITEM#	DESCRIPTION	QTY		
58X112FTB	5/8 X 1 1/2 FINE THD,GR. 8	2		
58X112BHB	5/8 X 1 1/2 BUTTON HEAD BLT	2		
58X412FTB	5/8 X 4 1/2 FINE THREAD BLT	2		
58CTN	5/8-11 NYLON INSERT LOCKNUT	2		
58FTN	5/8-18 NYLON INSERT LOCKNUT	4		
38CTN	3/8-16 COARSE N/I LOCK NUT	2		
58SAEW	5/8 SAE WASHERS	10		
BPBN	BUMP STOPS, BUTTON SHAPE	2		
HB-C966-DB	Driver and Passenger Side Differential Brac	kets		
HB-C966-DB ITEM#	Driver and Passenger Side Differential Brace DESCRIPTION	kets QTY		
	-			
ITEM#	DESCRIPTION	QTY		
ITEM# 916X2CTB	DESCRIPTION 9/16 X 2 COARSE BOLT,GR. 8	QTY 2		
ITEM# 916X2CTB 916X4FTB	DESCRIPTION 9/16 X 2 COARSE BOLT,GR. 8 9/16 X 4 FINE THREAD BOLT	QTY 2 1		
ITEM# 916X2CTB 916X4FTB 716X112FTB	DESCRIPTION 9/16 X 2 COARSE BOLT,GR. 8 9/16 X 4 FINE THREAD BOLT 7/16 X 1 1/2 FINE THRD BOLT	QTY 2 1 1		
ITEM# 916X2CTB 916X4FTB 716X112FTB 916CTN	DESCRIPTION 9/16 X 2 COARSE BOLT,GR. 8 9/16 X 4 FINE THREAD BOLT 7/16 X 1 1/2 FINE THRD BOLT 9/16 COARSE THD NYLON LOCKNUT	QTY 2 1 1 2		
ITEM# 916X2CTB 916X4FTB 716X112FTB 916CTN 916FTN	DESCRIPTION 9/16 X 2 COARSE BOLT,GR. 8 9/16 X 4 FINE THREAD BOLT 7/16 X 1 1/2 FINE THRD BOLT 9/16 COARSE THD NYLON LOCKNUT 9/16-18 NYLON INSERT LOCKNUT	QTY 2 1 1 2 1 2		

HB-C966-CVS	C.V. Spacers	
ITEM#	DESCRIPTION	QTY
10MMX60MMB	10 X 60 METRIC BOLT/10.9	6
10MMX110MMB	10 X 110 METRIC BOLT/10.9	6
LT100	Loctite 427 1 ML TUBE	1
HB-C966-SBL	Sway Bar Links	
ITEM#	DESCRIPTION	QTY
C966SBL-S	OE STYLE SWAY BAR LINKS	2
HB-916	Nuts For U-Bolts	
ITEM#	DESCRIPTION	QTY
916FTN	9/16-18 NYLON INSERT LOCKNUT	8

TORQUE SPECIFICATIONS					
INCH SYETEM			METRIC SYSTEM		
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9
5/16	<u> 15 FT LB</u>	<u>20 FT LB</u>	6MM	5 FT LB	<u>9 FT LB</u>
3/8	<u>30 FT LB</u>	<u>35 FT LB</u>	8MM	<u>18 FT LB</u>	<u>23 FT LB</u>
7/16	45 FT LB	<u>60 FT LB</u>	10MM	<u>32 FT LB</u>	<u>45 FT LB</u>
1/2	65 FT LB	<u>90 FT LB</u>	12MM	<u>55 FT LB</u>	<u>75 FT LB</u>
<u>9/16</u>	95 FT LB	<u>130 FT LB</u>	14MM	85 FT LB	120 FT LB
<u>5/8</u>	135 FT LB	<u>175 FT LB</u>	16MM	<u>130 FT LB</u>	<u> 165 FT LB</u>
<u>3/4</u>	185 FT LB	280 FT LB	<u>18MM</u>	<u>170 FT LB</u>	240 FT LB

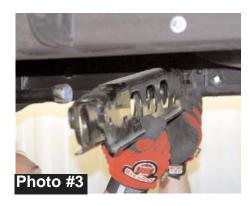
*The above specifications are not to be used when bolt is being installed with a bushing.

FRONT DISASSEMBLY:

- 1. With vehicle on flat level ground set the emergency brake and block the rear tires. Place floor jack under the lower control arm's front cross member and raise vehicle. Place jack stands under frame rails, behind the front wheel wells then and lower the frame onto the stands.
- 2. Remove both front factory skid plates located in front of and under the front differential using 15mm socket. (See Photo #1).
- **WARNING:** Be extremely careful when loading or unloading the torsion bars; there is a tremendous amount of stored energy (load pressure) in the bars. Keep your hands and body clear of the adjuster arm assembly and puller tool in case anything slips or breaks.
- **NOTE:** A special PULLER TOOL is required for SAFE REMOVAL/INSTALLATION of the Torsion bars. This special puller can be purchased from a GM Dealer (Tool #J36202) or from Kent Moore Tool Group, Roseville, MI (800) 345-2233 or (313) 774-9500 (Part #J-22517-C).
- 3. Locate the torsion bar adjuster bolt on the bottom of the rear cross member, measure and record the length of the torsion bar adjusting bolt that is exposed below the nut, and remove the torsion bar adjusting bolt. Apply a small amount of lubricating grease to the puller threads and the puller shaft-to-adjuster arm contact point. Position puller and load adjuster arm until the adjuster nut can be removed from the cross member. With the bar unloaded, slide it further forward into the lower control arm. If the bar seems lodged, use a hammer and punch through the hole in back of the cross member. When the bar shifts forward, the adjuster will fall free. (See Photo #2). Repeat this process on passenger side.
- 4. With torsion bars removed from rear cross member, remove torsion bar cross member using 21mm socket. With cross member removed, remove the torsion bars from the vehicle, be sure to mark driver and passenger for reinstallation.
- Remove front tires and remove the front shocks using 21mm socket and 15mm wrench. Remove front sway bar links using 9/16 wrench. Be sure to save sway bar link bushings. They will be reused in further installation.
- Remove the tie rod end nut from knuckle using 18mm socket. Remove the tie rod end from the knuckle by striking the knuckle to dislodge the tie rod end. Be careful not to damage the tie rod end. (See Photo # 4).









- 7. Disconnect the ABS line at the top of the frame rail. Remove the brakeline retaining bracket from the top of the steering knuckle using 10mm wrench. It will not be necessary to disconnect the actual banjo fitting at the caliper. Remove Caliper using 18mm socket. Then wire caliper out of the way so that there is no stress on brakeline. With caliper removed, remove the rotor. (See Photo # 5).
- Remove outer axle nut dust cover to allow access to outer axle nut. Remove outer axle nut and washer using 1 7/16 socket. (See Photo # 6).
- Mark C.V. shaft prior to removal so that shaft can be reinstalled the same as removed. Also be sure to mark left and right. Remove C.V. shaft from front differential using 15mm socket. Then, remove C.V. shaft. (See Photo #7).
- Remove upper and lower A Arm ball joints from knuckle using 18mm socket. Once again it may be necessary to strike the knuckle to allow the tie rod end to dislodge. Remove knuckle from vehicle.
- 11. Remove the spindle bearing from knuckle using 15mm socket. (See Photo # 8).
- 12. Remove Lower A -Arm from frame using 18mm socket and 15/16 Wrench. (See Photo #9).
- 13. Disconnect front driveshaft using 7/16 wrench. Caution: Be sure to mark U-Joint and Yoke at differential. The drive shaft must be installed the same way during reinstallation. Failure to realign the U-Joint and Yoke in the exact same point could result in vibration after install. (See Photo #10). Do not remove the driveshaft all together. Simply strap it out of the way.
- **NOTE:** GM front drive shafts are balanced on each vehicle due to driveline vibrations. It is **very** important that drive shaft is reinstalled same as factory.









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- 14. Locate the factory rear 2 piece differential cross member. Locate the point on the driver side where the cross member is welded to the frame, it will be necessary to grind off the welds so that the cross member can be removed. (See Photo #11).
- With welds ground off, remove cross member mounting bolts using 18mm wrench. Remove rear cross member assembly. (See Photo #12).
- 16. While supporting front differential with transmission jack, remove passenger side differential mounting bolts using 21mm socket. Also disconnect actuator line from passenger side of front differential.(See Photo #13).
- Remove driver side upper differential bolt using 21mm socket. Disconnect vacuum hose on driver side of front differential. (See Photo # 14). Then remove differential using transmission jack.
- On passenger side differential tubepad, locate the rearward mounting hole. Measure 1/2" from outside edge of hole to outside edge of mount and make a mark. Using a reciprocating saw, cut along mark. (See Photo #15 and 16).
- Locate the rear cross member mount on passenger side frame. Grind off the bottom bolt sleeve flush with the frame. (See the arrow in photo # 17).









REAR mounting point on passenger side diff tube.



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- 20. Locate the rear cross member mount on driver side frame. Grind the front outside edge smooth as shown in (Photo #18).
- 21. Locate the front steering center link point that attaches to the pitman arm. (Pitman arm is attached to the steering box on the driver side frame. It will be necessary to grind the inside lower edge of the center link where pitman arm attaches. This will allow clearance between the center link and the front differential mount. (See Photo # 19 and 20). The Aluminum differential mount can also be ground to allow additional clearance.

FRONT ASSEMBLY:

- 22. Install new Skyjacker rear cross member using 5/8 x 1 1/2 BUTTON HEAD BOLTS for <u>upper front holes</u>. NOTE: Button Head Bolts **must** be used in upper holes for clearance. Use a washer behind the nut, not behind the head of the bolt. Install 5/8 x 1 1/2 fine thread bolts at the upper rear mount. Be sure to use washers on both sides of this bolt. Tighten both bolts.(See Photo #21).
- 23. Install driver side differential brackets. Install outer bracket using 7/16 x 1 1/2 fine thread bolt, nuts, and washers at the upper mount. The bend will mount up pointing toward passenger side. The O.E.M. bolt will tie the two brackets together. Be sure to use the anti-crush sleeve between the two brackets. Do not tighten at this time.(See Photo #22).
- 24. Install passenger side differential bracket. The bracket will install with the open end to the inside and longest end on top. Use the O.E.M. hardware to attach the upper part of bracket to the O.E.M. mount. (See Photo #23).
- 25. Reinstall front differential. Attach differential to driver side bracket using 9/16 x 4 fine thread bolt, washers, and nut. Attach differential to passenger side bracket using (2) 9/16 x 2 coarse thread bolt, washers, and nut. Attach rear of differential to rear cross member using factory hardware. Push differential back toward the rear of vehicle and tighten all bolts. Be sure to tighten all differential bolts, brackets, and cross member. (See Photo #24). Reattach front vacuum line and front actuator line.











Photo #23



- 26. Install new Skyjacker front cross member using 5/8 x 4 1/2 fine thread bolts, washers, and nuts at the upper mount.(See Photo #25). If installing Skyjacker Single Stabilizer part # 7196 or Dual Steering Stabilizer Part # 7296, refer to those instructions at this time.
- 27. Install lower A-Arms to new cross members using factory hardware. Do not tighten at this time.(See Photo #26).
- 28. Attach new polyurethane bump stops to the rear cross member using 3/8 coarse thread nut.
- Install new Skyjacker Heavy-Duty Steering Knuckles. Attach upper and lower A-Arm ball joints using factory hardware. (See Photo #28).
- 30. Reinstall the hub bearing assembly to the new knuckle using factory hardware. Torque flange bolts to 125 lbs. Reinstall brake rotor and caliper. Torque caliper bolts to 30 lbs.
- 31. Install driver and passenger side C.V. shaft using larger 3.35" wide spacer on driver side, and the smaller 1.175" spacer on the passenger side. Spacer will install between C.V. shaft and differential. Spacer should install with male end against the differential. Be sure to use the 10 x 110mm bolts on driver side and the 10 x 60mm bolts on the passenger side. Be sure to use thread lock compound on bolts. (See Photo #29) Torque bolts to 45 lbs. Reinstall C.V. retaining nut and outer dust cover.
- 32. Attach brake line retaining clip to the new knuckle using 5 x 12mm bolts. Slide ABS clip up so that it will meet mount. It may be necessary to spray the line with WD-40 to allow it to slide. (See Photo #30)
- 33. Install new Skyjacker End Links. Be sure to install the end link with the pivoting end at the AArm. Gold washer should be on top of the A-Arm, with the nut on the bottom.. (See Photo #31)

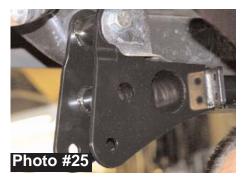




Photo #26





Driver Side shown with 3.35" C.V. Spacer.



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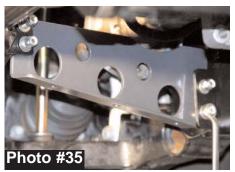


- Install new Skyjacker front shocks, reinstall front drive shaft. Be sure to reinstall at front differential the same as factory. (See Photo #32)
- 35. Now you are ready to install the Skyjacker Torsion Bar drop brackets. Install bracket onto frame. Line up the rivets in the bottom of the frame with the holes in the bottom of the bracket. Using a C-Clamp, hold the bracket so the outer and bottom holes can me marked and drilled. Once holes are marked, drill holes using 1/2 drill bit. Once all holes are drilled, install bracket using 1/2 x 1 1/2 fine thread bolts, washers, and lock nuts. Tighten bottom bolts first then the outer bolts. (See Photo #33).
- 36. With brackets installed, install poly bushings and sleeves into drop bracket. Reinstall factory torsion bar cross member using factory bolts.
- 37. Reinstall factory torsion bars. Be sure to install adjuster bolts to the same length as factory. (See Photo #34).
- 38. Reinstall front tires and let the weight of the vehicle on the ground. At this time, check all bolts and hardware for proper installation and tightness.
- Install driver side skid plate brace. Attach to front and rear cross member using (4) 3/8 x 1 1/2 coarse thread bolts, washers, and nuts. Do not tighten at this time, repeat this process with the passenger side. (See Photo # 35).
- 40. Install front skid plate. Attach skid plate to cross member tabs and braces using 3/8 x 1 fine thread bolts, washers, and nuts. Tighten all bolts at this time. (See Photo # 36).
- 41. Locate top three mounting holes on top of skid plate. With all of the lower bolts tight, mark and drill the upper three holes using 5/16 drill bit. Once all three holes are drilled, install the three 3/8 thread cutter bolts. (See Photo #37 and #38).











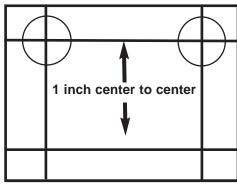
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- 42. Locate the transmission cross member. Using 15mm wrench, remove the transmission skid plate. Using transmission jack, support the rear of transfer case. Remove transmission jack from cross member using 15 mm socket. (See Photo #39).
- 43. Using 21 mm socket, remove the cross member bolts from the frame. Reinstall the upper bolts with template installed. Using the template below as a guide, mark holes with center punch and drill the new lower holes using 9/16 drill bit. It is recommended to use a smaller bit first to allow for ease of drilling. (See Photo #40 and #41).The new holes will be 1inch below the factory holes. Once all holes are drilled, reinstall cross member to lower holes. (See Photo #42). Reattach transmission mount to cross member mount. The factory skid plate will not be reinstalled.

Cross Member Relocation Template



Class II Option:

If installing the Class II kit, read the following instructions. If installing the Class I Kit, skip to step #46.

- 44. Attach front strut bar bracket to cross member. Male end on backside of bracket will slide into cross member. Mount bracket to cross member so that inside bolt hole is closest to outside. Attach using 9/16 x 4 fine thread bolts, washers, and nuts. (See Photo #43 and #44).
- 45. Attach rear bracket to transfer case cross member using 1/2 x1 1/2 fine thread bolts, washers, and nuts. Inside mounting hole will be closest to the inside. (See Photo #45).

Photo #39







Driver side shown, bolt hole mounts closest to outside.



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Passenger side shown, bolt hole mounts closest to inside.

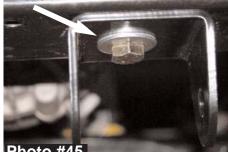
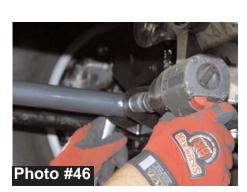


Photo #45

46. Install bushings and sleeves into strut bars. Attach strut bars to brackets using 9/16 x 4 fine thread bolts, washers, and nuts. If optional Double Shock brackets were ordered, part # MS966, refer to those instructions at this time. See Photo Below.





Rear Installation:

- 47. Remove factory rear shock using 21 mm socket.
- 48. Raise the rear end. Support the frame rails using jack stands.
- 49. While supporting the rear axle with floor jack, remove the rear U-Bolts using 22 mm socket. If installing add-a-leaf and blocks, skip to step # 51.

REAR SPRING INSTALLATION:

- 50. While supporting the gas tank with transmission jack, remove the retaining straps from the gas tank. This will allow access to the front spring eye bolt shown in (Photo #47).
- 51. Install the new Skyjacker Softride springs using the factory spring eye bolts. Install with the thickest part of the shim towards the rear. Do not tighten spring eye bolts at this time. Skip to step 55.

ADD-A-LEAF AND BLOCK INSTALLATION:

- 52.To perform the installation of add-a-leafs properly you must use two large C-clamps to contain the elastic potential energy in a leaf spring when the center tie bolt is being removed. Attach and tighten a C-clamp on leaf spring on both sides of the center tie bolt to hold spring assembly securely together. Using vise-grips to hold the head of the center bolt, loosen and remove it. With care, slowly loosen and remove the C-clamps and spring's bottom overload leaf, if equipped.
- 53. Insert new tie bolt through original bottom overload leaf, new add-a-leaf, and through original spring pack. Only finger tighten the nut.
- 54. DO NOT USE THE CENTER TIE BOLT TO DRAW THE SPRING LEAVES TOGETHER. FAIL-URE OF ANY COMPONENT CAN CAUSE AN EXPLOSIVE DISASSEMBLY AND POSSIBLE INJURY! Place one C-clamp on each side of the center bolt and tighten evenly. Once C-clamp has drawn leaves securely together, hold the center tie bolt head with vise-grips and tighten nut. Remove C-clamps. Cut off excess length of tie bolt. Install new 5.5" lift blocks with thickest part of block towards the rear.



- 55. Raise axle back up to leaf spring, be sure that dial pin lines up with axle. Install new U-Bolts and toque to 85-90 ft lbs. Let the weight of the vehicle on to the ground and tighten spring eyes.
- 56. Install new Skyjacker shocks. (See Photo #48). **Note:** On the factory shock brackets at the differential, there is a brake line bracket. The bolt that holds this bracket to the shock bracket must be ground down for clearance of the shock.



FINAL NOTES:

- After installation is complete, double check that all nuts and bolts are tight. Refer to the following chart again for torque specifications. (Do not retighten nuts and bolts where Loctite was used.)
- If new tires are installed that are more than 10% taller than original tires, the speedometer must be recalibrated for the rear wheel anti-lock brake system to function properly. Contact an authorized GM dealer for details on recalibration.
- With the vehicle on the floor, cycle steering lock to lock and inspect steering, suspension and driveline systems for proper operation, tightness and adequate clearance. Recheck brake hose/fittings for leaks. Be sure all hoses, including the rear, are long enough.
- Have headlights readjusted to proper settings.
- Have a qualified alignment center realign front end to factory specifications. Be sure vehicle is at desired ride height prior to realignment.
- Retorque all bolts after the first 100 miles.

Seat Belts Save Lives, Please Wear Your Seat Belt.

