



www.skyjacker.com

01-06 Chevy/GMC 2500 HD 4x4  
3" Suspension lift  
Installation Instructions  
Part # C9381K

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

---

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 unlevel (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.

## Kit Box Breakdown:

### **C9381A:**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
C938L	3" 2500HD 4X4,LEFT KNUCKLE	1
C938R	3" 2500HD 4X4,RIGHT KNUCKLE	1
C938FCM-S	3"2500HD,FRONT CROSS MEMBER	1
C938RCM-S	3"2500HD,REAR CROSS MEMBER	1
C938DPS-S	3"2500HD,PASSENGER DIFF BRKT	1
C968CVS-P	CV SPACER,2500HD,15/16"WIDE	1
C938TBD-S	3"2500HD,TORSION DROP BRKT	2
C938FBS-S	3"2500HD,FRT BUMP STOP BRKT	2
C938TXD	3"2500HD,DRIV TRAN X-M SPACER	1
C938TXP	3"2500HD,PASS TRAN X-M SPACER	1
HB-C938-CVS	HDWR BAG: 3",C938 CV SPACER	1
HB-C938-CM	HDWR BAG: 3",C938 CROSS-MEMBER	1
HB-C938-SBBS	HDWR BAG:3"2500HD SWAY/BUMP	1
HB-C938-DB	HDWR BAG:3",C938 DIFF BRKTS	1
HB-C938-TBB	HDWR BAG: TORSION BAR BRKTS	1
HB-C938-TCM	HDWR BAG: C938 TRANS X-MEMB	1
HB-C938-FS	HDWR BAG: C938 OE SKID PLAT	1
CBL2500	CARR BRG LWRG KIT, 2500 HD	1

### **Hardware Bag Breakdown:**

#### **HB-C938-CVS C.V. Spacer**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
10MMX50MMB	10 X 50 METRIC BOLT/10.9	6
LT100	NUTS N' BOLTS 427 1 ML TUBE	1
5MMX12SHB	5MM X 12MM.80 KNUCKLE BOLTS	2
38CC	3/8" CABLE CLAMPS	4

#### **HB-C938-CM Cross Members**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
58X412FTB	5/8 X 4 1/2 FINE THREAD BLT	2
58X6FTB	5/8 X 6 FINE THD BOLT/GRD 8	2
916X5FTB	9/16 X 5 FINE THRD BOLT	1
916X112FTB	9/16 X 1 1/2 FINE THRD BOLT	1
58FTN	5/8-18 NYLON INSERT LOCKNUT	4
58SAEW	5/8 SAE WASHERS	6
916SAEW	9/16 SAE WASHERS	3
916FTN	9/16-18 NYLON INSERT LOCKNUT	2

**HB-C938-SBBS Sway Bar / Bump Stops**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
C766SBL-S	FRONT SWAY BAR LINK	2
38X114FTB	3/8 X 1 1/4 FINE THD/GRD 8	4
38SAEW	3/8 SAE WASHER	8
38FTN	3/8-24 FINE N/I LOCK NUT	4

**HB-C938-DB Driver and Passenger Side Differential Brackets**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
916X4FTB	9/16 X 4 FINE THREAD BOLT	1
916X112FTB	9/16 X 1 1/2 FINE THRD BOLT	2
916FTN	9/16-18 NYLON INSERT LOCKNU	3
916SAEW	9/16 SAE WASHERS	6
716X112FTB	7/16 X 1 1/2 FINE THRD BOLT	1
716SAEW	7/16 SAE WASHER	2
716FTN	7/16-20 FINE N/I LOCK NUT	1
C938DSI-S	2500HD 3"DRVR DIF INNR BRKT	1
C938DSO-S	2500HD 3"DRVR DIF OUTR BRK	1
CS2125	3"2500HD,DRIV DIF CRUSH SLV	1

**HB-C938-TBB Torsion Bar Brackets**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
SP3445	GM 1/2T,3/4T TORSION BUSHG	4
TBBS1590	TORSION BAR SLEEVE,1.590"L	2
716X112FTB	7/16 X 1 1/2 FINE THRD BOLT	8
716FTN	7/16-20 FINE N/I LOCK NUT	8
716SAEW	7/16 SAE WASHER	16

**HB-C938-TBB Transmission Cross Member**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
10MMX60MMB	10 X 60 METRIC BOLT/10.9	2
38SAEW	3/8 SAE WASHER	2
716SAEW	7/16 SAE WASHER	4
12MMN	12 MM NUT (METRIC)	4
C938TS-B	3"2500HD,TRANSMISSION SPACER	2

**HB-C938-FS Front Skid Plate**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
10MMX100MMB	10 X 100 METRIC BOLT/ 10.9	2
10MMX30MMB	10 X 30 METRIC BOLT/ 10.9	2
38SAEW	3/8 SAE WASHER	6
10MMN	10 MM N/I LOCKNUT	4

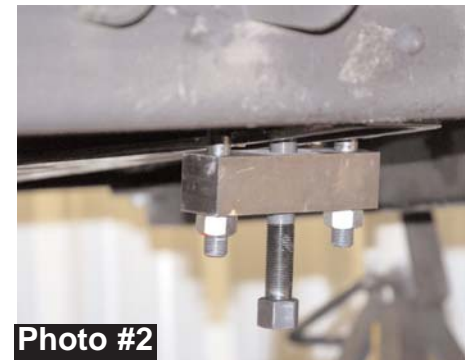
## **FRONT DISASSEMBLY:**

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 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.
5. Remove front tires and remove the front shocks using 21mm socket and 15mm wrench. Remove front sway bar links using 13mm wrench. Be sure to save sway bar link bushings. They will be reused in further installation.
6. Remove the tie rod end nut from knuckle using 21mm 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 21mm 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).
8. 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).
9. 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).
10. Remove upper and lower A - Arm ball joints from knuckle using 18mm and 24mm 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. Then remove the inner O-Ring from the knuckle. The O-Ring will be reused in installation. (See Photo # 8).
12. Remove Lower A -Arm from frame using 24mm socket and 18mm Wrench. (See Photo #9).
13. Disconnect front driveshaft using 11mm 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.



Photo #5

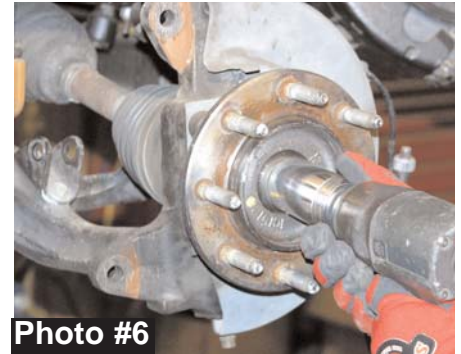


Photo #6



Photo #7



Photo #8

I-C938



Photo #9

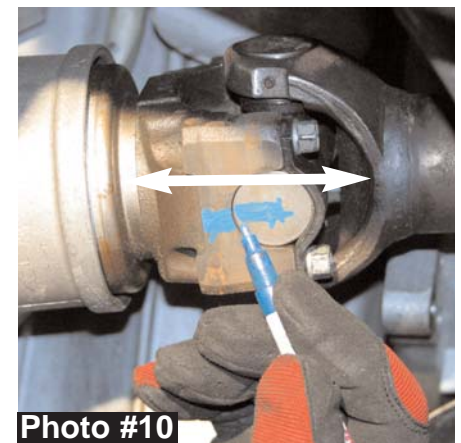
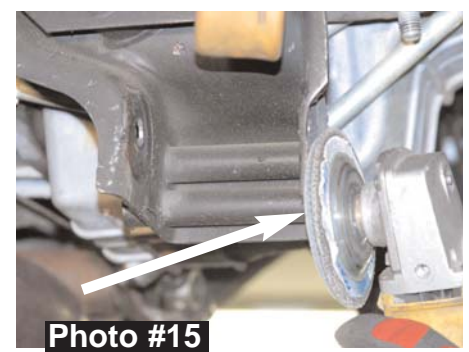
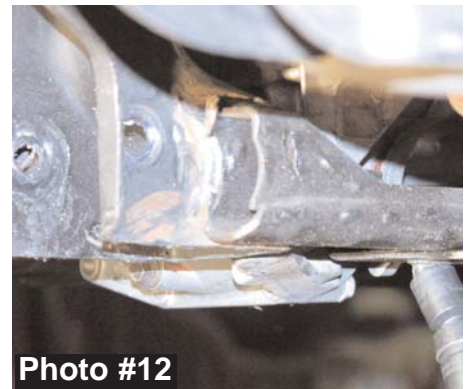


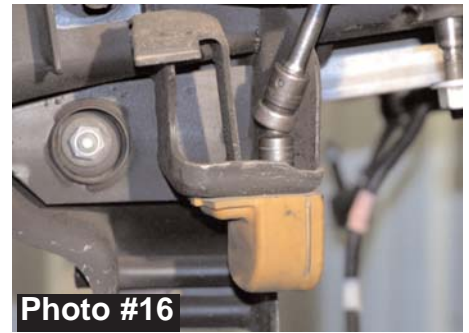
Photo #10

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).
15. 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).
17. 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.
18. Then lower differential using transmission jack.
19. Locate the rear cross member mount on driver side and passenger side frame. Grind the front outside edge smooth as shown in (Photo #15).

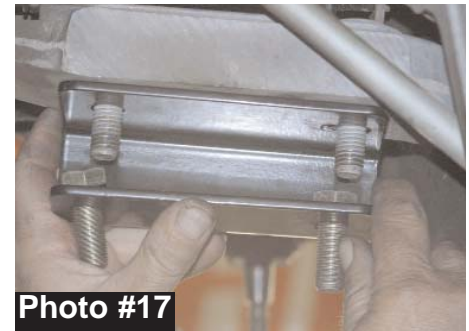


## **FRONT ASSEMBLY:**

20. Remove the factory bump stops from the frame using 15mm socket. (See Photo #16).
21. Install passenger side differential bracket. Attach using the factory hardware at the frame (See Photo #17).
22. Install driver side differential bracket using the 9/16 x 4 fine thread bolt, washers, and nut along with crush sleeve. With bracket installed, mark the upper hole in the frame that needs to be drilled. With the hole marked, remove the bracket and drill the hole to 15/32". Reinstall bracket using the 7/16 x 1 1/2 fine thread bolts, washers, and nut. (See Photo #18). Install the 9/16 x 4" bolt along with crush sleeve but do not tighten at this time. Attach differential to new mounting locations using the factory hardware on the driver side and the 9/16 x 1 1/2" at the passenger side.
23. Install rear cross member. Attach at the side mounting locations using the 9/16 x 1 1/2" fine thread bolts, washers and nuts. (See Arrow #1 Photo #19). Attach to rear differential mount using the 9/16 x4" fine thread bolts, washers and nut. (See Arrow #2 in Photo #19). Attach cross member to factory A-Arm location using the 5/8 x 6" fine thread bolts and crush sleeve provided. No washer will be used under the head of the bolt.
24. Install front cross member using the 5/8 x 4 1/2" fine thread bolts washers and nuts. (See Photo #20). On the bottom side of the cross member there are mounting locations for the factory skid plate. Make sure slotted mount is toward the rear.
26. With cross members installed, tighten differential bolts and attach drive shaft. (See Photo #21)
27. Attach the lower A - Arms to the new cross members using the factory bolts. (See Photo #22).



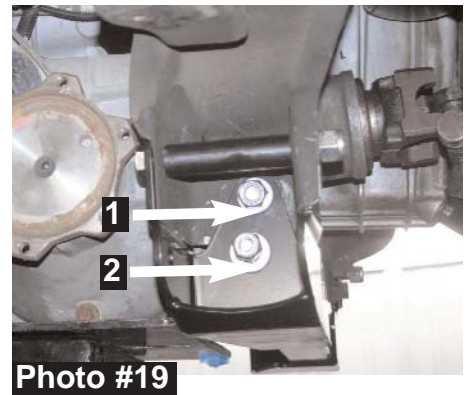
**Photo #16**



**Photo #17**



**Photo #18**



**Photo #19**

Arrow shows the support shim from step #25.  
Found in hardware bag part #HB-C968-DB



**Photo #20**

I-C938



**Photo #21**



**Photo #22**

28. Attach the hub bearing assembly to the new knuckle using factory hardware. Be sure to reinstall O-Ring and use loctite on bolts. Torque flange bolts to 130 ft. lbs. (See Photo #23).
29. Install Skyjacker Heavy Duty steering knuckles. Attach upper and lower A - Arms to new knuckle using factory hardware. The outer tie rod end will install from the top instead of from the bottom as factory. (See Photo #24).
30. Reinstall the brake rotor and caliper. Torque caliper bolts to 70 ft. lbs. Attach Brake line to the side of the steering knuckle using the 5mm screws provided. Attach the ABS line to the upper A-Arm using the factory bolt with plastic clips provided. (See Photo #25).
31. Install driver and passenger side C.V. shafts. Use the 15/16" C.V. spacer on DRIVER'S side. Spacers will install between C.V. shaft and differential. Spacer should install with male end against the differential. Use 10mm x 50mm/class 10.9 bolts on driverside. Be sure to use at least **3** drops of thread lock compound on bolts. (See Photo #26) Torque bolts to 45 ft. lbs. Passenger side shaft will install same as OE with no spacer. Reinstall C.V. retaining nut and dust cover.
32. Locate new front bump stop relocation brackets. Line up with factory hole in the frame. Drill the new mounting locations using a 25/64" drill bit. Attach to frame using the 3/8 x 1 1/4" bolts, washers and nuts supplied. Attach factory bump stop to the bottom of the new bracket using the OE hardware. (See Photo #27)
33. Install new Skyjacker Shock. (See Photo #28)
34. Install new sway bar extended links (See Photo #29). Be sure to install the pivoting end at the lower A-Arm. The gold washer will go on top of the A-Arm, the nut on the bottom.



Photo #23



Photo #24



Photo #25



Photo #26

Driver side shown with one 15/16" C.V. spacers.

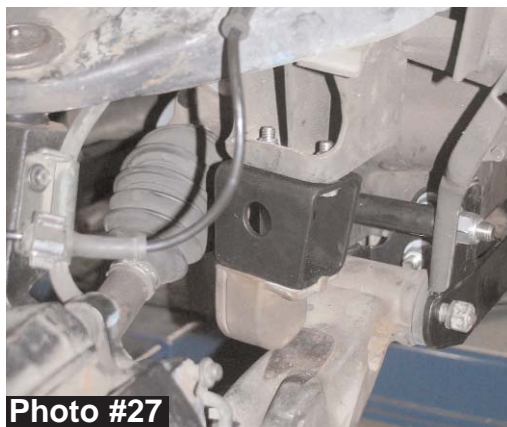


Photo #27

I-C938

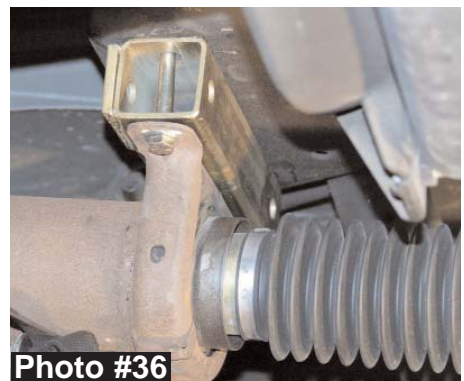
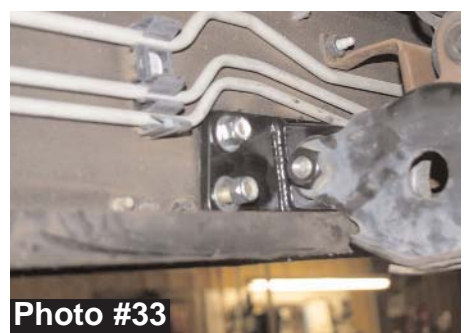


Photo #28





35. Support transmission using transmission jack. Disconnect transmission cross member from transmission. Disconnect cross member from the frame. (See Photo #30).
36. Remove transmission mount from the bottom of the transmission. Install the supplied aluminum spacers using the 10mmx60mm bolts with SAE washers. (See Photo #31).
37. Reinstall the transmission cross member using the supplied lowering brackets. Install using the factory bolts with the new 12mm nuts and washers supplied. (See Photo #32). Note: There is a driver and passenger side bracket. The passenger side is marked with an extra hole.
38. Locate the new torsion bar drop brackets. Grind off the rivets on the outside of the frame.
39. Slide the torsion bars into the A-Arms and push forward. Install new torsion bar drop brackets using the 7/16 x 1 1/2" fine thread bolts, washers and nuts. (See Photo #33). Install new poly bushings and sleeves into the new drop brackets. Attach cross member using the factory bolt.
40. Reinstall factory torsion bars. Be sure to install adjuster bolts to the same length as factory. (See Photo #34)
41. Attach front skid plate using the 10mm bolts supplied. (See Photo #35)
42. Disconnect rear driveline carrier bearing from the frame. Install supplied lowering bracket using the 3/8" hardware provided. (See Photo #36).



**Photo #34**  
I-C938

**Photo #35**

**Photo #36**

## **Rear Installation:**

47. Remove factory rear shock using 21 mm socket. (See Photo #37).
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 15/16 socket.

## **BLOCK INSTALLATION:**

52. Install the new Skyjacker 2" blocks. Slowly let weight down onto the blocks being sure that the dial pin in the block is inserted into the axle pad correctly, and that the spring head seats into the hole in the block. Install the 5/8" x 2 3/4" x 12 1/2" U-bolts supplied. Torque U-Bolts to 100-110 ft. lbs. (See Photo #38)
53. With U-bolts installed, remove the jack stands and let all weight down onto springs.
54. Install the new Skyjacker shocks using factory hardware. (See Photo #39).



Photo #37



Photo #38



Photo #39

**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.
- Re-torque all bolts after the first 100 miles and after every off-road use.

**Seat Belts Save Lives, Please Wear Your Seat Belt.**

<b>TORQUE SPECIFICATIONS</b>					
<b>INCH SYSTEM</b>			<b>METRIC SYSTEM</b>		
<b>Bolt Size</b>	<b>Grade 5</b>	<b>Grade 8</b>	<b>Bolt Size</b>	<b>Class 8.8</b>	<b>Class 10.9</b>
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 FT LB	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 bolt is being installed with a bushing.**