2011-13 Chevy/GM 2500HD 4WD 6" & 7" Suspension Lift Installation Instructions

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REQUIRED TOOL LIST:

- **Safety Glasses**
- **Metric / Standard Wrenches & Sockets**
- **Assorted Drill Bits**
- **Floor Jack**
- **Jack Stands**
- **Measuring Tape**
- **Torque Wrench**
- **Torsion Bar Tool**
- **Transmission Jack**
- **Reciprocating Saw**

Before beginning the installation, thoroughly & completely read these instructions & the enclosed driver's WARNING NOTICE. Affix the WARNING decal in the passenger compartment in clear view of all occupants. Please refer to the Parts List to insure that all parts & hardware are received prior to the disassembly of the vehicle. If any parts are found to be missing, contact SKYJACKER® Customer Service at 318-388-0816 to obtain the needed items. If you have any questions or reservations about installing this product, contact SKYJACKER® Technical Assistance at 318-388-0816.

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

Driver Side Front: _____ Passenger Side Front: _____

Driver Side Rear: _____ Passenger Side Rear: _____

IMPORTANT NOTES:

- This lift is determined from the amount of lift to the front of the vehicle, while only lifting the rear to a position level with the front.

- If larger tires (10% more than the stock diameter) are installed, speedometer recalibration will be necessary. Contact your local GM dealer or an authorized dealer for details.

- After installation, a qualified alignment facility is required to align the vehicle to the OEM specifications.

Component Box Breakdown:

Part #: C1168A (6" Lift Box)

Item #	Description	Qty
C1178L	LEFT STEERING KNUCKLE	1
C1178R	RIGHT STEERING KNUCKLE	1

Item #	Description	Qty
C1178TBD-S	TORSION BAR DROP BRACKET	2
HB-C1178-TBB	HDWR BAG:TORSION BAR BRKT	1

Hardware Bag Breakdown:

Part # HB-C1178-TBB

Item #	Description	Qty
916X4FTB	9/16 X 4 FINE THREAD BOLT	2
916SAEW	9/16 SAE WASHER	4

Item #	Description	Qty
916FTN	9/16-18 NYLON LOCK NUT	2

Component Box Breakdown:

Part #: C1178A (7" Lift Box)

Item #	Description	Qty
C1178L	LEFT STEERING KNUCKLE	1

Item #	Description	Qty
C1178R	RIGHT STEERING KNUCKLE	1

Part #: C1178B (6" & 7" Lift Box)

Item #	Description	Qty
C1178FCM-B	FRONT CROSS MEMBER	1
C1178RCM-B	REAR CROSS MEMBER	1
C1178BSB-DF	DRV FRT BUMP STOP BRKT	1
C1178BSB-PF	PASS FRT BUMP STOP BRKT	1

Item #	Description	Qty
C1178SKD-S	FRONT DIFF SKID PLATE	1
H-BOX C1178B	HDWR BOX: C1178B COMP BOX	1
I-C1178	INSTRUCTION SHEET: C1178	1

Hardware Box Breakdown:

Part # H-BOX C1178B

Item #	Description	Qty
C1178CVS-D	DRIVER SIDE CV SPACER	1
C1178DDS-B	DRIVER SIDE DIFF BRKT	1
C1178PDS-B	PASS SIDE DIFF BRKT	1
GMBL70	FRONT/REAR SET BRAKELINES	1
SBE1125	FRONT SWAY BAR END LINKS	1
RB57	5.5" BLOCK	2
58X318X1612U	5/8 X 3 1/8 X 16 1/2 SQ U-BOLT	4

Item #	Description	Qty
HB-C1178-BLE	HDWR BAG: BRAKE EXT BRKT	1
HB-C1178-BSB	HDWR BAG: BUMP STP BRKT	1
HB-C1178-CM	HDWR BAG: CROSS MEMBER	1
HB-C1178-CVS	HDWR BAG: CV SPACER	1
HB-C1178-DB	HDWR BAG: DIFF BRKTS	1
HB-C1178-SKD	HDWR BAG: DIFF SKID PLATE	1
HB-58	HDWR BAG: 5/8" NYL LOCK NUT	1

Part #: GMBL70

Item #	Description	Qty
GMBL70S	FRONT/REAR BRAKE LINE	4

Item #	Description	Qty
I-BL	INSTRUCTIONS: BRAKE LINES	1

Part #: SBE1125

Item #	Description	Qty
SBE1125-S	OE SWAY BAR LINK / 11.25"	2

Item #	Description	Qty
HB-SBE-CBSH	HDWR BAG: SBE-CBSH	1

Hardware Bag Breakdown:

Part # HB-SBE-CBSH

Item #	Description	Qty
SBE-CBSH	END LINK BUSHING	2

Part #: HB-C1178-BLE

Item #	Description	Qty
RBLE11-S	EMER BRAKE EXT BRKT	1
RBLE60U-S	REAR BRAKE EXT BRKT	1
516X34TCFB	5/16 X 3/4 THRD CUT FLG BOLT	1

Item #	Description	Qty
516X1FTB	5/16 X 1 FINE THREAD BOLT	2
516FTN	5/16" FINE THRD N/I LOCK NUT	2
516SAEW	5/16 SAE WASHER	4

Part #: HB-C1178-BSB

Item #	Description	Qty
38X1TCFB	3/8 X 1 THRD-CUT FLG BOLT	10

Part #: HB-C1178-CM

Item #	Description	Qty
18X130MMB	18MM X 130MM BOLT/ 10.9	2
18X150MMB	18MM X 150MM BOLT/ 10.9	2

Item #	Description	Qty
18MMFW	18MM FLAT WASHER	8
18MMN	18MM-2.5 NYLON LOCK NUT	4

Part #: HB-C1178-CVS

Item #	Description	Qty
10MMX80MMB	10 X 80 METRIC BOLT/ 10.9	8

Item #	Description	Qty
LT100	NUTS N' BOLTS 427 1 ML TUBE	1

Part #: HB-C1178-DB

Item #	Description	Qty
12X40MMB	12 X 40 METRIC BOLT/10.9	5
12X90MMB	12 X 90 METRIC BOLT/ 10.9	1
12MMN	12 MM NUT	4

Item #	Description	Qty
716USSW	7/16 USS FLAT WASHER	10
BTIE-K	BLACK BOOT TIE	4
LT100	NUTS N' BOLTS 427 1 ML TUBE	1

Part #: HB-C1178-SKD

Item #	Description	Qty
516X1CARB	5/16 X 1 CARRIAGE BOLT	4
516CTN	5/16-18 COARSE N/I LOCK NUT	4

Item #	Description	Qty
516SAEW	5/16 SAE WASHER	4

Part #: HB-58

Item #	Description	Qty
58FTN	5/8-18 NYLON LOCK NUT	8

Component Box Breakdown:

Part #: C1178TR (7" Lift Box)

Item #	Description	Qty
C1178TBR-D	DRV RAISED TORSION BAR BRK	1

Item #	Description	Qty
C1178TBR-P	PAS RAISED TORSION BAR BRK	1

Part #: C1178N (6" & 7" Lift Box)

Item #	Description	Qty
N8095	NITRO SHOCK W/RED BOOT	2

Item #	Description	Qty
N8064	NITRO SHOCK W/RED BOOT	2

Front Installation:

Photo # 1

Photo # 2

Photo # 3

1. With the vehicle on flat level ground, set the emergency brake, & block the rear tires / wheels.

2. Place a floor jack under the lower control arm's front cross member & raise the vehicle. Place jack stands under the frame rails, behind the front wheel wells & lower the frame of the vehicle onto the jack stands.

3. Remove the front tires / wheels using a 7/8" socket. (See Photo # 1)

4. Remove the front OEM skid plates located in front & under the front differential using a 15mm socket. (See Photo # 2)

   WARNING: Be extremely careful when loading or unloading the torsion bars; there is a tremendous amount of stored energy (load pressure) in the torsion bars. Keep your hands & body clear of the adjuster arm assembly & puller tool in case anything slips or breaks.

   NOTE: A special PULLER TOOL (Kent - Moore Part # CH-48809 is required for the SAFE REMOVAL / INSTALLATION of the torsion bars. This special puller can be purchased from a GM dealer or auto parts store.

5. Locate the torsion bar adjuster bolt on the bottom of the torsion bar cross member, measure & record the length of the torsion bar adjusting bolt that is exposed. Apply a small amount of lubricating grease to the puller threads & the puller shaft-to-adjuster arm contact point. Position the puller & load adjuster arm until the adjuster nut can be removed from the torsion bar cross member using a 21mm socket. (See Photo # 3) With the torsion bar unloaded, slide it further forward into the lower control arm & remove the torsion keys. If the torsion bar seems lodged, use a hammer & punch through the hole in back of the torsion bar cross member. When the torsion bar shifts forward, the adjuster will fall free. Repeat this process on passenger side.

6. With the torsion bars removed from the torsion bar cross member, remove the wire clips from the front of the torsion bar cross member & remove the torsion bar cross member using a 21mm socket. (See Photo # 4) With the torsion bar cross member removed, remove the torsion bars from the vehicle. **Note:** Be sure to mark the torsion bars driver & passenger side for reinstallation.

Photo # 4

7. Remove the front sway bar end links using a 15mm socket.

8. Remove the tie rod end nut from the steering knuckle using a 21mm socket & tie rod removal tool. (See Photo # 5) **Note:** It may be necessary to strike the the knuckle to dislodge the tie rod end. Be careful not to damage the tie rod end.

Photo # 5

9. Disconnect the ABS line & brake line retaining bracket from the steering knuckle using a 10mm wrench. (See Photo # 6) Remove the brake caliper assembly using a 21mm socket & wire the brake caliper assembly out of the way so there is no stress on the brakeline.

10. Remove the outer cv-axle nut dust cover to allow access to the outer cv-axle nut & remove the outer cv-axle nut using a 1 5/16" socket. (See Photo # 7) Remove the brake rotor using a T30 torx bit.

Photo # 6

11. Remove the hub bearing & backing plate from the steering knuckle using a 21mm socket & remove the inner o-ring from the steering knuckle. (See Photo # 8) The o-ring will be reused later in the installation process.

12. Remove the upper & lower a-arm ball joints from the steering knuckle using a 18mm & 24mm socket & remove the steering knuckle. **Note:** It may be necessary to strike the steering knuckle to dislodge the ball joints. Be careful not to damage the ball joints.

Photo # 7

Photo # 8

13. Mark the cv-axle prior to removal so the cv-axle can be reinstalled the same way as removed. **Note:** Be sure to mark them left & right. Disconnect the cv-axle from the front differential using a 15mm socket & remove the cv-axle. (See Phot # 9)

14. Remove the front shock & lower a-arm using a 21mm socket. (See Photo # 10 & # 11)

15. Disconnect the front driveshaft at the differential using a 11mm socket. **Note:** Be sure to mark the u-joint & yoke at the differential before disconnecting.The drive shaft must be installed the same way during reinstallation. Failure to realign the u-joint & yoke in the exact same point could result in vibration after installation. (See Photo #12) Do not remove the driveshaft all together. Simply strap it out of the way. GM front drive shafts are balanced on each vehicle due to driveline vibrations. It is very important that the drive shaft is reinstalled the same as OEM.

16. Remove the rear cross member using a 18mm socket. (See Photo # 13)

17. Disconnect the electrical connector from the front differential actuator & remove the wire from the plastic wire retainers along the top of the differential.

18. While supporting the front differential with a transmission jack, remove the passenger side differential mounting nuts using a 21mm socket. (See Photo # 14)

19. Remove the driver side differential bolts using a 15mm & 18mm socket. Disconnect the vacuum hose on the driver side of the front differential & remove the front differential using a transmission jack.

Photo # 9

Photo # 10

Photo # 11

Photo # 12

Photo # 13

Photo # 14

20. It will now be necessary to cut the OEM rear cross member bracket for differential clearance when the lift is installed. Locate the OEM driver side rear cross member bracket, measure from the edge of the OEM bracket over 3 1/2" & draw a line along the outer face of the bracket. (See Photo # 15) Connect the lines drawn on the front & rear sides of the bracket in order to have a single cutting reference line. Cut along the drawn line using a reciprocating saw or similar tool.

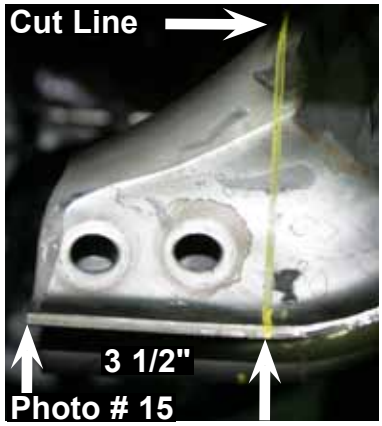

Photo # 15

21. Install the new Skyjacker passenger side differential bracket to the OEM mount using the OEM hardware & 21mm socket. The passenger side differential bracket will install with the open end to the inside & the longer end toward the front of the vehicle. (See Photo # 16)

Photo # 16

22. Install the new Skyjacker driver side differential bracket to the OEM mount using the two 12mm x 40mm bolts, 12mm x 90mm bolt, two 7/16" USSW washers, 18mm socket, & 19mm socket. The bracket will install with the open end to the outside & the longer end toward the front of the vehicle. (See Photo # 17)

23. Support the front differential & attach the front differential to the new Skyjacker passenger side bracket using the two 12mm x 40mm bolts, four 7/16" USSW washers, two 12mm nuts, 18mm socket, & 19mm socket. (See Photo # 18)

Photo # 17

24. Attach the front differential to the front & middle mounting holes of the new Skyjacker driver side differential bracket using the two OEM bolts, four 7/16" USSW washers, two 12mm nuts, & 19mm socket. Attach the front differential to the rear mounting hole of the new Skyjacker driver side differential bracket using the 12mm x 40mm bolt, 7/16" USSW washer, & 18mm socket. (See Photo # 19)

Photo # 19

25. Apply thread locking compound to the OEM hardware & reattach the front drive shaft using a 11mm socket. **Note:** Be sure to reinstall in the exact same position with the marks made to the u-joint & yoke from Step # 15. Some models, may require the transmission pan flange to be slightly ground for clearance of the front drive shaft. (See Arrow in Photo # 20)

Photo # 18

Photo # 20

26. Attach the electrical connector to the the front differential actuator & attach the wire to the top of the front differential using the supplied plastic tie.

27. Install the new Skyjacker rear cross member using the two 18mm x 150mm bolts, four 18mm washers, two 18mm nuts, & 1 1/16" socket at the upper mount. Use the OEM hardware for the two horizontal mounting holes located on the passenger side. (See Photo # 21)

28. Install the new Skyjacker front cross member using the two 18mm x 130mm bolts, four 18mm washers, two 18mm nuts, & 1 1/6" socket at the upper mount. (See Photo # 22) **Note:** If you have purchased separately the Skyjacker dual steering stabilizer kit (Part # 7211), install it at this time using the supplied I-7211 instructions.

29. Install the new Skyjacker front differential skid plate to the front & rear cross members using the four 5/16" x 1" carriage bolts, four 5/16" SAE washers, four 5/16" nuts, & 1/2" socket. (See Photo # 23)

30. Install the lower a-arms to the new Skyjacker cross members using the OEM hardware & 21mm socket. (See Photo # 24)

31. Attach the backing plate & hub bearing assembly to the new Skyjacker steering knuckle using the OEM hardware & 21mm socket. **Note:** Reinstall the O-Ring & use thread locking compound on the bolts. (See Photo # 25)

32. Install the new Skyjacker steering knuckle. Attach the upper & lower a-arm to the new steering knuckle using the OEM hardware, 18mm, & 24mm socket. (See Photo # 26)

33. Attach the ABS line & brake line bracket to the new Skyjacker steering knuckle using the OEM hardware &10mm wrench. **Note:** If necessary, spray lubricant may be used on the rubber ABS line mount for optimal positioning of the ABS line.

Photo # 21

Photo # 22

Photo # 23

Photo # 24

Photo # 25

Photo # 26

34. Install the passenger side cv-axle using the OEM hardware & 15mm socket. Install the driver side cv-axle using the new Skyjacker aluminum cv-axle spacer, eight 10mm x 80mm bolts, & 17mm socket. The new cv-axle spacer will install between the cv-axle & front differential with the male end against the front differential. **Note:** Use thread lock compound on these bolts. (See Photo # 27)

Photo # 27

35. Reinstall the cv-axle retaining nut & dust cover using the OEM hardware & 1 5/16" socket.

36. **6" Lift:** Remove the OEM foam bump stop from the front OEM bump stop bracket & remove the domed portion of the OEM foam bump stop by cutting along the illustrated line using a reciprocating saw or similar tool. (See Photo # 28) Attach the shortened OEM foam bump stop to the lower cup of the new Skyjacker bump stop bracket. Place the new Skyjacker bump stop bracket over the OEM bump stop bracket & align the cups of the OEM bump stop bracket & new Skyjacker bump stop bracket. Apply pressure to the lower portion of the new Skyjacker bump stop bracket or secure with a c-clamp to hold in place. Mark, center punch, & drill the mounting holes using a 5/16" drill bit. Once drilled, attach the new Skyjacker bump stop bracket using the ten 3/8" x 1" thread cutting bolts & 9/16" socket. (See Photo # 29)

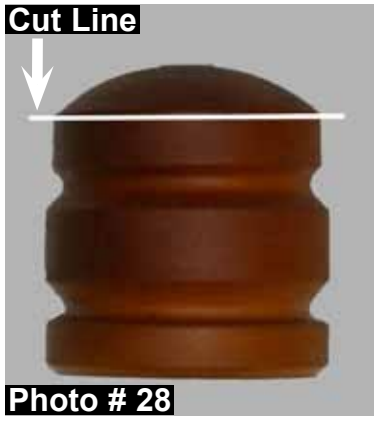

Photo # 28

37. **7" Lift:** Remove the OEM foam bump stop from the front OEM bump stop bracket & attach the foam bump stop to the lower cup of the new Skyjacker bump stop bracket. Place the new Skyjacker bump stop bracket over the OEM bump stop bracket & align the cups of the OEM bump stop bracket & new Skyjacker bump stop bracket. Apply pressure to the lower portion of the new Skyjacker bump stop bracket or secure with a c-clamp to hold in place. Mark, center punch, & drill the mounting holes using a 5/16" drill bit. Once drilled, attach the new Skyjacker bump stop bracket using the ten 3/8" x 1" thread cutting bolts & 9/16" socket. (See Photo # 29)

Photo # 29

38. Attach the tie rod end, brake rotor & brake caliper assembly to the new Skyjacker steering knuckle using the OEM hardware, T30 Torx bit, & 21mm socket.

39. Disconnect the OEM front brake lines at the frame & attach the new Skyjacker brake line extensions to the OEM brake lines. Attach the new Skyjacker brake line extensions to the OEM bracket using the OEM hardware. (See Photo # 30)

Photo # 30

40. Install the new Skyjacker sway bar end link bushing (Part # SBE-CBSH) on the stud of the pivoting end of the new Skyjacker sway bar end link with the larger diameter end facing the boot of the new Skyjacker sway bar end link. Align the new Skyjacker sway bar end link bushing with the OEM mounting location of the OEM a-arm & install the new Skyjacker sway bar end link. **Note:** Be sure to install the new Skyjacker sway bar end link with the pivoting end at the a-arm.

Photo # 31

41. **6" Lift:** Install the new Skyjacker torsion bar drop brackets to the OEM torsion bar cross member frame mounts using the two 9/16" x 4" bolts, four 9/16" SAE washers, & two 9/16" nuts. Reinstall the OEM torsion bars, OEM torsion bar keys, & OEM torsion bar cross member using the OEM hardware & 21mm socket. (See Photo # 31) **Note:** Be sure to install the adjuster bolts to the same length as OEM when removed in Step # 5.

Photo # 32

42. **7" Lift:** Install the new Skyjacker raised torsion bar bracket by aligning the hex of the torsion bar bracket with the hex of the lower a-arm, completely seating the bracket with the lower a-arm. (See Photo # 32) Reinstall the OEM torsion bars, OEM torsion bar keys, & OEM torsion bar cross member using the OEM hardware & 21mm socket. **Note:** Be sure to install the adjuster bolts to the same length as OEM when removed in Step # 5.

43. Install the new Skyjacker front shock using the OEM hardware & 21mm socket. (See Photo # 33)

Photo # 33

44. Install the front tires / wheels using a 7/8" socket & lower the vehicle to the ground.

Rear Installation:

45. Block the front tires / wheels, raise the rear of the vehicle, & support securely with jack stands.

46. Remove the rear tires / wheels using a 7/8" socket.

47. Disconnect the ABS line & remove the OEM rear shock using a 21 mm socket.

48. Disconnect the driver's side E-brake cable from the OEM E-brake cable union & bracket. Relocate the E-brake cable below the OEM rear leaf spring & conncect the driver's side E-brake cable to the OEM E-brake cable union & bracket. (See Arrows Photo # 34)

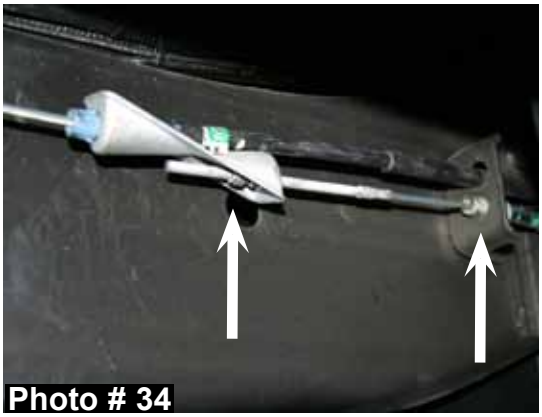
Photo # 34

49. Remove the OEM E-brake cable wire hanger bracket from the frame using a 13mm socket. (See Photo # 35)

50. Install the new Skyjacker E-brake cable bracket to the frame using the OEM hardware & 13mm socket. Mark, center punch, & drill the second mounting hole using a 1/4” drill bit. Once drilled, install the 5/16" x 3/4" thread cutting bolt using a 1/2" socket. Insert the driver's side E-brake cable thru the OEM E-brake cable wire hanger & install to the new bracket using the 5/16" x 1" bolt, two 5/16" washers, 5/16" nut, & 1/2" socket. (See Photo # 36)

51. Remove the rear U-bolts using a 1 1/6" socket. **Note:** The rear axle will now be free to move, so support securely with a floor jack.

52. Disconnect the OEM rear brake lines at the frame & attach the new Skyjacker brake line extensions to the OEM brake lines. Attach the new Skyjacker brake line extensions to the OEM bracket using the OEM hardware. (See Photo # 37)

53. Remove the OEM E-brake cable bracket from the differential using a 13mm socket. With the offset of the new Skyjacker E-brake cable bracket towards the front of the vehicle & the notch to the passenger side, install the new E-brake cable bracket using the OEM hardware, 5/16" x 1" bolt, two 5/16" washers, 5/16" nut, 13mm socket, & 1/2" socket. (See Photo # 38)

54. Install the new Skyjacker rear lift blocks with the taller end of the blocks toward the rear bumper, between the OEM leaf spring & axle pad.

55. Raise the axle up to the rear leaf springs. **Note:** Be sure the rear leaf spring center tie bolts & block pins align in the proper holes & are completely seated. Install & tighten the new Skyjacker u-bolts using a 1 1/6" socket. Attach the ABS line to the outside of the new Skyjacker u-bolts using the supplied plastic ties.

56. Install the new Skyjacker rear shocks & rear tires / wheels using a 21mm & 7/8" socket & lower the vehicle to the ground.

Photo # 35

Photo # 36

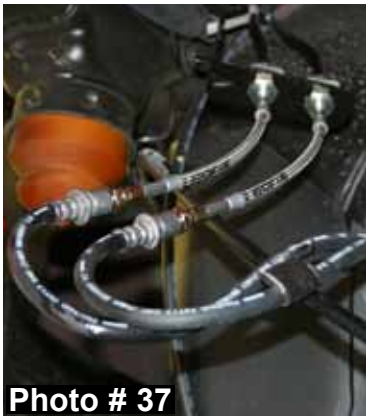
Photo # 37

Photo # 38

BLEEDING THE BRAKE SYSTEM:

Fill the master cylinder with D.O.T. approved brake fluid. Pump the brake pedal & hold down. While the brake pedal is down, open the bleeder screw to release any air out of the brake system. Tighten the bleeder screw & re-pump the brake pedal. Continue the pumping / bleeding process until no air is being expelled. Make sure your master cylinder is full of brake fluid after each bleeding process. The brake pedal will not "pump up" or will have excessive down-travel if all the air is not out of the brake system. It is the customer's responsibility to check the brake lines for any leaks, abrasion, proper clearances, & brake line fittings after the first 100 miles & after every off-road activity.

FINAL NOTES:

- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart below for the proper torque specifications. (Do not retighten the nuts & bolts where thread lock compound was used.)

- With the vehicle placed on the ground, cycle the steering lock to lock & inspect the steering, suspension, brake lines, front & rear drivelines, fuel lines, & wiring harnesses for proper operation, tightness, & adequate clearance.

- Have the headlights readjusted to the proper settings.

- Have a qualified alignment center realign the vehicle to the OEM specifications.

- Retorque all the bolts after the first 100 miles.

TORQUE SPECIFICATIONS

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

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

Seat Belts Save Lives, Please Wear Your Seat Belt.