TUFF COUNTRY™

EZ - Ride Suspension

INSTALLATION MANUAL
4" I.F.S. SUSPENSION SYSTEM
1992 - 1998
2 DOOR TAHOE / 1500 6 LUG
PART # 14830

SJ100702

PART NUMBER : 14830
1992 - 1998 / 2 DOOR TAHOE / 1500 6 LUG
4" SUSPENSION SYSTEM WITH FRONT SPINDLES

PARTS LIST:

Part #	Description	Qty.
14810-01	Lower One Piece Sub Frame	1
14810-03	Driver Side Differential Relocation Bracket	1
14810-04	Passenger Side Differential Relocation Bracket	1
C4I-111	Torsion Bar Drop Brackets	2
C4I-114	Passenger Side Spindle	1
C4I-115	Driver Side Spindle	1
C4I1SN-31	Rear Sway Bar End Links	2
SBPL	Rear Sway Bar Bushings & Sleeves	1
BL401	4" Lifted Blocks	2
5U-9262S	9/16" x 2 3/4" x 12 5/8" Square U-Bolts	4
916NW	9/16" U-bolt High Nuts & Washers	1
14810SL	Sleeve and Poly Bag	1
14810NB	Hardware Bag	1
BLR01	Rear Brake Line Extension Bracket	1
BLR02	Front Brake Line Extension Bracket	2
P98	Rear Shock Clevis Mounts	2
9801	Axle Spacers	2
14830INST	Instruction Sheet	1

Shocks are not include in this suspension system. If you have not already done so, please contact Tuff Country or your local Tuff Country dealer and order the proper shocks for this suspension system.

Tuff Country EZ-Ride Suspension recommends using a 4.5" back spacing on the tire and wheel combination. The stock wheels will not work in combination with the new spindle design.

Congratulations on your selection to purchase a Tuff Country EZ-Ride Suspension System. We at Tuff Country are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us, and our product.

Before installation begins, it is the customers/ installers responsibility to make sure that all parts are on hand. If any parts are missing, please feel free to call one of our customer service representative @ (800) 288-2190.

Make sure to use locktite on all new and stock hardware associated with this installation.

Tuff Country EZ-Ride Suspension highly recommends that a qualified and or certified mechanic performs this installation.

IMPORTANT CUSTOMER INFORMATION

This vehicles reaction and handling characteristics may differ from standard cars and/or trucks. Modifications to improve and/or enhance off road performance may raise the intended center of gravity. Extreme caution must be utilized when encountering driving conditions which may cause vehicle imbalance or loss of control. DRIVE SAFELY! Avoid abrupt maneuvers, such as sudden sharp turns which could cause a roll over, resulting in serious injury or death.

It is the customers responsibility to make sure that a re-torque is performed on all hardware associated with this suspension system after the first 500 miles of installation. It is also the customers responsibility to do a complete re-torque after every 3000 miles or after every off road use.

After the original installation, Tuff Country EZ-Ride Suspension also recommends having the alignment check every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country EZ-Ride Suspension take no responsibility for abuse, improper installation or improper suspension maintenance.

It is the responsibility of the customer or the mechanic to wear safety glasses at all times when performing this installation.

It is the customers/installers responsibility to read and understand all steps before installation begins. OEM manual should be used as a reference guide.

The Tuff Country EZ-Ride Suspension product safety label that is included in your kit box must be installed inside the cab in plain view of all occupants.

It is the responsibility of the installers to make sure that the rear view mirror hanger is hung from the rear view mirror. The rear view mirror hanger has instructions on proper post installation procedure.

If you desire to return your vehicle to stock, it is the customers responsibility to save all stock hardware.

LIMITED LIFETIME WARRANTY

Notice to all Tuff Country EZ-Ride Suspension customers: It is your responsibility to keep your original sales receipt! If failure should occur on any Tuff Country EZ-Ride Suspension component, your original sales receipt must accompany the warranted unit to receive warranty. Warranty will be void if the customer can not provide the original sales receipt. Do not install a body lift in conjunction with a suspension system. If a body lift is used in conjunction with any Tuff Country EZ-Ride Suspension product, your Tuff Country EZ-Ride Suspension WARRANTY WILL BE VOID. Tuff Country Inc. ("Tuff Country") suspension products are warranted to be free from defects in material and workmanship for life if purchased, installed and maintained on a non-commercial vehicle; otherwise, for a period of twelve (12) months, from the date of purchase and installation on a commercial vehicle, or twelve thousand (12,000) miles (which ever occurs first). Tuff Country does not warrant or make any representations concerning Tuff Country Products when not installed and used strictly in accordance with the manufacturer's instructions for such installation and operation and accordance with good installation and maintenance practices of the automotive industry. This warranty does not apply to the cosmetic finish of Tuff Country products nor to Tuff Country products which have been altered, improperly installed, maintained, used or repaired, or damaged by accident, negligence, misuse or racing. ("Racing is used in its broadest sense, and, for example, without regards to formalities in relation to prizes, competition, etc.) This warranty is void if the product is removed from the original vehicle and re-installed on that or any other vehicle. This warranty is exclusive and is in lieu of any implied warranty of merchantability, fitness for a particular purpose or other warranty of quality, whether express or implied, except the warranty of title. All implied warranties are limited to the duration of this warranty. The remedies set forth in this warranty are exclusive. This warranty excludes all labor charges or other incidental of consequential damages. Any part or product returned for warranty claim must be returned through the dealer of the distributor from whom it was purchased. Tuff Country reserves the right to examine all parts returned to it for warranty claim to determine whether or not any such part has failed because of defect in material or workmanship. The obligation of Tuff Country under this warranty shall be limited to repairing, replacing or crediting, at its option, any part or product found to be so defective. Regardless of whether any part is repaired, replaced or credited under this warranty, shipping and/or transportation charges on the return of such product must be prepaid by the customer under this warranty.

Important Customer Information

General Motors has introduced a new transfer case option that uses the name "Auto Trac". Auto Trac is a full time 4WD system. This options pertains to the Tahoe (2 or 4 door), Suburban and some pick up trucks. To identify this, see the transfer case selection panel located on the dash board. Below the 2HI button it will read "Auto 4WD" or "Auto". Vehicles with the "Auto Trac" transfer case may encounter a front drive line vibration when the lift kit is installed. After installation, if the vehicle that you are working on encounters any front driveline vibration, please feel free to contact Tuff Country @ (800) 288-2190 or your local Tuff Country dealer and order part # C9598DL to replace your stock driveline.

General Motors has also introduced and upgrade on the front ABS system for vehicle manufactured between 1992—1995. If the vehicle that you are working on has the upgrade ABS system on it, the new spindle design WILL NOT work due to the ABS upgraded sensor. If this is the case on the vehicle that you are working on and you still want to install a Tuff Country EZ-Ride Suspension, please contact Tuff Country or your local Tuff Country dealer and order part # 14833. NON SPINDLE DESIGN

After the completion of the installation a front end alignment is required. Also an exhaust modification is needed.

For a list of all parts, please refer to the Parts Description Page, at the end of the Installation Manual.

Please Follow Instruction Carefully

Before installation begins, drive and check to make sure there are no uncommon sounds and or frame damage. Also at this time measure from the center of the hub to the bottom of the fender well and record measurements below.

Pre Installation Measurements:

Driver Side Front:_____
Passenger Side Front:_____
Driver Side Rear:_____
Passenger Side Rear:_____

At the end of the installation take the same measurements and compare to the pre-installation measurements.

Post Installation Measurements:

Driver Side Front:_____
Passenger Side Front:_____
Driver Side Rear:_____
Passenger Side Rear:_____

Please Follow Instructions Carefully:

Front End Installation:

1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the frame with a pair of jack stands. Place a jack stand on both the driver and passenger side. Next, remove the wheels and tires from both sides.

2. Working on the driver side, remove the inner rubber fender splash guard and save for later re-installation. Repeat procedure on passenger side.

3. Working on the driver side, remove the stock shock from the stock location and save the stock hardware for later re-installation. Longer shocks are needed, so the stock shocks may be discarded. **Special Note: Shocks are not included with this suspension system and need to be ordered as a separate part number, Tuff Country EZ-Ride Suspension recommends using a 23" fully extended nitrogen gas shocks.** Repeat procedure on passenger side.

4. Remove the stock front differential skid plate. The stock front differential skid plate and hardware can be discarded.

5. Remove the stock front driveline from the stock front differential and the transfer case. Save the stock driveline and hardware for later re-installation.

6. Measure exposed threads on the torsion bar adjusting bolt and record measurement here for a later reference.
Record Driver Side measurement here:_____
Record Passenger Side measurement here:_____

See Illustration # 1

7. Working on the driver side, attach the torsion bar removing tool, making sure that the unloading bolt in the center of the torsion bar removing tool is in the small divot of the stock torsion bar key. Adjust the torsion bar key up high enough so that the stock small metal adjusting block and bolt can be removed. Save the stock hardware for later re-installation. Repeat procedure on passenger side.

See Illustration # 2

8. Mark both torsion bars before removal so that they can be re-installed back into the same location. **Example: Driver vs. Passenger and front vs. rear.** Working on the driver side, tap the stock torsion bar forward until the stock torsion bar cross member can be removed. Repeat procedure on the passenger side. Set the stock torsion bar keys a side for later re-installation.

9. Working on the driver side, remove the (3) stock bolts that connect the stock torsion cross member to the bottom side of the stock frame rail. The stock hardware may be discarded. Repeat procedure on the passenger side. Remove the stock torsion bar cross member from the stock location and set a side for later re-installation.

10. Working on the driver side, slide the stock torsion bar out of the stock rear lower control arm and set a side for later re-installation. Repeat procedure on passenger side.

11. Working on the driver side, remove the stock brake line bracket from the stock upper control arm bracket and save hardware for later re-installation. Repeat procedure on passenger side.

12. Working on the driver side, remove the front sway bar end link from the stock sway bar and the stock lower control arm location. The stock end link and hardware may be discarded. Repeat procedure on passenger side. **Special Note: At this time, invert the stock sway bar.**

13. Working on the driver side, remove the (2) stock bolts that connect the stock brake caliper to the stock rotor. Save the stock hardware for later re-installation. Using a bungee cord, carefully tie the stock brake caliper up and out of the way in the fender well. **Special Note: Take special care not to kink or over extend the stock brake line.**

14. Working on the driver side, remove the stock nut that connects the stock axle to the stock hub assembly. Save the stock nut for later re-installation.

See Illustration # 3

15. Working on the driver side, disconnect the ABS lines from each other. Also disconnect the ABS line from any other mounting points.

16. Working on the driver side, remove the stock cotter pin from the stock castle nut that connects the stock upper control arm ball joint to the stock steering knuckle. **Save the stock cotter pin for re-installation.** Loosen the stock nut that connects the stock upper control arm ball joint to the stock steering knuckle. **Do not remove the stock nut completely.** Carefully break the stock taper on the stock upper control arm ball joint. **Special Note: Take special care not to rip or tear the stock ball joint dust boot.**

17. Working on the driver side, remove the stock cotter pin from the stock castle nut that connects the stock lower control arm ball joint to the stock steering knuckle. **Save the stock cotter pin for re-installation.** Loosen the stock nut that connects the stock lower control arm ball joint to the stock steering knuckle. **Do not remove the stock nut completely.** Carefully break the stock taper on the stock lower control arm ball joint. **Special Note: Take special care not to rip or tear the stock ball joint dust boot.**

18. Working on the driver side, loosen the stock nut that connects the stock outer tie rod ball joint to the stock steering knuckle. **Do not remove the stock nut completely.** Carefully break the stock taper on the stock

outer tie rod ball joint. **Special Note: Take special care not to rip or tear the stock outer tie rod ball joint dust boot.**

19. Working on the driver side, move back to the stock nuts holding the upper control arm ball joint, the lower control arm ball joint and the outer tie rod ball joint to the stock steering knuckle and remove completely. Save the stock hardware for later re-installation.

20. Working on the driver side, use a suitable removal tool to remove the stock axle from the stock hub assembly. **Special Note: Take special care not to damage the stock threads on the stock axle.**

21. Carefully remove the stock hub assembly and the stock steering knuckle from the stock location.

22. Working on the driver side stock hub assembly, remove the (3) stock bolts that connect the stock hub assembly to the stock steering knuckle. Save the stock hardware and stock hub assembly for later re-installation. A new steering knuckle is used, the stock steering knuckle can be discarded.

23. Locate the new driver side steering knuckle. Using the stock hardware that was removed from step # 22, secure the new driver side steering knuckle to the stock hub assembly. Torque to **92 ft lbs. Special Note: Make sure to use thread locker or lock tite.**

24. Set the new driver side steering knuckle and hub assembly a side for later re-installation.

25. Working on the driver side, scribe a mark on the CV plate and another directly across to the stock differential, this will allow you to re-install the stock CV back into the stock location at a later step.

See Illustration # 4

26. Working on the driver side, unbolt and remove the (6) stock bolts holding the inner CV to the stock differential. Save the stock hardware and the stock front axles for later re-installation.

27. Working on the driver side, remove the stock front and rear hardware that connects the stock lower control arm to the stock front and rear location. Save the stock hardware for later re-installation. Set the stock lower control arm a side for later re-installation.

28. Repeat step's 13 - 27 on the passenger side.

29. Working on the driver side, locate the stock lower bracket that wraps around the rear lower half of the stock front differential. Remove the stock bolt that connects the lower portion of the stock front differential to the stock bracket. Save the stock hardware for later re-installation. Using the stock mounting point on the rear lower control arm as a reference point, measure 3" towards the inside of the vehicle and scribe a line on the stock bracket that wraps around the rear portion of the stock front differential. Using a hacksaw or suitable cutting tool, cut along the line that was scribe earlier in this step. **Special Note: Tuff Country recommends not using a cutting torch when performing step # 29. Clean and dress up any exposed metal.**

See Illustration # 5

30. Locate the new one-piece lower sub frame and the stock lower control arm hardware that was removed in step # 27. Working on the driver side, install the front and rear part of the new one-piece lower sub frame into the stock front and rear lower control arm stock pockets and secure using stock hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Repeat procedure on passenger side.

See Illustration # 6 / Front Location
See Illustration # 7 / Rear Location

31. Place a pair of hydraulic floor jacks under the front differential. Place one on the driver side and one and the passenger side. Carefully raise up on both hydraulic floor jacks at the same time until the come in contact with the front differential.

32. Working on the drivers side, remove the stock upper bolt that connects the stock front differential into the stock upper location and save the stock hardware for later re-installation. **Special Note: The front driver side upper stock mounting point is up high and difficult to see.**

33. On the passenger side, remove the (2) stock nuts that hold the passenger side of the front differential into the stock location and save the stock hardware for later re-installation.

34. Disconnect the stock vent hoses on the front differential.

35. Locate the stock rear driver side differential mounting bracket hardware that was removed from step # 29. Carefully lower down on both hydraulic floor jacks at the same time, until the rear portion of the front differential seat properly into the previously installed lower one-piece sub frame. Secure using the stock hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.**

See Illustration # 8

36. Carefully remove both hydraulic floor jack from under the front differential.

37. On the driver side of the stock front differential upper tab, measure 2" from the stock mounting point and scribe a mark on the front differential. Using a sawzall, cut the upper tab off of the stock front differential and discard.

See Illustration # 9

38. Locate the new driver side differential relocation

bracket, (2) MO2050 poly bushings and (1) 9/16" x 2 1/8" anti crush sleeve. Install the new poly bushings and the anti crush sleeve into the new driver side relocation bracket. **Special Note: Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new driver side differential relocation bracket. This will increase the life of the bushing as well as prevent squeaking.**

39. Locate (1) 7/16" X 3" bolt, (1) 7/16" unitorque nut, (2) 7/16" flat washers and (1) 7/16" lock washer. Referring to illustration # 10, remove the (4) stock differential mounting bolts that connect to two half's of the front differential together. Save the stock hardware for later re-installation. Secure the new driver side differential relocation bracket to the stock front differential using the stock hardware that was removed earlier in this step. Torque to **34 ft. lbs. Special Note: Make sure to use thread locker or lock tite.** Secure the lower portion of the new driver side differential relocation bracket to the stock front differential, using the new 7/16" x 3" bolt and hardware. Torque to **34 Ft. lbs. Special Note: Make sure not to over tighten the stock and new hardware associated with the front differential. If bolts are over tighten, the stock front differential could crack.**

See Illustration # 10

40. Locate the new passenger side differential drop bracket and the stock hardware that was removed from step # 33. Install the new passenger side differential drop bracket into the stock location and secure using the stock hardware. **Do not tighten at this point. Special Note: Make sure to use thread locker or lock tite.**

See Illustration # 11

41. Locate the stock upper front differential hardware that was removed from step # 32. Working on the driver side, secure the new driver side relocation bracket to the front part of the newly installed one piece lower sub frame and secure using the stock hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.**

See Illustration # 12

42. Locate (2) 9/16" x 1 1/2" bolt , (4) 9/16" flat washers, (2) 9/16" unitorque nuts and (2) 9/16" lock washers. Working on the passenger side, secure the passenger side of the stock front differential to the newly installed passenger side differential drop bracket using the new 9/16" x 1 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.**

See Illustration # 13

43. Locate (2) 1/2"x 1 1/4" bolts, (2) 1/2" unitorque nuts, (4) 1/2" flat washers and (2) 1/2" lock washers. Using the holes in the front part of the new lower one-piece sub frame as a guide, drill (2) 1/2" holes into the frame. Secure using new 1/2" x 1 1/4" bolts and hardware. **Torque to 85 ft lbs. Make sure to use thread locker or lock tite.**

See Illustration # 14

44. Move back to all stock and new hardware associated with the new driver and passenger side differential drop brackets, the rear portion of the stock front differential that mounts to the new one piece sub frame and the stock mounting points were the new one-piece sub frame mounts. Torque all hardware to proper torque specifications. **Refer to the torque setting sheet at the end of the installation manual.**

45. Locate the (2) poly bump stops, (2) 3/8" lock nuts, (2) 3/8" flat washers and (2) 3/8" lock washers. Working on the driver side, install the new poly bump stop into the newly installed lower one-piece sub frame and secure using the new 3/8" hardware. Torque to **28 ft. lbs. Make sure to use thread locker or lock tite.** Repeat procedure on passenger side.

See Illustration # 15

46. Locate (2) 5/8" x 4 1/2" bolts, (2) 5/8" x 5 1/2", (4) 5/8" unitorque nuts, (8) 5/8" flat washers, (4) 5/8" unitorque nuts, (4) 5/8" lock washers and the driver and passenger side lower control arms that were removed from step # 27. Working on the driver side, install the stock lower control into the newly installed one-piece sub frame front location and secure using the new 5/8" x 4 1/2" bolt and hardware. Next, secure the rear portion of the stock lower control arm into the rear portion of the newly installed one-piece lower sub frame and secure using the new 5/8" x 5 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Repeat procedure on passenger side.

See Illustration # 16 / Front Location
See Illustration # 17 / Rear Location

47. Locate 2 new axle half shaft spacers, the stock half shaft hardware and the stock front axles that were removed from step # 26. Working on the driver side, install (1) new axle spacer between the stock front differential and the stock axle. Secure using the stock hardware. Torque to **65 ft. lbs. Make sure to use thread locker or lock tite. Special Note: Make sure that the stock axle is re-installed back into the stock location on the stock front differential. Refer to the marks that were scribe in step # 25.** Repeat on the passenger side.

See Illustration # 18

48. Locate the new driver side steering knuckle and stock hub assembly, the stock hardware for the upper control arm ball joint, lower control arm ball joint and outer tie rod ball joint that was removed from step # 19. Using the stock hardware, secure the new driver side steering knuckle and stock hub assembly to the stock upper control arm ball joint, the stock lower control arm ball joint and the stock outer tie rod assembly. Torque the stock hardware on the upper and lower ball joints to **85 ft lbs.** Torque the outer tie rod ball joint hardware to **68 ft. lbs. Make sure to use thread locker or lock tite. Also when performing this step, slide the stock axle into the stock hub assembly location.** Repeat procedure on the passenger side using the passenger side steering

knuckle.

See Illustration # 19

49. Locate the stock cotter pins that were removed from step # 16 and 17. Install the stock cotter pins back into the stock location on the stock upper and lower control arm ball joints.

50. Locate the stock hardware that connects the stock front axle to the stock hub assembly that was removed in step # 14. Working on the driver side, secure the stock front axle to the hub assembly using the stock hardware. Torque to **112 ft. lbs. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side.

51. Move back to all associated hardware that connects the stock lower control arms to the new one-piece lower sub frame and torque **125 ft. lbs.**

52. Locate the stock hardware that was removed from step # 13. Working on the driver side, re-install the stock brake caliper to the stock rotor using the stock hardware. **Make sure to use thread locker or lock tite.** Torque to **90 ft lbs.** Repeat procedure on the passenger side.

53. Working on the driver side, reconnect the stock ABS lines back together. Also reconnect all other stock mounting points on the stock ABS line. Repeat procedure on the passenger side.

54. Locate (2) front brake line relocation brackets, (2) 5/16" x 1 1/4" bolts, (4) 5/16" flat washers, (2) 5/16" unitorque nuts (2) 5/16" lock washers and the stock hardware that was removed from step # 11. Working on the driver side, install the new brake line relocation bracket to the stock location using the stock hardware. **Make sure to use thread locker or lock tite.** Next, secure the stock brake line bracket to the newly installed brake line extending bracket and secure using the new 5/16" x 1 1/4" bolt and hardware. **Make sure to use thread locker or lock tite.** Torque the stock and new hardware to **15 ft lbs.**

See Illustration # 20

55. Locate (2) new sway bar end links, (2) 3/8" x 10" bolts, (8) sway bar end links washers, (8) sway bar end links bushings, (2) 3/8" flat washers and (2) 3/8" unitorque nuts. Working on the driver side, install the new sway bar end link and hardware to the stock sway bar and the stock lower control arm. Torque to **32 ft lbs.** Repeat procedure on the passenger side. **Special Note: If you did not invert the stock sway bar in step # 12, invert it before you install the new sway bar end links.**

See Illustration # 21

56. Locate (2) new torsion bar drop blocks, (10) 7/16" x 1 1/2" bolts, (2) 7/16" x 2 1/2" bolts, (24) 7/16" flat washers, (12) 7/16" unitorque nuts and (12) lock washers. Working on the driver side of the stock torsion bar cross member that was removed from step # 9, install the new torsion bar drop block to the stock torsion bar cross member and secure using (1) 7/16" x 2 1/2" bolt and hardware in the center of the new torsion bar drop block and the stock torsion bar cross member. Use (2) 7/16" x 1 1/2" bolts and hardware on the outer (2) bottom holes. **Make sure to use thread locker or lock tite.** Torque the (3) 7/16" bolts to **35 ft lbs. Special Note: Install the stock torsion bar cross member to the inside of the new torsion bar drop blocks.** Repeat procedure on the passenger side.

57. Locate the driver side torsion bar that was removed on step # 10. Install the stock torsion bar into the stock lower control arm. Make sure that you push the stock torsion bar as far forward as you can, this will allow you to install the stock torsion cross member. **Special Note: Make sure that you install the stock torsion bar the same way that it was removed. Example: driver side vs. passenger side and front vs. rear.** Repeat procedure on passenger side.

58. Working on the driver side, install the stock torsion bar cross member and the newly installed torsion bar drop blocks to the stock location on the bottom of the stock frame rail and secure using the new 7/16" x 1 1/2" bolt and hardware. **Make sure to use thread locker or lock tite.** Torque to **35 ft lbs.** Repeat procedure on the passenger side.

See Illustration # 22

59. Locate the stock driver and passenger side torsion bar key's that were removed from step # 6. Working on the driver side, install the stock torsion bar key back into the stock torsion bar cross member. Holding the stock torsion bar key into the stock location, slide the driver side torsion bar into the stock torsion bar key. Repeat procedure on the passenger side.

60. Locate the small metal adjusting blocks and bolts that were removed from step # 7. Also, locate the stock torsion bar keys that were removed from step # 8. Working on the driver side, attach the torsion bar removing tool, making sure that the unloading bolt in the center tool is in the small divot of the torsion bar key. Adjust the torsion bar key up high enough so that the small metal adjusting block and stock bolt can be re-installed, Refer back to step # 6 and adjust the stock bolt to the stock location. Repeat procedure on passenger side.

61. Move back to all newly installed brackets and make sure that all stock and new hardware is torqued to proper specifications. Now re-connect the front differential vent hose. **Special Note: Refer to the torque setting sheet at the end of the installation manual and torque to proper settings.**

62. Locate (2) 5/8" x 2 1/2" poly shock bushings, (2) 1/2" x 2 1/2" shock sleeves, the stock upper and lower shock

hardware that was removed from step # 3 and the new shock boots. Install the new shock boots onto the new shocks. Insert the new poly shock bushings and sleeves into the upper eyelet of the new shocks. **Special Note: Shocks are not included with this suspension system, shocks need to be ordered as a separate part number, Tuff Country EZ — Ride Suspension recommends using a 23" fully extended nitrogen gas shock. Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new shock. This will increase the life of the bushing as well as prevent squeaking.** Install the lower shock bushing and sleeve into the lower eyelet of the new shock. **Special Note: Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new shock. This will increase the life of the bushing as well as prevent squeaking.** Working on the driver side, install the new shock into the stock location and secure using the stock hardware. Torque the upper and lower stock hardware to **70 ft lbs.** Repeat procedure on passenger side.

63. Locate the stock inner rubber fender splash guards that were removed from step # 2. Working on the driver side, re-install the inner rubber fender splash guard. Repeat procedure on the passenger side.

64. Re-install the tires and wheels and carefully lower the vehicle to the ground.

65. Check and double check to make sure that all steps were performed properly. Check and double check to make sure that all new and stock hardware has been torque to proper torque specifications. Refer to the torque specification sheet at the end of the installation manual.

66. Carefully lower the vehicle to the ground.

67. An exhaust modification is required once the suspension system has been completed. After the rear end installation is complete take the vehicle directly to a muffler shop and have the exhaust modification performed. Once the exhaust modification has been performed re-install the stock front drive line back into the stock location using the stock hardware that was removed from step # 5. Torque to **35 ft lbs.**

Congratulation, Front End Installation Complete!

Rear End Installation:

68. To begin installation, block the front tires of the vehicle so that the vehicle is stable and can't roll forward. Safely lift the rear of the vehicle and support the frame with a pair of jack stands. Place a jack stand on both the driver and passenger side. Next remove the wheels and tires from both sides.

69. Locate (1) rear brake line extending bracket, (1) 5/16" x 1 1/4" bolt, (2) 5/16" flat washers, (1) 5/16" unitorque nut and (1) 5/16" lock washer. Remove the stock brake line bracket from the rear differential and save stock bolt for later re-installation. Secure the new brake line bracket to the rear differential housing using the stock bolt. **Special Note: Make sure to use thread locker or lock tite.** Next, attach the stock brake line bracket to the newly installed brake line bracket and secure using the new 5/16" x 1 1/4" bolt and hardware. **Torque to 16 ft. lbs.**

See Illustration # 23

70. Position a pair of hydraulic floor jacks under the rear axle. Place one jack stand on the driver side and one on the passenger side. Raise up on both hydraulic floor jacks at the same time until they make contact with the rear axle.

71. Working on the driver side, remove the stock shock and save the stock hardware for later re-installation. Longer shocks are needed, so the stock shocks may be discarded. **Special Note: Shocks are not included with this suspension system, shocks need to be ordered as a separate part number, Tuff Country EZ-Ride Suspension recommends using a 30" fully extended nitrogen gas shocks.** Repeat procedure on passenger side.

72. Working on the driver side, remove the stock sway bar end links for the stock upper and lower location. Save the stock hardware. The stock end link may be discarded. Repeat procedure on the passenger side.

73. Working on the driver side, remove the (2) stock rear U-bolts and discard. Set the upper and lower U-bolt plates a side for later re-installation. Repeat procedure on passenger side

74. Lower down on both hydraulic floor jacks at the same time until the stock springs separate from the stock rear axle. Lower down approximately 4". **Special Note: Make sure not to over extended any brake lines or hoses when lowering axle.**

75. Locate (2) new 4" lifted rear blocks. Working on the driver side, install (1) new 4" lifted block between the stock rear axle and the stock spring assembly. **Special Note: The new 4" lifted block has a slight taper to it, the small end of the new block needs to be installed with the small end towards the front of the vehicle.** Repeat procedure on passenger side.

See Illustration # 24

76. Raise up on both hydraulic floor jacks at the same time until the driver and passenger side stock spring assembly seats flush with newly installed 4" block.

77. Locate (4) new 9/16" x 2 3/4" x 12 5/8" Square U-bolts, (8) 9/16" U-bolt high nuts, (8) 9/16" U-bolt washers and the stock upper and lower U-bolt plates that were removed from step # 73. Working on the driver side, install (2) new 9/16" x 2 3/4" x 12 5/8" square U-bolts into

the stock location and secure using the new 9/16" high nuts and washers. Torque to **120 ft lbs.** Repeat procedure on passenger side.

See Illustration # 24

78. Working on the driver side, install the new rear shocks absorbers using the stock hardware removed from step # 71. **Locate the new rear upper clevis mount and install the new clevis mount into the upper eyelet of the rear shock before installation.** Repeat procedure on passenger side.

79. Locate (2) new rear sway bar end links and the new rear sway bar poly bushings and sleeves. Install the new poly bushings and sleeves into each end of the new rear sway bar end link. **Special Note: Make sure to use a lithium or moly base grease prior to inserting the new bushings and sleeves into the new rear sway bar end links. This will increase the life of the bushing as well as prevent squeaking.**

80. Locate the stock rear sway bar end link hardware that was removed from step # 72. Working on the driver side, install the new rear sway bar end link into the stock upper and lower location. Secure using the stock hardware. Torque to **65 ft lbs. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side. **Special Note: If you are not able to install the rear sway bar end links into the stock position, this step may need to be performed once the weight of the vehicle is on the ground.**

See Illustration # 25

81. Check and double check to make sure that all step related with the front and rear end were performed properly. Check and double check to make sure that all stock and new hardware is torque to proper torque specifications. Refer to the torque specification sheet at the end of the installation manual.

82. Install the tire wheels and safely lower the vehicle to the ground.

83. If you were not able to perform step # 80. Perform this step once the weight of the vehicle is on the ground.

CONGRATULATIONS INSTALLATION COMPLETE

SPECIAL NOTE: AN EXHAUST MODIFICATION IS NEEDED. ALSO A FRONT END ALIGNMENT IS REQUIRED

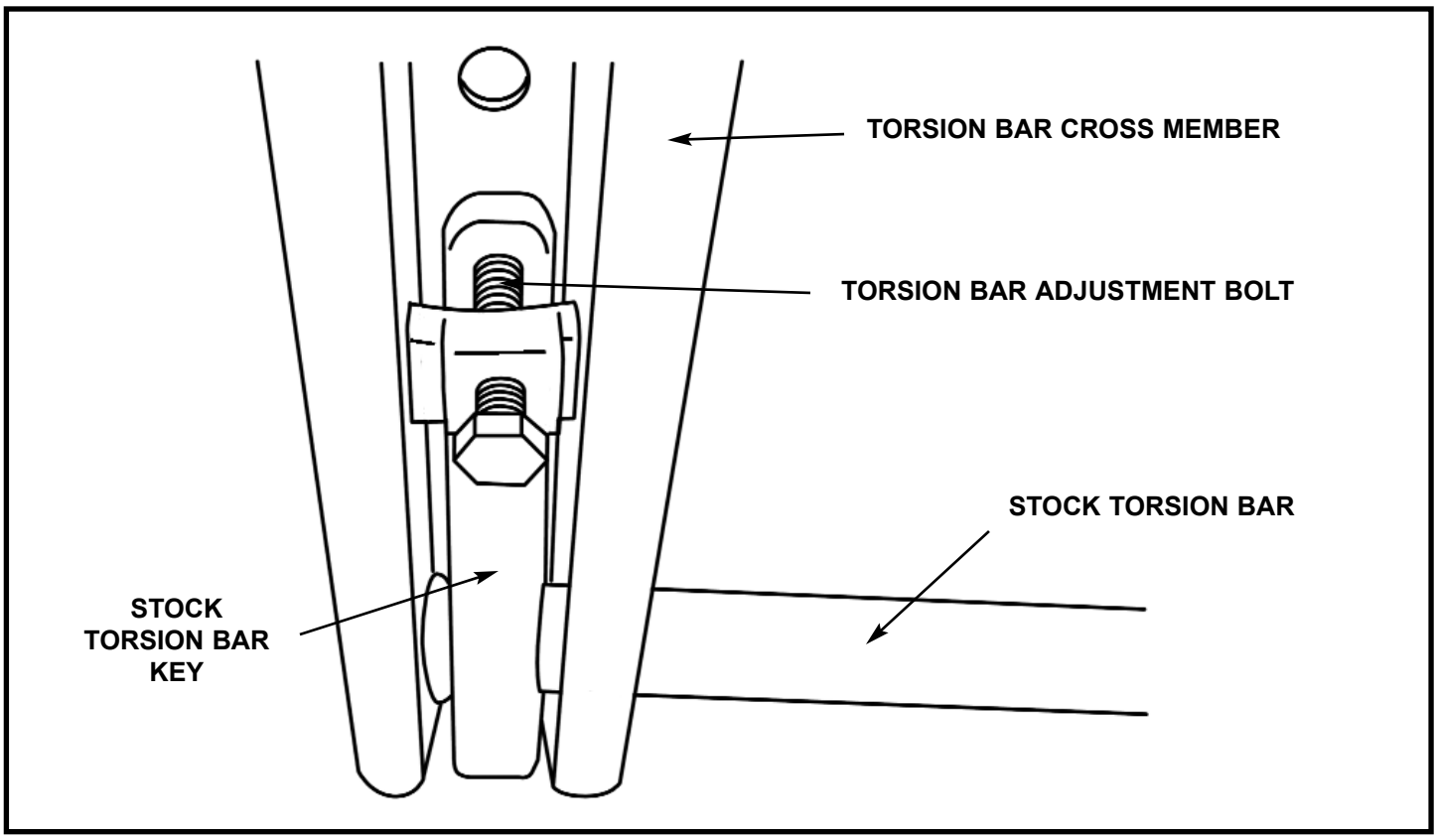
ONCE THE EXHAUST MODIFICATION HAS BEEN PERFORMED REPLACE THE STOCK FRONT DRIVE LINE BACK INTO THE STOCK LOCATION AND SECURE USING THE STOCK HARDWARE THAT WAS REMOVED IN STEP # 4

IF YOU HAVE ANY QUESTION AND OR CONCERS ABOUT THE INSTALLATION PLEASE FEEL FREE TO CONTACT TUFF COUNTRY

Torque Settings

5/16"	**15—18 ft lbs.**
3/8"	**28—32 ft lbs.**
7/16"	**30—35 ft lbs.**
1/2"	**65—85 ft lbs.**
9/16"	**85—120 ft lbs.**
5/8"	**95—130 ft lbs.**
3/4"	**100—140 ft lbs.**

Special Post Installation Procedure: Once the new Suspension System has been installed. Check the fluid level in the front differential. Top off the fluid with proper differential fluid. On occasion customer may find burping of fluid coming out of the front vent tube.



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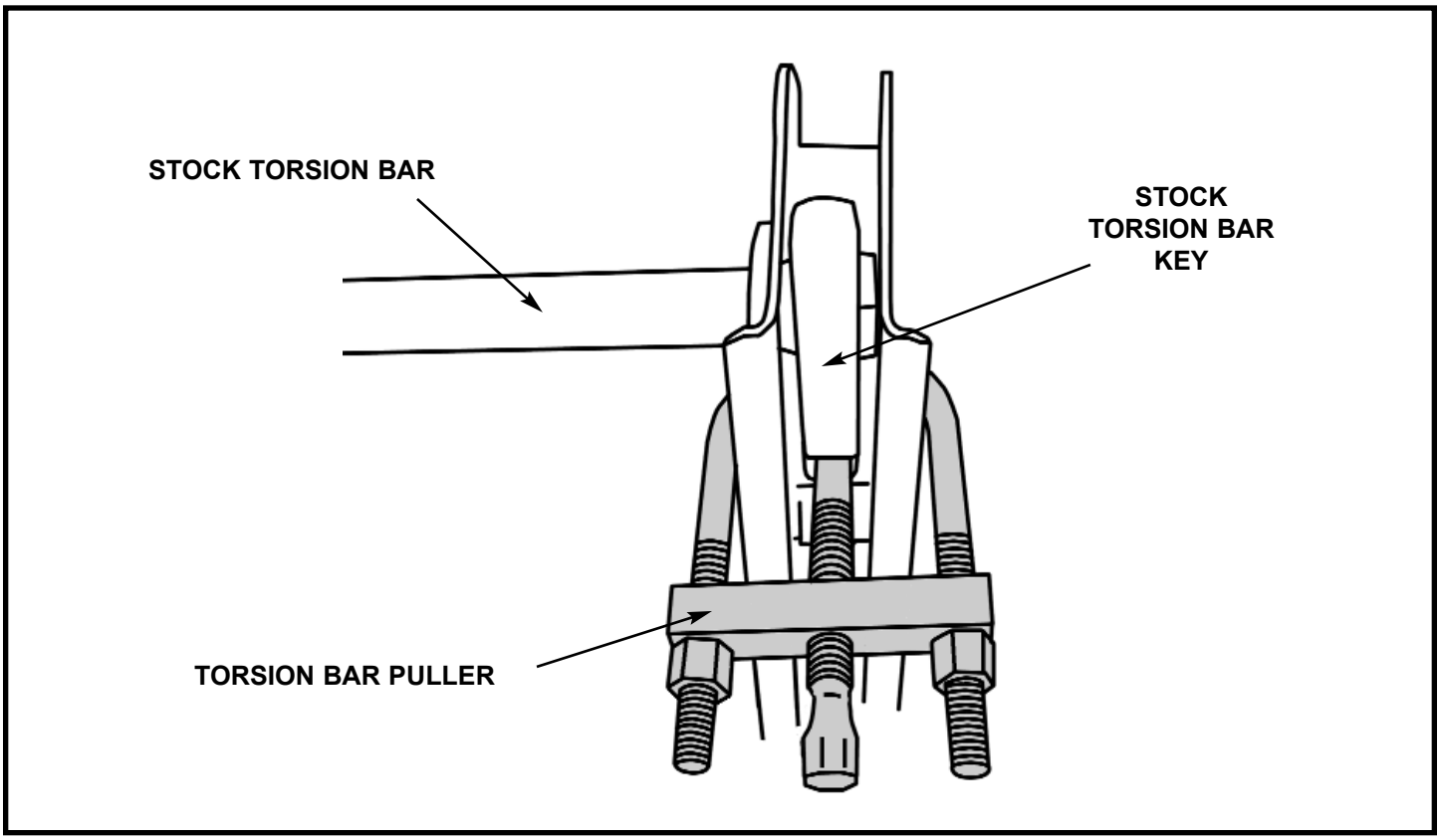

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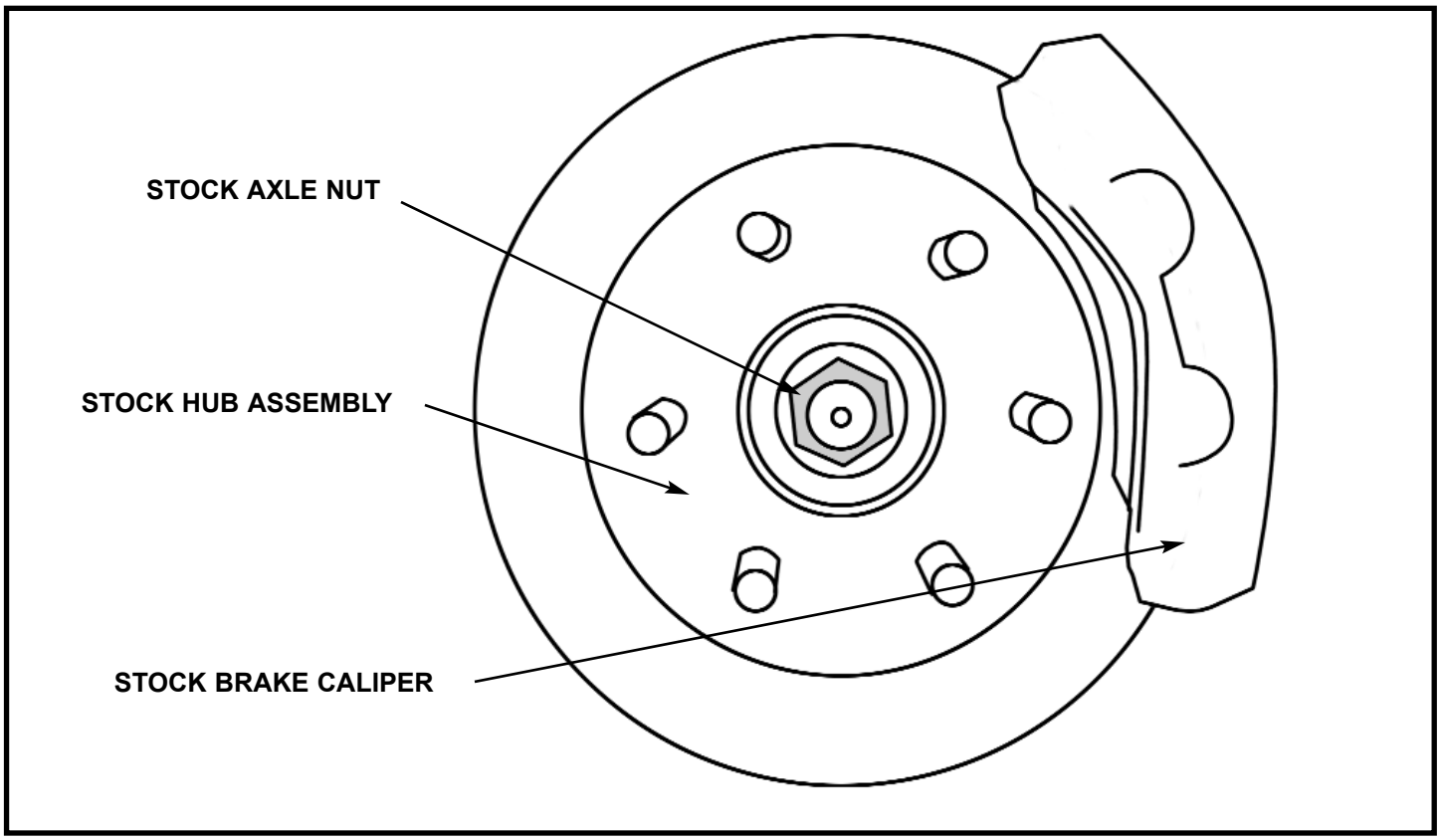

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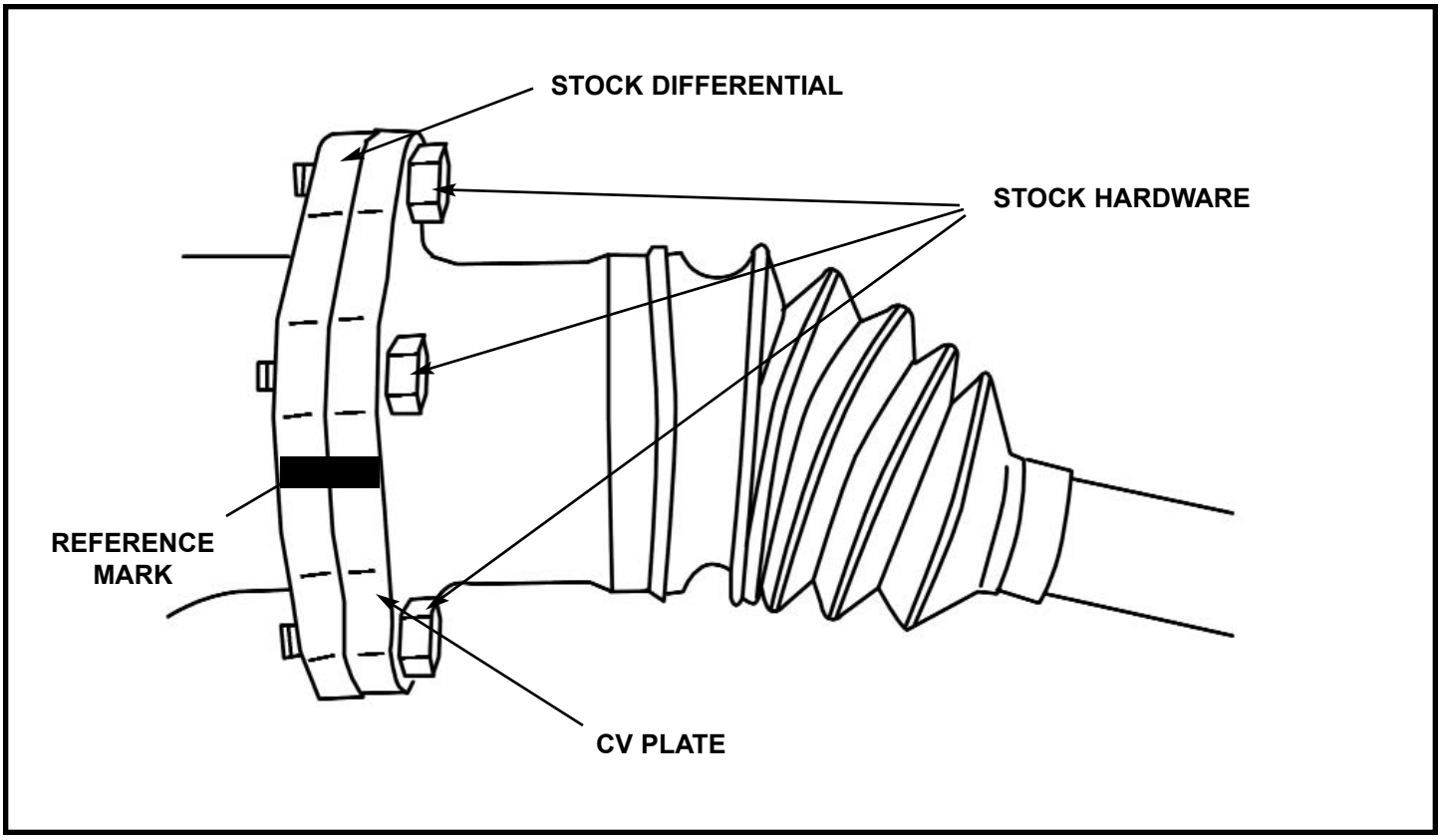

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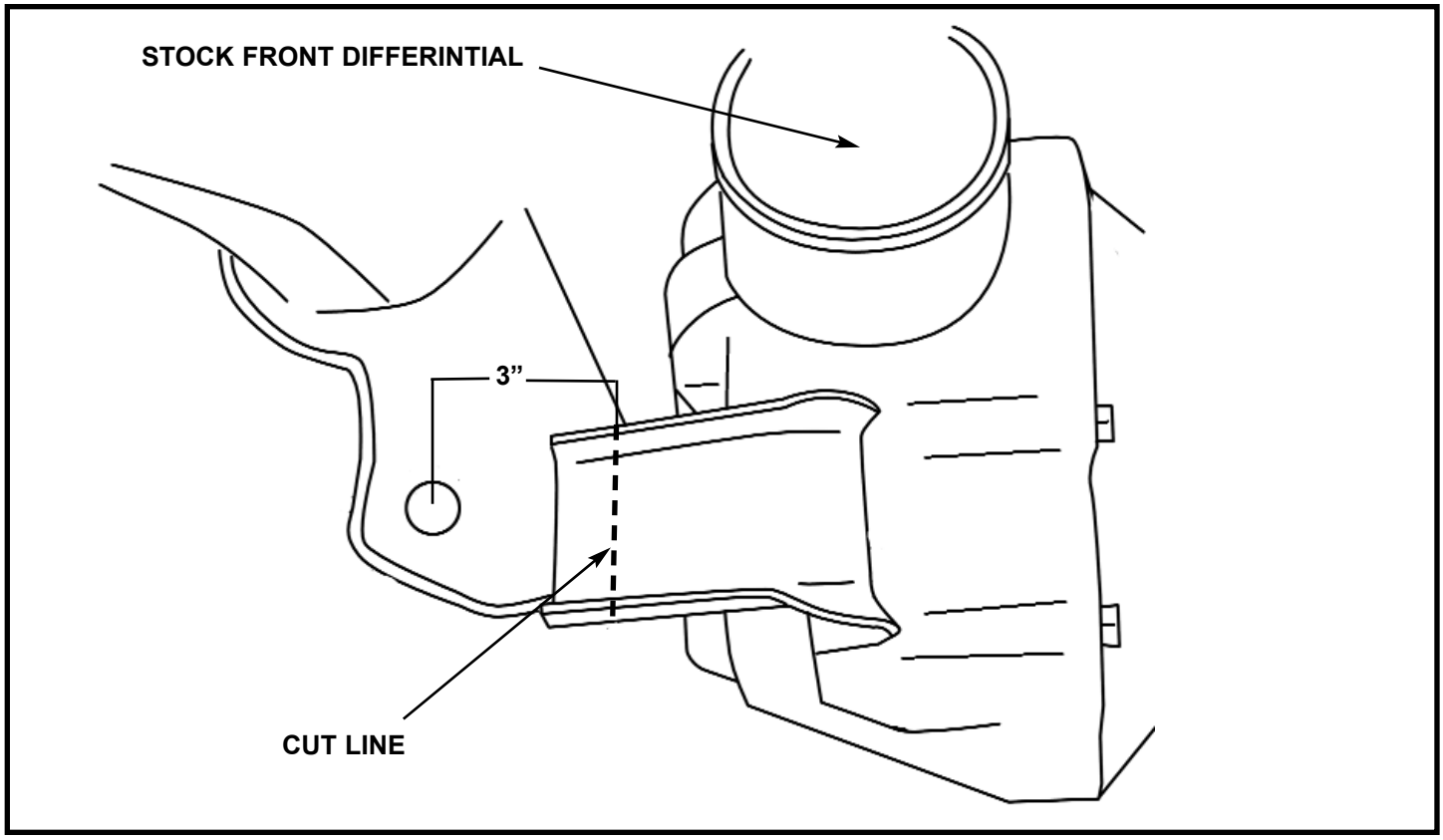

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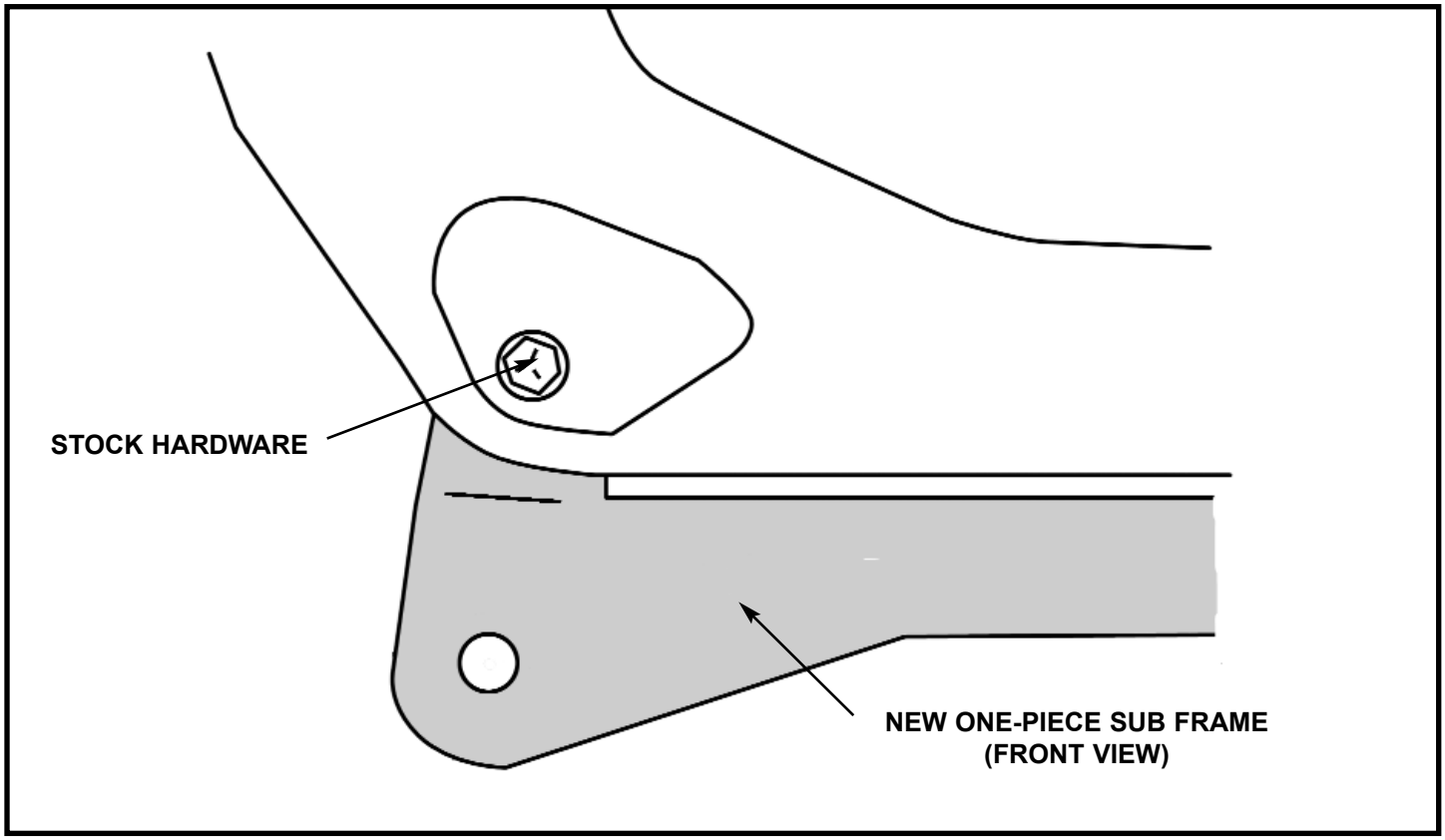

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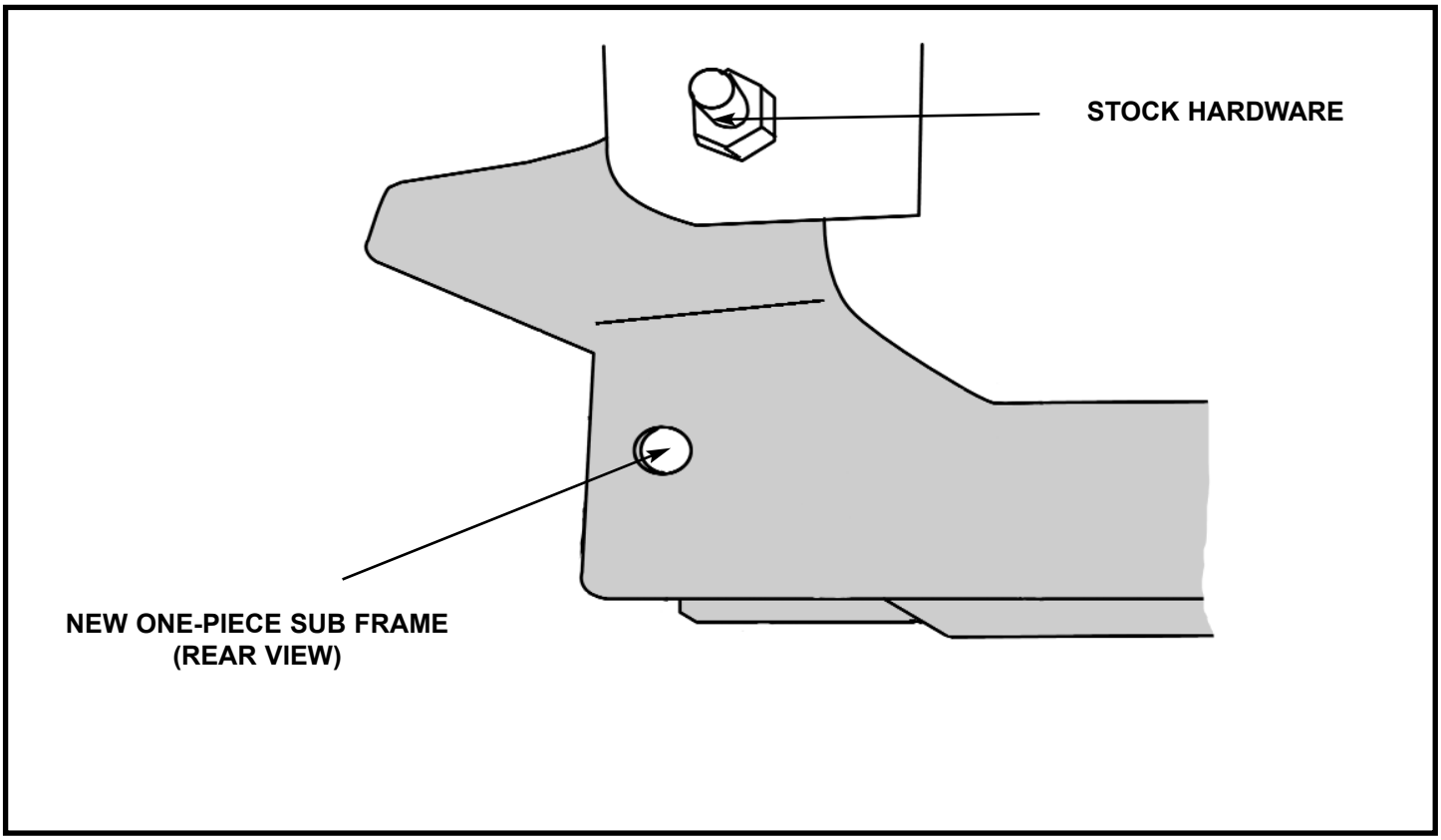

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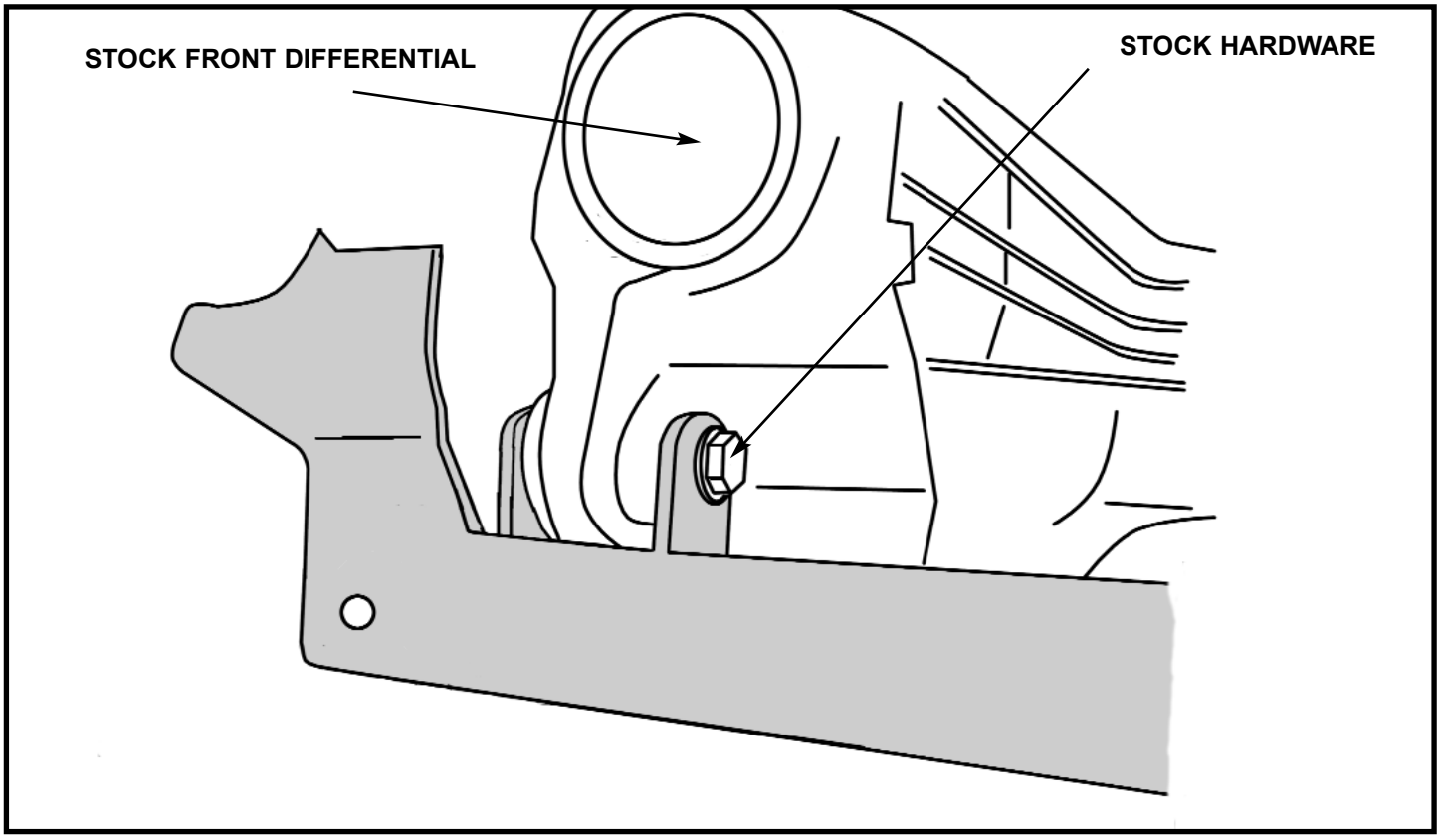

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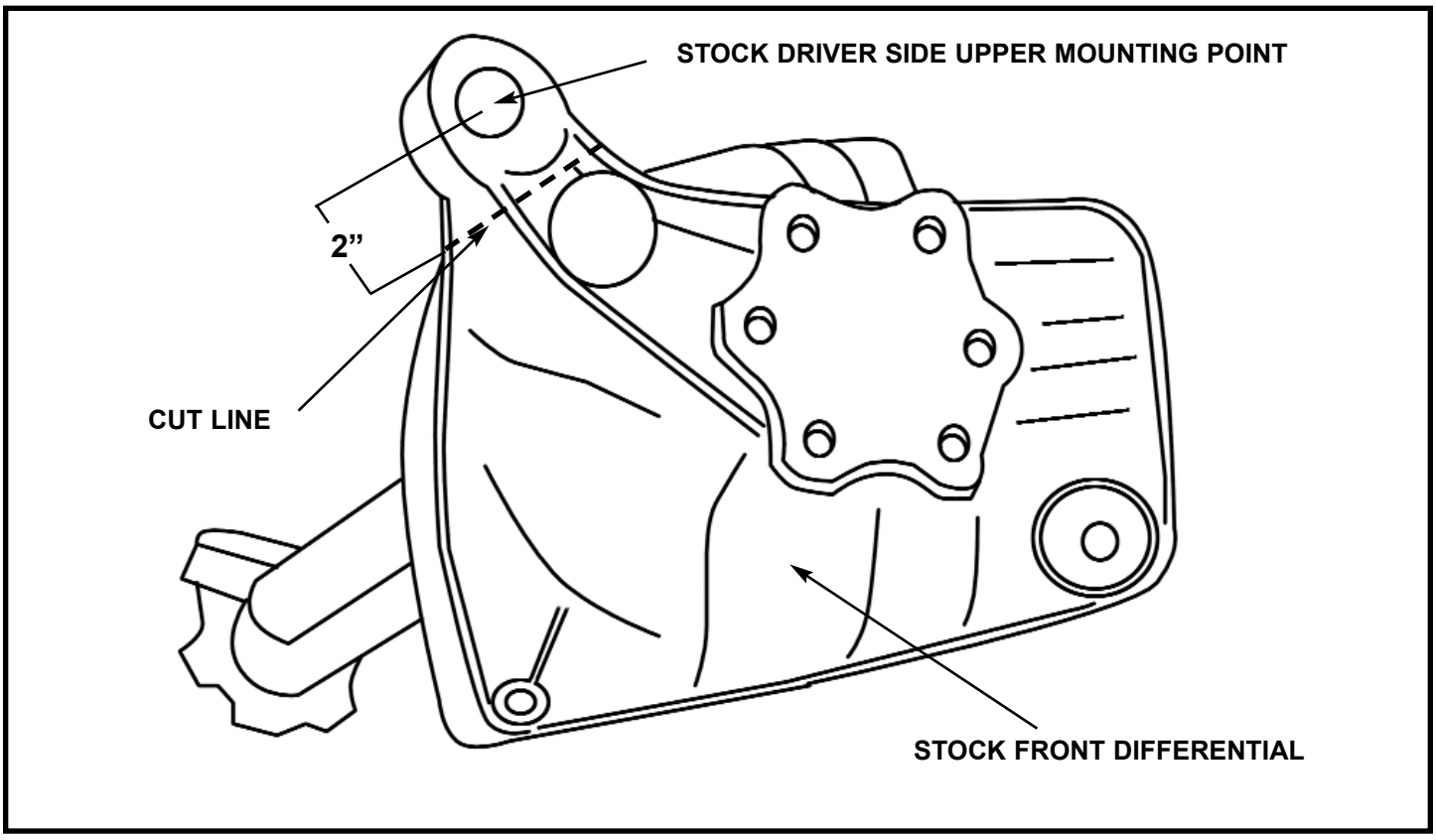

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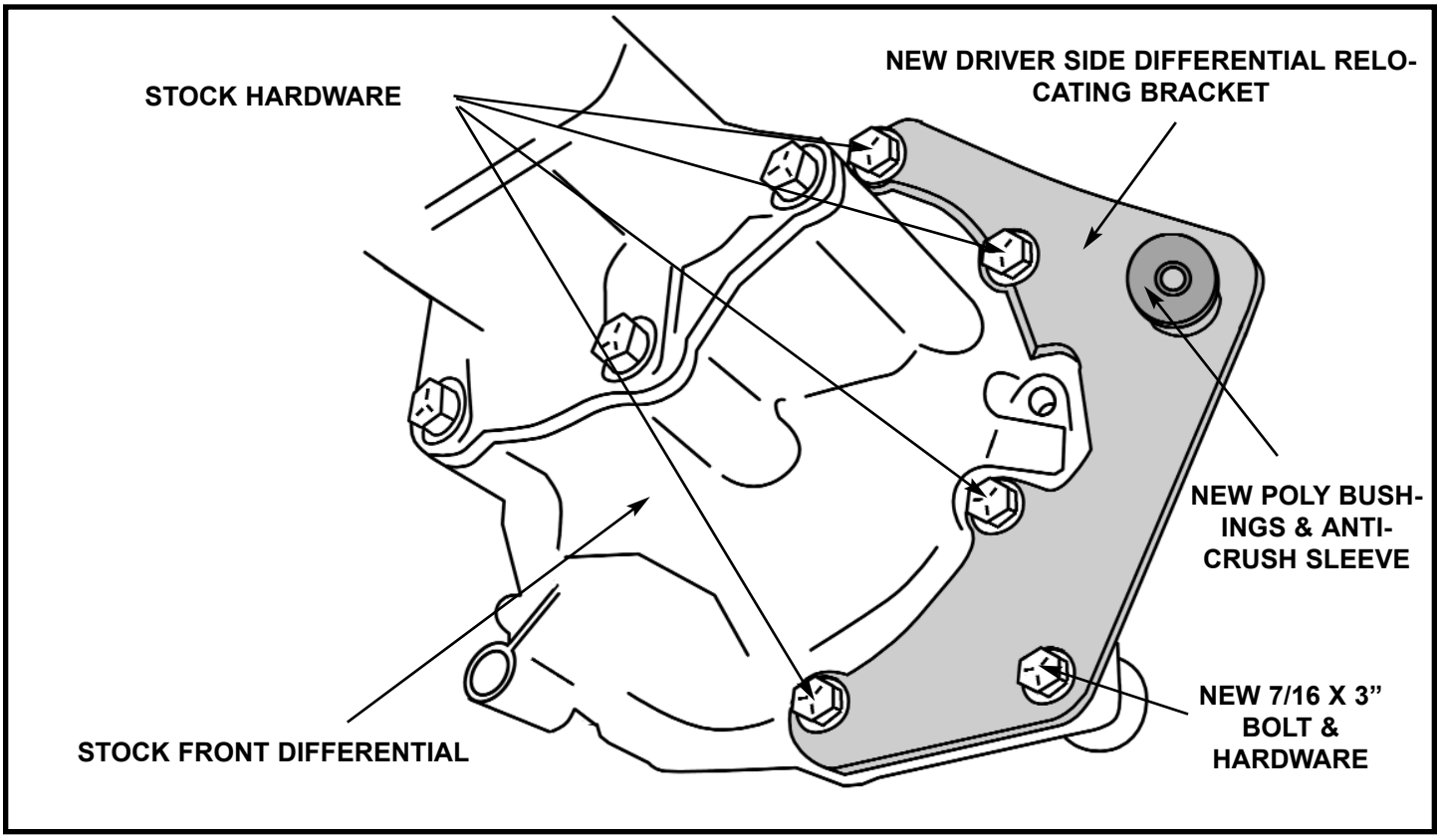

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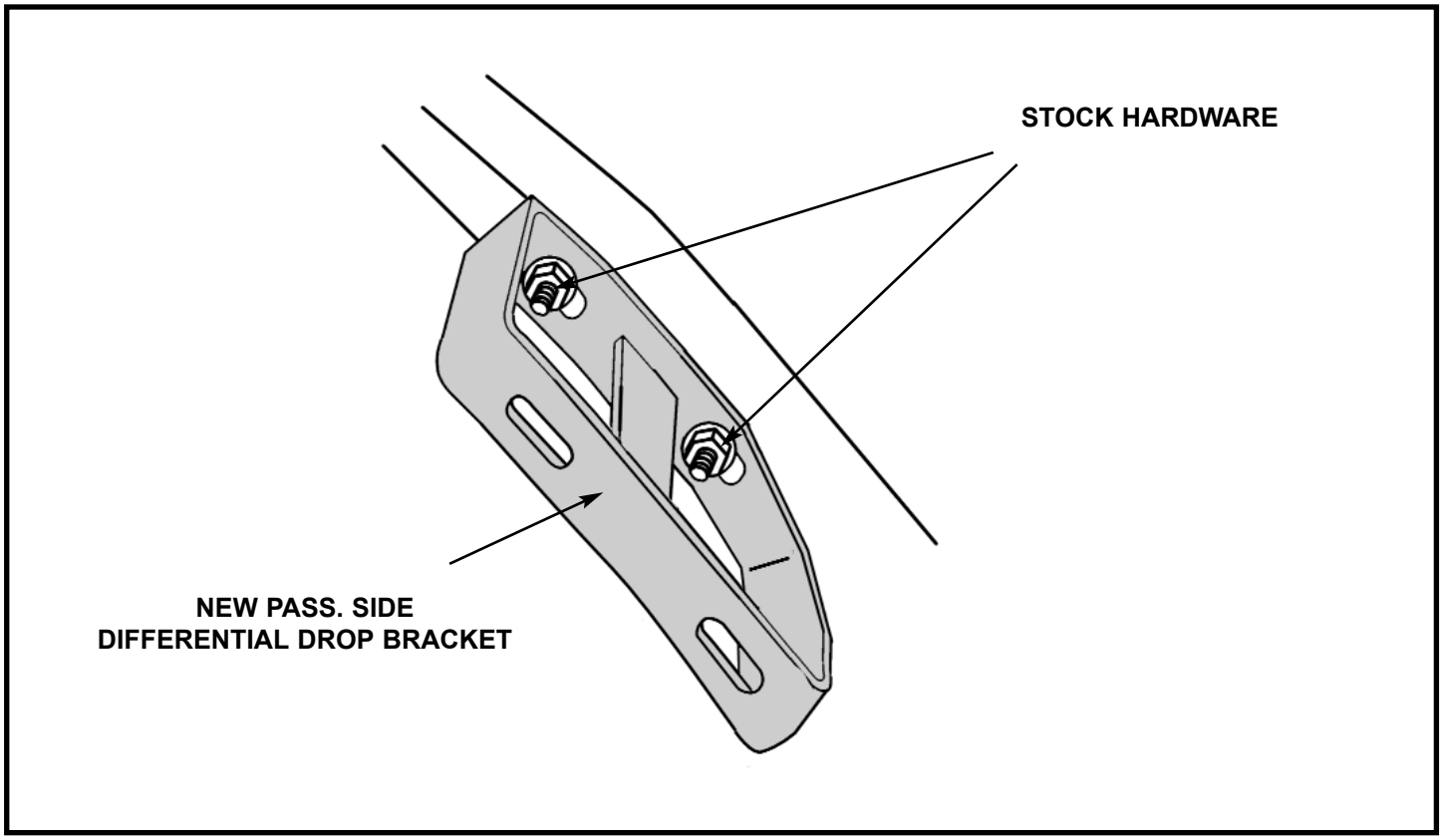

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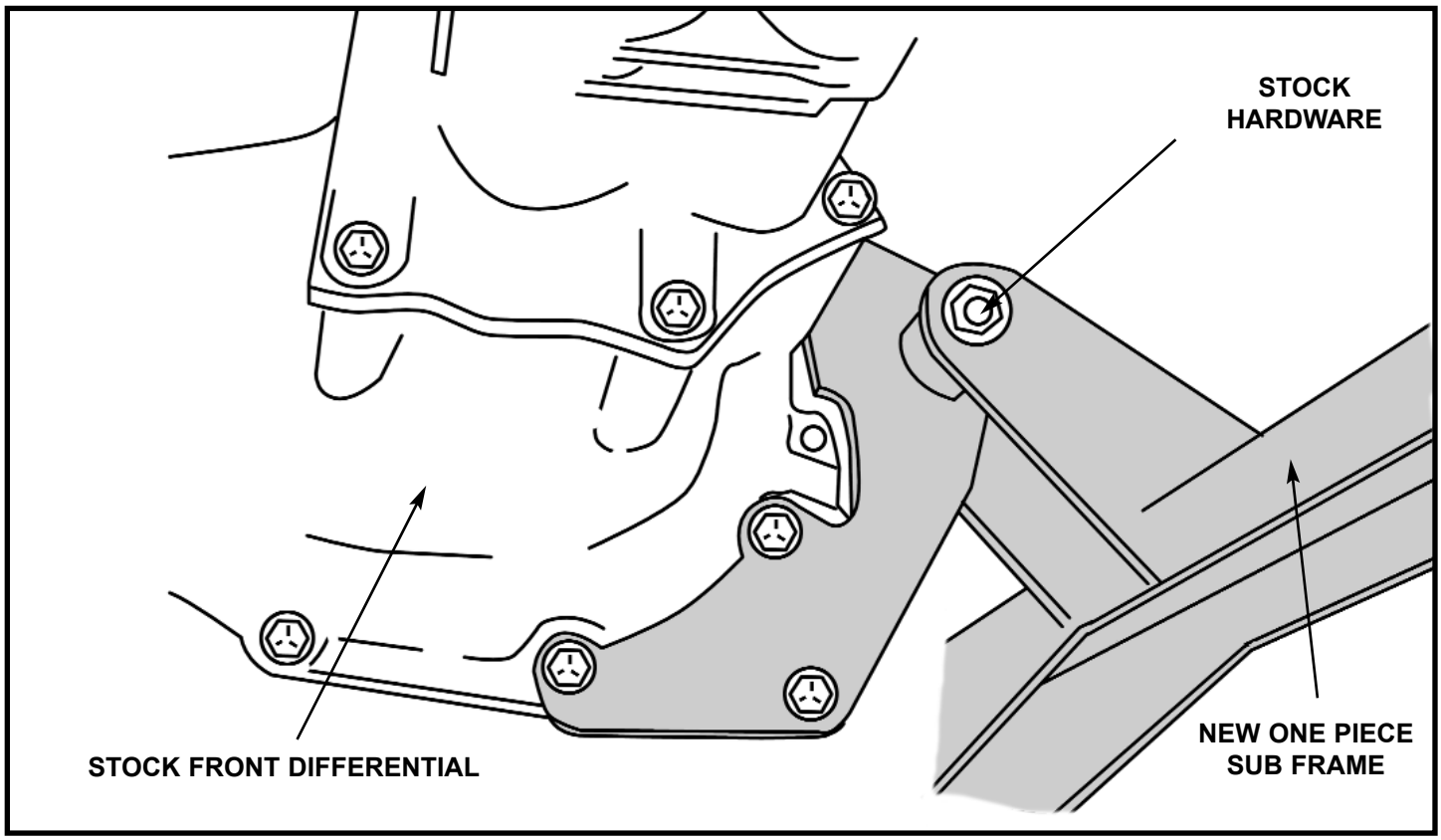

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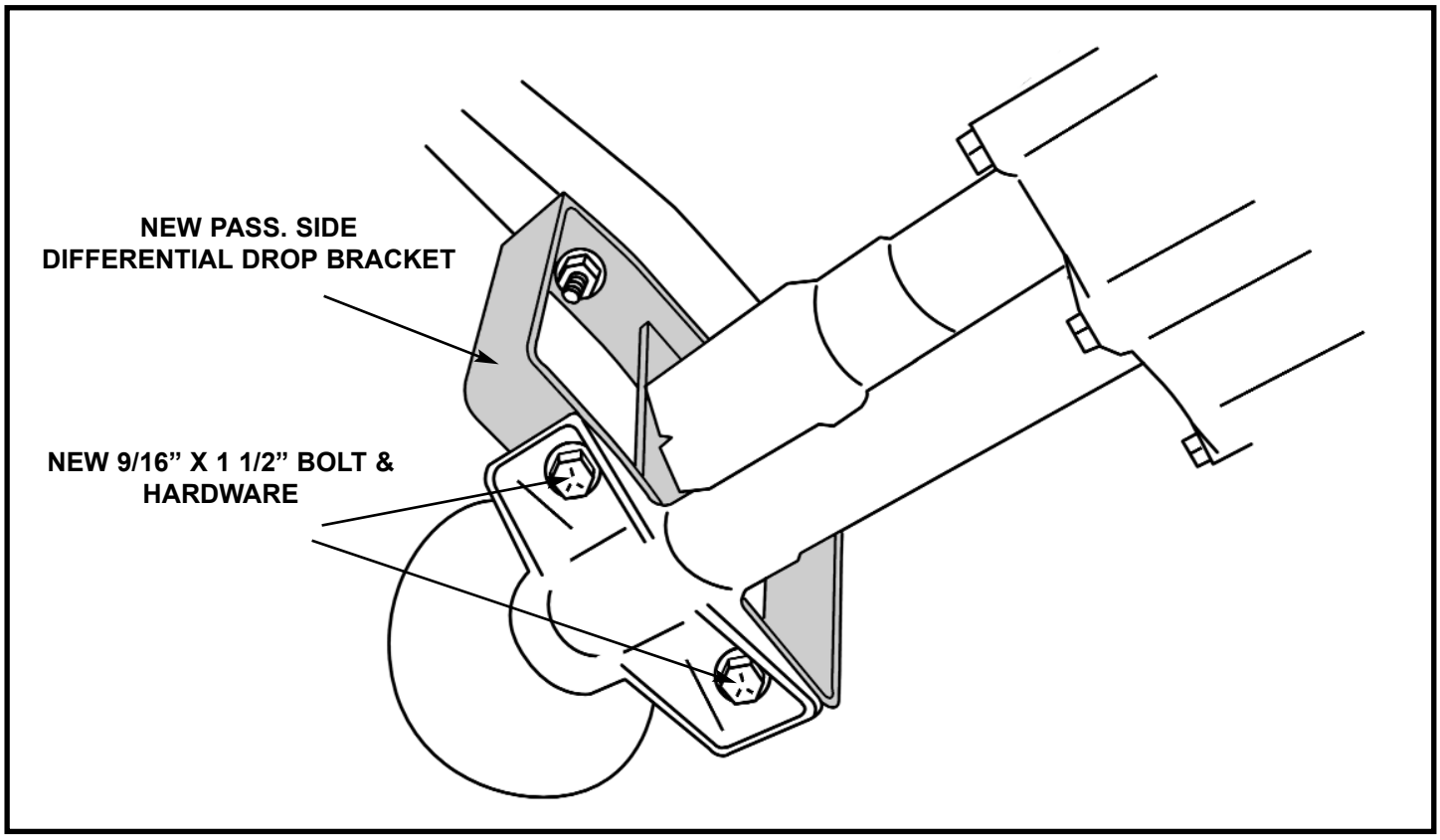

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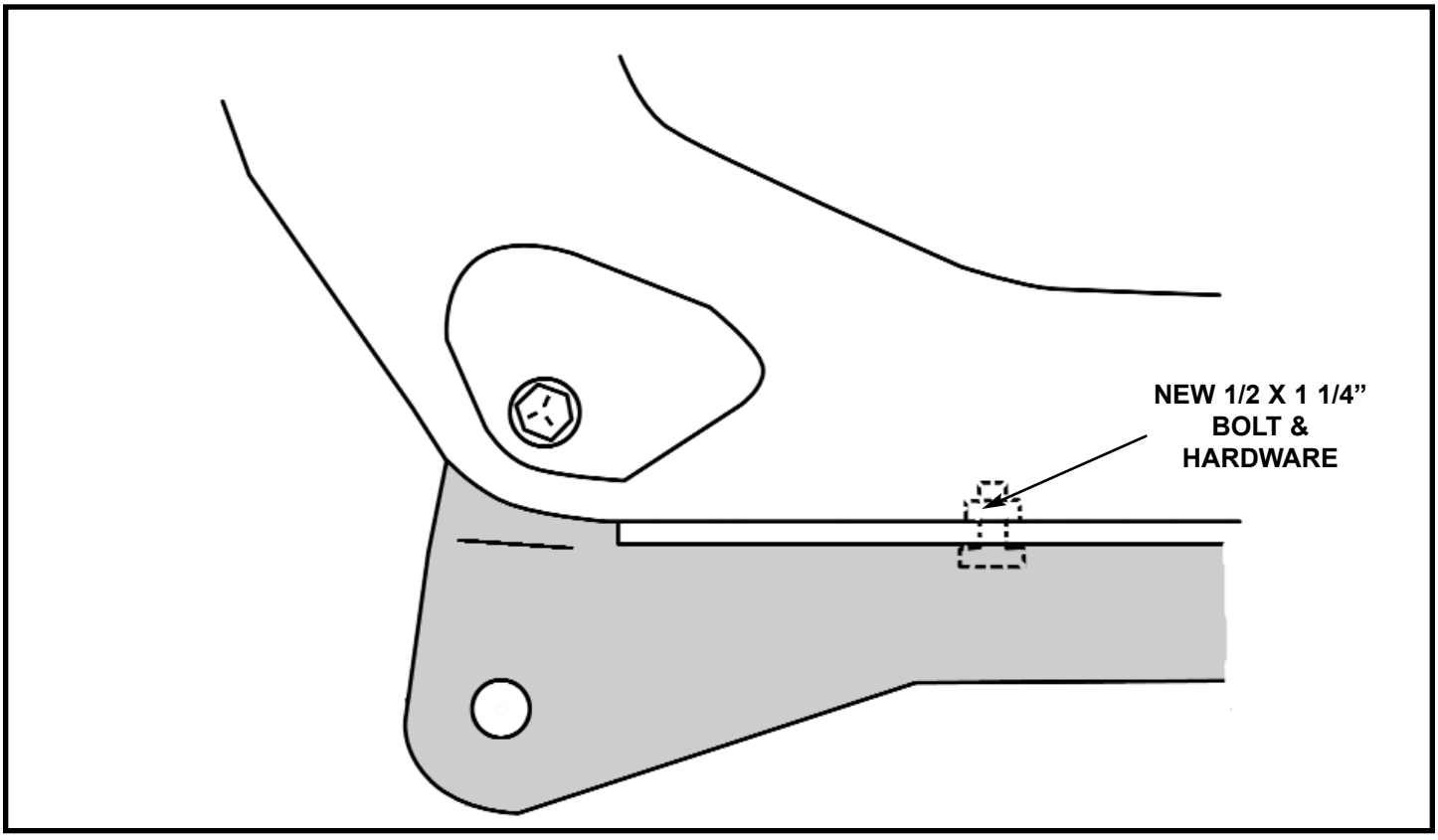

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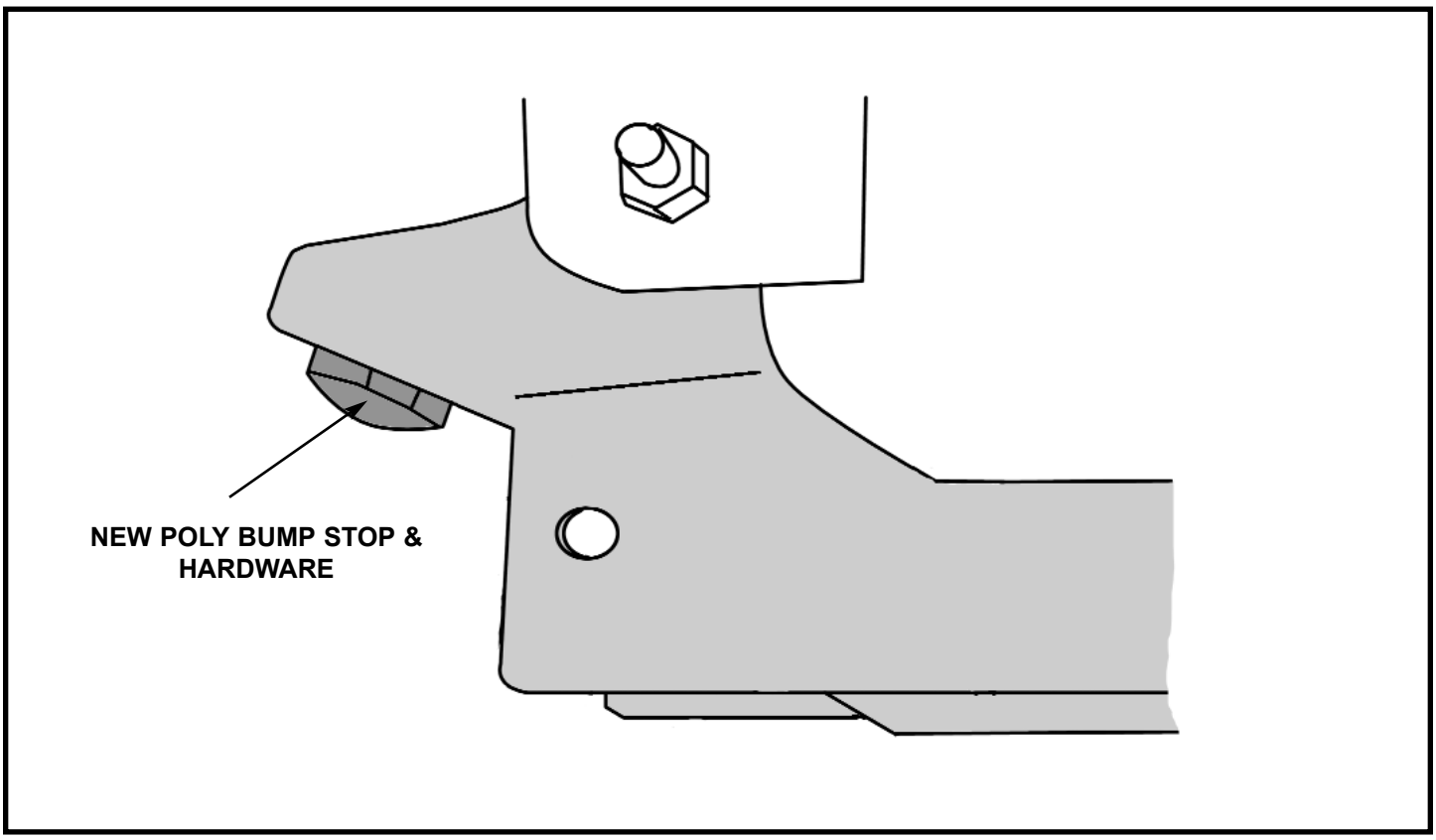

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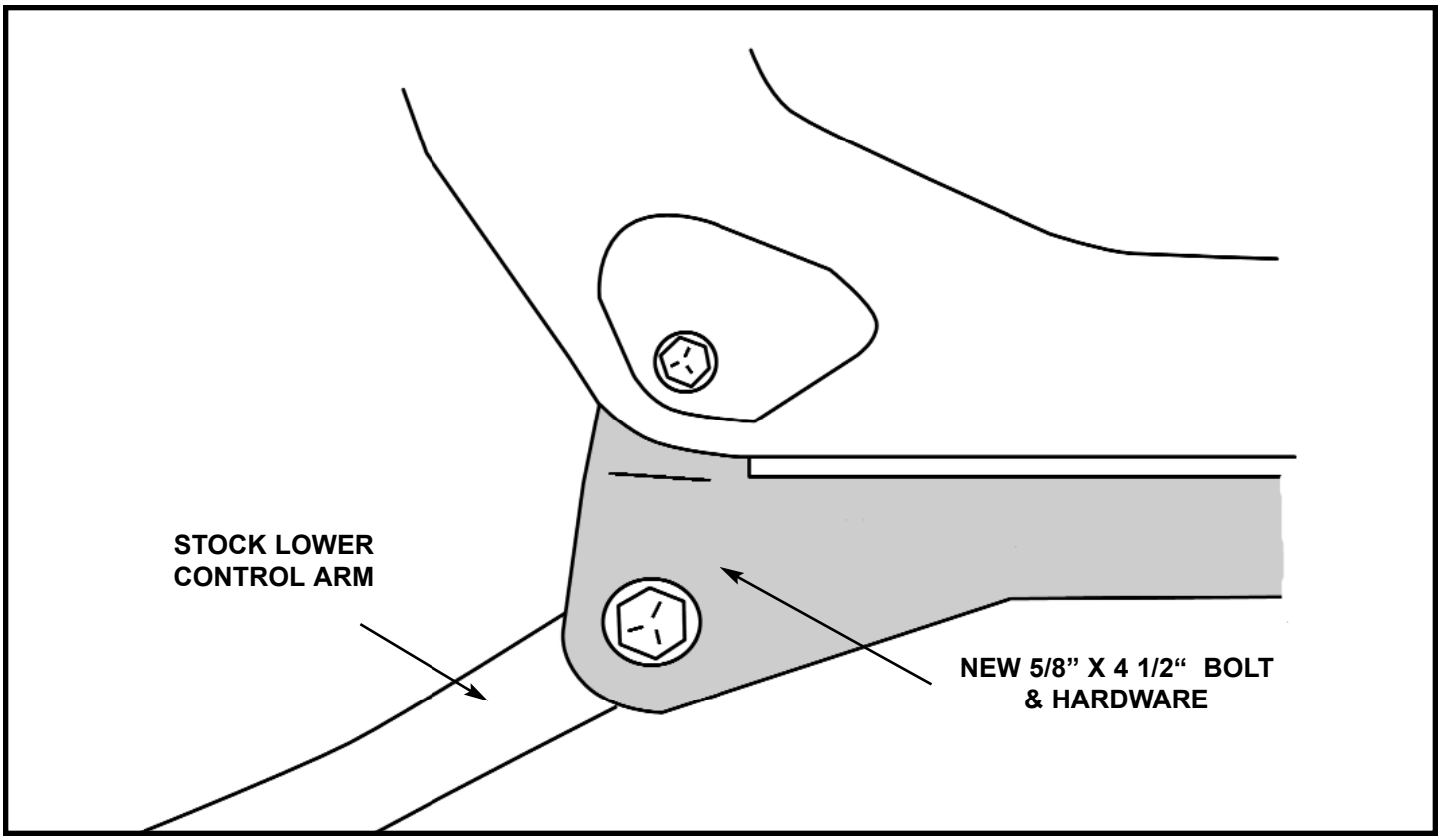

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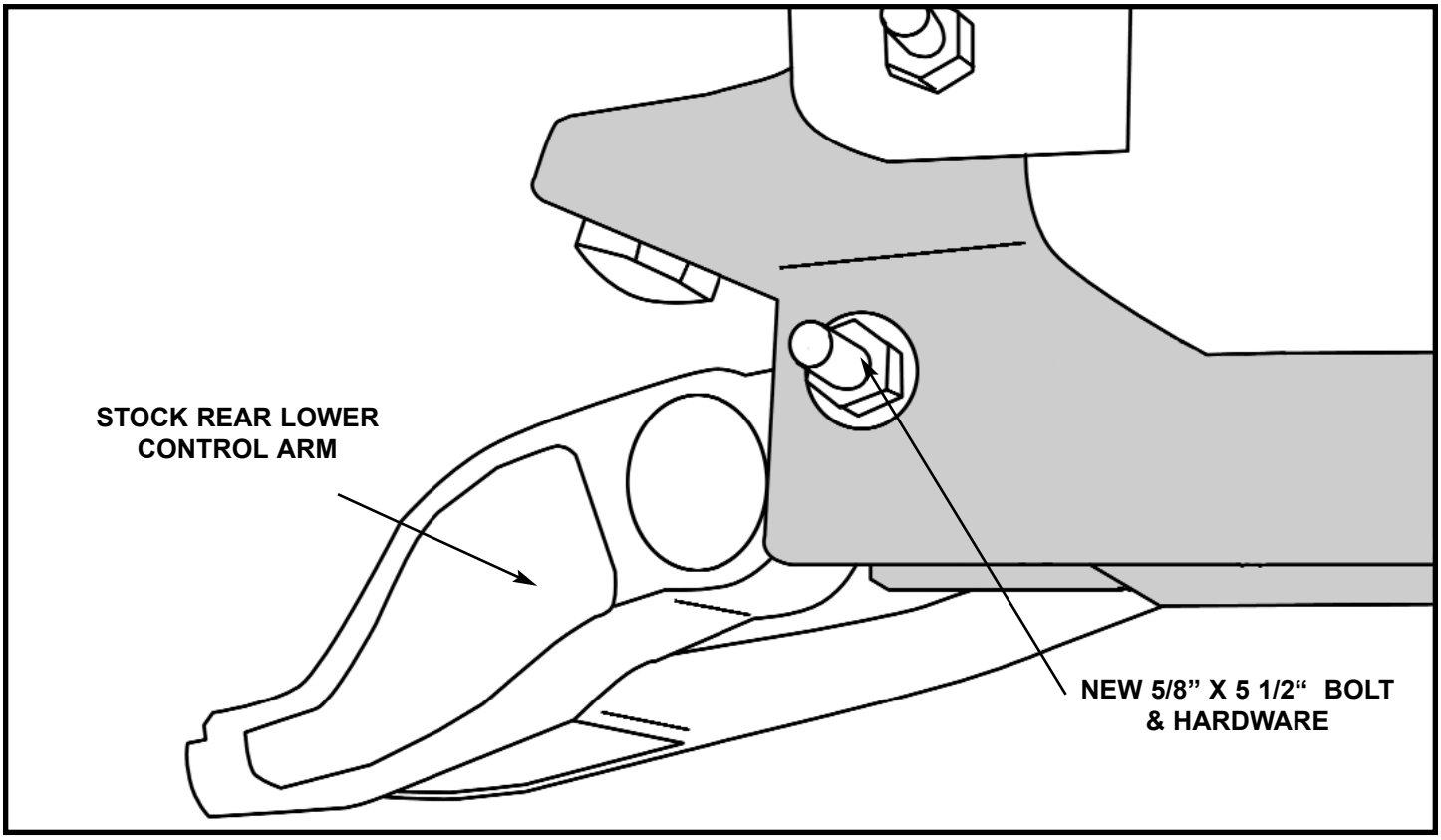

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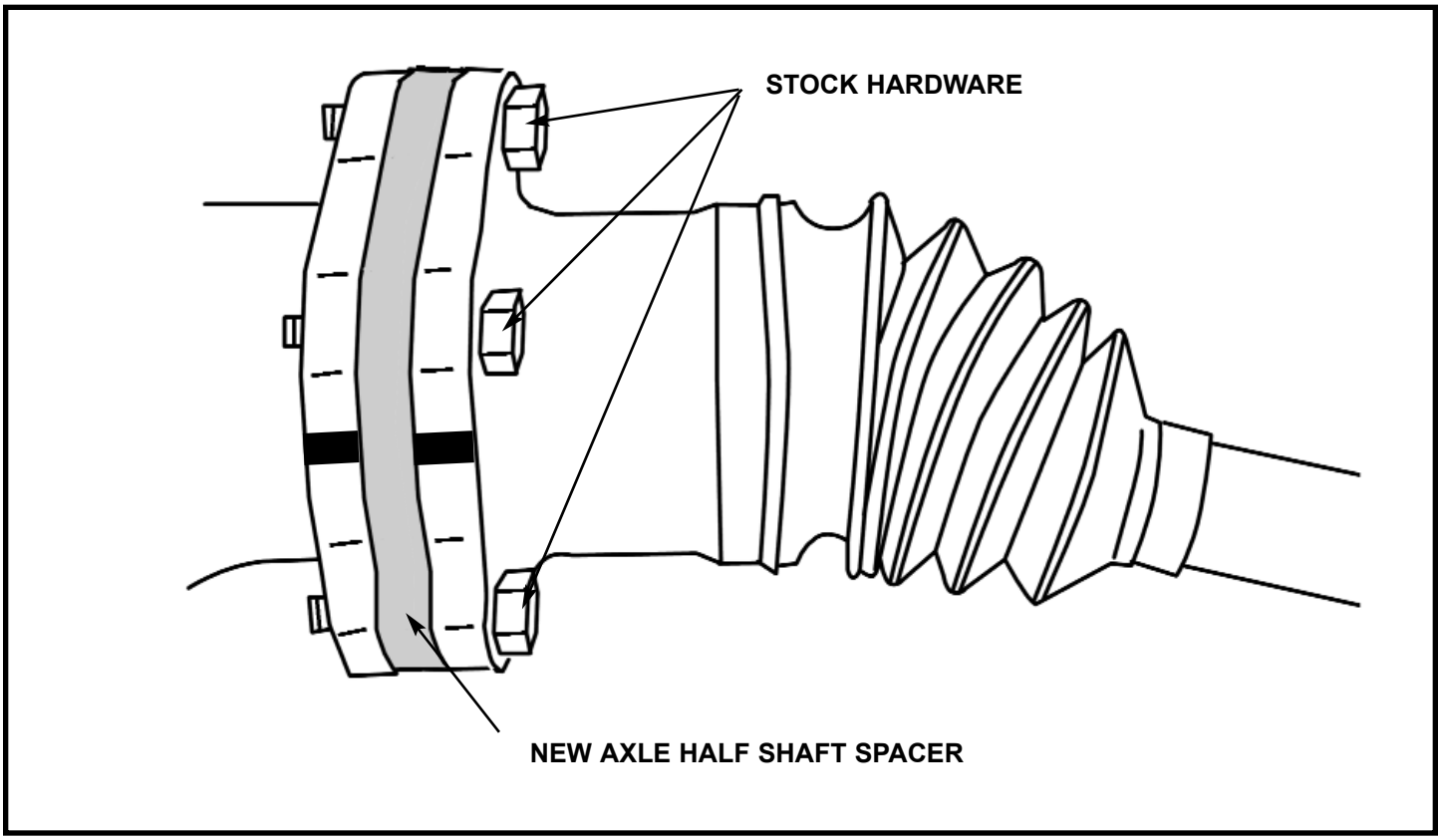

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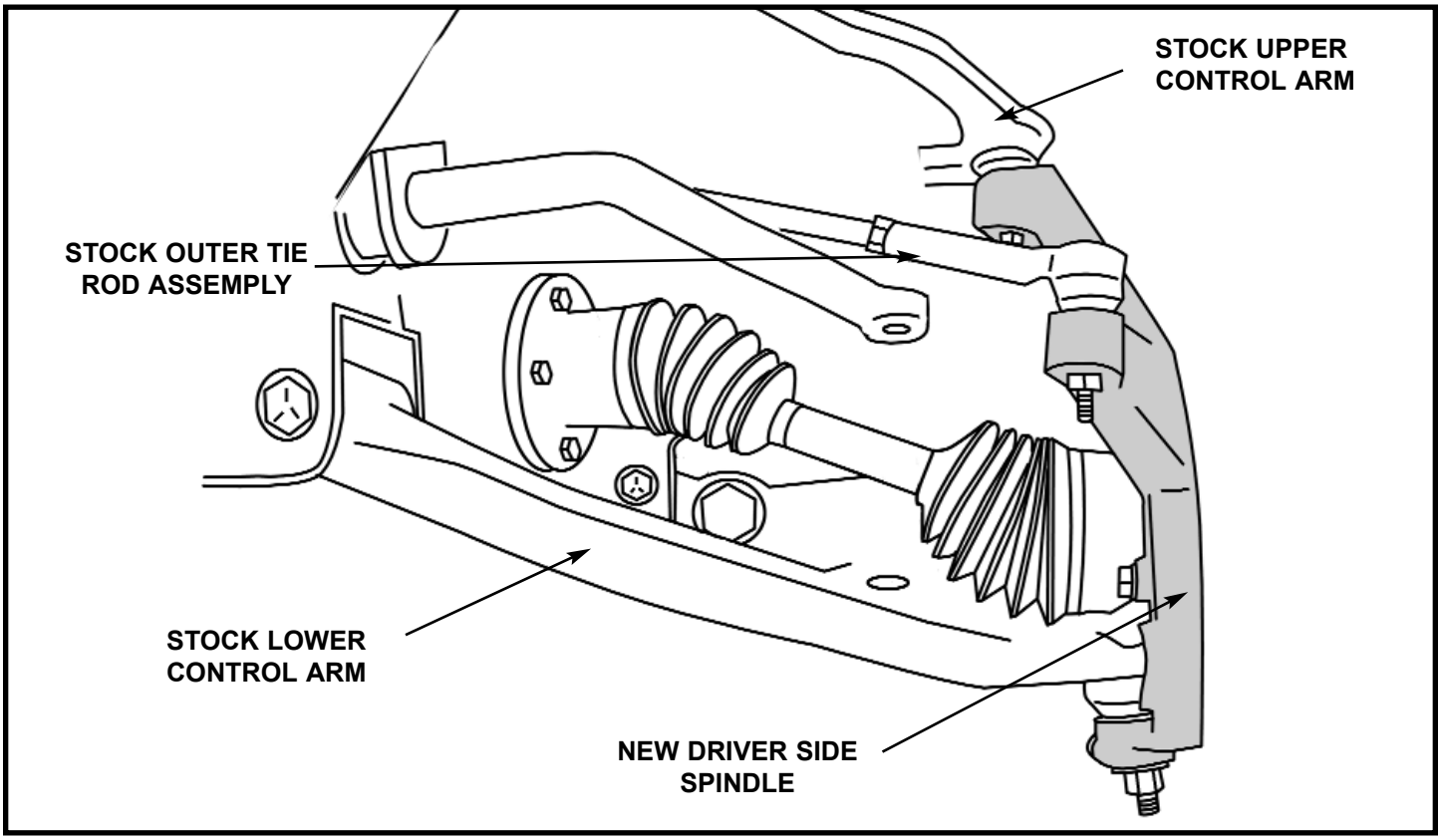

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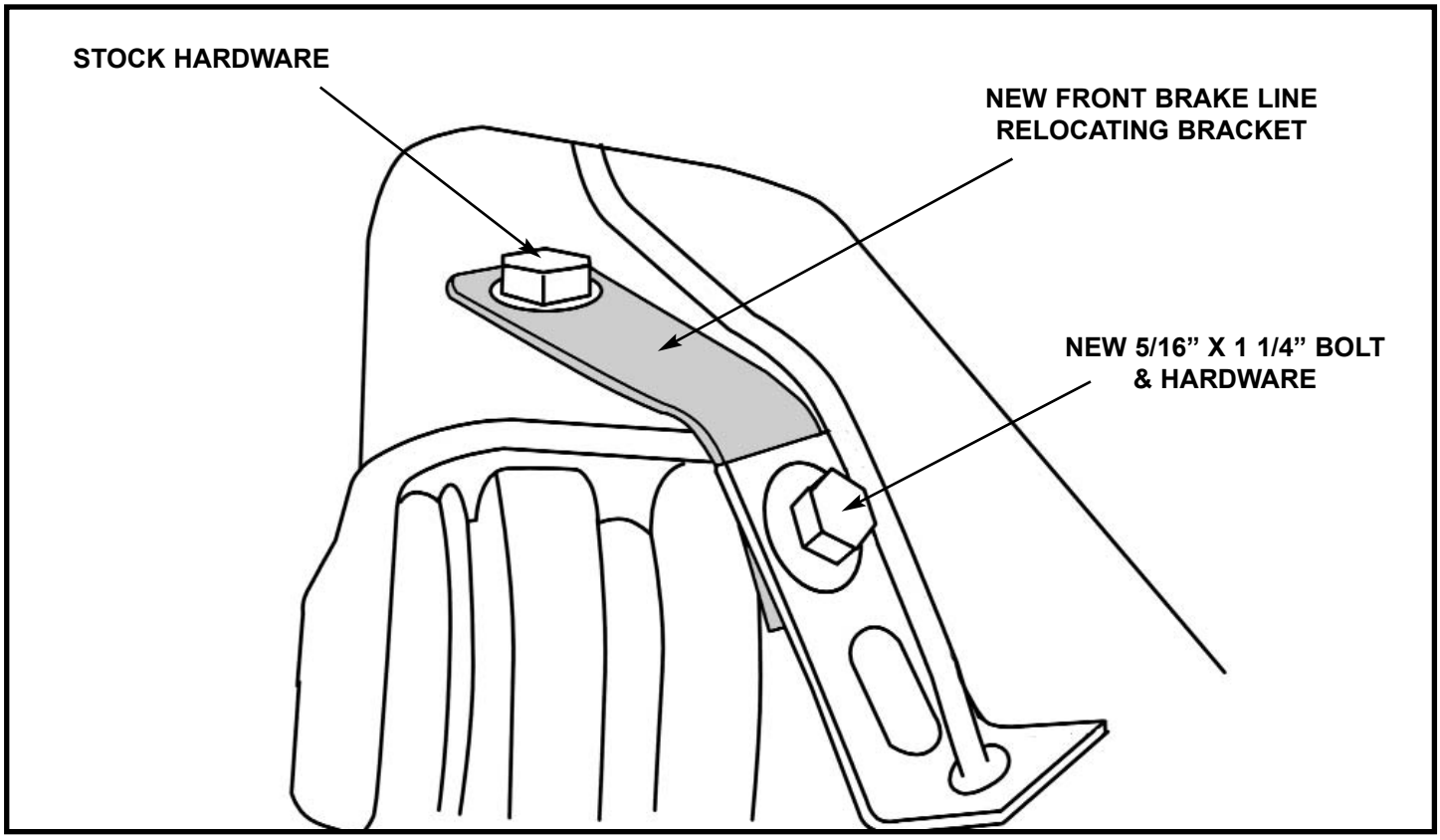

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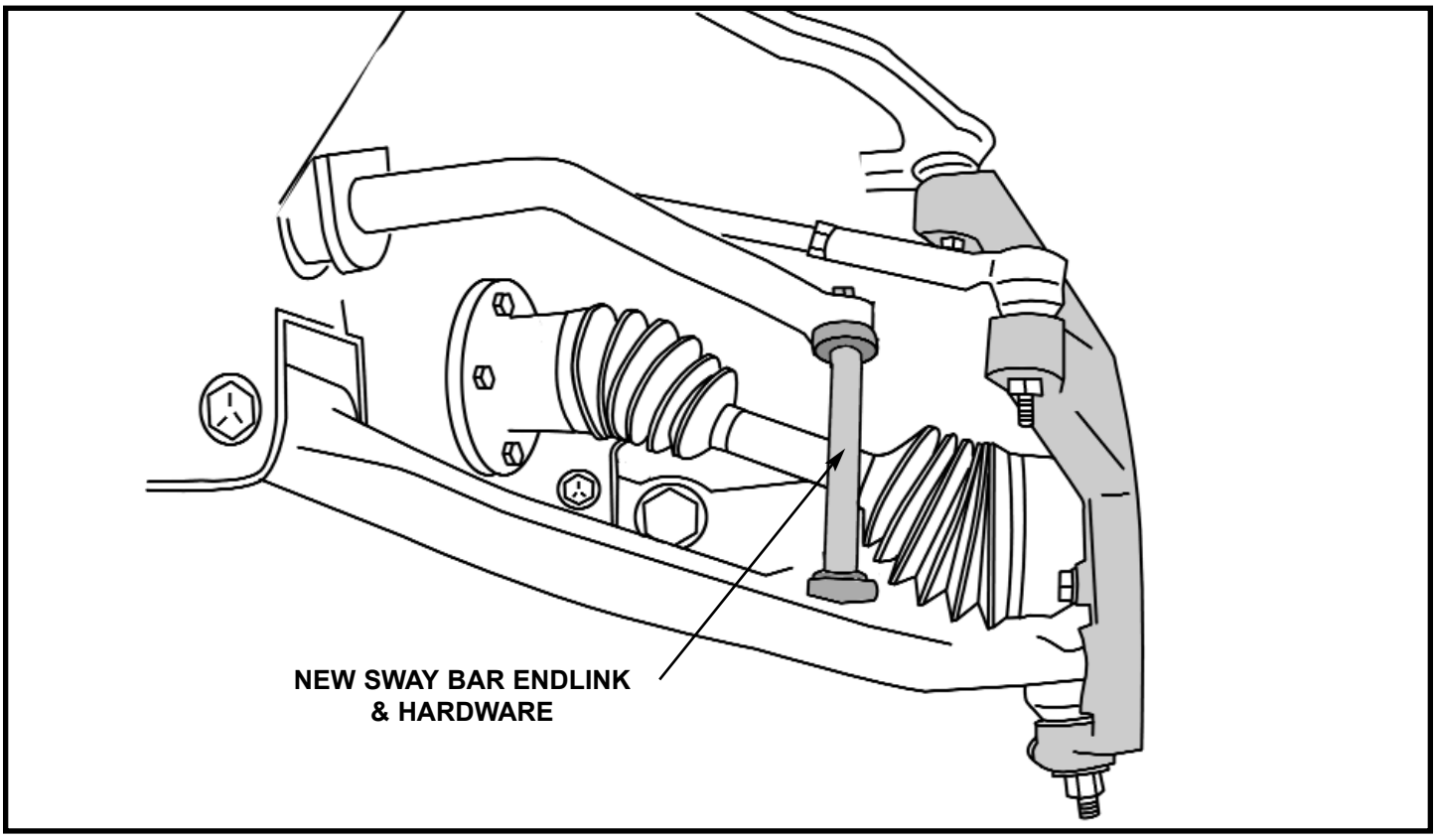

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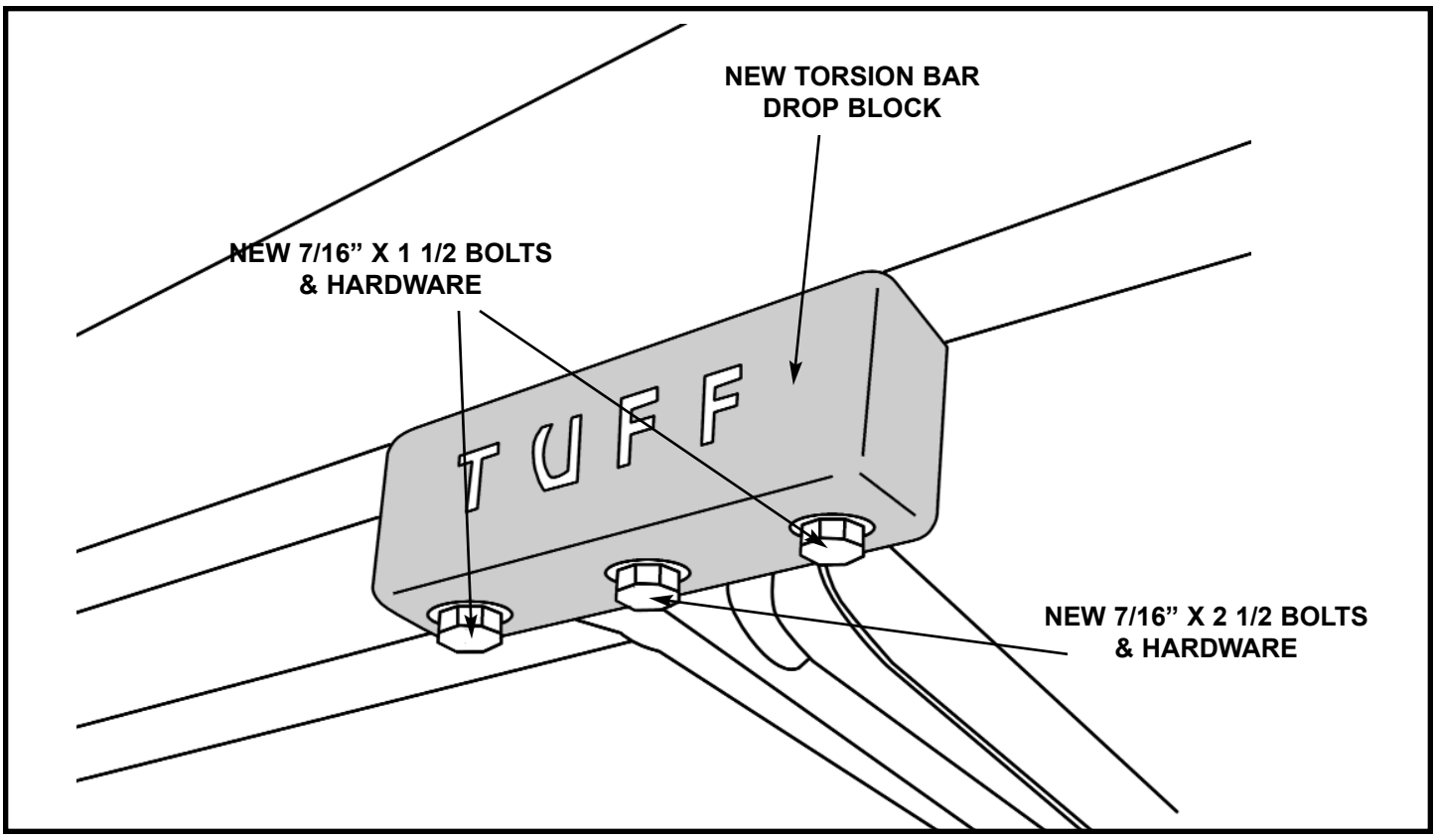

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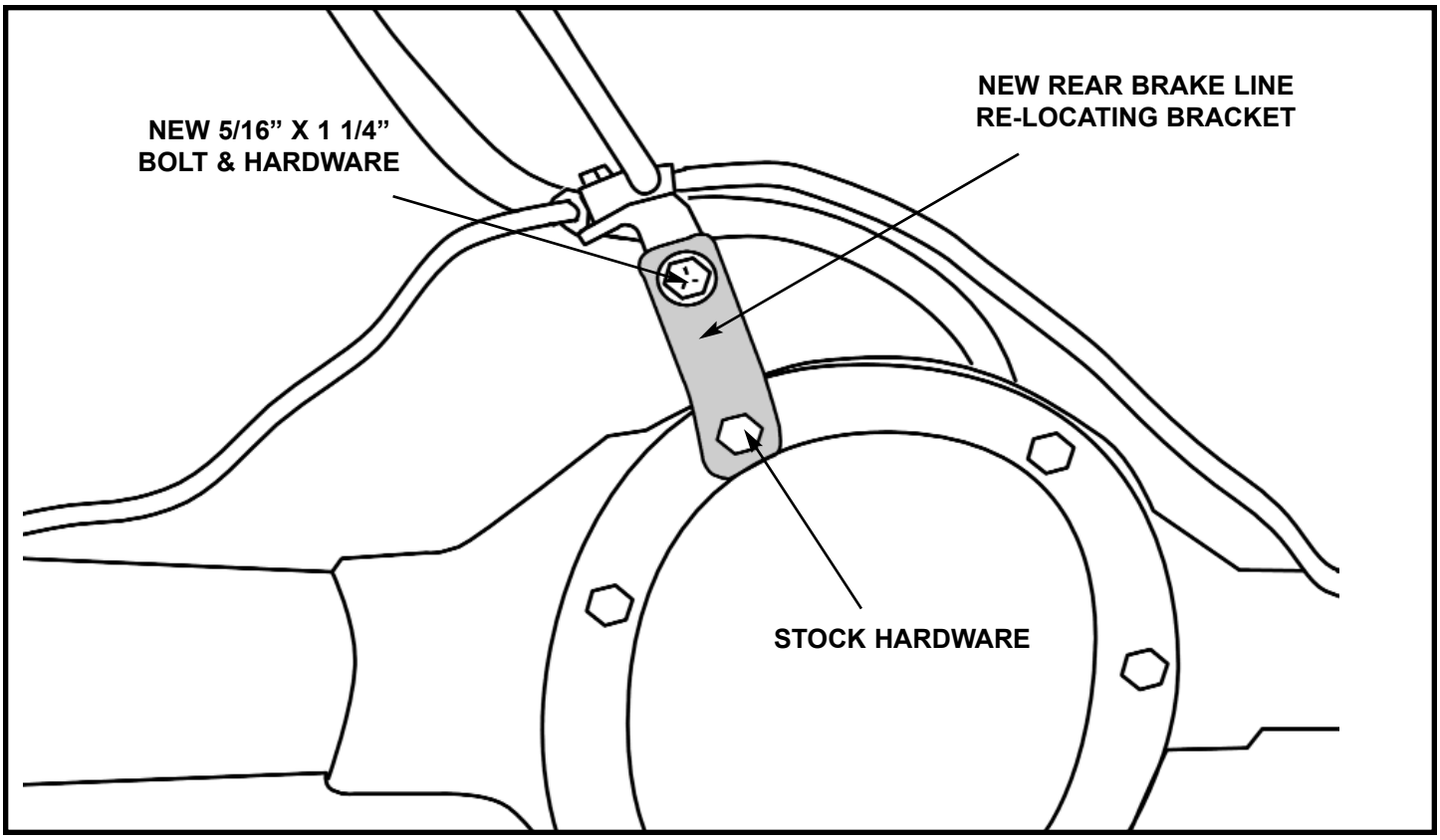

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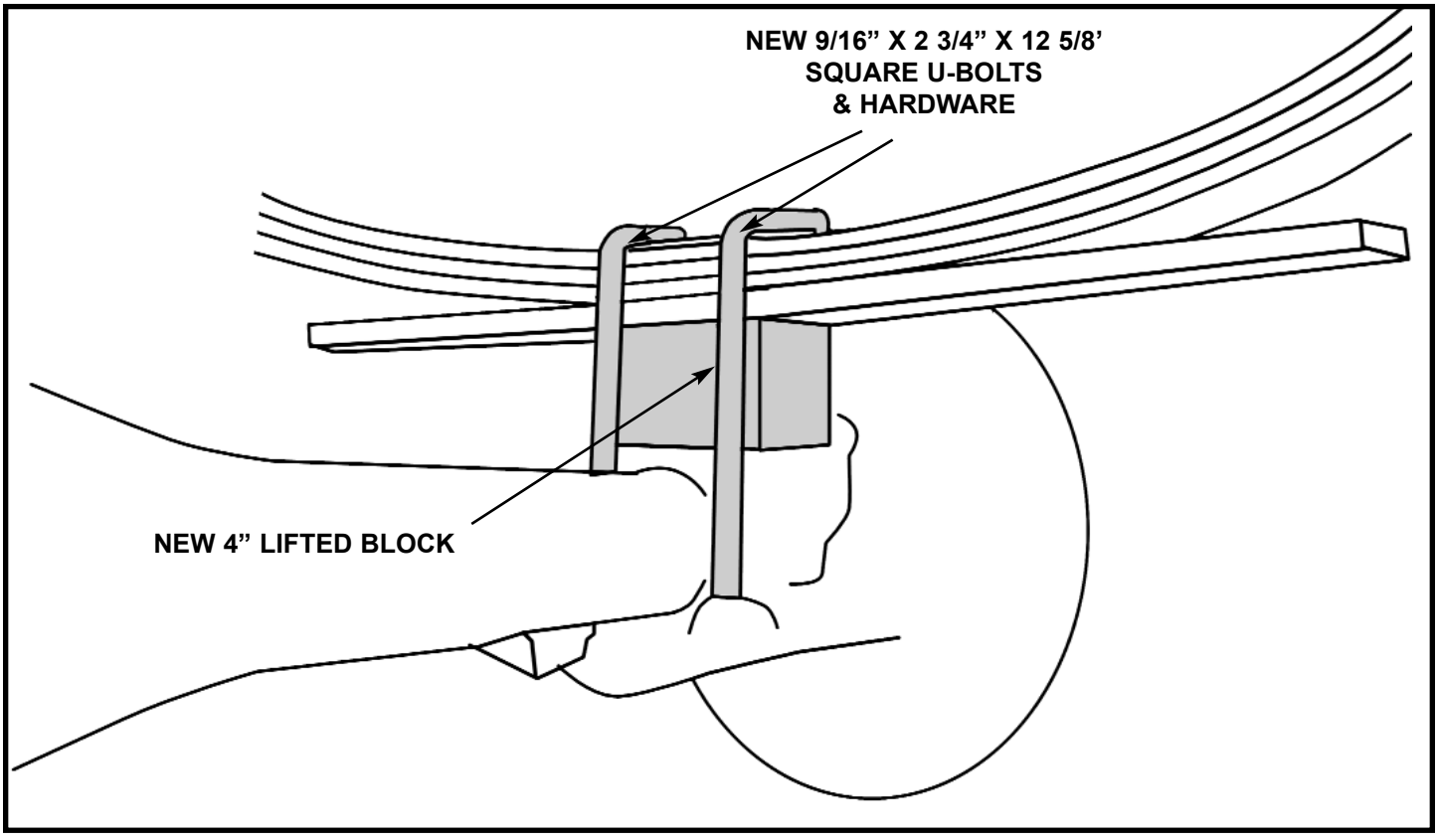

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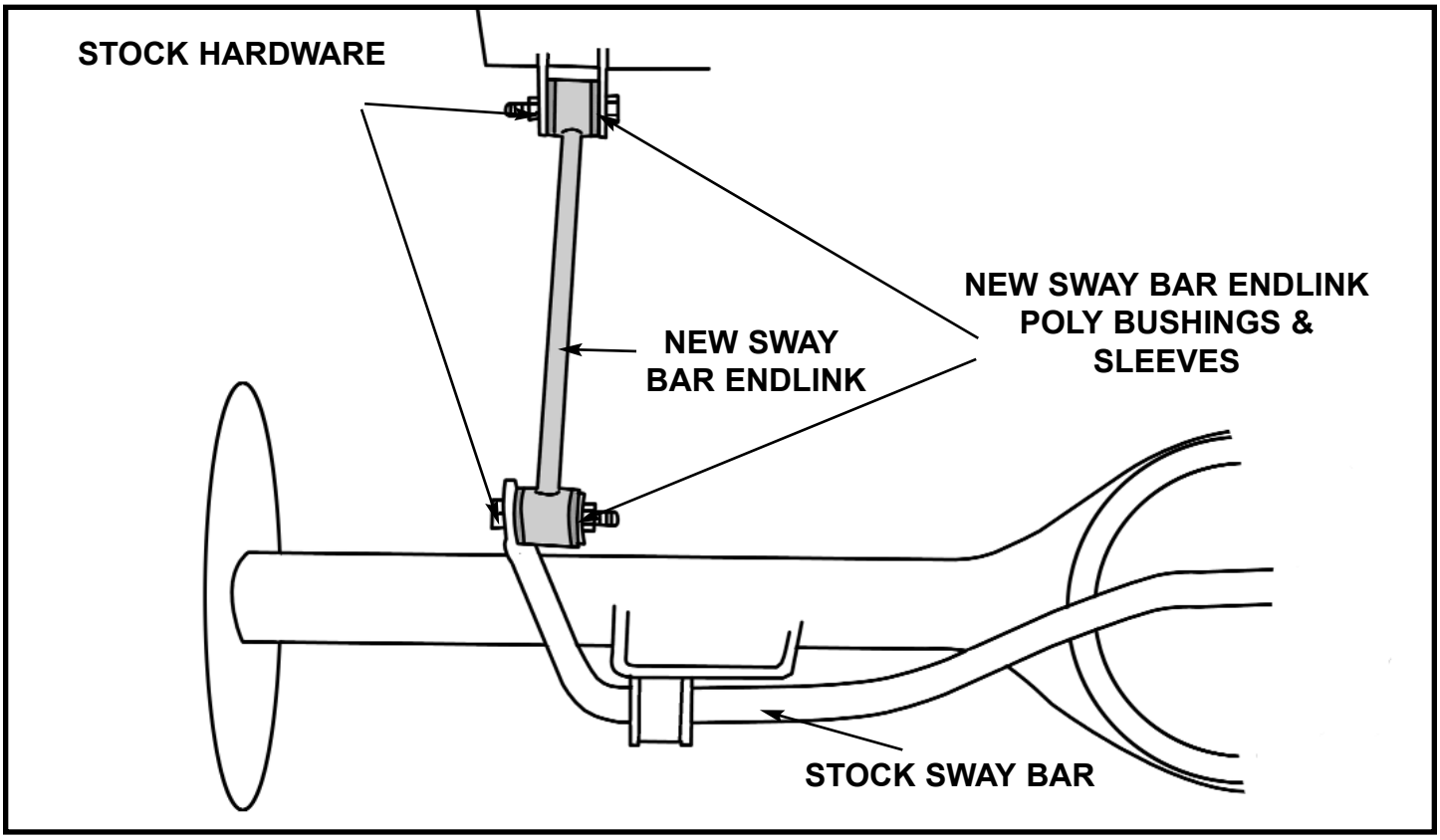

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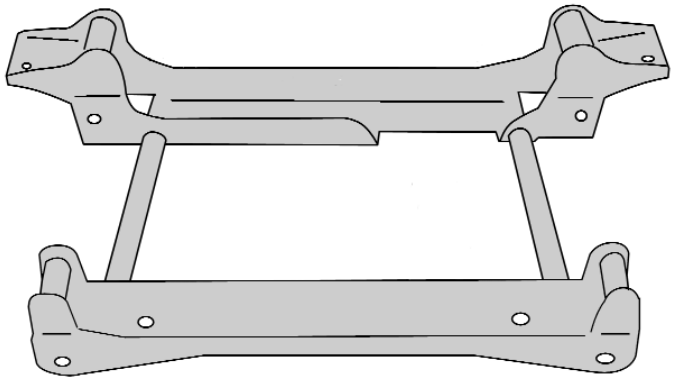
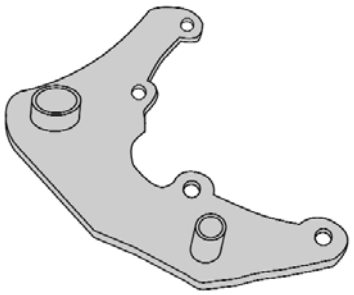
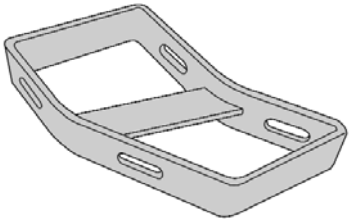


ONE PIECE LOWER SUB FRAME
14810-01 / QTY 1

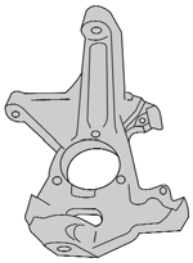


DRIVER SIDE DIFFERENTIAL
RELOCATION BRACKET
14810-03 / QTY 1



PASSENGER SIDE
DIFFERENTIAL DROP BRACKET
14810-04 / QTY 1

TORSION BAR DROP BRACKETS
C4I-111 / QTY 2



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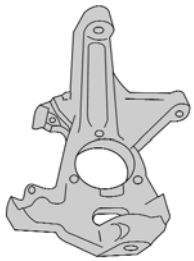
C4I-114 / QTY 1



DRIVER SIDE SPINDLE
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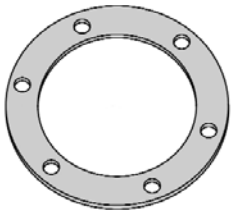

AXLE SPACERS
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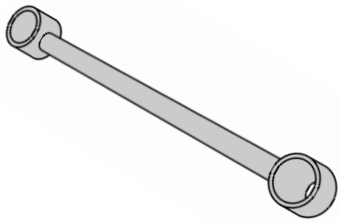

REAR SWAYBAR
ENDLINKS
C4I1SN-31 / QTY 2