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Latest Revision:
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PRO COMP SUSPENSION

Kit will require front Wheel Spacers when using factory wheels (90-7089)

CASTOR TECH NOTE: Pro Comp recommends 3.0-4.0 degrees of caster with this kit. All 2020 OEM vehicles were inspected in OEM form to have 3.0-4.0 degrees of caster. GM alignment spec per manual was lower than all vehicles tested in stock form.

51804B

K1097M/ BX/ BXU

Lift Kit 5.5"

2020-2022 Chevrolet Silverado 2500HD 4WD

2020-2022 GMC Sierra 2500HD 4WD

READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.

INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED.

PRO COMP IS NOT RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

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.

Box 1 of 6-PN 51804B-1

Part #	Description	Qty.	Illus.	Page
91-12179	REAR CROSSMEMBER	1	6	10
90-6769	HARDWARE PACK: Rear Crossmember	1	-	-
120C350HCSMZ	12mm-1.75 X 35mm HEX BOLT GR. 8.8	2	6	10
.120NWHDY	12mm HARDENED FLAT WASHER	2	6	10
.180CNNEZ	12mm-1.75 NYLOCK NUT GR. C	2	6	10
90-6955	HARDWARE PACK: Rear Crossmember	1	-	-
37C100HCS8Y	3/8" X 1 1/4" HEX CAP SCREW GR. 8	2	6	10
37NWHDY/SAE	3/8" HARDENED FLAT WASHER	2	6	10
90-60775	HARDWARE PACK: Rear Crossmember	1	-	-
90-40769	CLIP ON BARRELL NUT	2	6	10
91-20223	FRONT BUMP STOP SPACER: Drvr	1	10	13
91-20224	FRONT BUMP STOP SPACER: Pass	1	10	13
91-12190	FRONT BUMP STOP SUPPORT PLATE: Drvr	1	10	13
91-12193	FRONT BUMP STOP SUPPORT PLATE: Pass	1	10	13
90-6502	HARDWARE PACK: Front Bump Stop	2	-	-
50C125HCS8Y	1/2" X 1 1/4" HEX BOLT GR. 8	2	10	13
50NWHDY/SAE	1/2" HARDENED FLAT WASHER	2	10	13
90-6513	HARDWARE PACK: Front Bump Stop	1	-	-
31C100HCS8Y	5/16" X 1" HEX BOLT GR 8	4	10	13
31CNUCY	5/16" STOVER NUT GR. C	4	10	13
31NWHDY/SAE	5/16" HARDENED FLAT WASHER	8	10	13
90-7113	FRONT BUMP STOP LOCKING TAB	4	10	13

Box 2 of 6-PN 51804B-2

90-44112	KNUCKLE: Drvr	1	9	11,12
90-6782	HARDWARE PACK: Spare Tire Spacer	1	-	-
90-7089	WHEEL SPACER	1	-	5

Box 3 of 6-PN 51804B-3

90-44113	KNUCKLE: Pass	1	-	-
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Box 4 of 6-PN 51804B-4

91-12172	FRONT CROSSMEMBER	1	7	10
91-12155	TORSION BAR DROP: Drvr	1	11	14
91-12159	TORSION BAR DROP: Pass	1	11	14
91-12171	TORSION BAR SHIM	2	11	14
90-6612	HARDWARE PACK: Torsion Bar Drop	1	-	-
56350HC8I/IMP	9/16" X 3 1/2" HEX BOLT GR 8	2	11	14
56CNPTZ/GRC	9/16" STOVER NUT GR. C	2	11	14
56RWHDI/IMP	9/16" HARDENED FLAT WASHER	4	11	14

Part #	Description	Qty.	Illus.	Page
90-6299	HARDWARE PACK: Torsion Bar Drop	2	-	-
70-0311001500	5/16" X 1" GR.8 HEX BOLT	2	11	14
72-03100100512	5/16" NYLOCK NUT	2	11	14
73-03100030	5/16" HARDENED FLAT WASHER	4	11	14
90-60776	HARDWARE PACK: Sway Bar End Link	1	-	-
90-44139	Sway Bar End Links	2	-	15
7536	EXTENDED BRAKE LINES	1	-	-
	BRAKE LINE ASSEMBLY: DRIVER	1	9	12
	BRAKE LINE ASSEMBLY: PASSENGER	1	9	12
	ADEL CLAMP	2	9	12
	RETAINING CLIP	2	-	12
	COPPER CRUSH WASHER	4	-	12
90-6319	HARDWARE PACK: Zip Ties	1	-	-
10999	ZIP TIE, 11", BLACK	12	9	12
Box 5 of 6-PN 51804B-5				
91-12187	DIFFERENTIAL SKID PLATE	1	7	10
90-44122	CV AXLE SHAFT SPACER	2	8	11
90-40907-01116	SEAL O-RING -116	1	-	9
91-12164	DIFF DROP: Drvr	1	5	9
91-12168	DIFF DROP: Pass	1	5	9
91-12188	DIFFERENTIAL SKID PLATE ADAPTER MOUNT		1	11
90-6783	HARDWARE PACK: Crossmember	1	-	-
.180C1200HCS1Z	18mm-2.5 X 120mm HEX BOLT GR 10.9	2	7	10
.180C1400HCS1Z	18mm-2.5 X 140mm HEX BOLTGR 10.9	2	6	10
.180CNUCZ	18mm-2.5 STOVER NUT GR. C	4	7	10
.180NWUSZ	18mm USS FLAT WASHER	8	7	10
90-6790	HARDWARE PACK: Skid Plate	1	-	-
94850A170	3/8" NO-SLIP CLIP ON NUTS	2	7	10
37C100HCS8Y	3/8" X 1" HEX CAP SCREW GR. 8	6	7	10
37NWHDY/SAE	3/8" HARDENED FLAT WASHER	6	7	10
90-60773	HARDWARE PACK: Axle Shaft Spacers	1	-	-
	12mm-1.75 X 50mm HEX BOLT GRADE 10.9	16	8	11
.120NWHDY	12mm HARDENED FLAT WASHER	16	8	11
90-6784	HARDWARE PACK: Diff Drop	1	-	-
120C300HCS1Y	12mm-1.75 X 30mm HEX BOLT GR. 10.9	3	5	9
.120NWHDY	12mm HARDENED FLAT WASHER	3	5	9
50C150HCS8Y	1/2" X 1 1/2" HEX BOLT GR. 8	2	5	9
50C350HCS8Y	1/2" X 3 1/2" HEX BOLT GR. 8	3	5	9
50CNUCZ	1/2" STOVER NUT GR. C	5	5	9
50NWHDY/SAE	1/2" HARDENED FLAT WASHER	10	5	9
13-90348	U-BOLT: 2500 ONLY!: 3/4"-16 X 3.145" X 15.250"	4	13,14	17,18
95-308	REAR LIFT BLOCK: 3"	2	13,14	17,18

Part #	Description	Qty.	Illus.	Page
20-65750	HARDWARE PACK: Hi- Nut	1	-	-
	3/4"-16 HIGH NUT	8	13,14	17,18
	3/4" HARDENED FLAT WASHER	8	13,14	17,18
91-7090	REAR BUMPSTOP PAD SPACER	2	13,14	17,18
96-12189	REAR BRAKE LINE DROP	1	13	17
90-6299	HARDWARE PACK: Rear Brake Line Drop	1	-	-
70-0311001500	5/16" X 1" GR.8 HEX BOLT	2	13	17
72-03100100512	5/16" NYLOCK NUT	2	13	17
73-03100030	5/16" HARDENED FLAT WASHER	4	13	17
90-6787	HARDWARE PACK: Rear Bump Stop Pad Spacer	2	-	-
.80C200HCS1Y	8mm-1.25 X 20mm HEX BOLT GR 10.9	2	14	18

Box PR2030/ PR2031 (K1097M)

PR2030	FRONT SHOCKS	2	-	-
PR2031	REAR SHOCKS	2	-	-

OR Box 51053BX-1/2 K1097BX)

51053BX-1	FRONT SHOCKS	1	-	-
51053BX-2	REAR SHOCKS	1	-	-

OR Box 51053BX-1/2 K1097BXU)

51053BX-1	FRONT SHOCKS	1	-	-
51053BX-2	REAR SHOCKS	1	-	-
51042B	UPPER CONTROL ARMS	1	-	-

Warning!

Be extremely careful when unloading or loading the torsion bars on your vehicle. There is a tremendous amount of stored energy! Keep your hands and body clear of the adjuster arm assembly and puller tool in case anything slips or breaks!

Special Equipment

- ⇒ A special removal tool is required for safe removal and installation of the torsion adjuster arms. This special puller can be purchased from Pro Comp (PN 67965). Call for details.
- ⇒ Front end and head light realignment is necessary!
- ⇒ Speedometer and ABS recalibration will be necessary if larger tires (10% more than stock diameter) are installed

Wheel and Tire Information:

- ⇒ **Due to differences in manufacturing, dimensions and inflated measurements, tire and wheel combinations should be test fit prior to installation. Tire and wheel choice is crucial in assuring proper fit, performance, and the safety of your Pro Comp equipped vehicle. For this application, we recommend an 18" wheel not to exceed 9" in width with a maximum backspacing of 5 3/4". Also a 20" wheel not to exceed 9" in width with a maximum backspacing of 6 1/8" can be used. A quality tire of radial design, not exceeding 37" tall X 12.5" wide is also recommended. Please note that the use of a 37" X 12.5" tire will require trimming of the front valance. Violation of these recommendations will not be endorsed as acceptable by Pro Comp Suspension and will void any and all warranties either written or implied.**

NOTE: Installation of 37" X 12.5" tire will require plastic trim and valance trimming.

IMPORTANT!: This kit cannot be used in conjunction with Factory wheels or the factory spare on the front suspension without (90-7089) wheel spacer.

CASTOR TECH NOTE: Pro Comp recommends 3.0-4.0 degrees of caster with this kit. All 2020 OEM vehicles were inspected in OEM form to have 3.0-4.0 degrees of caster. GM alignment spec per manual was lower than all vehicles tested in stock form.

Front Installation

1. Ensure that your work space is of adequate size and the work surface is level. Measure and record the distance from the center of each wheel to the top of its fender opening.

LF: _____ RF: _____

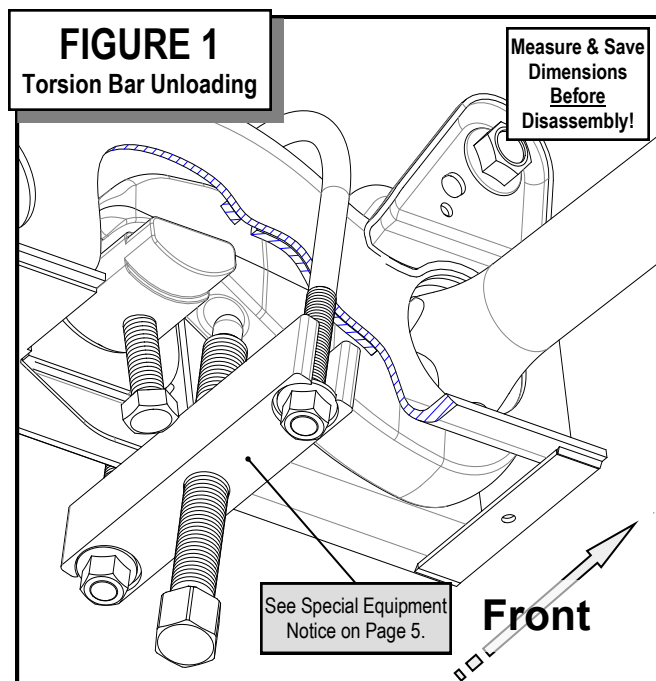
LR: _____ RR: _____

2. Place the vehicle in neutral. Place your floor jack under the front cross member and raise vehicle. Place jack stands under the frame rails behind the front wheel wells 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.
3. Remove any skid plates or debris shields from the vehicle.
4. Unbolt the sway bar end links from the sway bar and lower control arms.
5. Carefully remove the (4) OE rubber bump stops. Save for reinstallation.
6. Remove the front shock absorbers from the vehicle. Save hardware for reinstallation.
7. Measure the torsion bar adjusting screw depth and record this dimension for later use on reassembly. See FIGURE 1.
8. Mark the orientation of the torsion bar in relation to the front A-arm.

LEFT: _____ RIGHT: _____

9. Remove the torsion bar adjusting screw. Apply a small amount of lubrication grease to the puller threads and the puller shaft-to-adjuster arm contact point. Load the puller and torsion bar adjuster arm until the adjuster nut can be removed from the cross member. Release the puller to unload the torsion bar. With the bar unloaded, slide it forward into the lower control arm until the adjuster arm falls free.

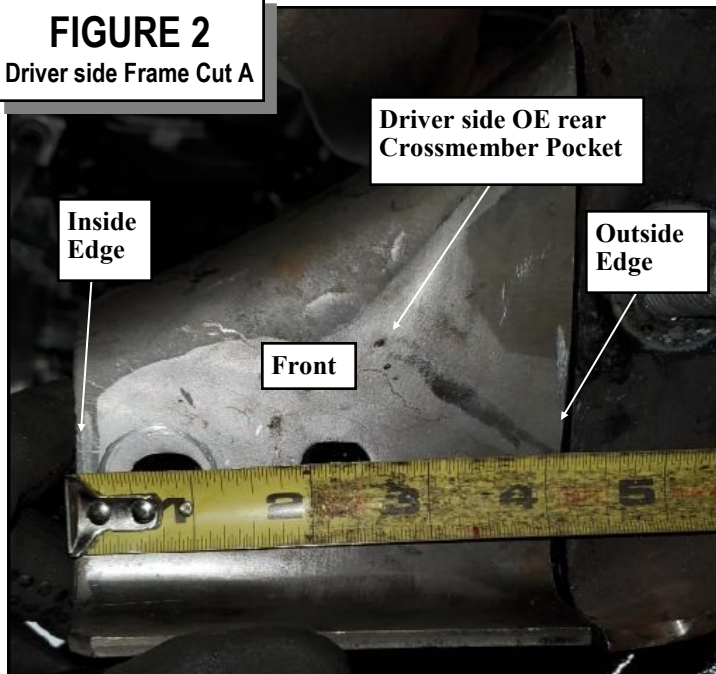
NOTE: *If the bar seems stuck, use a hammer and punch through the hole in the rear of*



the cross member to dislodge it.

10. Repeat this procedure on the other side of the vehicle.
 11. Remove the heat shield from the torsion bar crossmember.
 12. Remove the torsion bar crossmember by unbolting it from the frame.
 13. Remove the torsion bars from the lower A-arms.
 14. Disconnect the ABS sensor from the frame.
 15. Unbolt the brake line bracket from the frame. Save the hardware for reuse.
 16. Remove the brake line bracket from the top of the OE knuckle. Unplug the ABS brake connection from the frame and control arm.
- CAUTION!: Do not suspend the calipers by the brake lines! Damage will result!**
17. Remove the brake caliper from the rotor and secure them clear of the work area. Secure the caliper up with wire so they do not hang.
 18. Remove the front rotor from the front hub.
 19. Remove the CV axle retaining nut.
 20. Unbolt the (4) bolts holding the hub flange to the knuckle. Remove the hub and O-rings and save for reinstallation.

FIGURE 2
Driver side Frame Cut A



21. Remove the nut from the **OE** tie rod end. Using an appropriate removal tool, remove the tie rod end from the knuckle.

22. Support the knuckle and loosen the upper ball joint nut from the knuckle. Separate using the appropriate tool.

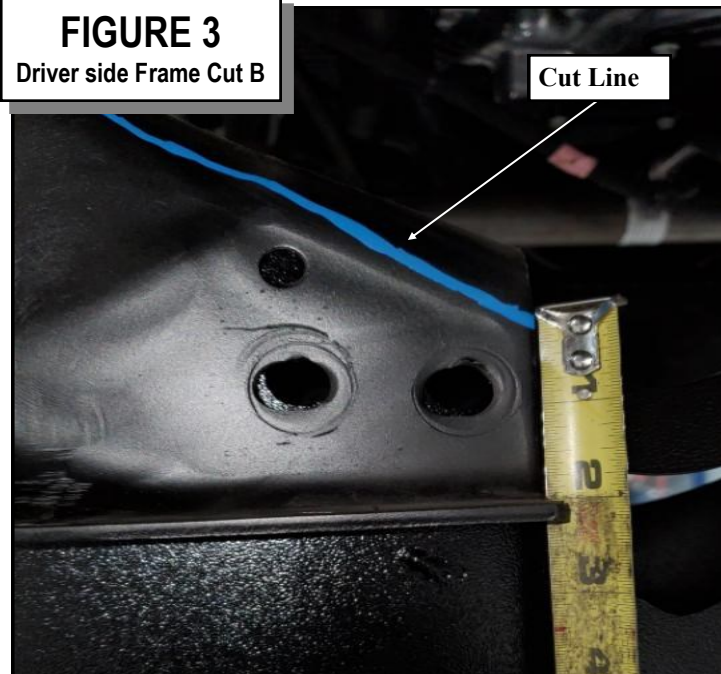
23. Support the knuckle and loos-

FIGURE 4
Driver side Frame Cut C



NOTE: Cutting More Than Shown Will Result In Unsupported Rear Mount

FIGURE 3
Driver side Frame Cut B



en the lower ball joint nut from the knuckle. Separate using the appropriate tool.

24. Remove the **(8)** retaining bolts from each CV joint. Carefully remove the CV axle from the side of the vehicle you are currently working on.

NOTE: Be extra cautious with the CV boots. DO NOT damage them!

25. Support the lower A-arm with your floor jack and remove the upper and lower ball joint nuts. Remove the knuckle from the vehicle.

26. Support the lower A-arm with your floor jack and remove the lower A-arm pivot bolts. Carefully remove the lower A-arms from the vehicle.

27. Disconnect the front drive shaft from the front differential and secure it clear of the work area.

28. Disconnect the differential vent line and any electrical control wire harnesses that may be present. Secure these clear of the work area.

29. Remove the **OE** differential rear crossmember and discard. Save the hardware for reinstallation.

30. Support the differential with your floor jack. Unbolt and lower the differential to the ground and move it clear of the work area.

31. ***On the Driver Side ONLY!***, using a suitable cutting tool, (abrasive cutoff wheel, Sawz-all, etc.) cut the rear crossmember mounting pock-

ets as shown in FIGURES 2, 3, and 4. Starting from the front of the vehicle looking towards the rear, measure **4 1/4"** from the inside edge of the mounting pocket and mark a vertical line. Continue this line across the top of the mounting pocket but not towards the rear. Once the line has been marked, move towards the rear of the mounting pocket and measure **2"** from the bottom of the mounting pocket near the inside edge. Mark a diagonal line from this **2"** mark to the previously marked line on the top of the mounting pocket. After all marks have been made, cut the section out of the mounting pocket.

32. After cutting the frame pocket, clean the area thoroughly and paint the exposed metal with a good quality paint.
33. Install the driver side differential bracket (**91-12164**) to the bottom of the **OE** frame mount. Secure the front (**2**) bolt holes using the supplied **12mm X 30mm** bolts from hardware

pack (**90-6784**). Secure the rear bolt hole by inserting the (**1**) **1/2" X 3 1/2"** bolt and hardware from hardware pack (**90-6784**). Insert the bolts from the top of the **OE** diff bracket. See FIGURE 5.

34. Install the passenger side differential bracket (**91-12168**) to the bottom of the **OE** frame mounting studs using the previously removed **OE** nuts. See FIGURE 5.
35. Remove the **OE** oil plug o-ring from the differential and replace with the supplied o-ring (**90-40907-01116**). Now would be a good time to check the oil level and ensure that the differential is filled to manufacturer's specifications.
36. Carefully raise the differential into position and secure it to the driver side drop bracket using the supplied **1/2" X 3 1/2"** bolts and hardware in the front (**2**) holes and the **12mm X 30mm** bolt and hardware from hardware pack (**90-6784**) in the rear hole. See FIGURE 5.

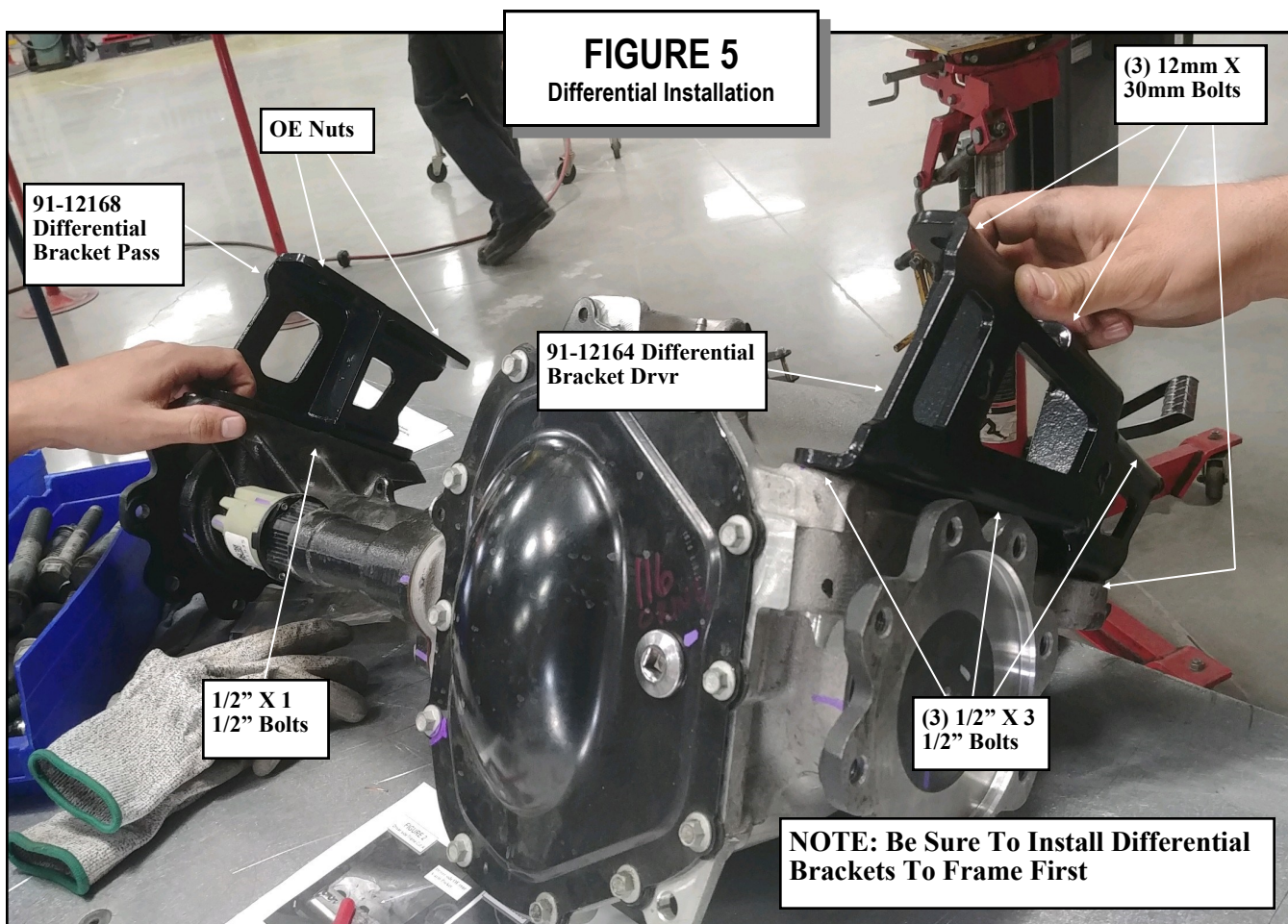


FIGURE 5
Differential Installation

NOTE: Be Sure To Install Differential Brackets To Frame First

FIGURE 6

Rear Crossmember

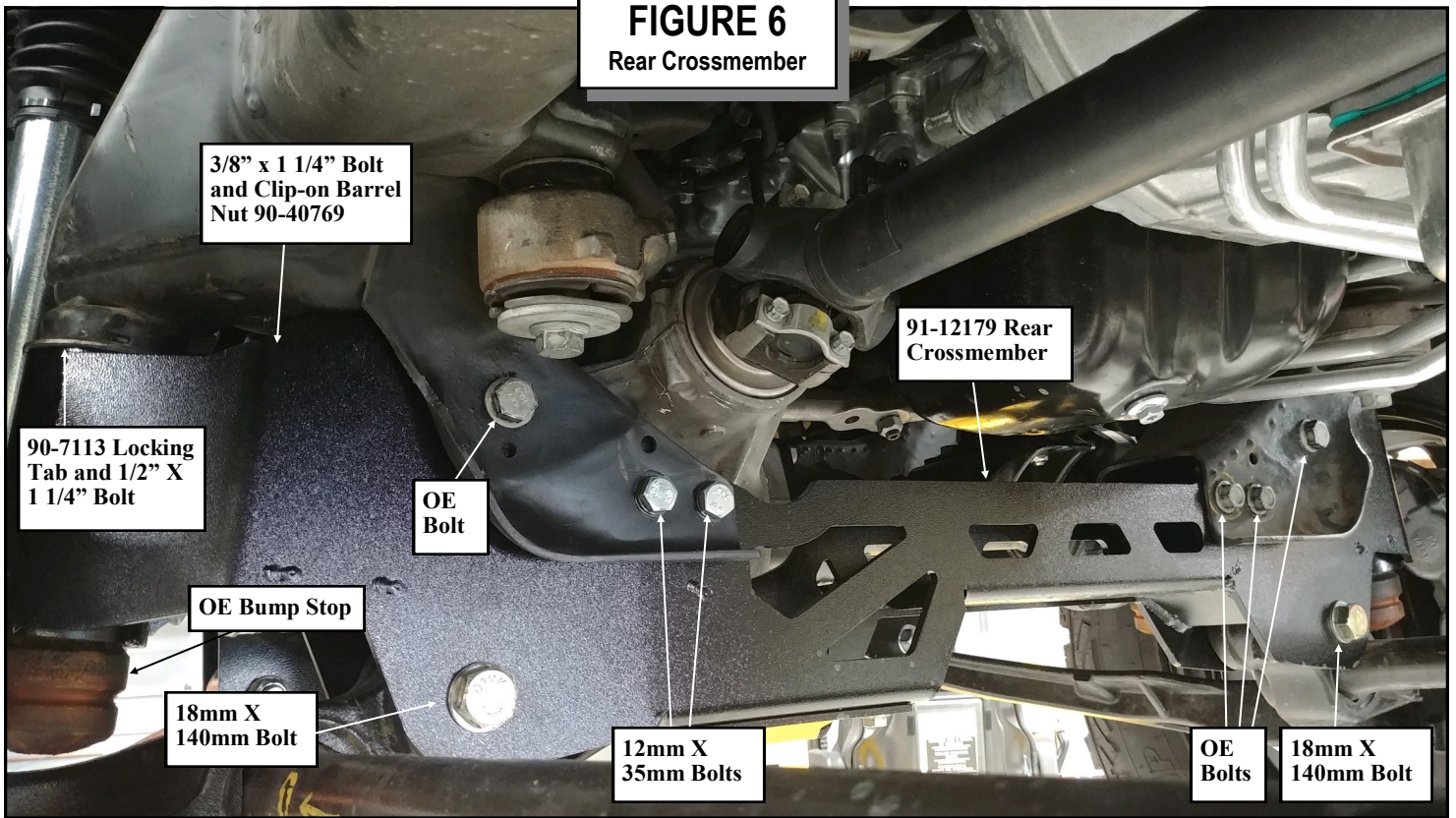
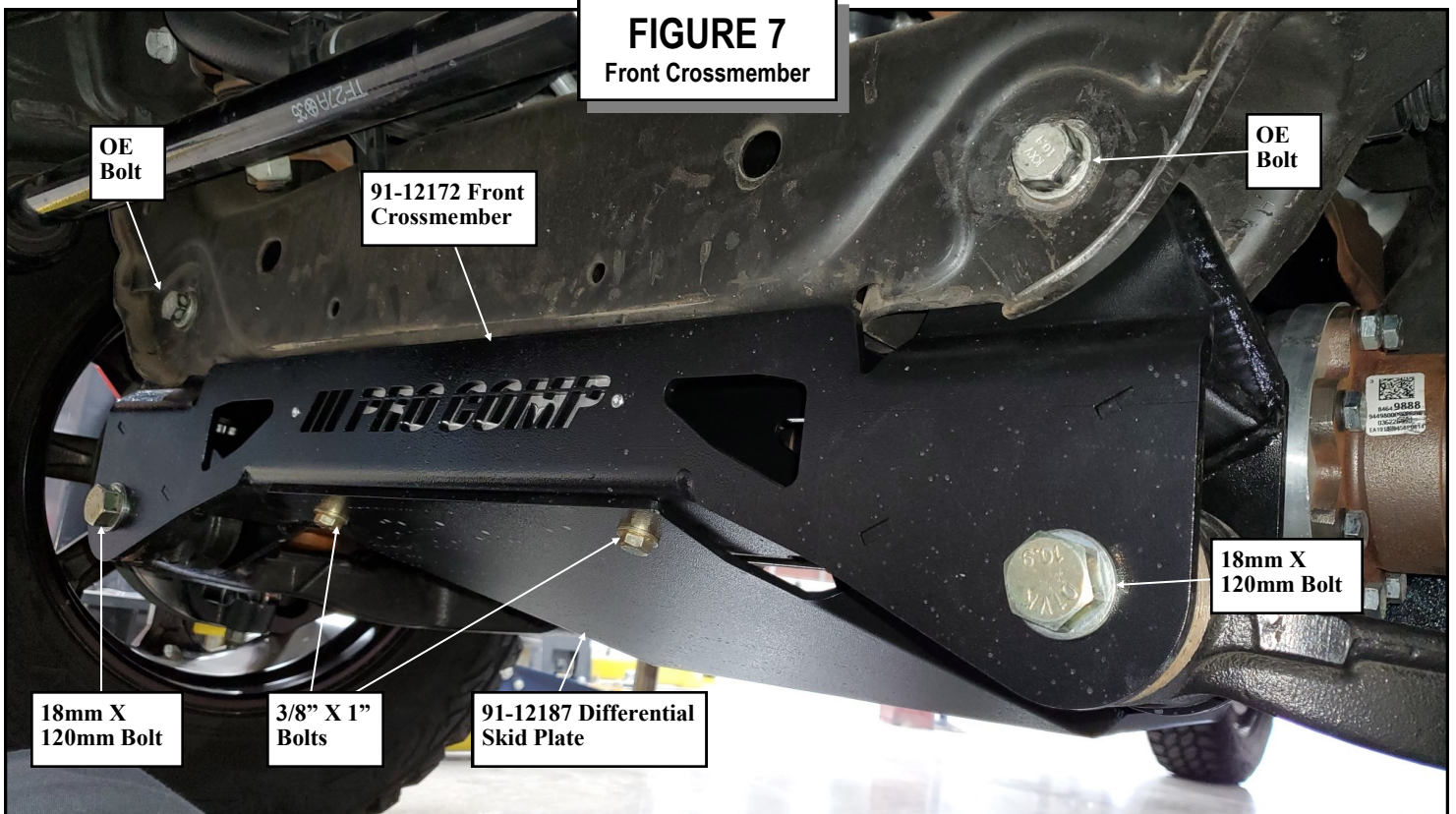
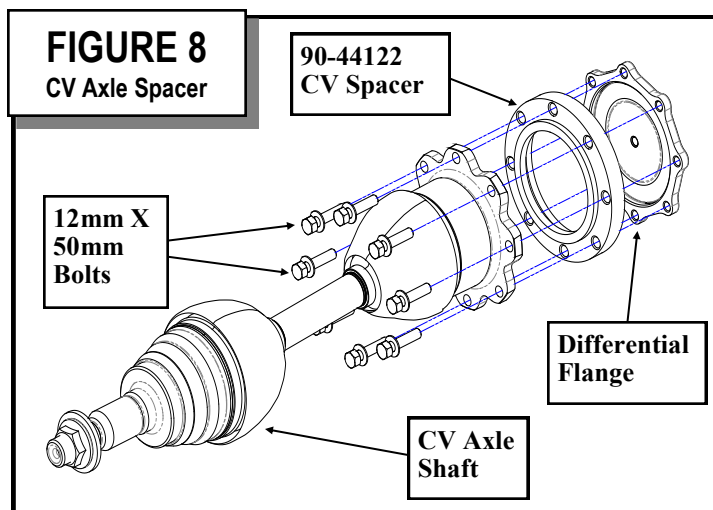


FIGURE 7

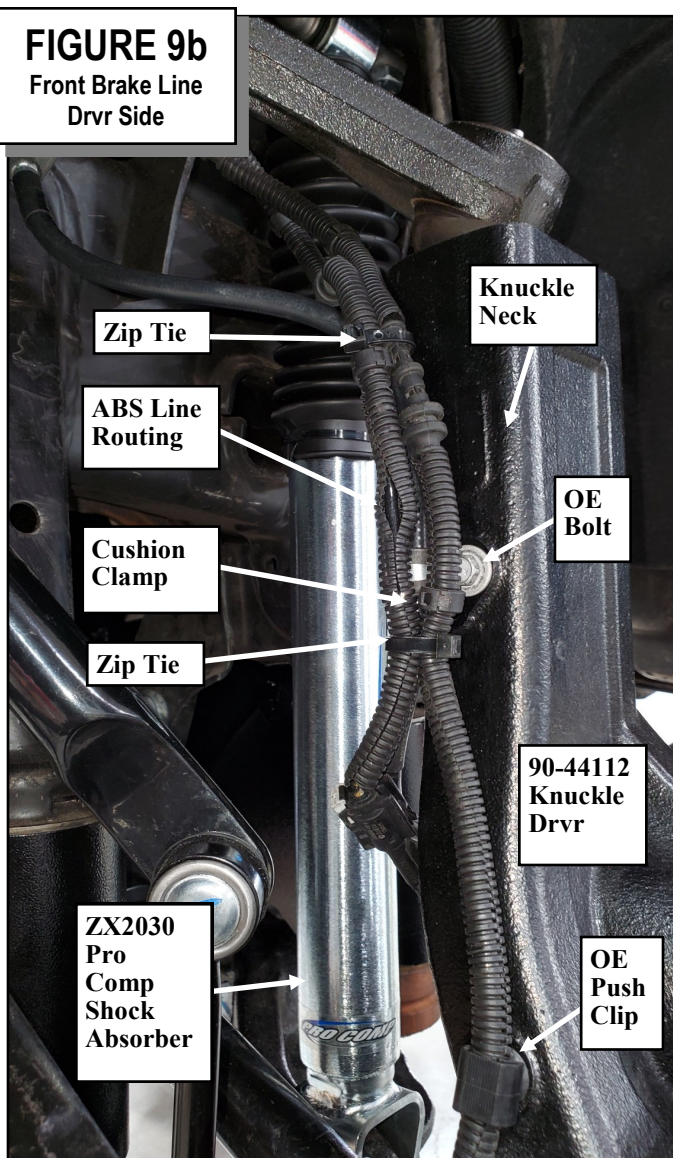
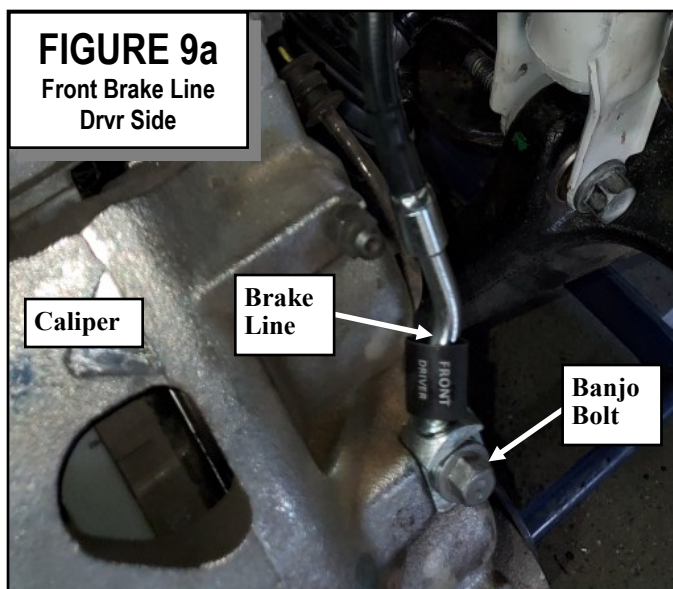
Front Crossmember





37. Secure the differential to the passenger side drop bracket using the (2) supplied 1/2" X 1 1/2" bolts and hardware from hardware pack (90-6784). See FIGURE 5.
38. Reinstall the vent tube and the electronic wiring to the differential.
39. Install clip on barrel nuts (90-40769) from hardware pack (90-60775) to both sides of the frame. See FIGURE 6.
40. Install the locking tab (90-7113) into the OE bump stop pocket. Secure using a 1/4 turn clockwise. See FIGURE 6 and 10.
41. Install the rear crossmember (91-12179) into the factory lower control arm pockets using the (4) previously removed OE bolts and hardware. Install the bolts with the heads to the rear of the vehicle. Leave loose at this time. See FIGURE 6.
42. Install the (2) 12mm X 35mm bolts from hardware pack (90-6769) into the driver side mounting holes and secure to the previously cut frame mount. See FIGURE 6.
43. Secure the rear crossmember (91-12179) to the previously installed clip-on barrel nuts using the supplied 3/8" X 1 1/4" bolts and hardware from hardware pack (90-6955). Secure the rear crossmember (91-12179) to the locking tab using the supplied 1/2" X 1 1/4" bolts and hardware from hardware pack (90-6502).
44. Install the front crossmember (91-12172) into the factory lower control arm pockets using the previously removed OE bolts and hardware. Install the bolts with the heads to the front of the vehicle. Leave loose at this time. See FIGURE 7.
45. Install the lower control arm into the new crossmember mounting pockets. Secure using the 18mm X 120mm (front) and 18mm X 140mm (rear) bolts and 18mm hardware from hardware pack (90-6783). **DO NOT** torque the bolts until the vehicle is on the ground. See FIGURE 6 and 7.
46. Install the differential skid plate (91-12187) to the front and rear crossmember using the supplied 3/8" X 1" bolts and hardware from hardware pack (90-6790). See FIGURE 7.
47. If you are re-installing the OE debris shield, install the additional skid plate adapter mount (91-12188) in between the front crossmember (91-12172) and the differential skid plate (91-12187). The supplied clip-on barrel nuts and 3/8" X 1" bolts and hardware from hardware pack (90-6790) will be used to mount the OE debris shield to the additional skid plate adapter mount (91-12188).
48. Torque the following differential and crossmember bolts: The driver side 1/2" differential bolts to 90 ft-lbs and the 12mm bolts to 75 ft-lbs. The passenger side 1/2" differential bolts to 90 ft-lbs, and the OE nuts to manufacturers specifications. The OE crossmember bolts to OE specifications. The 12mm crossmember bolts to 75 ft-lbs. The 3/8" crossmember bolts to 30 ft-lbs. The 1/2" crossmember bolts to 70 ft-lbs. The front differential skid plate/mount 3/8" bolts to 30 ft-lbs. Recheck all bolts on the front end for proper torque before proceeding to next step.
49. Assemble the new steering knuckles (90-44112 Dvr and 90-44113 Pass) using the previously removed OE hub bearing assemblies and O-rings. Apply thread lock compound to the OE hardware. Torque the flange bolts to manufacturer's specifications.

NOTE: Be sure the OE O-rings are placed in their proper position while installing the hub.
50. Install the assembled knuckle to the upper and lower ball joints using the OE nuts. Torque the upper and the lower ball joints to manufacturer's specifications.



51. Turn the tie rod ends 180 degrees. Reattach the tie rod end to the new knuckle using the previously removed OE nuts. Torque the OE nut to manufacturer's specifications.
52. Insert the CV shaft into the steering knuckle and reinstall the axle shaft washer and retaining nut. Be sure to use thread locker on the retaining nuts. Torque the axle nuts to manufacturer's specifications.
53. Place one of the CV spacers (90-44122) between the front differential drive flange and the CV. Use the 12mm X 50mm bolts and washers provided in hardware pack (90-60773) through the CV and spacer and into the differential drive flange. Be sure to use thread lock compound on the bolts. See FIGURE 8. Torque the CV spacer bolts to 75 ft-lbs. in a criss-cross pattern.
54. Reinstall the brake rotor and brake caliper. Torque the caliper to the knuckles to manufacturer's specifications using the previously removed OE hardware. Be sure to use thread locker on these bolts.
55. Remove the OE rubber brake line from the caliper and metal hard brake line per factory service manual. Save the OE banjo bolt for reinstallation. See FIGURE 9a.

IMPORTANT!: The new brake lines are driver and passenger specific. They are labeled to distinguish between driver and passenger.

56. Install new brake line assemblies to the hard brake lines and secure to the OE frame mounts using the supplied retaining clips. Be sure to hang the open brake line assembly ends up to prevent fluid loss.
57. Clean the brake caliper mating surfaces.
58. Position new copper washers on both sides of the new brake line assembly caliper mounting blocks and slide the OE banjo bolts through the copper washers and the caliper mounting blocks. Install the new brake line assembly caliper mounting blocks to the brake calipers and secure with the previously removed OE banjo bolts. Torque to manufacturer's specifications. See FIGURE 9a.

NOTE: Route brake line in same position as the OE line and do not let the brake hose

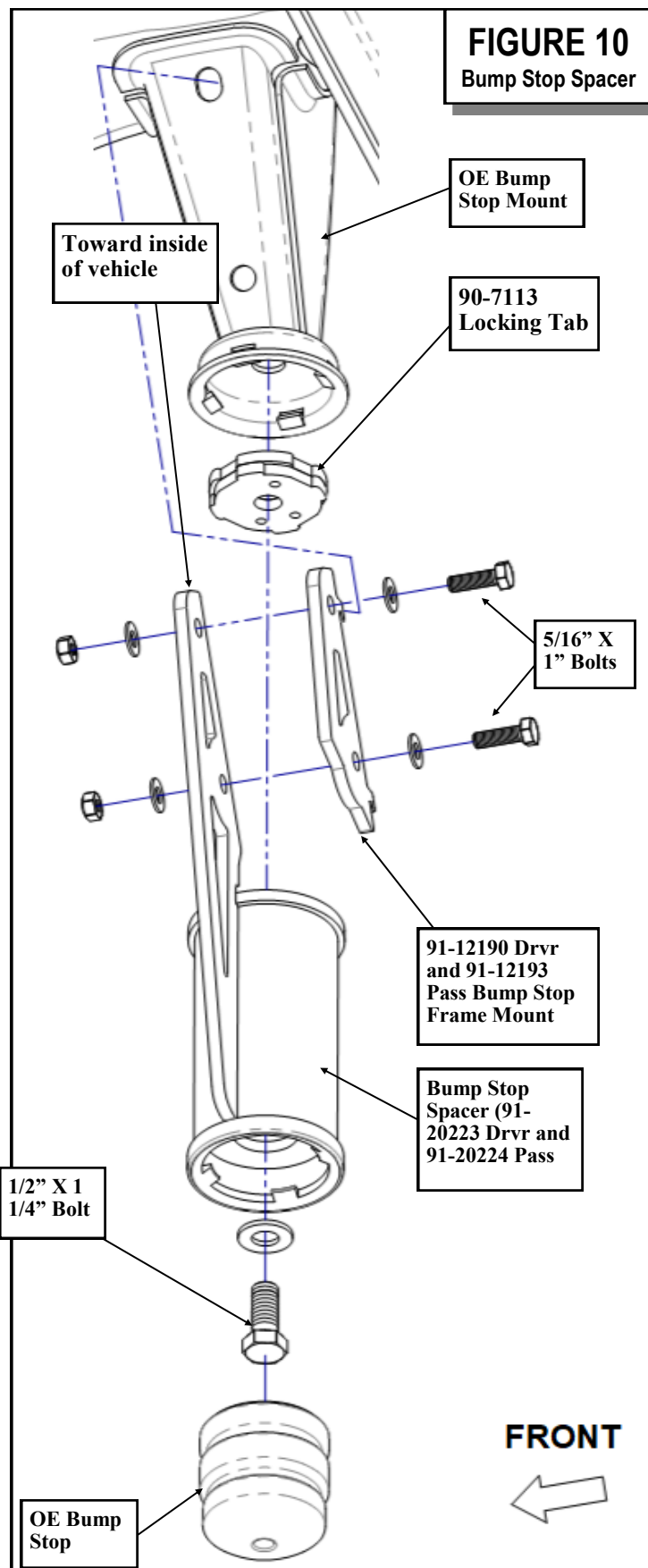


FIGURE 10
Bump Stop Spacer

twist when tightening the banjo bolt.

59. Secure the new brake line assemblies to the neck on the knuckles using the supplied cushion clamps and previously removed **OE** bolts. Attach the ABS line to the lower hole on the knuckles using the previously removed **OE** push clips. See FIGURE 9b.

60. Use the supplied zip ties from hardware pack (**90-6319**) to route the ABS line to the brake line. See FIGURE 9b.

61. Check to make sure the brake lines and ABS lines are properly routed to allow for a full turning radius of the steering components without tire or suspension component contact.

NOTE: Cycle vehicle droop to bump and lock to lock to verify brake line routing while torsion keys are still out of the vehicle.

IMPORTANT!: Bleeding of the brake system should be done according to GM factory service manual specifications. Use extreme caution to not let the master cylinder run out of fluid, damage to the ABS unit will occur.

62. Reattach the driveshaft to the differential yoke using the previously removed **OE** hardware. Torque **OE** bolts to manufacturer's specifications.

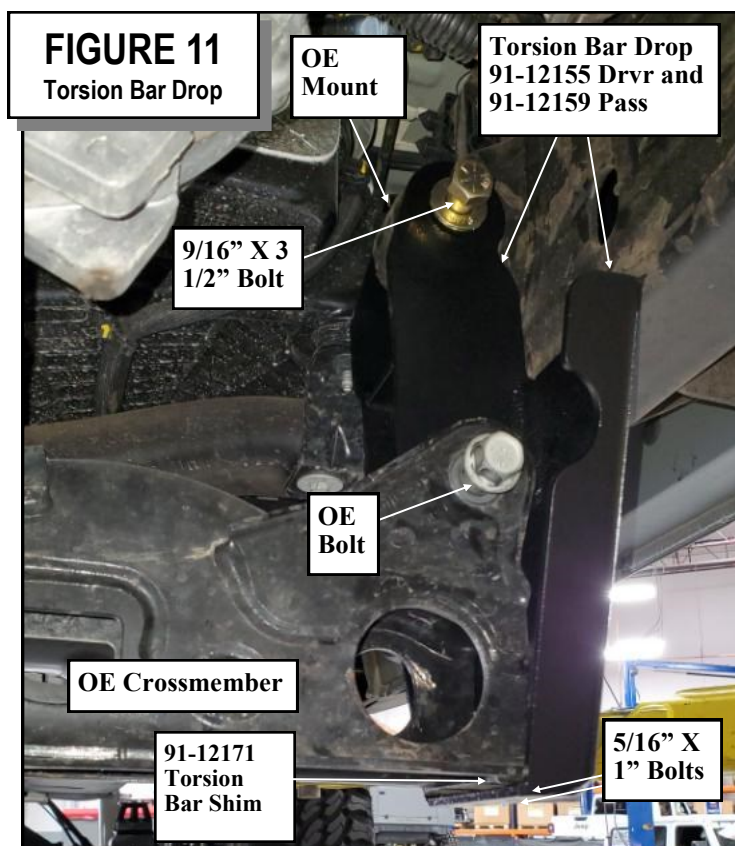
IMPORTANT!: Be sure to use thread locker on these bolts.

63. Install the bump stop spacer (**91-20223 Drvr** and **91-20224 Pass**) to the locking tab using the provided **1/2\"**

NOTE: Be sure to align the spine on the bump stop spacer so the spine is facing inward toward the center of the vehicle.

64. Install the bump stop frame mount (**91-12190 Drvr** and **91-12193 Pass**) to the holes in the frame. The "J" hooks will lock into place. The bump stop frame mount will be oriented toward the rear of the vehicle. See FIGURE 10.

65. Using an awl, align the bump stop spacer and the bump stop frame mount (**91-12190 Drvr** and **91-12193 Pass**). Secure it using the supplied **5/16\"**



NOTE: *The holes will not align up perfectly. As you tighten the bolts it will put pressure on the “J” hooks.*

66. Torque **5/16” X 1”** bump stop hardware according to the torque chart on page 19. Torque **1/2” X 1 1/4”** bump stop hardware to 70 ft-lbs.
67. Install the previously removed **OE** bump stops into the (4) new bump stop locations. See FIGURE 6 and 10.
68. The (4) holes on the bottom of the **OE** torsion bar crossmember will need to be drilled out to **5/16”** before performing the following torsion bar drop steps. See FIGURE 11 and reference the **5/16” X 1”** bolts for the correct location.
69. Install the torsion bars into the front A-arms. Again, be very careful to install them with the same orientation that they were removed (i.e. left front to left front, right front to right front!).
70. Install the torsion bar drop brackets (**91-12155 Drvr** and **91-12159 Pass**) to the torsion bar crossmember using the previously removed **OE** bolts. Be sure to align the torsion bar drop
71. Raise the torsion bar drop brackets to the **OE** torsion bar crossmember frame mounts. Secure using the supplied **9/16” X 3 1/2”** bolts and hardware from hardware pack (**90-6612**). Leave the hardware loose at this time. See FIGURE 11.
72. Install the torsion drop shim (**91-12171**) in between the bottom of the torsion bar crossmember and the torsion bar drop brackets and fasten using the supplied **5/16” X 1”** bolts and hardware from hardware pack (**90-6299**). See FIGURE 11.
73. Install the **OE** forged torsion key 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 through the Torsion Key. DO NOT use aftermarket torsion keys
74. Using the torsion bar unloading tool, apply pressure with the torsion key to allow the torsion key keeper to be reinstalled.
75. Reinstall the **OE** adjusting bolt to the torsion keeper and reset the torsion bar preload bolts using the measurements previously taken during disassembly.
76. Additional lift is available if you tighten the **OE** adjuster bolts past the previously recorded **OE** measurements. We recommend no more than **1/4”** past the **OE** measurements. This is roughly **4** additional full rotations to the **OE** adjuster bolts to give you an additional **1”** of lift in the front.
77. Torque the torsion bar drop hardware according to manufacturers specifications or to the torque chart on page 19.
78. Install the sway bar end links (**90-44139**) to the A-Arm and the sway bar, in the same orientation as the **OE** end links, using the supplied hardware.

NOTE: *The threads on the sway bar end links will point toward the rear of the vehicle when mounted to the sway bar.*
79. Install the new Pro Comp shock absorbers

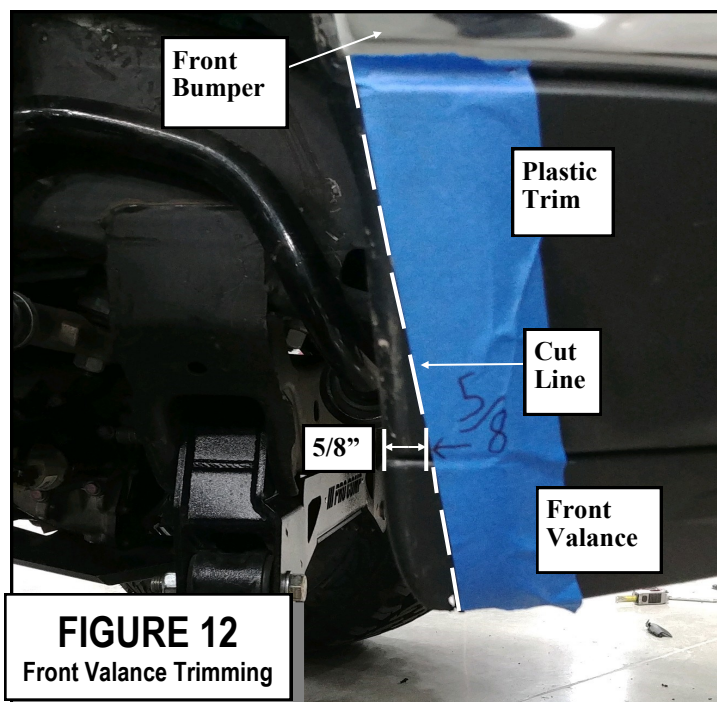


FIGURE 12
Front Valance Trimming

(924375 or ZX2030) to the vehicle using the previously removed OE hardware. Torque the OE upper mounting hardware to manufacturer's specifications. Do not torque the lower mounting hardware at this time.

80. Install the front wheels and tires and lower the vehicle to the ground. Torque the lug nuts according to the wheel manufacturers recommendations. If the wheel contacts the front or rear of the wheel well some trimming will be necessary.
81. If trimming is necessary, measure **5/8"** from the front of the wheel well along the upper valance. A diagonal line can be made from the top of the bumper, beneath the chrome, to the bottom of the valance. See FIGURE 12. Using a suitable cutting tool, (abrasive cutoff wheel, Sawz-all, etc.) trim along the marked line. This cut should be right behind a mounting bolt on the inside of the valance. After trimming, clean/sand the sharp edge with a file until it is safe to touch. The fender liner inside the front of the wheel well can be lightly hit with a dead blow hammer to allow additional tire clearance.

IMPORTANT!: Be sure not to trim the front bumper. Trim the valance only.

82. With the vehicle on the ground torque the **18mm** lower A-arm bolts to 240 ft-lbs. Torque the lower shock mounting hardware to manufacturer's specifications.
83. With the front wheels installed cycle the steering from lock to lock to check to make sure the front wheels have enough clearance in the wheel well. On both sides of the vehicle, check the routing of the brake lines and the ABS wire harnesses. There must be no pinching, rubbing, or stretching of either component. Use zip ties to secure these items out of the way of the steering components. At full droop, cycle the steering from lock to lock while observing the reaction of these components. Reposition them if needed.
84. On electronic stability control equipped vehicles, center the steering wheel and lock it in place. Set the toe by adjusting the tie rod ends properly. Lock the outer tie rod ends by tightening the jam nuts.

IMPORTANT!: On electronic stability control equipped vehicles, if the steering wheel and front wheels are not centered properly it will trigger the anti-lock brake and traction control warning lights.

85. Recheck all hardware for proper installation and torque at this time.

IMPORTANT! BE SURE TO BRING THE VEHICLE IMMEDIATELY TO A REPUTABLE ALIGNMENT SHOP TO BE ALIGNED!

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. Raise the rear of the vehicle enough for the tires to clear the ground and use jack stands on the frame to support the vehicle. Remove the rear wheels from the vehicle.
2. Carefully remove the **OE** shock absorbers. It may be necessary to raise the differential housing slightly to facilitate their removal.
3. Remove the factory brake line bracket from the rear axle. Attach the new brake line drop bracket (**96-12189**) to the rear axle using the previously removed **OE** hardware. Attach the **OE** brake line bracket to the new bracket using the **5/16" X 1"** bolts and hardware provided in hardware pack (**90-6299**). See FIGURE 13.
4. Remove the (2) **OE** bolts from the bump stop pad. Save the hardware for reinstallation.
5. Install the rear bump stop pad spacers (**91-7090**) to the bump stop pads on the rear axle using the (2) previously removed **OE** bolts and the (4) supplied **8mm X 20mm** bolts from hardware pack (**90-6787**). From the rear of the vehicle, looking towards the front, install the **OE** brake line bracket to the new bump stop spacer using the supplied **8mm X 20mm** bolt from hardware pack (**90-6787**). See FIGURE 13. From the front of the vehicle, looking towards the rear, install the supplied **8mm X 20mm** bolt to the new bump stop spacer. See FIGURE 14.
6. One side at a time, support the differential housing on the side being modified. Remove the U-bolts from that axle end and discard. Carefully lower the differential away from the **OE** springs. Take careful note of the position of the factory spring packs.
7. Install the lift block (**95-308**), short end to the front, to the mount pad on the axle housing and raise the axle housing until the lift block hole fits around the new leaf spring center bolt. See FIGURE 14.
8. Install the new U-bolts (**13-90348**) over the leaf spring assembly and using the new washers and hi-nuts (**20-65750**) supplied along with the existing spring plates, torque the U-bolt nuts to 190 ft-lbs. See FIGURE 14.
9. Repeat these steps on the other side of the vehicle.

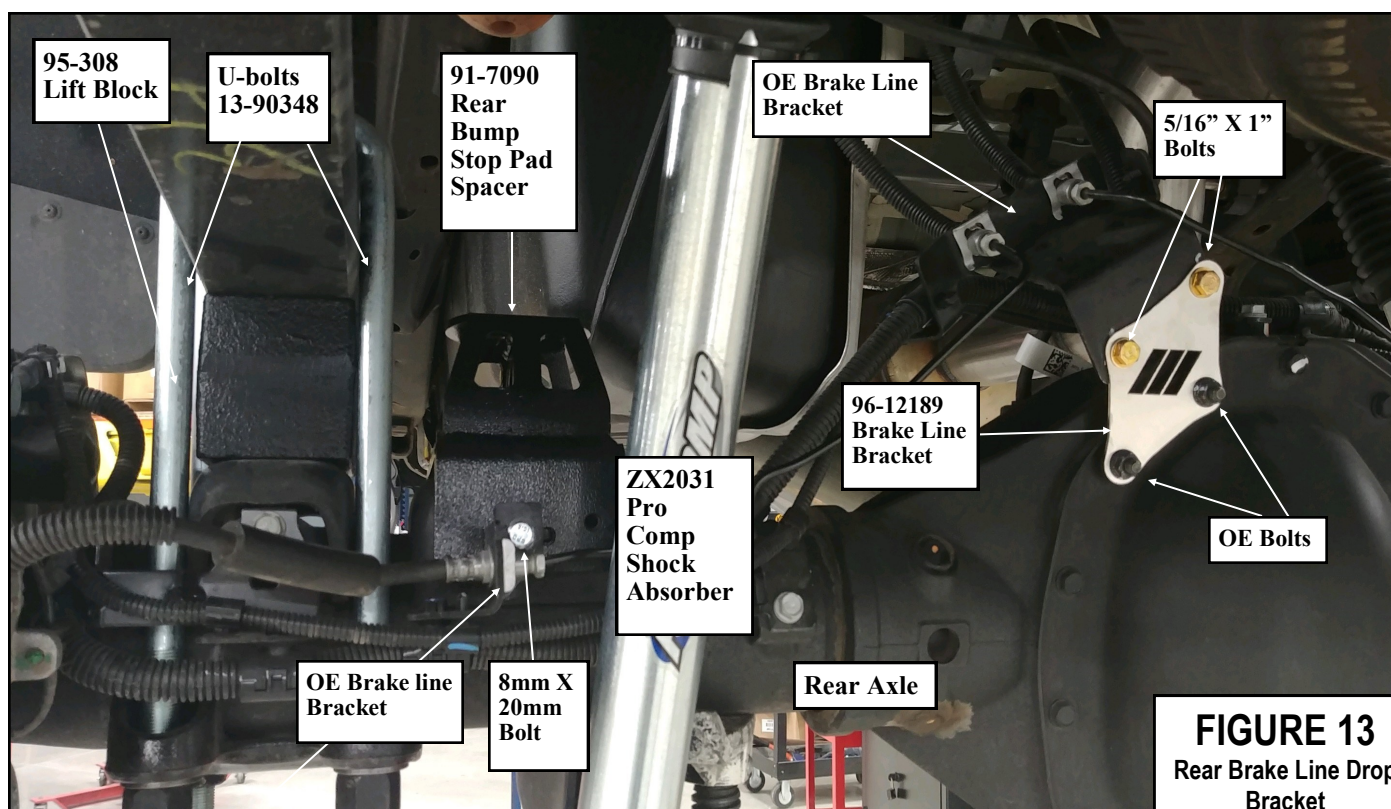
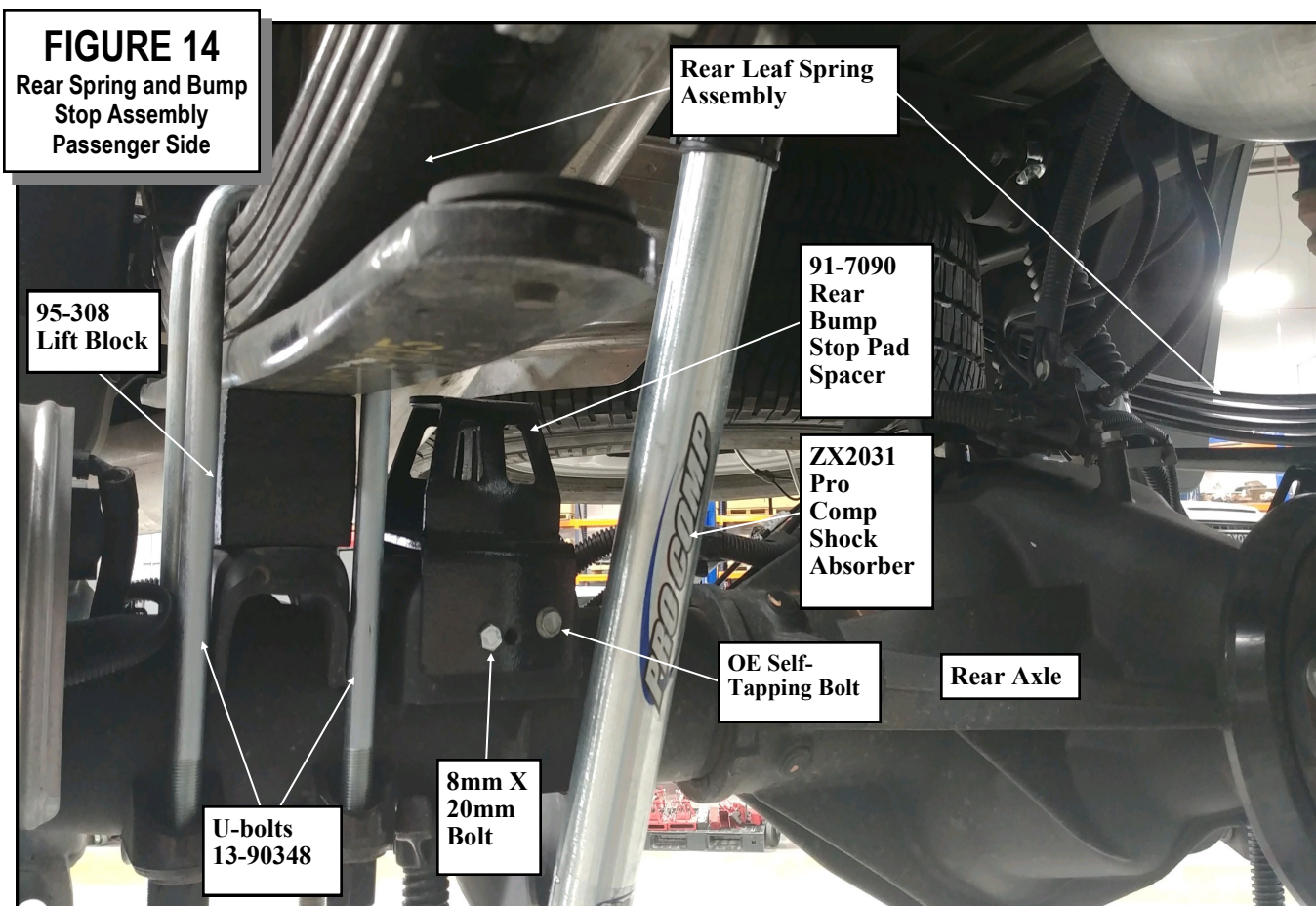


FIGURE 13
Rear Brake Line Drop Bracket



10. Install your new Pro Comp shock absorbers (**930001** or **ZX2031**) using the previously removed **OE** hardware. Torque the **OE** hardware to manufacturer's specifications.

11. Install your wheels and tires and lower the vehicle to the ground. Torque the lug nuts according to the wheel manufacturers recommendations.

12. After installation is complete, double check that all nuts and bolts are tight. Refer to the chart at the end of this document for torque specifications. (Do not retighten nuts and bolts where thread locker may have been used).

13. On both sides of the vehicle, check the routing of the brake lines and the ABS wire harnesses. There must be no pinching, rubbing, or stretching of either component. Use zip ties to secure these items out of the way of the steering components. At full droop, cycle the steering from lock to lock

while observing the reaction of these components. Reposition them if needed.

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			
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

1/2-13x1.75 HHCS

D T L X

Grade 5 Grade 8
(No. of Marks + 2)

M12-1.25x50 HHCS

D T L X

P

G = Grade (Bolt Strength)
D = Nominal Diameter (Inches)
T = Thread Count (Threads per Inch)
L = Length (Inches)
X = Description (Hex Head Cap Screw)

P = Property Class (Bolt Strength)
D = Nominal Diameter (Millimeters)
T = Thread Pitch (Thread Width, mm)
L = Length (Millimeters)
X = Description (Hex Head Cap Screw)

Safety Warning

MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH

Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers. Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers.

Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. PRO COMP does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your vehicle under the influence of alcohol or drugs.

Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any PRO COMP products. It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle. All raised vehicles have increased blind spots; damage, injury and/or death can occur if these instructions are not followed.

Installation Warning

All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.

Use caution during all disassembly and assembly steps to insure suspension components are not over extend-ed causing damage to any vehicle components and parts included in this kit.

Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.

PRO COMP recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components.

Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual. Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual. Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

SAEJ2492 Warning

By installing this product, you acknowledge that the suspension of this vehicle has been modified. As a result, this vehicle may handle differently than that of factory-equipped vehicles. As with any vehicle, extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, allow more time and distance for braking, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive this vehicle safely may result in serious injury or death. Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state. Consult your owner's manual, the instructions accompanying this product, and state laws before undertaking these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.

Headlamp Warning

A lifted vehicle may have different headlight aim performance. PRO COMP recommends marking and recording the headlight beam position before kit installation and then adjusting, if necessary, the headlamps to the same height settings after kit installation. Set the vehicle on a level surface 10' to 15' from a solid wall or garage door. (This is a general distance with some manufacturers requiring different distances.) Note the top height of the low beam's bright spot, the top of the most intense part of the beam, for driver and passenger side. Height may vary from side to side. Repeat this procedure and adjust after lift kit is installed. Adjust if the aim is off by turning the adjusters gradually (a quarter of a turn) and looking to see where the new alignment falls. It may be easier to block one headlamp while adjusting the other. Consult the owner operation manual for procedures to adjust headlights - many automakers offer headlight aiming specs. Some states have their own specifications when it comes to headlight aim, so it's best to follow those rules when aligning headlights.

FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS.

Final Checks & Adjustments

Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brake hoses and ABS lines for adequate slack at full extension, adjust as necessary.

RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.

Vehicle Handling Warning

Increasing the height of your vehicle raises the center of gravity and can affect stability and control. Use caution on turns and when making steering corrections.

Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

Wheel Alignment/Headlamp Adjustment

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving.

In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment. If the vehicle is equipped with active or passive safety/collision monitoring and/or avoidance systems including, but not limited to, camera- or radar-based systems, check and adjust your vehicle's systems for proper aim and function.

PRO COMP 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.

Warranty and Return policy:

PRO COMP warrants its full line of products to be free from defects in workmanship and materials. PRO COMP'S obligation under this warranty is limited to repair or replacement, at PRO COMP's option, of the defective product. Any and all costs of removal, installation, freight or incidental or consequential damages are expressly excluded from this warranty. PRO COMP is not responsible for damages and / or warranty of other vehicle parts related or non-related to the installation of PRO COMP product. A consumer who makes the decision to modify his vehicle with aftermarket components of any kind will assume all risk and responsibility for potential damages incurred as a result of their chosen modifications. Warranty coverage does not include consumer opinions regarding ride comfort, fitment and design. Warranty claims can be made directly with PRO COMP or at any factory authorized PRO COMP dealer.



The PRO COMP PROMISE WARRANTY

At Pro Comp, we know you have many choices when selecting products to personalize your vehicle. You should demand nothing but the highest quality available and have total confidence that the products you selected are the best in the industry. It is for these reasons that Pro Comp Suspension products are backed by the best warranty in the industry...the Pro Comp Promise!

Pro Comp promises that its products will last a lifetime or we will replace it free of charge. It's that simple! Because of our commitment to quality and manufacturing excellence, we are able to stand behind our products. FOREVER.

It is Pro Comp's Promise that if one of our suspension products breaks not due to misuse, neglect or vandalism, we will replace it. Whether you are the original purchaser or not, you can be assured that we will make it right. The Pro Comp Promise covers all suspension products including shocks and steering stabilizers. Buy Pro Comp Suspension today and enjoy it for the rest of your life!

That's our Pro Comp Promise!

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 that the Dealer / Installer explains and delivers all warning notices, warranty forms and instruction sheets included with Pro Comp product.

Warranty and Return Policy:

Pro Comp warrants its full line of products to be free from defects in workmanship and materials for the life of the product. Pro Comp's obligation under this warranty is limited to repair or replacement, at Pro Comp's option, of the defective product. Any and all costs of removal, installation, freight or incidental or consequential damages are expressly excluded from this warranty. Pro Comp is not responsible for damages and / or warranty of other vehicle parts related or non-related to the installation of Pro Comp product. A consumer who makes the decision to modify his vehicle with aftermarket components of any kind will assume all risk and responsibility for potential damages incurred as a result of their chosen modifications. Warranty coverage does not include consumer opinions regarding ride comfort, fitment and design. Warranty claims can be made directly with Pro Comp or at any factory authorized Pro Comp dealer.

IMPORTANT! To validate the warranty on this purchase please be sure to mail in the warranty card.

Claims not covered under warranty:

- * Parts subject to normal wear; this includes bushings, bump stops, ball joints, tie rod ends and heim joints.
- * Finish after 90 days.
- * Damage caused as a result of not following recommendations or requirements called out in the installation manuals.

Pro Comp Monotube coil-over shocks are considered a serviceable shock with a one-year warranty against leakage only. Rebuild service and replacement parts will be available and sold separately by Pro Comp. Contact Pro Comp for specific service charges. Pro Comp accepts no responsibility for any altered product, improper installation, lack of or improper maintenance or improper use of our products.

**E-Mail: info@procompusa.com
Website: www.procompusa.com
Fax: (310) 747-3912
Ph: 1-800-776-0767**

<u>PLACE</u> WARRANTY REGISTRATION <u>NUMBER</u> HERE: _____

Revision Page:

12.20.19: Release

1.9.20: FAI Installation Notes Added

4.19.20: Changed PN in BOM Box-4 90-60774 to 90-60776.

8.19.21: Added T and M instance

12.6.22: Updated Template and options