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Latest Revision:
12.6.24

PRO COMP SUSPENSION

IMPORTANT!: Vehicles equipped with lane departure and camera systems MUST be aligned by a Ford Dealership equipped with advanced alignment equipment. Alignment of the steering wheel is tied into these systems and programmed at a specific height. After the vehicle is lifted, driving and/or turning may cause the warning lights on the dash to illuminate if these systems are not properly calibrated..

FD216M
2017 & Up Ford Super Duty 4WD F250 Gas
Stage 2 Lift Kit

FD216M
2017 & Up Ford Super Duty 4WD F250 Diesel
Stage 2 Lift Kit

This document contains very important information that includes warranty information and instructions for resolving problems you may encounter. Please keep it in the vehicle as a permanent record.

Box 1 of 4-**PN 52890B-1**

Part #	Description	Qty.	Illus.	Page
91-9290	**TRACK BAR DROP BRACKET**	**1**	**3**	**7**
13-90540	**U-BOLT: 16.25"**	**4**	**9**	**15**
20-65471	**HARDWARE PACK: 5/8" Hi nuts and Washers**	**1**	**9**	**15**
91-10961	**SWAY BAR DROP: Drvr**	**1**	**8**	**11**
91-10964	**SWAY BAR DROP: Pass**	**1**	**8**	**11**
95-502SD	**5" REAR LIFT BLOCK: Drv.**	**1**	**9**	**15**
95-503SD	**5" REAR LIFT BLOCK: Pass**	**1**	**9**	**15**
FD800-1	**PITMAN ARM**	**1**	**1,2**	**6,7**
91-2511	**BUMP STOP SPACER**	**2**	**7**	**10**
91-2446	**REAR SWAY BAR END LINKS**	**2**	**-**	**-**
96-5002	**PITMAN ARM TOOL**	**1**	**2**	**7**
90-6772	**HARDWARE PACK: Track Bar Drop**	**1**	**-**	**-**
56C300HCS8Y	9/16" X 3" HEX BOLT GR. 8	2	3	7
56C150HCS8Y	9/16" X 1 1/2" HEX BOLT GR. 8	1	3	7
56CNUCZ	9/16" STOVER NUT GR. C	3	3	7
56NWHDY/SAE	9/16" HARDENED FLAT WASHER	6	3	7
90-7031	**BRAKE LINE MOUNT: Rear**	**1**		
90-6773	**HARDWARE PACK: Rear Brake Line Mount**	**1**	**-**	**-**
0431251800	3/8" X 1" HEX BOLT GR. 8	1	9	15
04300100512	3/8" NYLOCK NUT GR. 5	1	9	15
	3/8" HARDENED FLAT WASHER	2	9	15
72-01015008812	10MM X 1.5 PITCH NYLOCK: Rear E-Brake Bracket	1	9	15
90-6390	**HARDWARE PACK: Bump Stop**	**1**	**-**	**-**
70-0436501800	7/16" X 6 1/2" USS GR. 8 HEX BOLT	2	7	10
73-04300034	7/16" SAE FLAT WASHER	4	7	10
72-04300100816	7/16" USS GR.8 STOVER NUT	2	7	10
90-6572	**HARDWARE PACK: Rear Sway Bar Links**	**1**	**-**	**-**
.120C750HCS1Z	12mm-1.75 X 70mm HEX BOLT GR. 10.9	4	-	-
.120CNNEZ	12mm-1.75 NYLOCK NUT	4	-	-
.120NWHDY	12mm HARDENED FLAT WASHER	8	-	-
90-6042	**HARDWARE PACK: Rear Sway Bar Links**	**1**	**-**	**-**
45359	5/8" RUBBER HOURGLASS BUSHING	4	-	-
60859H	5/8" O.D. X 12mm I.D. X 1.480" SLEEVE	4	-	-
90-6595	**HARDWARE PACK: Pitman Arm Tool**	**1**	**-**	**-**
	THREAD LOCKER	**1**	**-**	**-**
0431251800	7/16" X 1 1/4" GR. 8 HEX BOLT	1	**2**	**7**
04300030	7/16" FLAT WASHER	1	**2**	**7**
04300100512	7/16" NYLOC NUT	2	**2**	**7**
90-6918	**HARDWARE PACK: Cam Plates**	**1**	**-**	**-**
90-9295	**Cam Plate**	**2**	**3**	**7**
90-7722	**FRONT BRAKE LINE DROP BRACKET: 05-16 Drvr**	**1**	**-**	**-**
90-7723	**FRONT BRAKE LINE DROP BRACKET: 05-16 Pass**	**1**	**-**	**-**
31-10984	**FRONT BRAKE LINE DROP BRACKET: 17&up Drvr**	**1**	**6a**	**9**

Part #	Description	Qty.	Illus.	Page
31-10985	**FRONT BRAKE LINE DROP BRACKET: 17&up Pass**	**1**	**6b**	**9**
90-6453	**HARDWARE PACK: Brake Line Bracket: 17&up**	**1**	**-**	**-**
S340G6	ADEL CLAMP w/ 10mm HOLE	2	6b	9
90-6789	**HARDWARE PACK: Brake Line Bracket: 17&up**	**2**	**-**	**-**
31C75HCS8Y	5/16" X 3/4" GR. 8 HEX BOLT	1	6a,6b	9
31NWHDY/SAE	5/16" HARDENED FLAT WASHER	2	6a,6b	9
31CNUCZ	5/16" GR. 8 STOVER NUT	1	6a,6b	9
90-6315	**HARDWARE PACK: Sway Bar Drop**	**1**	**-**	**-**
70-0431751800	7/16" X 1 3/4" GR. 8 HEX BOLT	4	8	11
73-04300034	7/16" HARDENED FLAT WASHER	8	8	11
72-04300100816	7/16" GR. 8 STOVER NUT	4	8	11
91-10967	**SWAY BAR SPACER**	**1**	**8**	**11**
90-6803	**HARDWARE PACK: Steering Stabilizer**	**1**	**-**	**-**
70-0120651758800	12mm– 1.75 X 65mm 10.9 HEX BOLT	1	8	11
73-01217508812	12mm FLAT WASHER	2	8	11
72-01200832	12mm– 1.75 STOVER NUT	1	8	11
91-3823	**STEERING STABILIZER BRACKET (05-16)**	**1**	8	11
91-10968	**STEERING STABILIZER BRACKET (17&up)**	**1**	8	11
31-40757	**DRAG LINK TAPERED SLEEVE (17&up)**	**1**	8	11
31-40758	**STEERING STABILIZER SPACER (17&up)**	**1**	8	11
31-40759	**STEERING STABILIZER BRACKET SPACER (17&up)**	**1**	8	11
90-60658	**HARDWARE PACK: Steering Stabilizer (17&up)**	**1**	**-**	**-**
.12C100H10I	12mm– 1.75 X 100mm 10.9 HEX BOLT	1	8	11
.12RWFLZ/DIN125	12mm FLAT WASHER	3	8	11
.12CNNLZ/DIN985-CL10	12mm– 1.75 NYLOCK NUT	1	8	11
90-60657	**HARDWARE PACK: Front Bump Stop (17&up)**	**1**	**-**	**-**
71-08150125210900	8mm– 1.25 X 150mm 10.9 HEX BOLT	2	7	10
73-00800036	8mm FLAT WASHER	2	7	10
73-00800040	8mm SPLIT-LOCK WASHER	2	7	10
90-60655	**HARDWARE PACK: Rear Shock Bushings (17&up)**	**1**	**-**	**-**
600020	.75" BUSHING	2	-	-
73-00800036	BUSHING SLEEVE: .750" X .56" X 1.480"	2	-	-

Box 2 of 4-**PN 52893B-2**

91-11563	**RADIUS ARM: Drvr**	**1**	**4,5**	**8**
35-20177	**SPACER SLEEVE: Radius Arm**	**2**	**4**	**9**
91-11569	**RADIUS ARM LINK**	**2**	**4**	**9**
90-40765	**DELRIN BUSHING: Radius Arm**	**4**	**4**	**8**
91-11572	**RADIUS ARM: Pass**	**1**	**4**	**8**
90-60659	**HARDWARE PACK: Radius Arm**	**1**	**-**	**-**
35-40766	**CAM BOLT 18mm-2.5 X 130mm Gr. 10.9**	**2**	**4**	**8**
90-5532	**CAM ECCENTRIC**	**2**	**4**	**8**

Part #	Description	Qty.	Illus.	Page
90-6399	**HARDWARE PACK: Radius Arms**	**2**	**4**	**8**
.180CNUCZ	18MM-2.5 STOVER NUT	1	4	8
.180NWHDZ	18MM HARDENED FLAT WASHER	1	4	8
90-6399	**HARDWARE PACK: Radius Arms**	**1**	**4**	**8**
.180CNUCZ	18MM-2.5 STOVER NUT	1	4	8
.180NWHDZ	18MM HARDENED FLAT WASHER	1	4	8
90-6569	**HARDWARE PACK: Driveline Shim**	**1**	**-**	**-**
90-1080	**3/8" Driveline Shim**	**2**	**-**	**-**
90-1081	**1/4" Driveline Shim**	**2**	**-**	**-**
90-1082	**1/8" Driveline Shim**	**2**	**-**	**-**
90-6013	**HARDWARE PACK: Driveline Shim**	**1**	**-**	**-**
70-04322501800	7/16" x 2 1/4" USS Grade 8 Bolt	2	-	-
73-04300042	7/16 USS Hardened Washer	2	-	-

Box PR2130/PR2131

PR2130	**FRONT SHOCKS**	**2**	**-**	**-**
PR2131	**REAR SHOCKS**	**2**	**-**	**-**

Special Tools:

Pitman Puller	**Snap-On PN**	**CJ1119B**
Tie Rod Separator	**Ford PN**	**T64P-3590-F**

The following parts are used in conjunction with this kit and must be purchased separately.

24514	**COILS GAS ENGINE: W/ K4202**	**1**	**-**	**-**
OR				
24515	**COILS DIESEL ENGINE: W/ K4203**	**1**	**-**	**-**

Important!

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 a wheel not to exceed 10" in width with a maximum backspacing of 5 3/4" must be used. Additionally, a quality tire of radial design, not exceeding 37" tall X 12.50" wide is also recommended. 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.

Introduction:

- **This installation requires a professional mechanic!**
- We recommend that you have access to a factory service manual to assist in the disassembly and reassembly of your vehicle. It contains a wealth of detailed information.
- Prior to installation, carefully inspect the vehicle's steering and driveline systems paying close attention to the tie rod ends, ball joints, wheel bearing preload, pitman and idler arms. Additionally, check steering-to-frame and suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition. Repair or replace all worn or damaged parts!
- Read the instructions carefully and study the illustrations before attempting installation! You may save yourself a lot of extra work.
- Check the parts and hardware against the parts list to assure that your kit is complete. Separating parts according to the areas where they will be used and placing the hardware with the brackets before you begin will save installation time.
- Check the special equipment list and ensure the availability of these tools.
- Secure and properly block vehicle prior to beginning installation.
- **ALWAYS** wear safety glasses when using power tools or working under the vehicle!
- Use caution when cutting is required under the vehicle. The factory undercoating is flammable. Take appropriate precautions. **Have a fire extinguisher close at hand.**
- Foot pound torque readings are listed on the Torque Specifications chart at the end of the instructions. These are to be used unless specifically directed otherwise. Apply thread lock retaining compound where specified.
- A pitman arm removal tool and tie rod separating tool are required to perform the installation. See the special tools at the top of page 4.
- Always use NEW cotter pins on re-assembly! (These items are NOT supplied)
- **Please note that while every effort is made to ensure that the installation of your Pro Comp lift kit is a positive experience, variations in construction and assembly in the vehicle manufacturing process will virtually ensure that some parts may seem difficult to install. Additionally, the current trend in manufacturing of vehicles results in a frame that is highly flexible and may shift slightly on disassembly prior to installation. The use of pry bars and tapered punches for alignment is considered normal and usually does not indicate a faulty product. However, if you are uncertain about some aspect of the installation process, please feel free to call our tech support department at the number listed on the cover page. We do not recommend that you modify the Pro Comp parts in any way as this will void any warranty expressed or implied by the Pro Comp Suspension company.**

Front Installation:

1. Position your vehicle on a smooth, flat, hard surface (i.e. concrete or asphalt). Block the rear tires and set the emergency brake.
2. Measure and record the distance from the center of each wheel to the top of its fender opening. Record below.

LF: _____ **RF**: _____

LR: _____ **RR**: _____

3. Place the vehicle in neutral. Place your floor jack under the front axle and raise the vehicle. Place jack stands under the frame rails and lower the frame onto the stands. Remove the jack and place the vehicle back in gear, set the emergency brake, and place blocks both in front and behind the rear wheels.
4. Remove the track bar bolt from the driver side frame mount. Save this hardware for re-use.
5. Remove the cast track bar mount on driver side of frame. Save the bolts and pal nuts. Hardware will be reused.
6. Unbolt the sway bar from the sway bar end links on both sides of the vehicle. Save the hardware for reuse.
7. Mark the orientation of the sway bar and unbolt it from the frame of the vehicle. Save the hardware for reuse.
8. If the vehicle is equipped with a factory steering stabilizer unbolt it and remove it from the vehicle.
9. Remove the cotter pin and nut from drag link, at the pitman arm. Save the nut for reinstallation. Use a tie rod separator to separate drag link from Pitman arm.
10. Remove the sector Pitman arm retaining nut and save for reinstallation. Use a Pitman arm puller to remove the **OE** pitman arm. The threads of the sector shaft and the Pitman arm retaining nut must be cleaned of all factory dry adhesive.

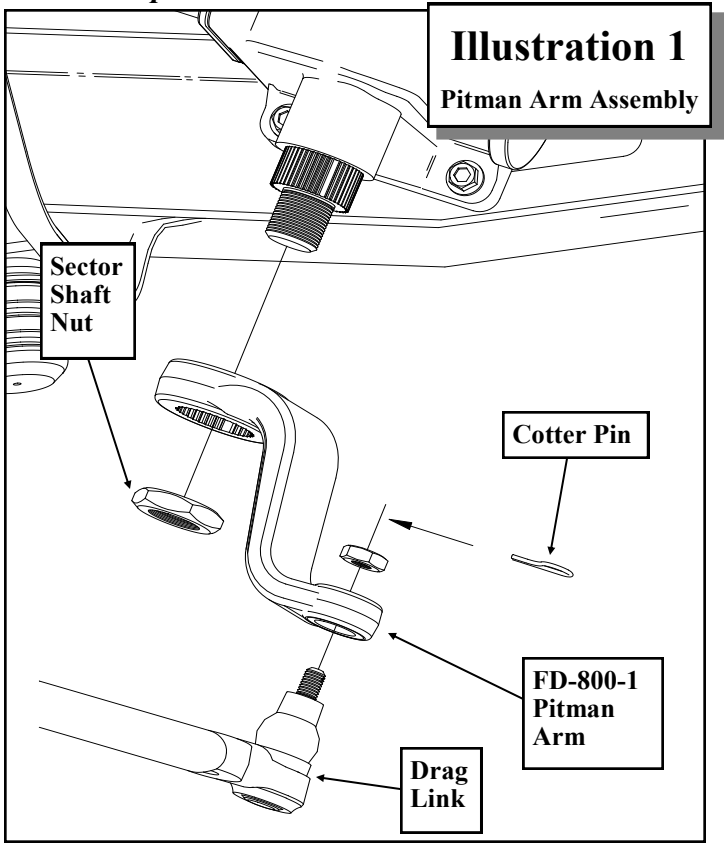
IMPORTANT!: THE ENTIRE INSTALLATION PROCESS MUST BE DONE WITH HAND TOOLS TO ENSURE PROPER INSTALLATION. DO NOT USE IMPACT TOOLS.

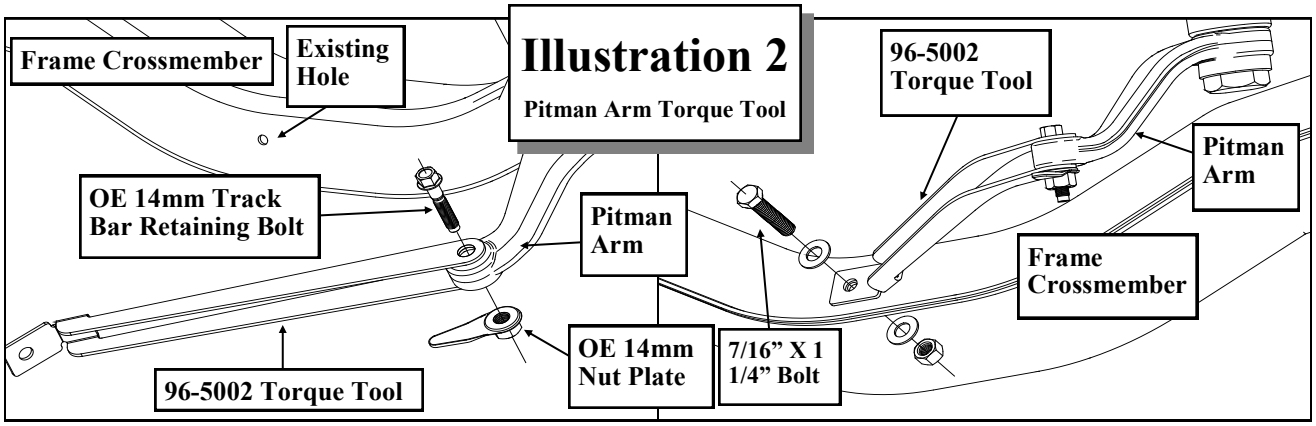
11. Install new pitman arm on sector shaft. Oil the sector shaft threads to ensure a proper torque reading. Install Pitman arm retaining nut and tighten until snug. **See Illustration 1.**
12. Insert the key and unlock the steering wheel.
13. Install the Pitman arm torque tool **(96-5002)** to the Pitman arm using one of the previously removed **OE 14mm** track bar bracket outer retaining bolt and nut plate. **See Illustration 2.**
14. Secure the torque tool **(96-5002)** to the existing hole in the frame crossmember using the supplied **7/16" X 1 1/4"** bolt and hardware. **See Illustration 2.**

NOTE: The steering wheel may need to be turned in order for the hole in the torque tool and the frame crossmember to line up. Once the bolts are tightened the torque tool will align it's self properly.

NOTE: The use of the torque tool is to keep the Pitman arm

Illustration 1
Pitman Arm Assembly





from moving right or left, but allow for movement up the sector shaft. If you do not have this tool, a length of chain or a flat bar with two holes is a suitable replacement.

15. Torque the Pitman arm retaining nut to 375 ft./lbs.
16. With the torque tool **(96-5002)** still in place remove the pitman arm retaining nut. The threads of the sector shaft and the Pitman arm retaining nut ***MUST*** be cleaned using brake cleaner or another suitable method to remove the previously applied oil.
17. Use the entire supplied thread locking compound to thoroughly cover the entire surface of the threads on the Pitman arm retaining nut.
18. Reinstall the Pitman arm retaining nut to the sector shaft and torque to 350 ft./lbs.

    NOTE: Whether re-using the existing pitman arm retaining nut or replacing with a new nut, the supplied locking compound must be used.
19. Unbolt and remove the Pitman arm torque tool **(96-5002)** from the vehicle.

NOTE: Save this Pitman arm torque tool to add to your toolbox for any future

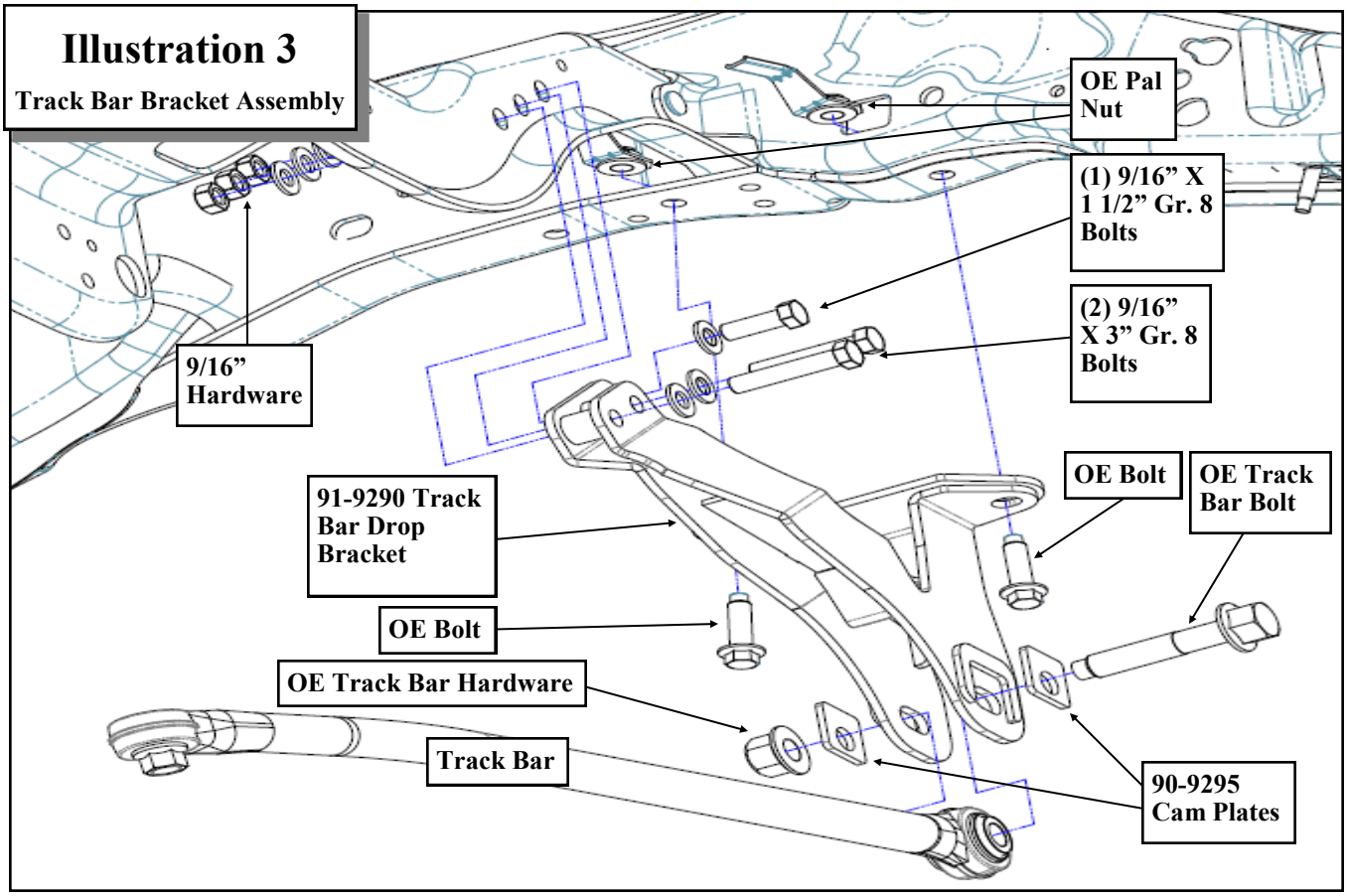


Illustration 4

Front Radius Arm Install
Driver Side Shown

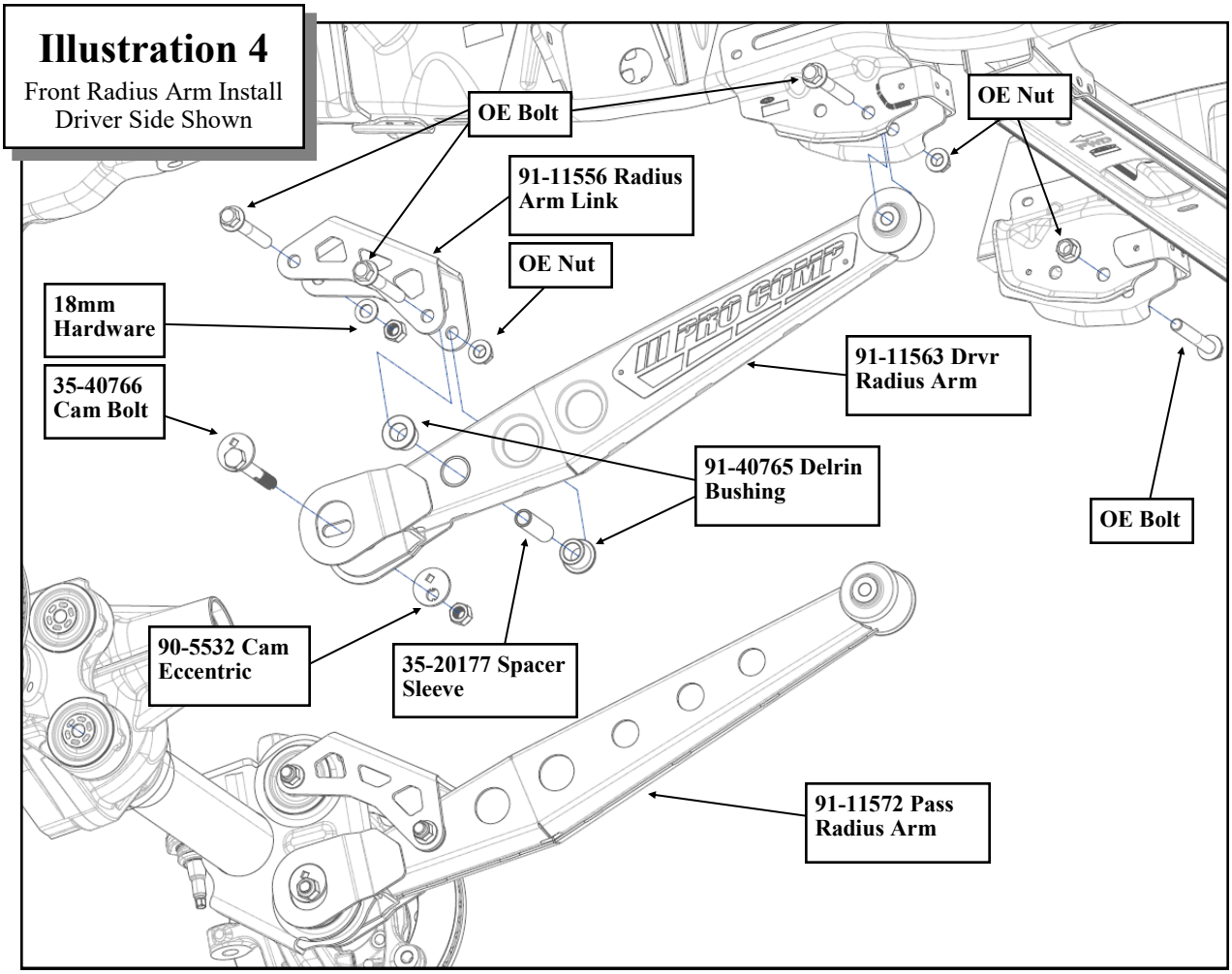
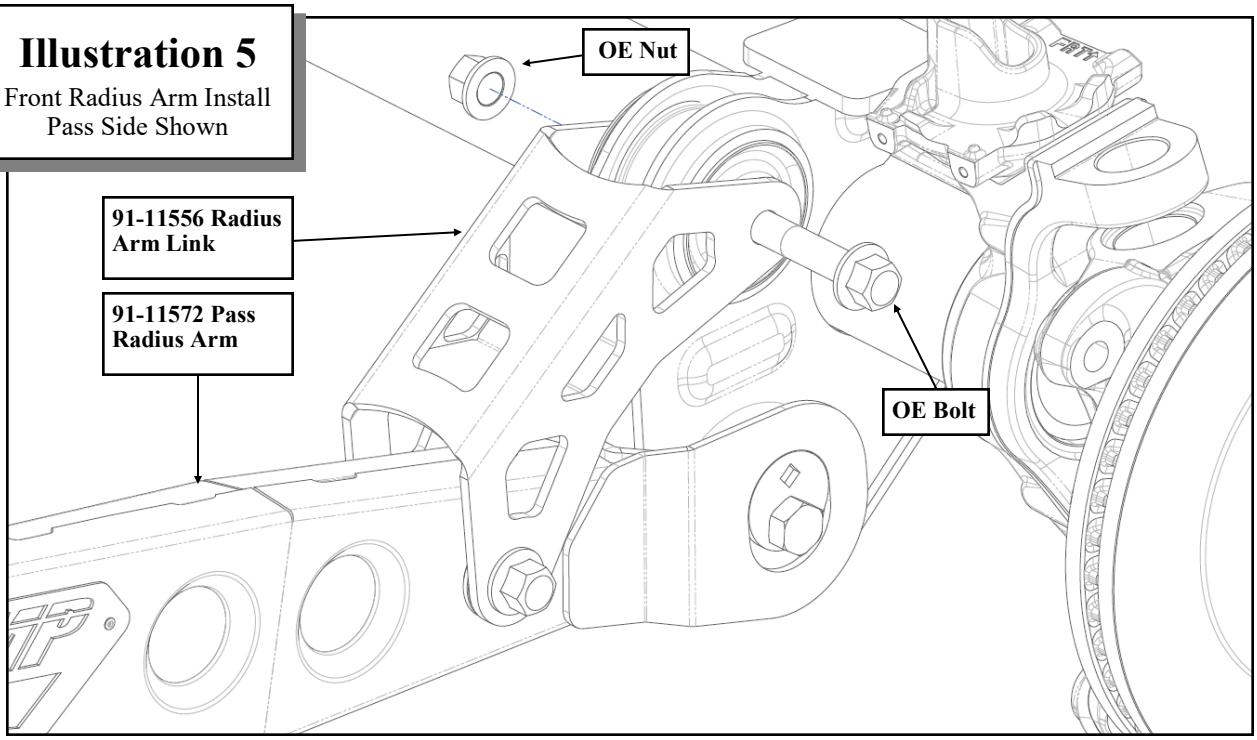


Illustration 5

Front Radius Arm Install
Pass Side Shown



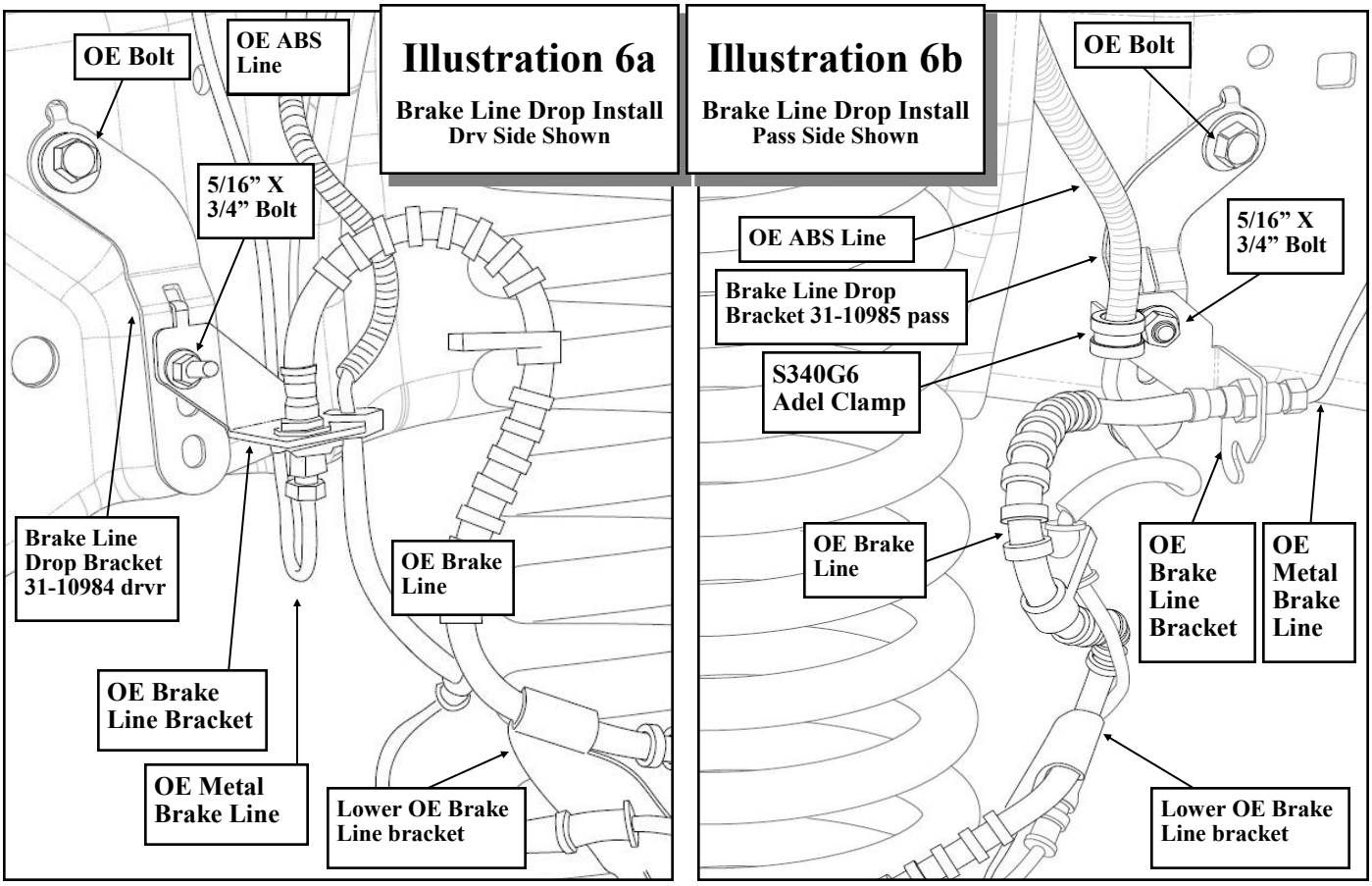


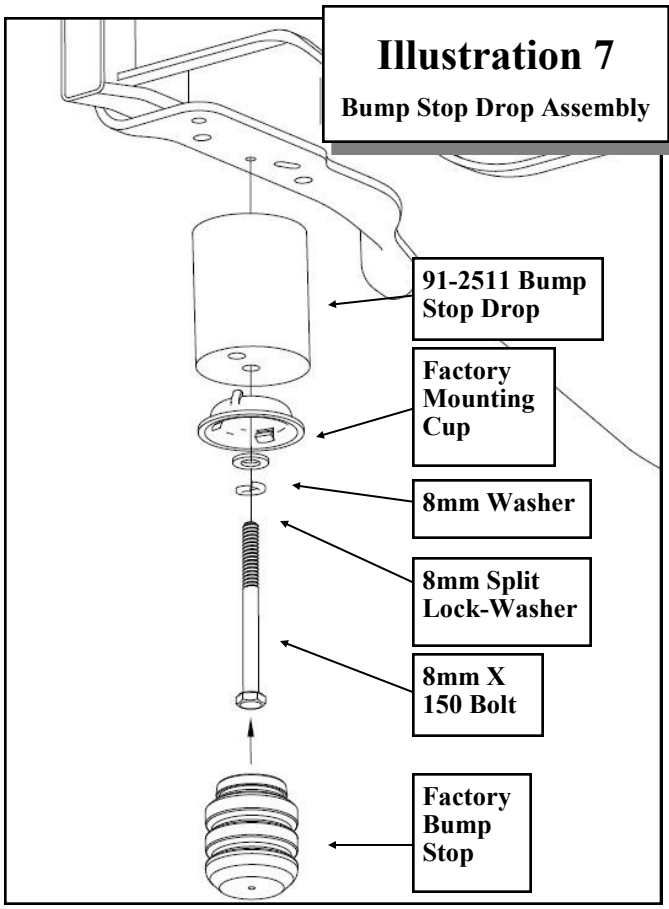
Illustration 6a
Brake Line Drop Install
Drv Side Shown

Illustration 6b
Brake Line Drop Install
Pass Side Shown

Pitman arm installations.

20. Install track bar drop bracket **(91-9290)** using **(2) 9/16" X 3", (1) 9/16" X 1 1/2"** and **(2) OE** bolts. Use thread locker on the bolts. Torque **OE** the bolts to 129 ft. lbs. and the **9/16"** bolts to 110 ft. lbs. See ILLUSTRATION 3.
21. Unbolt the front brake line bracket from the lower spring perch. Save hardware for reuse.
22. Unbolt and unclip the ABS wiring connected to the radius arm. Save hardware for reuse.
23. On the driver side, unclip the axle vent line from inside the frame.
24. On the passenger side unclip the axle hub vacuum line from inside of the axle bump stop plate.
25. Place a jack under the front axle pinion. Raise the front axle enough to relieve tension on the shock hardware and remove the shocks from the vehicle.
26. Lower the front axle enough to remove the coil springs from the front spring bucket. Save the factory isolators for reuse.

    NOTE: Be sure to support the axle while the springs and shocks are removed.
27. Support the front axle with jack stands and place a floor jack under the rear of the differential housing.
28. Unbolt and remove the driver side radius arm from the vehicle by taking out the **(3) OE** mounting bolts from the front axle and the rear frame mounting pocket.
29. On the passenger side remove the rear radius arm to frame mounting bolt.
30. Using the floor jack carefully pivot the rear of the differential housing down. This will allow for easier installation of



the new driver side radius arm.

31. Install the driver side radius arm **(91-11563)** onto the lower axle bushing and secure using the supplied cam bolt **(35-40766)** and hardware. Do not torque the cam bolt at this time. See ILLUSTRATION 4.

32. Swing the rear of the radius arm **(91-11563)** up into the **OE** radius arm pocket and secure using the previously removed **OE** bolt and nut. Do not torque **OE** bolt at this time. See ILLUSTRATION 4.

    NOTE: Adjusting the cam bolt position may help align the OE bolt with the radius arm mount.

33. Install the radius arm link **(91-11569)** onto the radius arm **(91-11563)** using the supplied Delrin bushings **(90-40765),** spacer sleeve **(35-20177),** and previously removed **OE** bolt and nut. Do not torque **OE** bolt at this time. See ILLUSTRATION 4.

34. Rotate the radius arm link **(91-11569)** down onto the upper axle bushing and secure using the previously removed **OE** bolt, the supplied **18mm** nut and washer from pack **(90-6399).** Do not torque radius arm link hardware at this time. See ILLUSTRATION 5.

    NOTE: Use thread locker on the OE bolts, nuts and new 18mm nut.

35. Remove the passenger side radius arm from the vehicle.

36. Install the passenger side radius arm **(91-11572)** onto the lower axle bushing and secure using the supplied cam bolt **(35-40766)** and hardware. Do not torque the cam bolt at this time. See ILLUSTRATION 4.

37. Swing the rear of the radius arm **(91-11572)** up into the **OE** radius arm pocket and secure using the previously removed **OE** bolt and nut. Do not torque **OE** bolt at this time. See ILLUSTRATION 4.

    NOTE: Adjusting the cam bolt position may help align the OE bolt with the radius arm mount.

38. Install the radius arm link **(91-11569)** onto the radius arm **(91-11572)** using the supplied Delrin bushings **(90-40765),** spacer sleeve **(35-20177),** and previously removed **OE** bolt and nut. Do not torque **OE** bolt at this time. See ILLUSTRATION 4.

39. Rotate the radius arm link **(91-11569)** down onto the upper axle bushing and secure using the previously removed **OE** bolt and **OE** nut**.** Do not torque radius arm link hardware at this time. See ILLUSTRATION 5.

    NOTE: Use thread locker on the OE bolts, nuts and new 18mm nut.

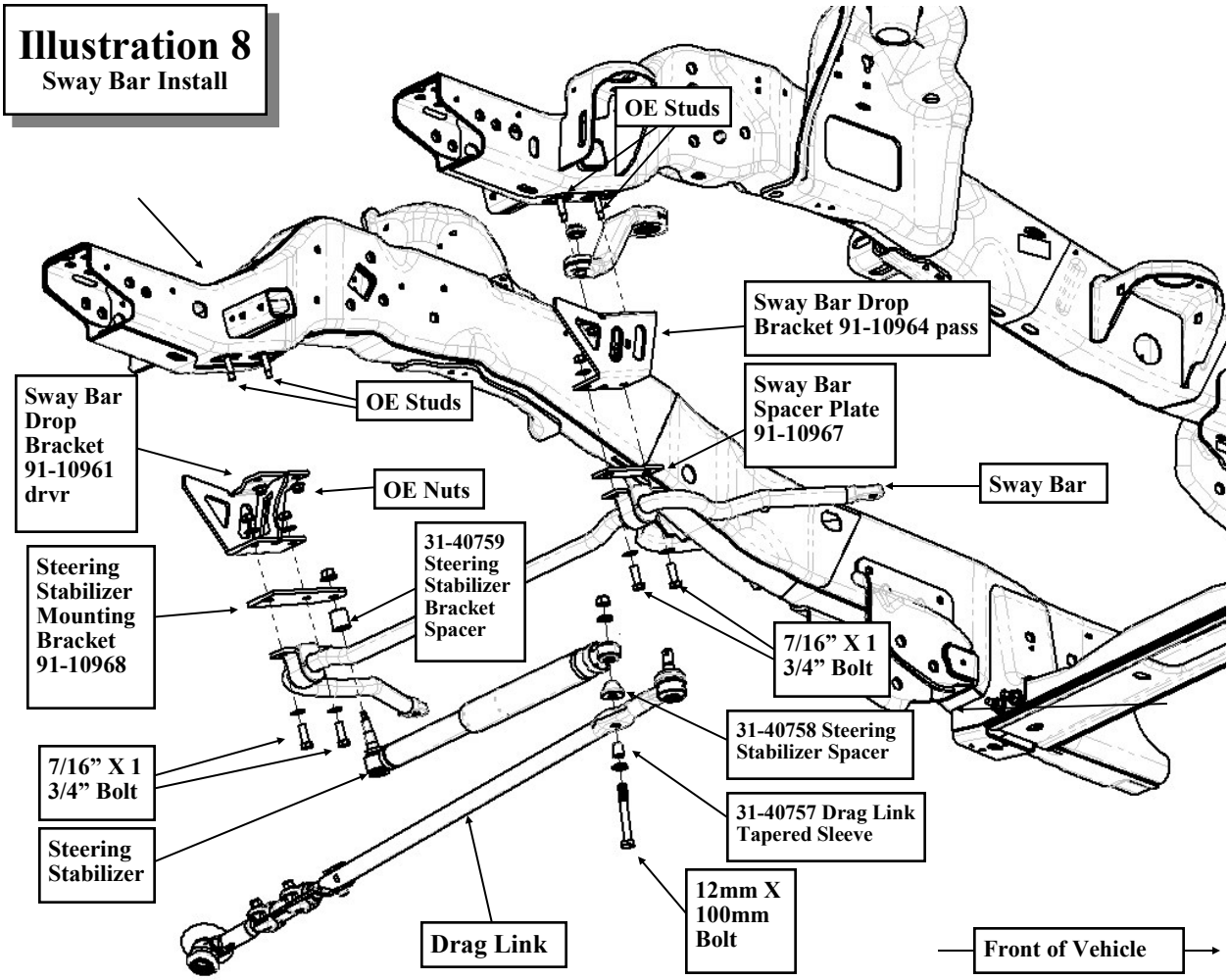
40. Torque the front axle mounting bolts to 222 ft. lbs. Do not torque the rear mounting bolt until vehicle is on the ground. See ILLUSTRATION 4 & 5.

41. Remove the **OE** front brake line bracket **OE** bolts. See ILLUSTRATION 6a & 6b.

42. On the passenger side only, install the supplied Adel clamp **(S340G6)** around the ABS line.

43. Secure the **OE** front brake line brackets to

Illustration 8
Sway Bar Install



the supplied front brake line drop brackets **(31-10984 drvr** and **31-10985 pass)** using the supplied **5/16" X 3/4"** bolts and hardware**.** See ILLUSTRATION 6.

NOTE: On the passenger side only, secure the Adel clamp* (S340G6) *to the 5/16 X 3/4" bolt.

44. Carefully unbend the metal brake lines, until the front brake line drop brackets **(31-10984 drvr** and **31-10985 pass)** aligns with original mounting holes in the frame and secure to the frame using the previously removed **OE** bolts.

IMPORTANT!: Be sure to not kink the brake line.

45. Install the new brake line drop bracket **(31-10984 drvr** and **31-10985 pass)** to the original hole in the frame rail using the previously removed **OE** bolt. See ILLUSTRATION 6.

NOTE: The lower OE line brake bracket may need to be bent so that there is at least 1" of clearance between the OE line brake bracket and the coil spring.

46. Remove the factory front bump stops from the bump stop mounting cups. Pliers and a back and forth rocking motion will assist in removal of the bump stops.

47. Unbolt the bump stop mounting cups.

48. Use the supplied **8mm X 150mm** bolts and hardware to bolt the bump stop drops **(91-2511)** and mounting cups to the bump stop holes in frame. See ILLUSTRATION 7.

NOTE: Be sure to fit the tab from the mounting cup into the hole in the drop.

49. Reinstall the previously removed factory bump stops into the mounting cup on the new bump stop drops. See ILLUSTRATION 7.

50. Using the factory isolators install the supplied front coil springs **(24514 Gas or 24515 Diesel)** into the spring buckets and raise the axle into place. Make sure the coil spring seats properly on the lower spring perch.
51. Install the new shocks **(926553, ZX2130).** Torque the upper mounting hardware to 46 ft. lbs. and the lower mounting hardware to 111 ft. lbs. Use thread locker on these bolts.
52. Loosen drag link turnbuckle pinch bolts and rotate the drag link pitman arm end 180 degrees.
53. Install draglink end into pitman arm and torque draglink nut to 148 ft. lbs. Reinstall cotter pin.

    NOTE: Always align castellated notches with the hole by tightening the nut.
54. Torque drag link turnbuckle pinch bolts to OE specification.
55. Install the sway bar drops **(91-10961 drvr** and **91-10964 pass**) to the **OE** sway bar mounting studs on the frame using the previously removed **OE** hardware. See ILLUSTRATION 8.
56. Carefully raise the sway bar back into place and on the passenger side insert the steering stabilizer bracket **(91-10968)** under the passenger side sway bar mount. On the driver side insert the sway bar spacer plate **(91-10967)** under the driver side sway bar mount. Secure the supplied **7/16" X 1 3/4"** bolts and hardware. See ILLUSTRATION 8.

    NOTE: Be sure the steering stabilizer mounting hole in the stabilizer bracket is oriented toward the rear of the vehicle.
57. Reattach the sway bar to the **OE** sway bar end links using the previously removed **OE** hardware.
58. Install the bushing end of the steering stabilizer to the drag link using **12mm X 100mm** bolt, steering stabilizer spacer **(31 -40758),** between stabilizer and draglink, drag link tapered sleeve **(31-40757),** in draglink, and hardware. See ILLUSTRATION 8.
59. Install the Steering Stabilizer Bracket Spacer **(91-40759)** on to the OE steering stabilizer, insert into the new steering stabilizer bracket **(91-10968)**, and reinstall OE steering stabilizer nut. See ILLUSTRATION 8.
60. Torque all sway bar hardware according to manufacturers specifications.
61. On the driver side, re clip the axle vent line on the frame providing adequate slack for the line at full droop.
62. On the passenger side, reposition the clip on the axle hub vacuum line to provide adequate slack to re-clip the line to the existing hole on the outside of the bump stop plate.

    NOTE: Be sure that the newly re-routed vent line does not interfere with the travel of the bump stop.
64. Remove the ABS line from the inner fender. Drill a new hole, using a **15/64"** bit, **3"** lower in the fender to provide adequate slack for line and reattach the ABS line.
65. Reinstall the ABS wiring onto the radius arms using the factory clips.
66. Refasten the lower brake line mount to the lower coil spring perch using the **OE** hardware.
67. Reinstall the front wheels and lower the vehicle to the ground. Torque to manufacturers specs.
68. Torque the **OE** rear Radius arm bolts to 222 ft. lbs.
69. Reinstall the track bar into the Pro Comp track bar bracket **(91-9290)** using the **OE** bolt and adjustable cam plates **(90-9295).** Torque to 406 ft. lbs. See ILLUSTRATION 3.

    NOTE: You may find that having someone inside the vehicle and moving the steering wheel from side to side will aid in

the alignment of the track bar. <u>DO NOT</u> start the engine for this! You only have to move it enough to line the holes up on the track bar mount.

70. 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. At full droop, cycle the steering from lock to lock while observing the reaction of these components. Reposition them if needed.
71. With the vehicle fully on the ground, measure the clearance between <u>*each*</u> tire and inner fender. If the axle is not properly centered, readjust the track bar cam hardware. Torque to 406 ft.

<u>NOTES:</u>

⇒ **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. Block the front tires and raise the rear of the vehicle. Support the frame with jack stands forward of the rear springs.
2. Remove the wheels and tires.
3. Unscrew the rear axle vent tube to separate the rear brake line bracket from the rear axle.
4. Remove the shocks on both sides of the vehicle. It may be necessary that you slightly raise the axle to unload the shocks for removal.
5. On the driver side, unbolt the emergency brake line bracket from the upper spring plate. Save hardware for reuse.
6. If your vehicle is equipped with factory sway bar, unbolt it from the end links. Unbolt and remove the end links from the vehicle.
7. Support the rear axle with a floor jack and remove the **U-bolts** on the driver side. Slightly loosen the **U-bolts** on the passenger side.
8. Lower the rear axle and remove the factory block.

NOTE: Be sure not to over extend the rear brake line and rear axle vent line.

9. Install the supplied lift block **(95-502SD drvr and 95-503SD pass)**. Make sure the pin fits into the hole on the spring perch. Use your floor jack to raise the axle to the spring making sure the pin on the factory leaf spring assembly fits into the hole on the lift block. Secure the assembly with the **5/8" U-bolts (13-90540) 5/8"** hi-nuts **(PN 20-65471)** and washers supplied. Do not torque the hi-nuts at this time. See ILLUSTRATION 9.

NOTE: Make sure the block sits flush on the axle perch.

10. Repeat the installation on the other side of the vehicle.
11. On driver side, carefully bend down the emergency brake line bracket that secures the line to the frame and bolt the emergency brake line bracket back to the spring pack center bolt using the supplied **10mm-1.5** nut..
12. Install your new Pro Comp shocks **(932005, ZX2131).** Torque the upper mounting hardware to 46 ft. lbs. and the lower mounting hardware to 66 ft. lbs. Use thread locker on these bolts.
13. Remove the **(2)** bolts that secure the center drive shaft bearing. Lower bearing and install **1/4"** of shim thickness for each inch of rear lift. Use new **7/16" X 2 1/4"** bolts and torque to 55 ft./lbs.

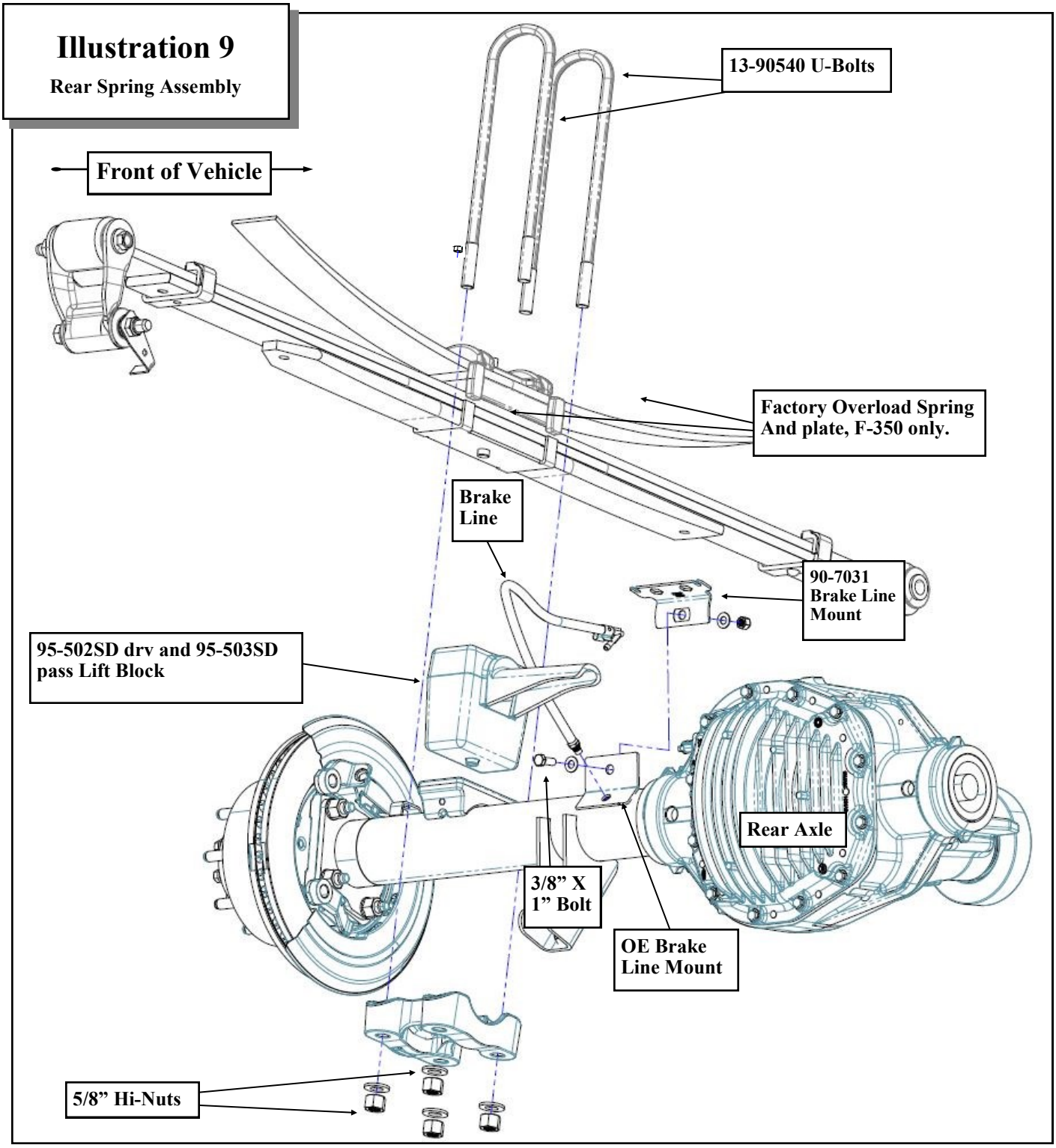
NOTE: 1/4" of shim for each inch of lift is only a starting point. Only by driving the vehicle and adding or removing shims can the high speed vibration be totally eliminated. The off the line vibration is caused by axle wrap up and cannot be eliminated with these products.

14. If vehicle came equipped with a rear sway bar, assemble the rear sway bar end links **(91-2446)** using the bushings **(45359)** and sleeves **(60859H).**
15. Secure the new rear sway bar end links **(91-2446)** to the frame and the sway bar using the provided **12mm-1.75 X 70mm.** Torque the bolts according to the torque chart on page 15.
16. Secure the new rear brake line bracket **(90-7031)** to the rear axle by reinstalling the vent tube.
17. Secure the **OE** brake line bracket to the new brake line bracket **(90-7031)** using the supplied **3/8" X 1"** bolt and hardware.
18. Reinstall the wheels and tires and lower the vehicle to the ground. Torque lug nuts to manufacturer specification.
19. Torque the spring mounts at this time. The front bolts are torqued to 250 ft. lbs. and the rear bolts are torqued to 185 ft. lbs. Torque the **5/8" U-bolts** to 120 ft. lbs.
20. Re-check the wheel lug torque on all four wheels at this time.
21. Re-check *all* hardware (both the front and the rear) for proper installation and torque!!
22. If you wish, you may trim the excess u-bolt thread length. If you do this you should leave approximately one inch of thread exposed after the **U-bolts** are torqued.
23. 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. Reposition them if needed.

NOTES:

Illustration 9

Rear Spring Assembly



⇒ **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.**

Revision Page:

3.1.17: Added hardware pack 90-6569 to BOM box-2.
8.24.21: Added T, M, and BX instances to K4209.
12.6.24: Change address, Change kit P/N from K4209 to FD216M.

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

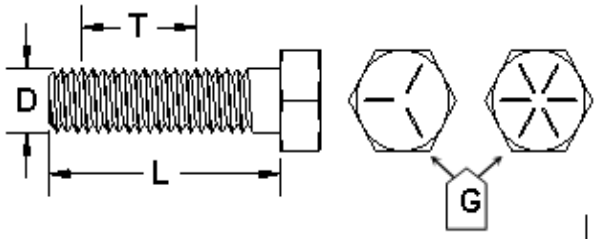
Bolt Torque and ID

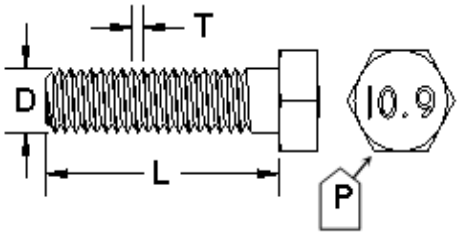
Decimal System

Metric System

All Torques in Ft. Lbs. Maximums

Bolt Size	Grade 5	Grade8	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

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

M12-1.25x50 HHCS

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)

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 warranties 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 MX Series 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
Ph: 1-800-776-0767

PLACE

WARRANTY REGISTRATION NUMBER

HERE: _____