



INSTALLATION MANUAL
4" I.F.S. SUSPENSION 2000 - CURR.
CHEVY SUBURBAN / YUKON XL
(WITH 5 LINK REAR END)
PART # 14965

SJ042403rev.03

PART NUMBER : 14965
2000—CURR. SUBURBAN W/ REAR COIL SPRINGS
4" SUSPENSION SYSTEM WITH FRONT SPINDLES

PARTS LIST:

Part #	Description	Qty.
C411SN-07	Passenger Side Differential Drop	1
C411SN-23	Driver Side Front Shock Bracket	1
C411SN-24	Passenger Side Front Shock Bracket	1
C411SN-25	Driver Side Rear Shock Bracket	1
C411SN-26	Passenger Side Rear Shock Bracket	1
C411SN-27	Driver Side Torsion Bar Bracket	2
C411SN-28	Passenger Side Torsion Bar Bracket	2
C411SN-29	Rear Track Bar Bracket	1
C411SN-30	Rear Coil Spring Spacers	2
C411SN-33	Lower One Piece Sub Frame	1
C411SN-35	Driver Side Spindle	1
C411SN-36	Passenger Side Spindle	1
C411SN-37	Driver Side Differential Drop	1
BP-01	Rear Sway Bar End Links	2
S10019	Rear Shock Spacer Sleeve	2
S10020	Torsion Bar Sleeve	2
9804	Axle Spacers	2
14965NB	Hardware Box	1
14965SL	Poly Bushing & Sleeve Bag	1
14965INST	Instruction Sheet	1

IMPORTANT CUSTOMER INFORMATION

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

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

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.

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 100 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 checked every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country EZ-Ride Suspension takes no responsibility for abuse, improper installation or improper suspension maintenance.

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.

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

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

Make sure to use thread locker or locktite on all new and stock hardware associated with the installation of this suspension system.

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.

Special Note: Chevy Suburban and Yukon XL came with two different shock options. One with Air Ride Load Sensor Shocks and one with out. Part # 14965 will work on both. If the vehicle that you are working on DOES NOT have the Air Ride Load Sensor Shocks, the stock shocks may be re-installed in conjunction with the new shock relocation brackets. Or if you prefer, after market shocks may be installed into the stock location. If the vehicle that you are working on has the Air Ride Load Sensor Shocks, the stock shocks need to be re-installed in conjunction with the new shock relocation brackets. This option is for the front and rear of the vehicle.

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 or 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 INFORMATION THAT NEEDS TO BE READ BEFORE INSTALLATION BEGINS:

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.

If the vehicle that you are working on has the stock transfer case cross member that is bolted to the bottom side of the stock frame rail, and you would like to install new lateral compression arms, please contact Tuff Country or your local Tuff Country dealer and order part # 10906.

If the vehicle that you are working on has the stock transfer case cross member that is bolted to brackets that are welded to the inside of the stock frame rail, and you would like to install new lateral compression arms, please contact Tuff Country or your local Tuff Country dealer and order part # 10907.

If you would like to install an aftermarket lower skid plate, please contact Tuff Country or your local Tuff Country dealer and order part # 90055.

If you would like to install an aftermarket pre-runner style skid plate, please contact Tuff Country or your local Tuff Country dealer and order part # 90056.

Before installation begins, Tuff Country EZ-Ride Suspension highly recommends that the installer performs a test drive on the vehicle. During the test drive, check to see if there are any uncommon sounds or vibrations. If uncommon sounds or vibrations occur on the test drive, uncommon sounds or vibrations will be enhanced once the suspension system has been installed. Tuff Country EZ-Ride Suspension highly recommends notifying the customer prior to installation to inform the customer of these issues if they exist.

After installation, some vehicles may encounter a front drive line vibration. If this is the case on the vehicle that you are working on, the stock drive line may need to be rebalanced. If the stock drive line is rebalanced and the vibration still occurs, a new drive line may be needed. If a new drive line is needed, you may contact Tuff Country or your local Tuff Country dealer and order part # 10902.

Hardware Bag 14965SL Includes:

<u>Description</u>	<u>Quantity</u>
Poly Bushings (PB2408G)	2
Crush Sleeve (9/16" x 2 1/2")	1
9 1/2" Long Sway Bar End Links	2
Poly Bushings (PB4902G)	12
Crush Sleeves (1/2" x 1 1/2")	4
Crush Sleeves (9/16" x 1 1/2")	2
Poly Bump Stops	2
Poly Lube Pack	2
Sway Bar End Link Washers	8
Sway Bar End Link Bushings	8

Hardware Bag 14965NB Includes:**Bag # 1**

<u>Description</u>	<u>Quantity</u>
3/8" x 13" Bolts	2
3/8" Uitorque Nuts	4
3/8" Flat Washers	2
3/8" Lock Washers	2
3/8" x 1 1/4" Self Threading Bolts	6
10 mm x 55 mm Bolts	12
10 mm Lock Washers	12

Bag # 2

<u>Description</u>	<u>Quantity</u>
7/16" x 1 1/4" Bolts	2
7/16" x 1 1/2" Bolts	2
7/16" x 3" Bolts	1
7/16" Uitorque Nuts	5
7/16" Flat Washers	10
7/16" Lock Washers	5

Bag # 3

<u>Description</u>	<u>Quantity</u>
1/2" x 1 1/4" Bolts	1
1/2" x 2 1/2" Bolts	4
1/2" Uitorque Nuts	5
1/2" Flat Washers	10
1/2" Lock Washers	5

Bag # 4

<u>Description</u>	<u>Quantity</u>
9/16" x 1 3/4" Bolts	2
9/16" x 3" Bolts	4
9/16" x 3 1/2" Bolts	5
9/16" Uitorque Nuts	11
9/16" Flat Washers	26
9/16" Lock Washers	11

Bag # 5

<u>Description</u>	<u>Quantity</u>
5/8" x 4 1/2" Bolts	2
5/8" x 5 1/2" Bolts	2
5/8" Uitorque Nuts	4
5/8" Flat Washers	8
5/8" Lock Washers	4

Special Note: 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 representatives @ (801) 280-2777.

Please Follow Instructions Carefully:

Before installation begins, 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: _____

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. Remove the stock lower skid plate and discard the stock lower skid plate and hardware.

3. Remove the stock front upper plate. If you are going to re-install the stock upper skid plate back into the stock location, save the (3) stock upper bolts, (2) stock lower bolts and the stock front upper skid plate for later re-installation. If you are not going to re-install the stock front upper skid plate, discard the (3) stock upper bolts and the stock front upper skid plate, but keep the (2) stock lower bolts for later re-installation.

4. Remove the stock front driveline from the stock location, and save the stock driveline and hardware for later re-installation.

If the vehicle that you are working on is equipped with Air Ride Load Sensor Shocks, please follow step # 5

If the vehicle that you are working on is not equipped with Air Ride Load Sensor Shocks, please follow step # 6

5. Working on the driver side, carefully remove the load sensor valve located at the top of the stock shock.
Special Note: Take special care not to damage during

removal. Remove the stock hardware on the top of the stock shock and save hardware for later re-installation. Remove the stock hardware on the lower shock mount and save hardware for later re-installation. Save the stock shock for later re-installation. Repeat procedure on the passenger side.

6. Working on the driver side, remove the stock hardware on the top of the stock shock and save hardware for later re-installation. Remove the stock hardware on the lower shock mount and save hardware for later re-installation. If you desire to re-install the stock shock, save the stock shock for later re-installation. If you desire to install a new after market shock, the stock shock may be discarded. Repeat procedure on the passenger side.

If the vehicle that you are working on is equipped with the Air Ride Load Sensor Shocks, please follow step # 7

If the vehicle that you are working on is not equipped with Air Ride Load Sensor Shocks, please skip to step # 8

7. Working on the driver side, carefully remove the stock actuator rod and set a side for later re-installation. Repeat procedure on the passenger side.

8. Measure exposed threads on the stock torsion bar adjustment bolt and record measurement here for a later reference.

Record Driver Side measurement here: _____

Record Passenger Side measurement here: _____

See Illustration # 1

9. Working on the driver side, attach the torsion bar removing tool to the stock torsion bar cross member, 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. Set the stock torsion bar key and hardware a side for later re-installation. Repeat procedure on passenger side.

See Illustration # 2

10. 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. Tap the stock torsion bars forward until the stock torsion bar cross member can be removed.

11. Working on the driver side, remove the stock bolt that connects the stock torsion bar cross member to the stock mounting point. The stock hardware may be discarded.
Special Note: The stock mounting point is on the inside of the stock frame rail. 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.

12. 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.

13. Working on the driver side, remove the stock sway bar end link from the stock location and discard the stock end link and stock hardware. **Special Note: New end links and bushings are included with this suspension system.** Repeat procedure on the passenger side.

14. Working on the driver side, remove the stock brake line bracket that connects to the top of the stock steering knuckle and save the stock hardware. Also, remove the stock bolt that connects the stock brake line bracket to the stock upper control arm and save hardware for later re-installation.

15. 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.**

16. Working on the driver side, remove the stock rotor and set a side for later re-installation.

17. Working on the driver side, remove the stock cap right in the middle of the stock hub assembly. Set the stock cap a side for later re-installation.

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

See Illustration # 3

19. Working on the driver side, locate the ABS line quick disconnect located above the stock upper control arm. Disconnect the ABS lines from each other. Also, disconnect the ABS line from any other mounting points.

20. Working on the driver side, 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.**

21. Working on the driver side, 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.**

22. 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.**

23. 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 hardware for later re-installation.

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

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

26. 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.

27. Locate the new driver side steering knuckle. Using the stock hardware that was removed from step # 25, 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.**

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

29. 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

30. Working on the driver side, unbolt and remove the (6) stock bolts holding the inner CV axle to the stock differential. Discard the stock hardware. Set the stock axle aside for later re-installation.

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

32. Repeat step's 14 - 31 on the passenger side.

33. Working on the driver side, remove the stock bolt that connects the lower rear portion of the stock front differential to the stock rear cross member. Save the stock hardware for later re-installation.

34. Working on the passenger side, remove the (2) stock bolts that connect the stock rear cross member to the

stock passenger side rear lower control arm mounting point. The (2) stock bolts may be discarded.

See Illustration # 5

35. Working on the driver side, measure 2 1/8" towards the inside of the vehicle from the stock rear lower control arm mounting point, scribe a mark on the stock rear cross member. Using a hacksaw or suitable cutting tool, carefully cut off the stock rear cross member along the line that was scribed earlier in this step. The stock rear cross member may be discarded. **Special Note: When making this cut, make sure that you cut all the way through the stock rear lower control arm mounting point. If this cut is not performed properly, the stock front differential will not seat properly when the front differential is lowered into the new one piece lower sub frame. Also, Tuff Country EZ-Ride highly recommends not using a cutting torch when performing step # 35. Clean and dress up any exposed metal.**

See Illustration # 6

36. Working on the driver side, carefully cut flush, the remainder of the stock rear cross member that is located on the rear portion of the stock rear lower control arm mounting bracket. **Refer to illustration # 6 for proper cut line. Special Note: Take special care not to cut into the stock rear lower control arm mounting bracket. Tuff Country recommends not using a cutting torch when performing step # 36. Clean and dress up any exposed metal.**

37. Place a pair of hydraulic floor jacks under the front differential, and carefully raise up on both hydraulic floor jacks at the same time, until they come into contact with the front differential.

38. Locate the wiring harness that connects the 4WD control panel to the front differential. Disconnect the 4WD wiring harness from the front differential. Tie the 4WD wiring harness up and out of the way. **Special Note: Take special care not to kink wiring.**

39. Disconnect any other vent hoses and/or wiring that is connected to the front differential.

40. Working on the driver side, remove the stock hardware that connects the upper driver side tab of the stock front differential to the stock location. Save the stock hardware for later re-installation.

41. Working on the passenger side, remove the (2) stock nuts that connect the passenger side of the stock front differential to the stock location and save the stock hardware for later re-installation.

42. Carefully lower down on both hydraulic floor jacks at the same allowing enough room to remove the front differential completely from the vehicle. Remove the front differential completely from underneath the vehicle.

43. Working 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, carefully cut the upper tab off of the stock front differential and discard. **Refer to illustration # 7 for proper cut line.**

See Illustration # 7

44. Locate the new driver side differential relocation bracket, (1) 7/16" X 3" bolt, (1) 7/16" unitorque nut, (2) 7/16" flat washers and (1) 7/16" lock washer from hardware bag 14965NB2. Also, locate (2) MO2050 poly bushings and (1) 9/16" x 2 1/8" anti crush sleeve from hardware bag 14965SL. Install the new poly bushings and 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.** Referring to illustration # 8, 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. **Special Note: Get all (4) stock bolts started but do not tighten at this point. Also, 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.** Go back to the (4) stock bolts that hold the new differential relocation bracket to the stock front differential and 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 # 8

45. Working on the passenger side stock rear lower control arm pocket. Carefully cut off the front corner of the stock passenger side stock rear lower control arm pocket. This will allow enough room for the stock front differential to seat properly when the new passenger side differential drop bracket is installed. **Refer to the cut line in illustration # 9**

See Illustration # 9

46. Locate the new passenger side differential drop bracket and the stock hardware that was removed from step # 41. Install the new upper passenger side differential drop bracket into the stock location and secure using the stock hardware. **Do not tighten at this point. Special Note: There is a front and a rear of this bracket, refer to illustration # 10 for proper placement of the new passenger side differential drop bracket. Make sure to use thread locker or lock tite.**

See Illustration # 10

47. Locate (2) 9/16" x 1 3/4" bolts, (4) 9/16" flat washers, (2) 9/16" unitorque nuts and (2) 9/16" lock washers from hardware bag 14965NB4. Carefully install the passenger side of the stock front differential to the previously installed passenger side differential drop bracket. Secure using the new 9/16" x 1 3/4" bolts and hardware. **Do not tighten at this point. Also, make sure to use thread locker or lock tite. Using a bungee cord, carefully tie the driver side of the stock front differential up and out of the way so that the new one piece lower sub frame can be installed.**

See Illustration # 11

48. Locate the new one piece lower sub frame and the stock lower control arm mounting hardware that was removed from step # 31. On the driver side, install the front and rear part of the new one piece sub frame into the stock front and rear lower control arm mounting points using the stock hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Repeat procedure on passenger side.

See Illustration # 12 / Front Location

See Illustration # 13 / Rear Location

49. Carefully remove the bungee cord that is holding the driver side of the front differential up and out of the way. Let the stock front differential rest on the newly installed one piece lower sub frame.

50. Locate the stock hardware that was removed from step # 33. Install the rear portion of the front differential into the tab on the rear portion of the new one piece lower sub frame. Secure using the stock hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.**

See Illustration # 14

51. Locate the stock hardware that was removed from step # 40. Secure the newly installed front differential relocation bracket to the front portion of the new one piece lower sub frame. Secure using the stock hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.**

See Illustration # 15

Note: If you are going to re-install the stock front upper skid plate, please follow step #'s 52 - 54

Note: If you are not going to install the stock front upper skid plate please skip to step # 56

52. Locate the stock front upper skid plate and the mounting hardware that was removed from step # 3. Secure the stock front upper skid plate to the upper stock location using the (3) stock bolts. **Do not tighten at this point. Make sure to use thread locker or lock tite.**

53. Install the lower portion of the stock front skid plate between the newly installed one piece lower sub frame and the stock front cross member. Using a pair of

hydraulic floor jacks, carefully raise up on the front portion on the one piece lower sub frame, and smash the stock upper skid plate between the stock front cross member and front portion of the newly installed one piece sub frame.

54. Locate (2) stock upper skid plate lower bolts that were removed from step # 3. Working on the driver side, secure the newly installed one piece lower sub frame to the stock front cross member using the stock hardware. Torque to **38 ft lbs. Special Note: Make sure to use thread locker or lock tite. Also, make sure that the bolts secure the lower portion of the stock upper skid plate into the stock location.** Repeat procedure on the passenger side. Move back to the (3) stock upper bolts and torque to **38 ft lbs.** Carefully remove both hydraulic floor jacks from under the front portion of the one piece lower sub frame.

Note: If you installed the stock front upper skid plate, please skip to step # 57

55. Using a pair of hydraulic floor jacks, carefully raise up on the front portion on the one piece lower sub frame until the one piece lower sub frame sits flush with the stock front cross member.

56. Locate (2) stock upper skid plate lower bolts that were removed from step # 3. Working on the driver side, secure the newly installed one piece sub frame to the stock front cross member using the stock hardware. Torque to **38 ft lbs. Special Note: Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side. Carefully remove both hydraulic floor jacks from under the front portion of the one piece lower sub frame.

57. Move back to all the new and stock hardware associated with the front differential, and the new one piece sub frame and torque to proper specifications. Refer to the torque setting sheet at the end of the installation manual for proper torque.

58. Reconnect the 4WD wiring to the front differential. Also, reconnect any other vent hoses and/or wiring that was connected to the stock front differential.

59. Locate (2) poly bump stops from hardware bag 14965SL. Also, locate (2) 3/8" unitorque nuts, (2) 3/8" flat washers and (2) 3/8" lock washers from hardware bag 14965NB1. Working on the driver side rear portion of the newly installed one piece lower sub frame, secure the new poly bump stop using the new 3/8" hardware. Torque to **28 ft lbs.** Repeat procedure on the passenger side. **Make sure to use thread locker or lock tite.**

See Illustration # 16

60. Locate (2) 5/8" x 4 1/2" bolts, (2) 5/8" x 5 1/2" bolts, (8) 5/8" flat washers, (4) 5/8" unitorque nuts and (4) 5/8" lock washers from hardware bag 14965NB5. Also locate

the stock lower control arms that were removed from step # 31. Working on the driver side, install the stock lower control arm into the newly installed one piece sub frame's front location and secure using the new 5/8" x 4 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Install the stock lower control arm into the newly installed one piece sub frame's rear location 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 the passenger side.

See Illustration # 17 / Front Location

See Illustration # 18 / Rear Location

61. Locate the new driver side steering knuckle and the stock hub assembly. Also, locate 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 # 23. 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.** **Special Note: When installing the new driver side spindle, make sure that the stock brake line is located towards the inside of the vehicle. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side using the passenger side steering knuckle.

See Illustration # 19

62. Locate (2) axle half shaft spacers, (12) 10 mm x 55 mm hex bolts and (12) 10 mm lock washers from hardware bag 14965NB1. Also locate the stock front axles that were removed from step # 30. Working on the driver side, install (1) new axle spacers between the stock front differential and the stock axle. Secure using the new 10 mm x 55 mm bolts. 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 scribe mark that was made in step # 28.** Repeat on the passenger side.

See Illustration # 20

63. Locate the stock rotors that were removed in step # 16. Working on the driver side, install the stock rotor into the stock location. Repeat procedure on the passenger side.

64. Locate the stock hardware that connects the stock front axle to the stock hub assembly that was removed in step # 18. 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. Also, re-install the hub assembly center cap that was removed from step # 17.** Repeat procedure on the passenger side.

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

66. 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.

67. Locate the stock brake caliper hardware that was removed in step # 15. Working on the driver side, re-install the stock brake caliper to the stock rotor and secure using the stock hardware. Torque to **76 ft. lbs. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side.

68. Locate the stock brake line hardware that was removed in step # 14. Working on the inside of the newly installed driver side spindle, reconnect the stock brake line bracket to the new driver side spindle. Secure using the stock hardware. Torque to **18 ft lbs. Make sure to use thread locker or lock tite.** Also reconnect the stock brake line bracket to the stock upper control arm using the stock hardware. Torque to **18 ft lbs. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side.

See Illustration # 21

If the vehicle that you are working on is equipped with Air Ride Load Sensor Shocks or you are going to re-install the stock shock, please follow step # 69 — 70

If the vehicle that you are working on is going to have new after market shocks installed, please skip to step # 74

69. Locate the new driver and passenger side front shock relocation bracket, (2) PB4902 poly bushings and (2) 916112SL anti crush sleeves from hardware bag 14965SL. Install the new poly bushing and anti crush sleeve into the new driver and passenger side shock relocation brackets. **Special Note: Make sure to use a lithium or moly base grease prior to inserting the new bushings and sleeves into the new driver side and passenger side front shock relocation brackets. This will increase the life of the bushing as well as prevent squeaking.**

70. Locate (2) 9/16" x 3" bolts, (8) 9/16" flat washers, (2) 9/16" unitorque nuts, (2) 9/16" lock washers from hardware bag 14965NB4. Also, locate (2) 7/16" x 1 1/2" bolt, (4) 7/16" flat washers, (2) 7/16" unitorque nuts and (2) 7/16" lock washers from hardware bag 14965NB2. Working on the passenger side, install the new passenger side shock relocation bracket to the stock location and secure using the new 9/16" x 3" bolt and hardware. **Do not tighten at this point. Special Notice: When installing the new shock relocation bracket, make sure to use (2) 9/16" flat washers as spacers on**

the front lower portion of the new shock relocation bracket and the stock location. Refer to illustration # 22 for proper 9/16" flat washer placement. Using the passenger side shock relocation bracket as a guide, drill a 7/16" hole into the stock lower control arm. Secure the new passenger side bracket to the stock lower control arm using the new 7/16" x 1 1/2" bolt and hardware. Torque to **42 ft lbs.** Torque the new 9/16" bolt **110 ft lbs.** Repeat procedure on the driver side.

See Illustration # 22

If the vehicle that you are working on is equipped with the Air Ride Load Sensor Shocks, please follow step # 71 — 72

If the vehicle that you are working on is not equipped with Air Ride Load Sensor Shocks but you are going to re-install the stock shocks, please follow step # 73

71. Locate the stock load sensor shocks and hardware that was removed from step # 5. Working on the driver side, re-install the lower mount on the stock load sensor shock to the newly installed relocation bracket and secure using the stock hardware. **Do not tighten at this point.** Secure the upper mount on the stock load sensor shock to the stock location and secure using the stock hardware. Torque the upper hardware to **18 ft lbs.** Torque the lower stock mount to **95 ft lbs.** Next, reconnect the load sensor valve bracket back on the top of the stock shock. Repeat procedure on the passenger side. **Special Note: After the installation of the stock load sensor shock, check to make sure that there is proper clearance between the stock load sensor shock and the stock bump stop bracket. If there is contact between the stock load sensor shock and the stock bump stop bracket, carefully cut off the corner of the stock bump stop bracket for proper shock clearance.**

72. Locate the stock actuator rods that were removed from step # 7. Working on the driver side, install the stock actuator rod into the stock upper and lower location. Repeat procedure on the passenger side.

73. Locate the stock shock and hardware that was removed from step # 5. Working on the driver side, re-install the stock shock to the newly installed shock relocation bracket and secure using the stock hardware. **Do not tighten at this point.** Secure the upper mount of the stock shock into the stock location and secure using the stock hardware. Torque the upper hardware to **18 ft lbs.** Torque the lower stock mount to **95 ft lbs.** Repeat procedure on the passenger side.

See Illustration # 23

74. Locate the new front shocks and the stock hardware that was removed from step # 5. Working on the driver side, install the new front shock into the stock upper and lower location. Secure using the stock hardware. **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. Also, after the installation of the new front shock, check to make sure that there is proper clearance between the new front shock and the stock bump stop bracket. If there is contact between the new front shock and the stock bump stop bracket, carefully cut off the corner of the stock bump stop bracket for proper shock clearance.

75. Locate (4) new torsion bar drop plates, (2) 9/16" x 3 1/2" bolts, (4) 9/16" flat washers, (2) 9/16" unitorque nuts and (2) lock washers from hardware bag 14965NB4. Working on the driver side, install the new torsion bar drop plates to the stock torsion bar cross member location and secure using the new 9/16" x 3 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side.

See Illustration # 24

76. Locate the stock torsion bars that were removed from step # 12. Refer to the marks that were made in step # 10. This will allow you to re-install the stock torsion bars back into the stock location. **Example: Driver vs. Passenger and Front vs. Rear.** Working on the driver side, slide the stock torsion bar back into the stock rear lower control arm. Slide the stock torsion bar far enough forward so that the stock torsion bar cross member can be re-installed. Repeat procedure on the passenger side.

77. Locate (2) 9/16" x 3 1/2" bolt, (4) 9/16" flat washers, (2) 9/16" unitorque nuts and (2) 9/16" lock washers from hardware bag 14965NB4. Also, locate (2) S10020 crush sleeves that were packaged with your instruction sheet and the stock torsion bar cross member that was removed from step # 10. Working on the driver side, install the stock torsion bar cross member to the newly installed torsion bar drop plates and secure using the new 9/16" x 3 1/2" bolt, hardware and crush sleeve. **Special Note: The stock nut that is attached to the stock torsion bar cross member needs to be removed before installing the stock torsion bar cross member to the new torsion bar drop plates. Do not tighten at this point. Make sure to use thread locker or lock tite. Special Note: Refer to the illustration # 25 on how to install the new crush sleeve. On the rear tab of the stock torsion bar cross member, you will notice that this hole is larger in diameter than the front hole, the new crush sleeve will be small enough for the tab of the stock torsion bar cross member to slide over the sleeve.** Repeat procedure on the passenger side. Torque the upper and lower mounting bolt to **95 ft lbs.**

See Illustration # 25

78. Locate the stock torsion bar keys that were removed from step # 9. Working on the driver side, install the stock torsion bar key back into the stock location in the stock torsion bar cross member. Slide the stock torsion bar back into the previously installed stock torsion bar key. Repeat procedure on the passenger side.

79. Locate the torsion bar adjusting blocks and hardware that was removed from step # 9. Working on the driver side, attach the torsion bar removing tool to the stock torsion bar cross member, 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 re-installed back into the stock location. Refer back to the measurements that were made in step # 8 and set to the stock setting. Repeat procedure on the passenger side. Remove the torsion bar removing tool from the stock torsion bar cross member.

80. Locate (2) 3/8" x 13" bolts and (2) 3/8" unitorque nuts from hardware bag # 14965NB1. Also, locate (2) new sway bar end links, (8) sway bar end link bushings and (8) sway bar end link washers from hardware bag 14965SL. Working on the driver side, install the new sway bar end link and hardware into the stock location and torque to **32 ft lbs.** Repeat procedure on passenger side.

See Illustration # 26

81. Locate the stock front drive line and hardware that was removed from step # 4. Re-install the stock front drive line back into the stock location and secure using the stock hardware.

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

83. 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.

Congratulation, Front End Installation Complete

Rear End Installation:

84. 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.

85. Place a pair of hydraulic floor jack under the rear axle and raise up on both hydraulic floor jacks at the same time until they come into contact with the rear axle.

86. Working on the driver side, remove the stock hardware that connects the stock sway bar end link to the stock location. The stock sway bar end link and hardware may be discarded. Repeat procedure on the passenger side.

If the vehicle that you are working on is equipped with Air Ride Load Sensor Shocks please follow step # 87 — 105

If the vehicle that you are working on is not equipped with Air Ride Load Sensor Shocks but you are going to re-install the stock shocks, please follow step # 106 — 122

If the vehicle that you are working on is not equipped with Air Ride Load Sensor Shocks and you want to install new after market shock, please follow step 123 — 140

87. Working on the driver side, carefully remove the ball joint coupler from the stock shock actuator rod. Carefully remove the stock actuator rod from the top and bottom ball joint caps. The rear stock actuator can be discarded. Repeat procedure on the passenger side.

88. Working on the driver side, remove the stock rear lower shock mounting bolt from the stock rear location and save the stock hardware for later re-installation. **Special Note: The stock shock will be re-installed. The stock upper mounting point does not need be removed, let the stock shock hang.** Repeat procedure on passenger side.

89. Working on the driver side, remove the stock bolt that connects the stock rear track bar to the stock rear track bar location. Save the stock hardware for later re-installation.

90. Working on the driver side, scribe a mark on the stock rear coil spring and another directly across on the stock coil spring pocket. **This will allow you to re-install the stock coil spring back into the stock location.** Repeat procedure on passenger side. Carefully lower down on both hydraulic floor jacks at the same time about 4" - 4.5". **Special Note: Take special care not to kink or over extend any brake lines and/or hoses.** Remove the stock driver and passenger side coil springs and set a side for later re-installation.

91. Locate (2) rear coil spring spacer. Working on the driver side, hold the new coil spring spacer into the upper coil spring pocket. With a marker, using the new bracket as a guide, scribe (3) marks on the stock upper coil spring pocket. Remove the new coil spring spacer and set a side for later re-installation. Repeat procedure on the passenger side.

92. Working on the driver side, carefully drill 5/16" holes into the stock upper coil spring pocket where the marks were scribe in step # 91.

93. Locate (6) 3/8" x 1 1/4" self threading bolts from hardware bag 14965NB1. Working on the driver side, install the new coil spring spacer into the stock upper pocket and secure using the new 3/8" x 1 1/4" self threading bolts. **Make sure to use thread locker or lock tite.** Torque to **32 ft lbs.** Repeat procedure on the passenger side.

See Illustration # 27

94. Locate the new rear track bar relocation bracket, (1) 9/16" x 3 1/2" bolt, (2) 9/16" flat washers, (1) 9/16" unitorque nut and (1) 9/16" lock washer from hardware bag 14965NB4. Also, locate (1) 1/2" x 1 1/2" bolt, (2) 1/2" flat washers, (1) 1/2" unitorque nut and (1) 1/2" lock washer from hardware bag 14965NB3. Install the new track bar relocation bracket into the stock track bar location and secure using the new 9/16" x 3 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Make sure that the new track bar relocation bracket is sitting square in the stock pocket. Using the new track bar relocation bracket as a guide, carefully drill a 1/2" hole into the stock track bar bracket. Secure the new track bar relocation bracket to the new 1/2" hole in the stock track bar bracket using the new 1/2" x 1 1/2" bolt and hardware. **Make sure to use thread locker or lock tite.** Torque the new 1/2" bolt to **85 ft lbs.** Also, torque the new 9/16" bolt to **112 ft lbs.**

See Illustration # 28

95. Locate the stock track bar hardware that was removed from step # 89. Secure the stock track bar to the newly installed track bar relocation bracket and secure using the stock hardware. **Make sure to use thread locker or lock tite.** Torque the stock bolt to **108 ft lbs.** **Special Note: If you are not able to line up the hole on the track bar and the new track bar relocation bracket, you may have to perform this step once the weight of the vehicle is on the ground.**

See Illustration # 29

96. Locate (2) new rear shock relocation brackets. Locate (2) 9/16" x 3" bolts, (4) 9/16" flat washer, (2) 9/16" unitorque nuts, (2) 9/16" lock washers from hardware bag 14965NB4. Also, locate (2) 7/16" x 1 1/4" bolt, (4) 7/16" flat washers, (2) 7/16" unitorque nuts, (2) 7/16" lock washers from hardware bag 14965NB2 and (2) S10019 anti-crush sleeves that are packaged with your instruction sheet. Working on the driver side, install the new shock relocation bracket into the stock location and secure using the new 9/16" x 3" bolt and hardware. **Special Note: Make sure to install the new anti-crush sleeve on the inside of the new shock relocation bracket. Do not tighten at this point. Make sure to use thread locker or lock tite.** Make sure that the new shock bracket is sitting flush with the stock shock bracket. From the stock mounting point, towards the inside of the vehicle, measure 1 1/4" towards the front of the vehicle. Scribe a mark. Carefully drill a 7/16" hole in the stock bracket and the new shock relocation bracket. Secure the shock relocation bracket to the stock shock bracket using

the new 7/16" x 1 1/4" bolt and hardware. Torque the 7/16" hardware to **35 ft lbs.** Also, torque the 9/16" hardware to **112 ft lbs.** Repeat procedure on the passenger side.

See Illustration # 30

97. Locate the stock rear coil springs that were removed from step # 90. Working on the driver side, re-install the stock rear coil spring into the stock lower coil spring pocket. Repeat procedure on the passenger side. **Special Note: make sure to re-install the stock coil spring back into the stock location, refer to the marks that were scribed in step # 90.** Carefully raise up on both hydraulic floor jacks at the same time until the stock coil springs seats properly with the newly installed upper coil spring spacers.

See Illustration # 31

98. Locate the stock lower shock mounting hardware that was removed from step # 88. Working on the driver side, install the lower portion of the stock shock into the newly installed lower shock relocation bracket. Secure using the stock hardware. Torque to **112 ft. lbs.** Repeat procedure on the passenger side.

See Illustration # 32

99. Carefully remove both hydraulic floor jacks from under the rear axle.

100. Locate (2) new actuator rods from hardware bag 14965NB1. Working on the driver side, carefully install the new actuator rod into the stock rear location by inserting the actuator rod into the bottom ball joint cap and then into the top. Repeat procedure on the passenger side.

101. Locate (2) new rear sway bar end links. Also, locate (8) PB4902 poly bushings, (4) S10026 anti crush sleeves from hardware bag 14965SL. 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.**

102. Locate (4) 1/2" x 2 1/2" bolts, (8) 1/2" flat washers, (4) 1/2" unitorque nuts and (4) 1/2" lock washers from hardware bag 14965NB3. Working on the driver side, install the new sway bar end link into the stock location and secure using the new 1/2" x 2 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side. Once both new sway bar end links are secure to the stock location, torque the new hardware to **85 ft lbs.** **Special Note: If you are not able to connect the new rear sway bar end link to the stock location, the weight of the vehicle may need to be on the ground. If this is the case, perform this step once the tires have been installed and the vehicle is on the**

ground.

See Illustration # 33

103. Install the tires and wheels and carefully lower the vehicle to the ground.

104. If you were not able to attach the stock track bar to the new track bar relocation bracket in step # 95, perform this step now that the weight of the vehicle is on the ground.

See Illustration # 29

105. If you were not able to attach the new sway bar end links to the stock location in step # 102, perform this step now that the weight of the vehicle is on the ground.

See Illustration # 33

If the vehicle that you are working on is equipped with Air Ride Load Sensor Shocks please skip to step # 141

106. Working on the driver side, remove the stock rear lower shock mounting bolt from the stock rear location and save the stock hardware for later re-installation. **Special Note: The stock shock will be re-installed. The stock upper mounting point does not need be removed, let the stock shock hang.** Repeat procedure on passenger side.

107. Working on the driver side, remove the stock bolt that connects the stock rear track bar to the stock rear track bar location. Save the stock hardware for later re-installation.

108. Working on the driver side, scribe a mark on the stock rear coil spring and another directly across on the stock coil spring pocket. **This will allow you to re-install the stock coil spring back into the stock location.** Repeat procedure on passenger side. Carefully lower down on both hydraulic floor jacks at the same time about 4" - 4.5". **Special Note: Take special care not to kink or over extend any brake lines and/or hoses.** Remove the stock driver and passenger side coil springs and set a side for later re-installation.

109. Locate (2) rear coil spring spacer. Working on the driver side, hold the new coil spring spacer into the upper coil spring pocket. With a marker, using the new bracket as a guide, scribe (3) marks on the stock upper coil spring pocket. Remove the new coil spring spacer and set a side for later re-installation. Repeat procedure on the passenger side.

110. Working on the driver side, carefully drill 5/16" holes into the stock upper coil spring pocket where the marks were scribe in step # 109.

111. Locate (6) 3/8" x 1 1/4" self threading bolts from hardware bag 14965NB1. Working on the driver side, install the new coil spring spacer into the stock upper

pocket and secure using the new 3/8" x 1 1/4" self threading bolts. **Make sure to use thread locker or lock tite.** Torque to **32 ft lbs.** Repeat procedure on the passenger side.

See Illustration # 27

112. Locate the new rear track bar relocation bracket, (1) 9/16" x 3 1/2" bolt, (2) 9/16" flat washers, (1) 9/16" unitorque nut and (1) 9/16" lock washer from hardware bag 14965NB4. Also, locate (1) 1/2" x 1 1/2" bolt, (2) 1/2" flat washers, (1) 1/2" unitorque nut and (1) 1/2" lock washer from hardware bag 14965NB3. Install the new track bar relocation bracket into the stock track bar location and secure using the new 9/16" x 3 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Make sure that the new track bar relocation bracket is sitting square in the stock pocket. Using the new track bar relocation bracket as a guide, carefully drill a 1/2" hole into the stock track bar bracket. Secure the new track bar relocation bracket to the new 1/2" hole in the stock track bar bracket using the new 1/2" x 1 1/2" bolt and hardware. **Make sure to use thread locker or lock tite.** Torque the new 1/2" bolt to **85 ft lbs.** Also, torque the new 9/16" bolt to **112 ft lbs.**

See Illustration # 28

113. Locate the stock track bar hardware that was removed from step # 107. Secure the stock track bar to the newly installed track bar relocation bracket and secure using the stock hardware. **Make sure to use thread locker or lock tite.** Torque the stock bolt to **108 ft lbs.** **Special Note: If you are not able to line up the hole on the track bar and the new track bar relocation bracket, you may have to perform this step once the weight of the vehicle is on the ground.**

See Illustration # 29

114. Locate (2) new rear shock relocation brackets. Locate (2) 9/16" x 3" bolts, (4) 9/16" flat washer, (2) 9/16" unitorque nuts, (2) 9/16" lock washers from hardware bag 14965NB4. Also, locate (2) 7/16" x 1 1/4" bolt, (4) 7/16" flat washers, (2) 7/16" unitorque nuts, (2) 7/16" lock washers from hardware bag 14965NB2 and (2) S10019 anti-crush sleeves that are packaged with your instruction sheet. Working on the driver side, install the new shock relocation bracket into the stock location and secure using the new 9/16" x 3" bolt and hardware. **Special Note: Make sure to install the new anti-crush sleeve on the inside of the new shock relocation bracket. Do not tighten at this point. Make sure to use thread locker or lock tite.** Make sure that the new shock bracket is sitting flush with the stock shock bracket. From the stock mounting point, towards the inside of the vehicle, measure 1 1/4" towards the front of the vehicle. Scribe a mark. Carefully drill a 7/16" hole in the stock bracket and the new shock relocation bracket. Secure the shock relocation bracket to the stock shock bracket using the new 7/16" x 1 1/4" bolt and hardware. Torque the 7/16" hardware to **35 ft lbs.** Also, torque the 9/16" hardware to **112 ft lbs.** Repeat procedure on the

passenger side.

See Illustration # 30

115. Locate the stock rear coil springs that were removed from step # 109. Working on the driver side, re-install the stock rear coil spring into the stock lower coil spring pocket. Repeat procedure on the passenger side. **Special Note: make sure to re-install the stock coil spring back into the stock location, refer to the marks that were scribed in step # 109.** Carefully raise up on both hydraulic floor jacks at the same time until the stock coil springs seats properly with the newly installed upper coil spring spacers.

See Illustration # 31

116. Locate the stock lower shock mounting hardware that was removed from step # 106. Working on the driver side, install the lower portion of the stock shock into the newly installed lower shock relocation bracket. Secure using the stock hardware. Torque to **112 ft. lbs.** Repeat procedure on the passenger side.

See Illustration # 32

117. Carefully remove both hydraulic floor jacks from under the rear axle.

118. Locate (2) new rear sway bar end links. Also, locate (8) PB4902 poly bushings, (4) S10026 anti crush sleeves from hardware bag 14965SL. 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.**

119. Locate (4) 1/2" x 2 1/2" bolts, (8) 1/2" flat washers, (4) 1/2" unitorque nuts and (4) 1/2" lock washers from hardware bag 14965NB3. Working on the driver side, install the new sway bar end link into the stock location and secure using the new 1/2" x 2 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side. Once both new sway bar end links are secure to the stock location, torque the new hardware to **85 ft lbs.** **Special Note: If you are not able to connect the new rear sway bar end link to the stock location, the weight of the vehicle may need to be on the ground. If this is the case, perform this step once the tires have been installed and the vehicle is on the ground.**

See Illustration # 33

120. Install the tires and wheels and carefully lower the vehicle to the ground.

121. If you were not able to attach the stock track bar to the new track bar relocation bracket in step # 113, perform this step now that the weight of the vehicle is on the ground.

See Illustration # 29

122. If you were not able to attach the new sway bar end links to the stock location in step # 119, perform this step now that the weight of the vehicle is on the ground.

See Illustration # 33

If the vehicle that you are working on is not equipped with Air Ride Load Sensor Shocks but you re-install the stock shocks, please skip to step # 141

123. Working on the driver side, remove the stock shock from the stock upper and lower location and save the stock hardware for later re-installation. The stock shock may be discarded. Repeat procedure on the passenger side. **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 shock.**

124. Working on the driver side, remove the stock bolt that connects the stock rear track bar to the stock rear track bar location. Save the stock hardware for later re-installation.

125. Working on the driver side, scribe a mark on the stock rear coil spring and another directly across on the stock coil spring pocket. **This will allow you to re-install the stock coil spring back into the stock location.** Repeat procedure on passenger side. Carefully lower down on both hydraulic floor jacks at the same time about 4" - 4.5". **Special Note: Take special care not to kink or over extend any brake lines and/or hoses.** Remove the stock driver and passenger side coil springs and set a side for later re-installation.

126. Locate (2) rear coil spring spacer. Working on the driver side, hold the new coil spring spacer into the upper coil spring pocket. With a marker, using the new bracket as a guide, scribe (3) marks on the stock upper coil spring pocket. Remove the new coil spring spacer and set a side for later re-installation. Repeat procedure on the passenger side.

127. Working on the driver side, carefully drill 5/16" holes into the stock upper coil spring pocket where the marks were scribe in step # 127.

128. Locate (6) 3/8" x 1 1/4" self threading bolts from hardware bag 14965NB1. Working on the driver side, install the new coil spring spacer into the stock upper pocket and secure using the new 3/8" x 1 1/4" self threading bolts. **Make sure to use thread locker or lock tite.** Torque to **32 ft lbs.** Repeat procedure on the passenger side.

See Illustration # 27

129. Locate the new rear track bar relocation bracket, (1) 9/16" x 3 1/2" bolt, (2) 9/16" flat washers, (1) 9/16" unitorque nut and (1) 9/16" lock washer from hardware bag 14965NB4. Also, locate (1) 1/2" x 1 1/2" bolt, (2) 1/2" flat washers, (1) 1/2" unitorque nut and (1) 1/2" lock

washer from hardware bag 14965NB3. Install the new track bar relocation bracket into the stock track bar location and secure using the new 9/16" x 3 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Make sure that the new track bar relocation bracket is sitting square in the stock pocket. Using the new track bar relocation bracket as a guide, carefully drill a 1/2" hole into the stock track bar bracket. Secure the new track bar relocation bracket to the new 1/2" hole in the stock track bar bracket using the new 1/2" x 1 1/2" bolt and hardware. **Make sure to use thread locker or lock tite.** Torque the new 1/2" bolt to **85 ft lbs.** Also, torque the new 9/16" bolt to **112 ft lbs.**

See Illustration # 28

130. Locate the stock track bar hardware that was removed from step # 124. Secure the stock track bar to the newly installed track bar relocation bracket and secure using the stock hardware. **Make sure to use thread locker or lock tite.** Torque the stock bolt to **108 ft lbs.** **Special Note: If you are not able to line up the hole on the track bar and the new track bar relocation bracket, you may have to perform this step once the weight of the vehicle is on the ground.**

See Illustration # 29

131. Locate (2) new rear shock relocation brackets. Locate (2) 9/16" x 3" bolts, (4) 9/16" flat washer, (2) 9/16" unitorque nuts, (2) 9/16" lock washers from hardware bag 14965NB4. Also, locate (2) 7/16" x 1 1/4" bolt, (4) 7/16" flat washers, (2) 7/16" unitorque nuts, (2) 7/16" lock washers from hardware bag 14965NB2 and (2) S10019 anti-crush sleeves that are packaged with your instruction sheet. Working on the driver side, install the new shock relocation bracket into the stock location and secure using the new 9/16" x 3" bolt and hardware. **Special Note: Make sure to install the new anti-crush sleeve on the inside of the new shock relocation bracket. Do not tighten at this point. Make sure to use thread locker or lock tite.** Make sure that the new shock bracket is sitting flush with the stock shock bracket. From the stock mounting point, towards the inside of the vehicle, measure 1 1/4" towards the front of the vehicle. Scribe a mark. Carefully drill a 7/16" hole in the stock bracket and the new shock relocation bracket. Secure the shock relocation bracket to the stock shock bracket using the new 7/16" x 1 1/4" bolt and hardware. Torque the 7/16" hardware to **35 ft lbs.** Also, torque the 9/16" hardware to **112 ft lbs.** Repeat procedure on the passenger side.

See Illustration # 30

132. Locate the stock rear coil springs that were removed from step # 125. Working on the driver side, re-install the stock rear coil spring into the stock lower coil spring pocket. Repeat procedure on the passenger side. **Special Note: make sure to re-install the stock coil spring back into the stock location, refer to the marks that were scribed in step # 109.** Carefully raise up on both hydraulic floor jacks at the same time until the stock

coil springs seats properly with the newly installed upper coil spring spacers.

See Illustration # 31

133. Locate the stock shock hardware that was removed from step # 123 and the new rear 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 30" fully extended nitrogen gas shock.** Install the proper shock bushings and sleeves into each end of the new rear shocks. **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.**

134. Working on the driver side, install the new shock into the stock location and secure using the stock hardware. **Make sure to use thread locker or lock tite.** Torque to **78 ft lbs.** Repeat procedure on the passenger side.

See Illustration # 32

135. Carefully remove both hydraulic floor jacks from under the rear axle.

136. Locate (2) new rear sway bar end links. Also, locate (8) PB4902 poly bushings, (4) S10026 anti crush sleeves from hardware bag 14965SL. 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.**

137. Locate (4) 1/2" x 2 1/2" bolts, (8) 1/2" flat washers, (4) 1/2" unitorque nuts and (4) 1/2" lock washers from hardware bag 14965NB3. Working on the driver side, install the new sway bar end link into the stock location and secure using the new 1/2" x 2 1/2" bolt and hardware. **Do not tighten at this point. Make sure to use thread locker or lock tite.** Repeat procedure on the passenger side. Once both new sway bar end links are secure to the stock location, torque the new hardware to **85 ft lbs.** **Special Note: If you are not able to connect the new rear sway bar end link to the stock location, the weight of the vehicle may need to be on the ground. If this is the case, perform this step once the tires have been installed and the vehicle is on the ground.**

See Illustration # 33

138. Install the tires and wheels and carefully lower the vehicle to the ground.

139. If you were not able to attach the stock track bar to the new track bar relocation bracket in step # 130, perform this step now that the weight of the vehicle is on

the ground.

See Illustration # 29

140. If you were not able to attach the new sway bar end links to the stock location in step # 137, perform this step now that the weight of the vehicle is on the ground.

See Illustration # 33

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

142. Take vehicle directly to an alignment shop for proper alignment.

Congratulations Installation Complete

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.

Also refer to the Vehicle owners manual for proper torque specifications on any stock hardware.

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.

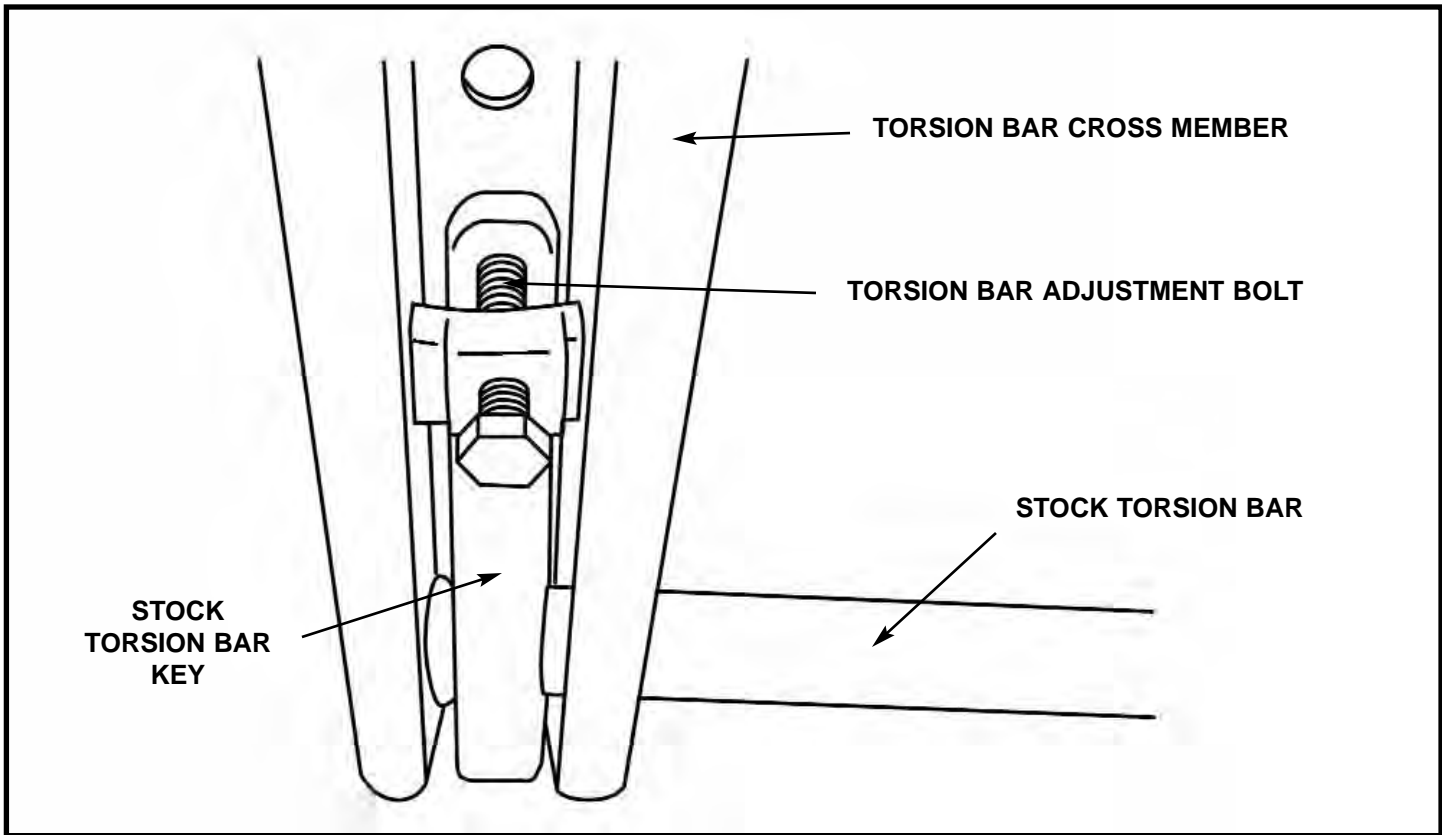


ILLUSTRATION # 1

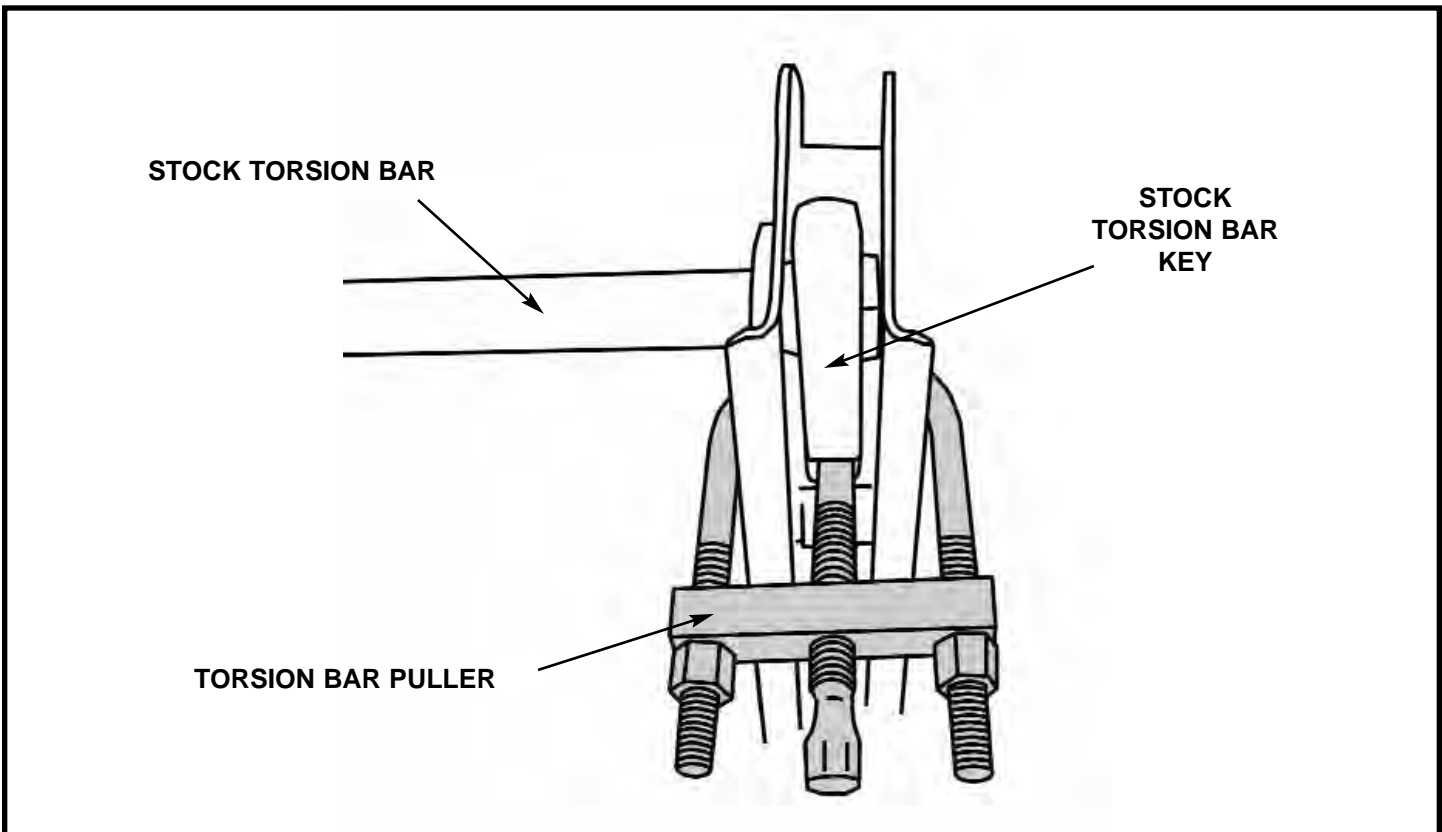


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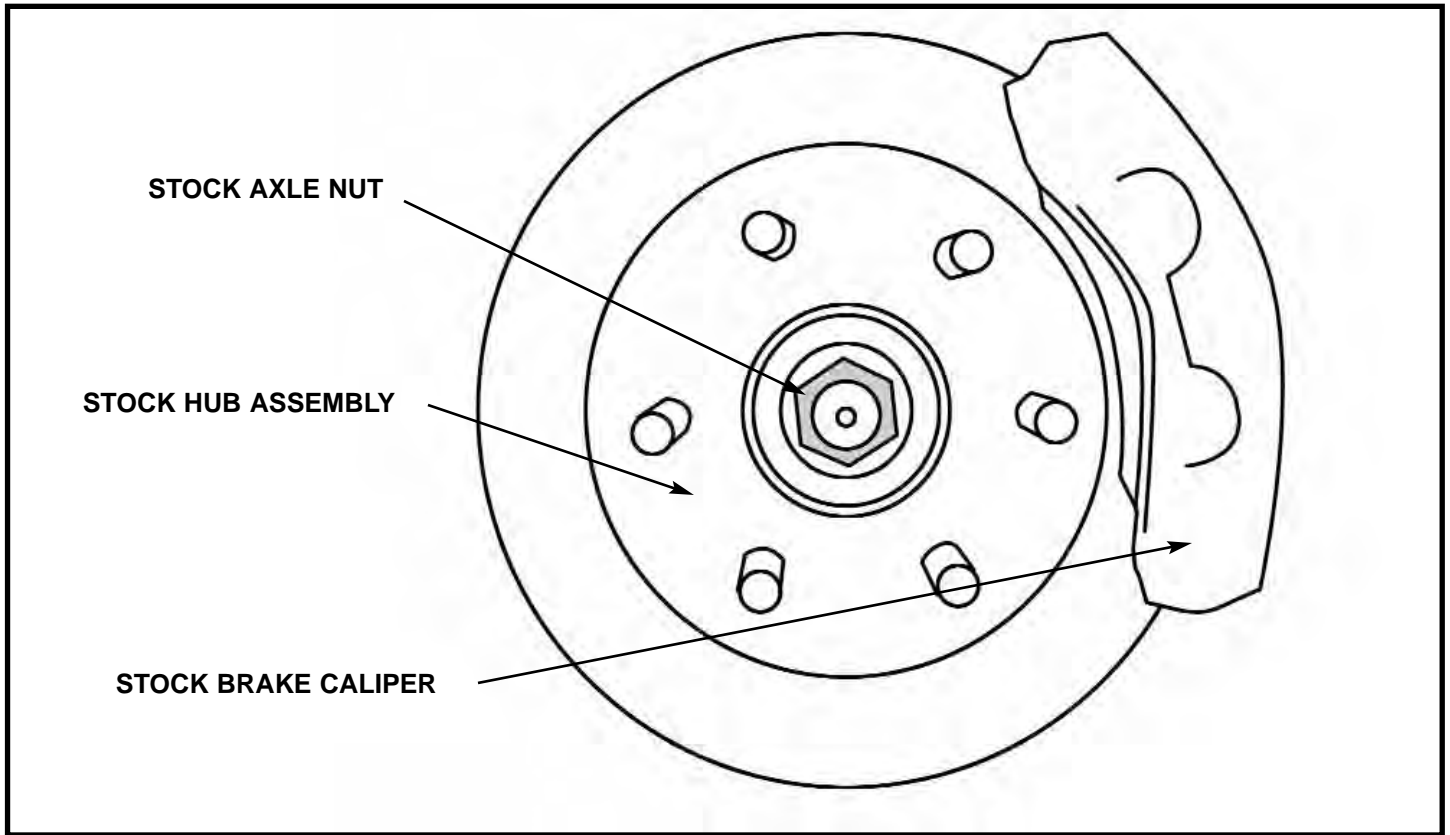


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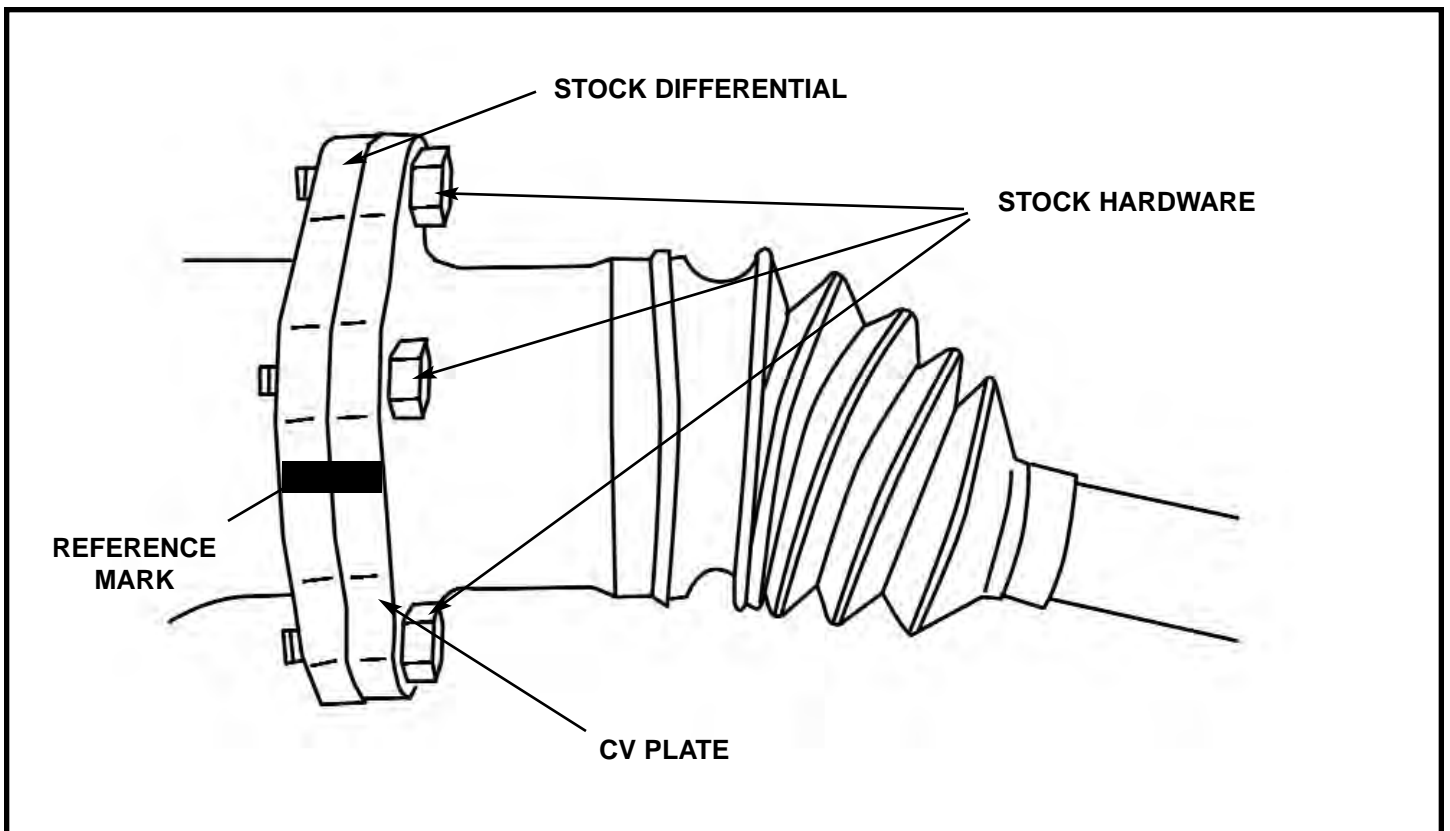


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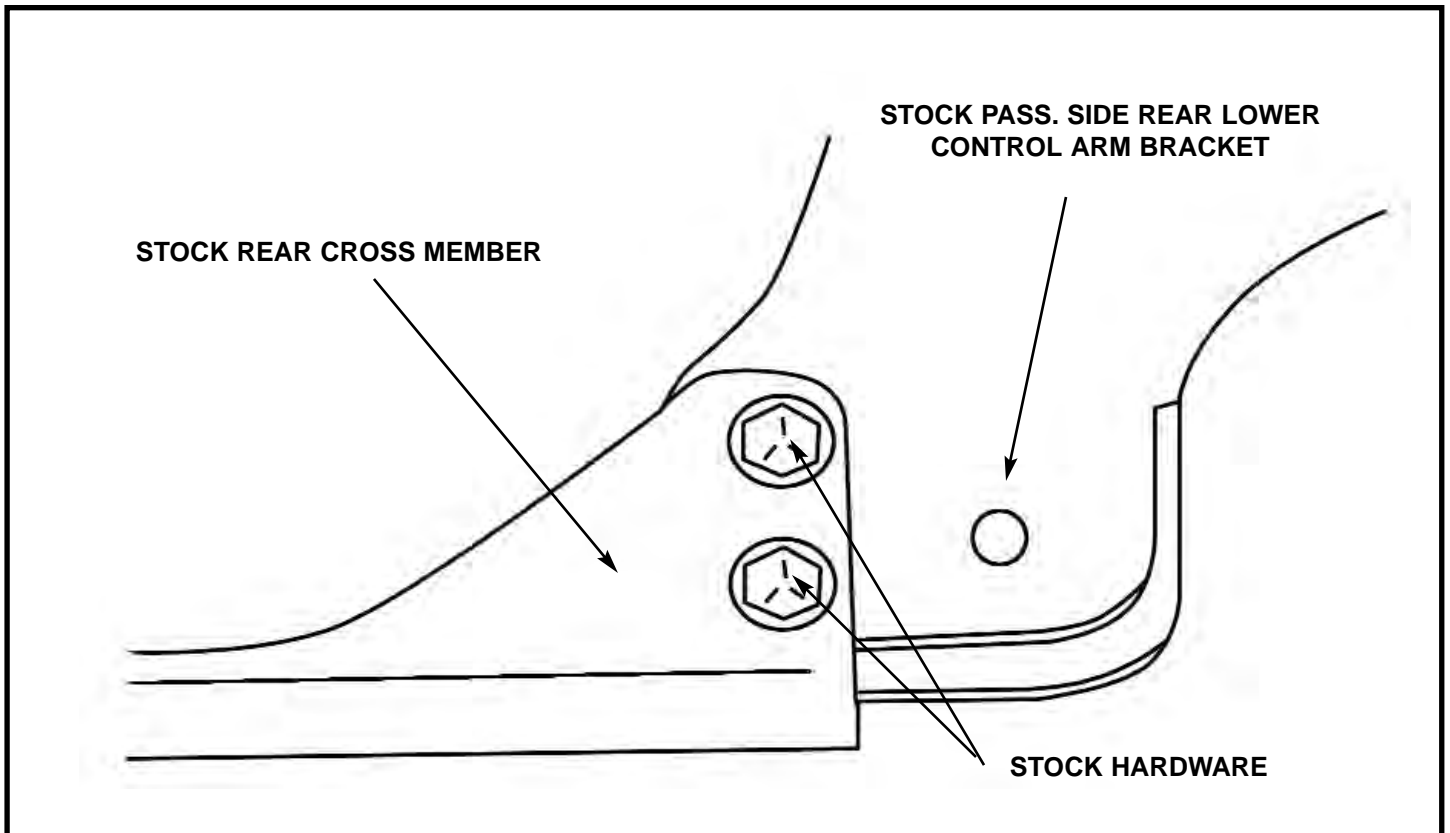


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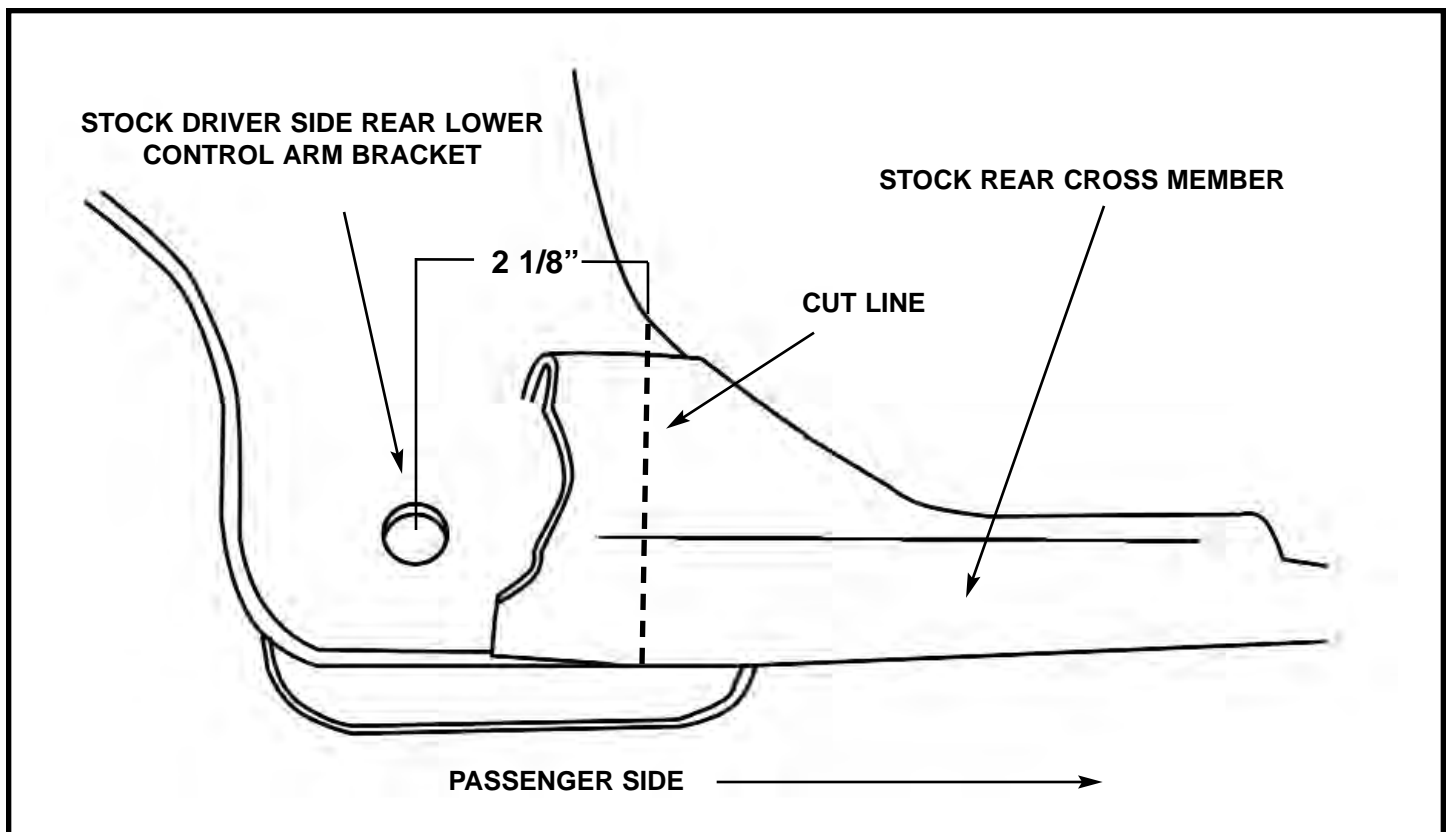


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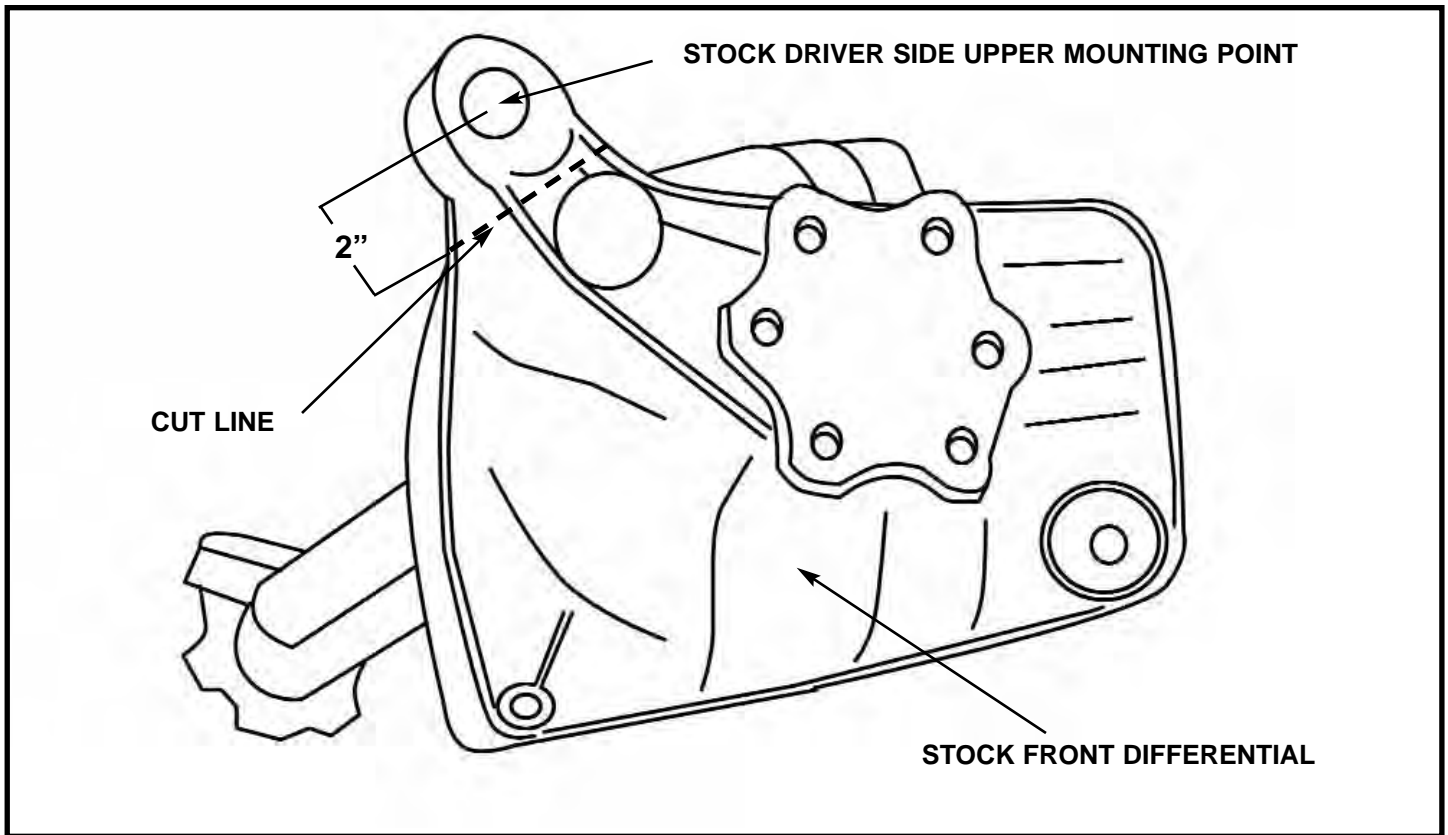


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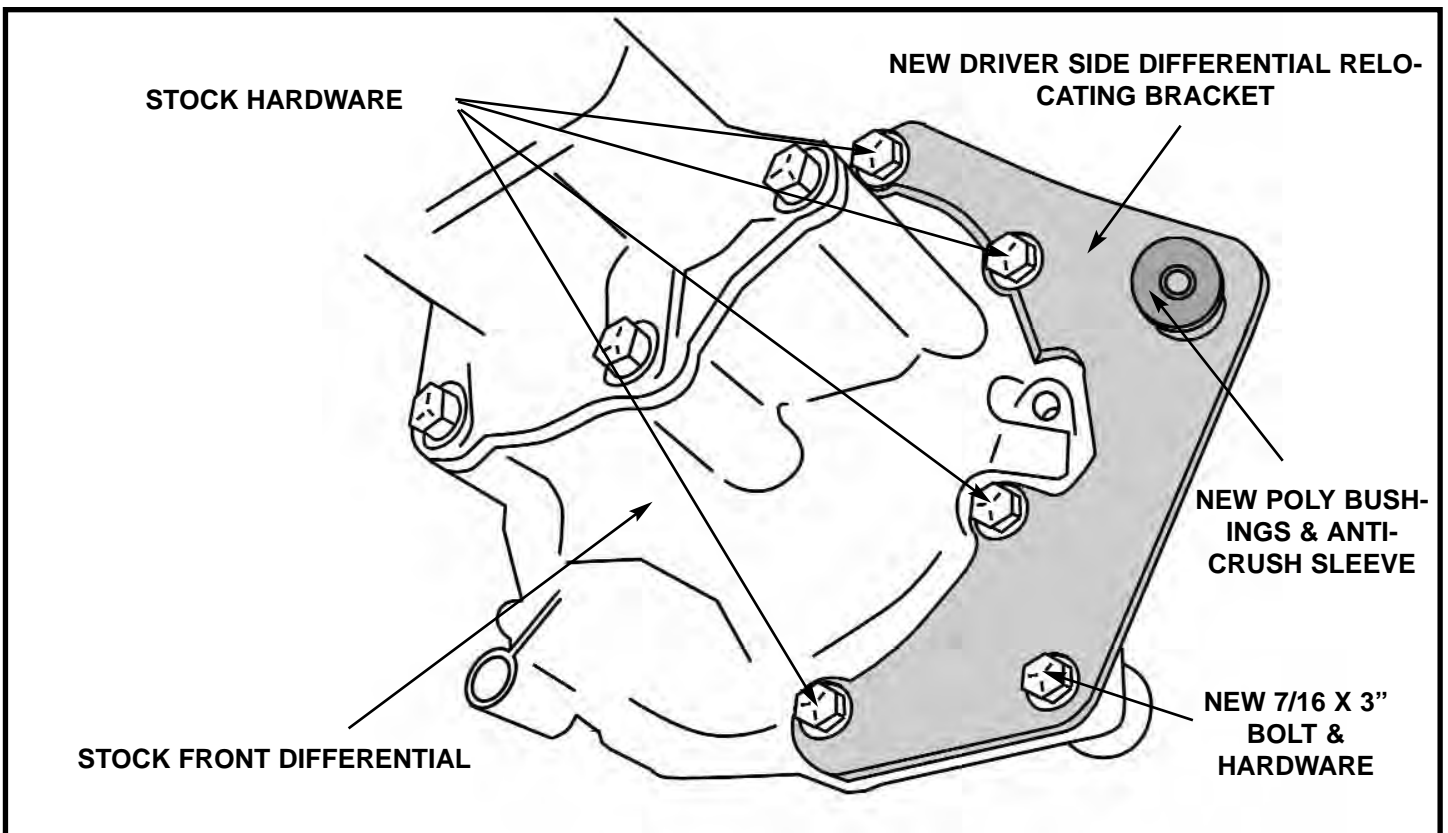


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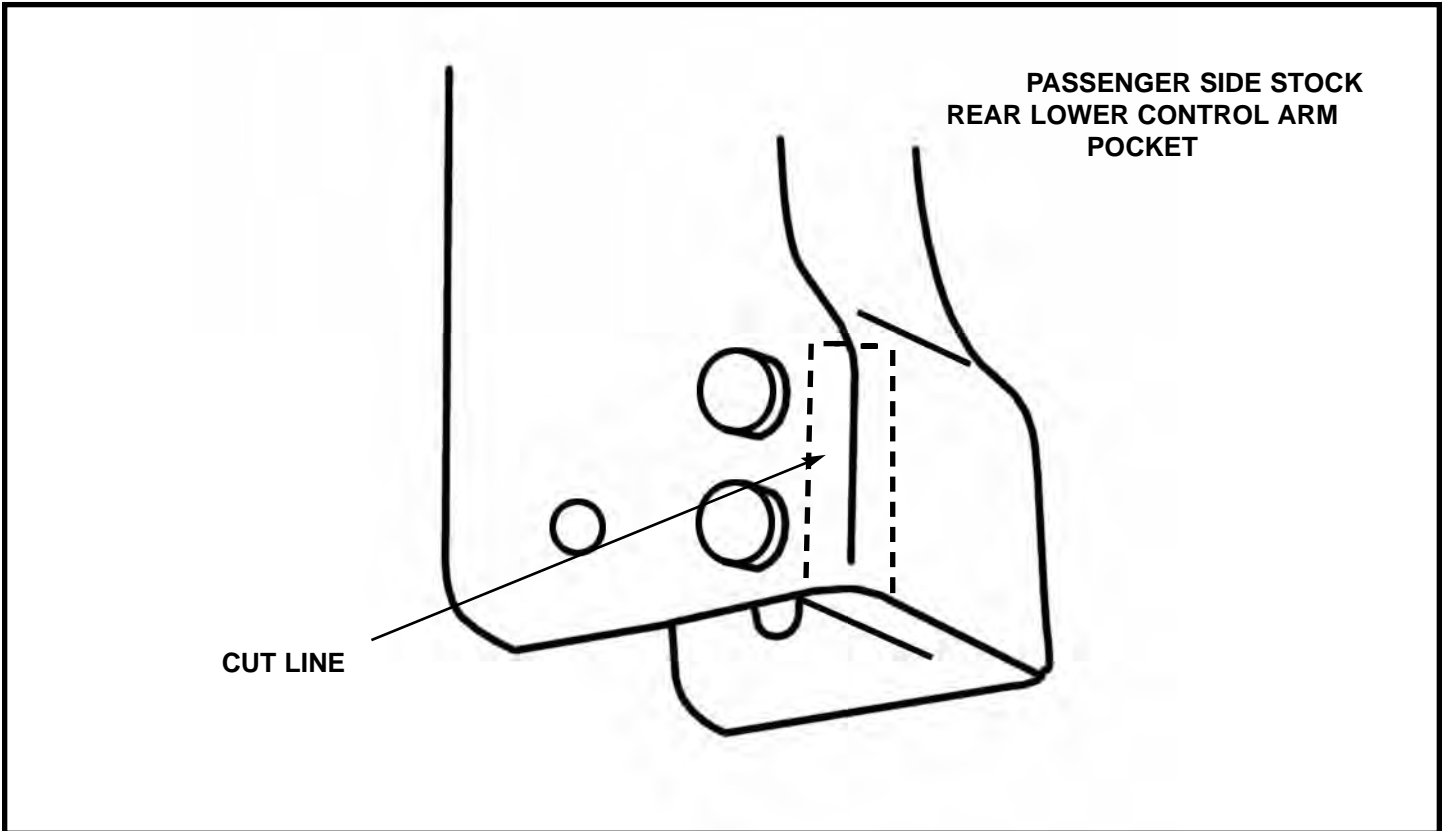


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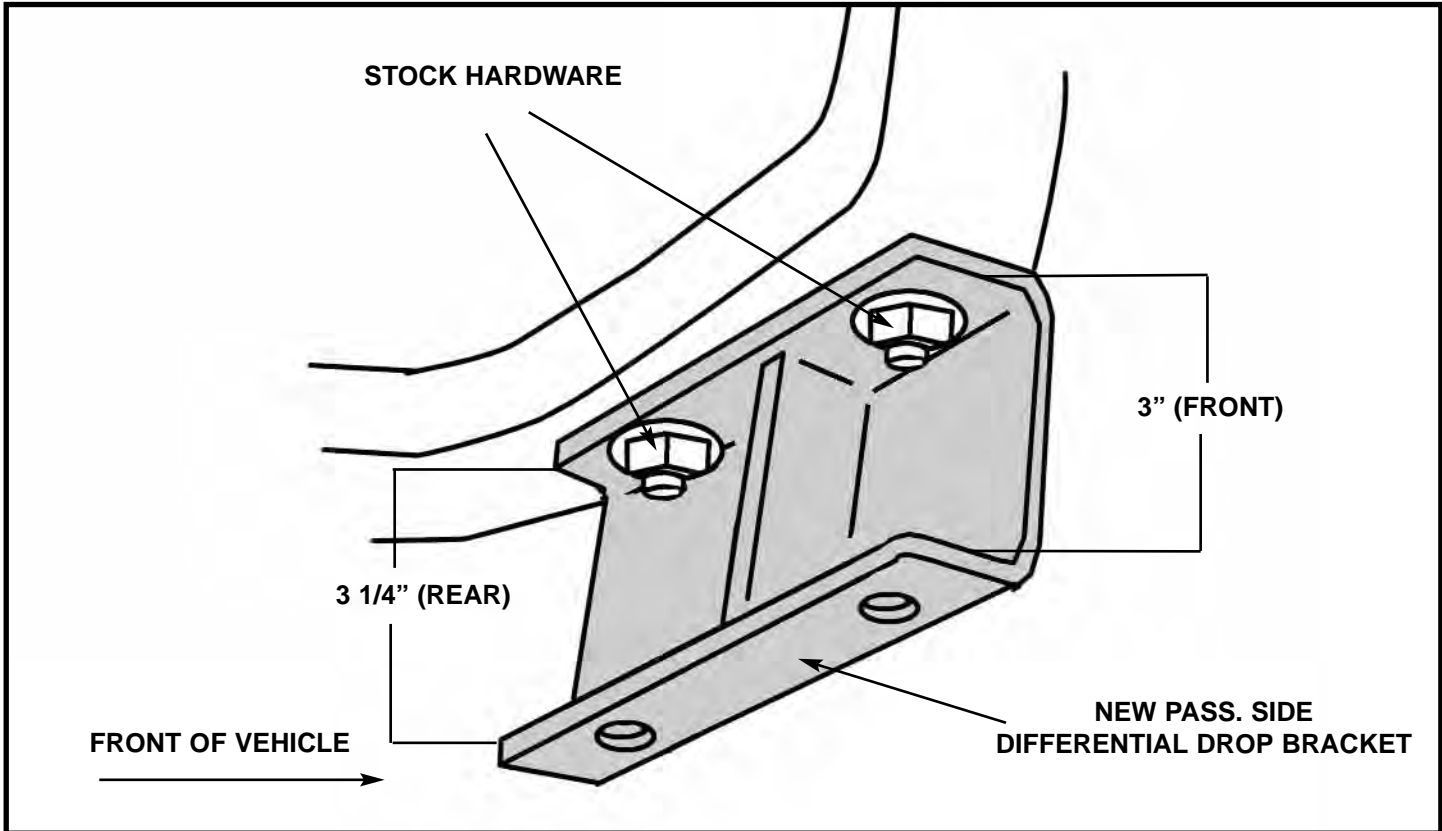


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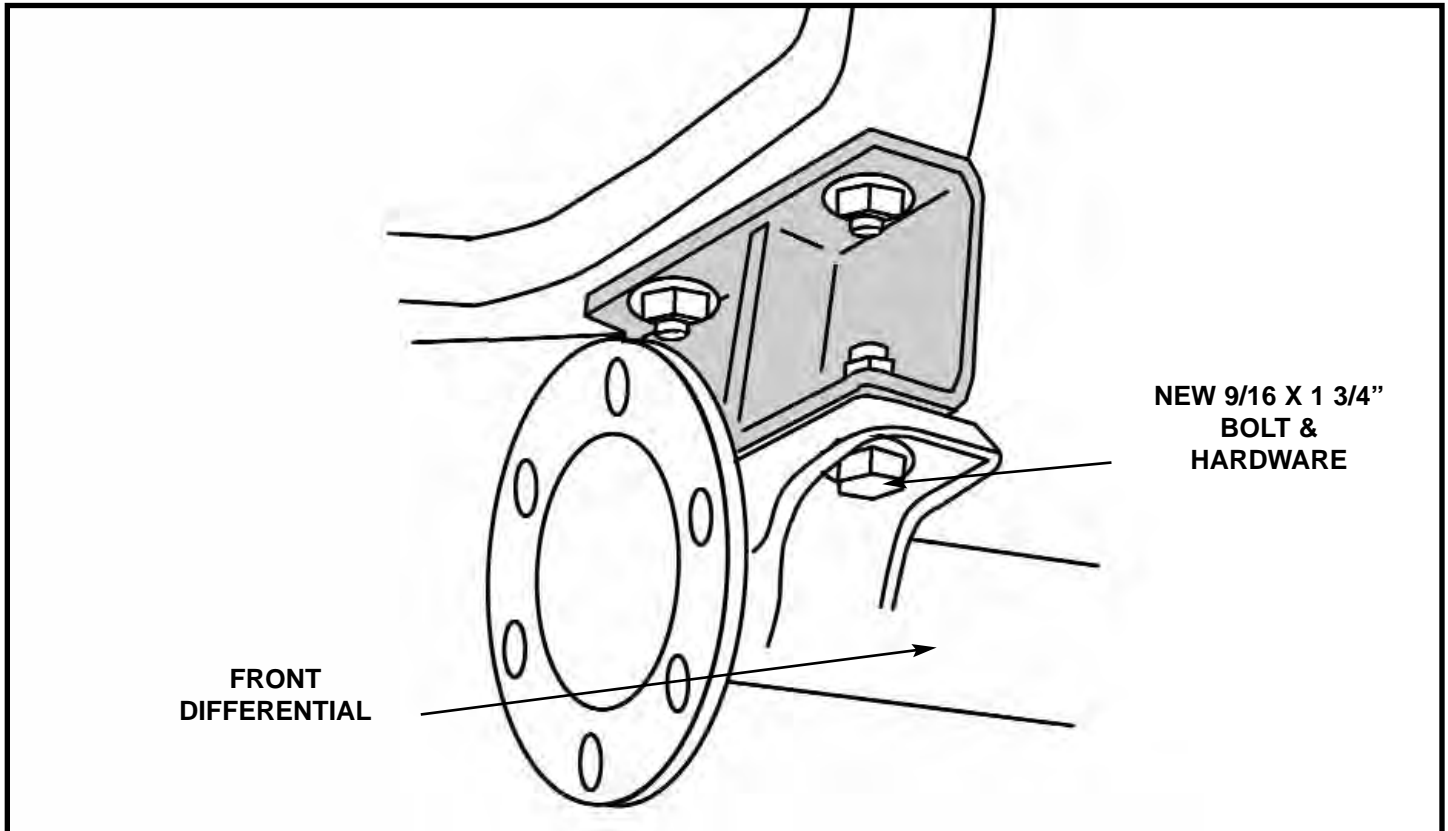


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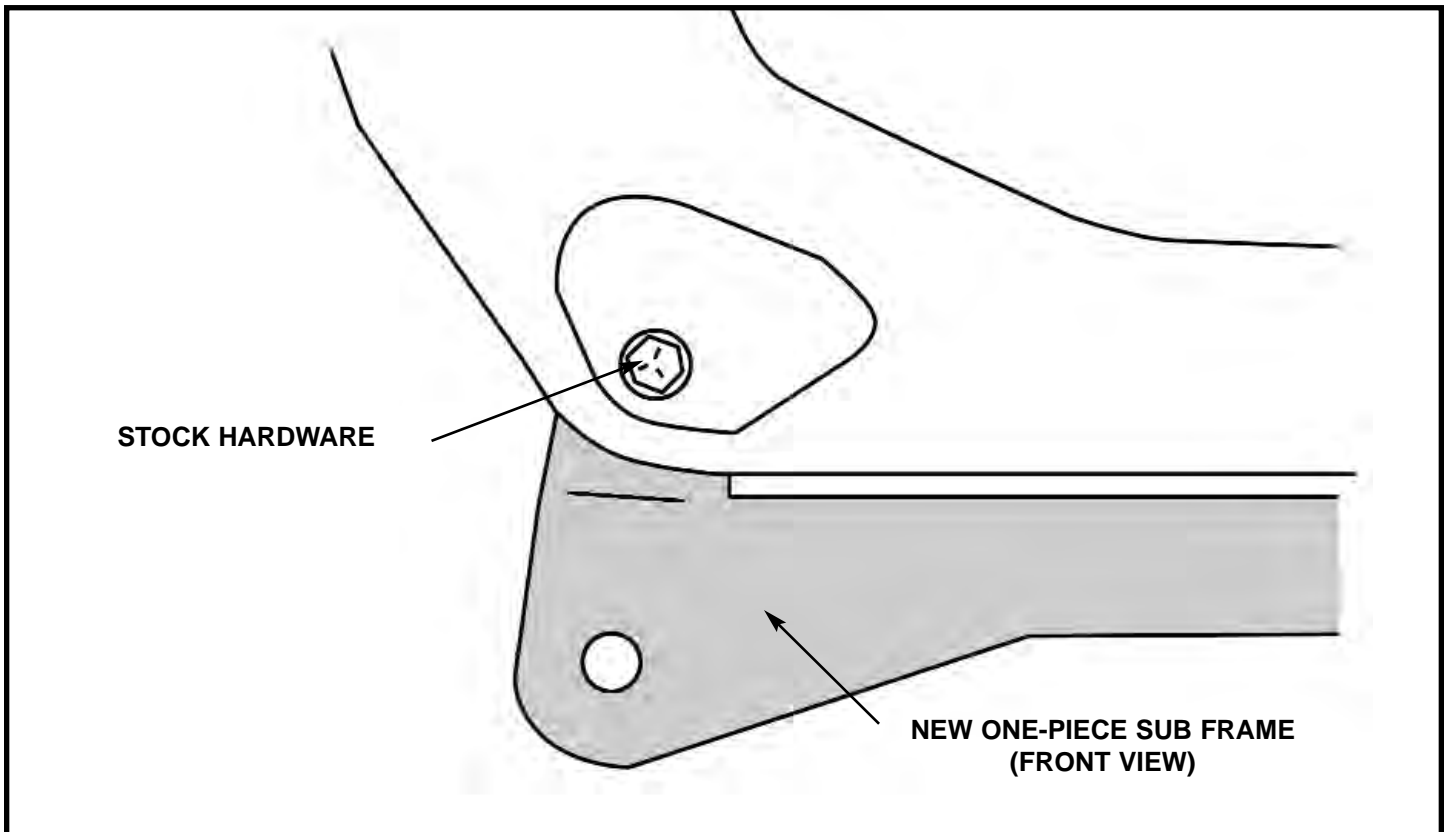


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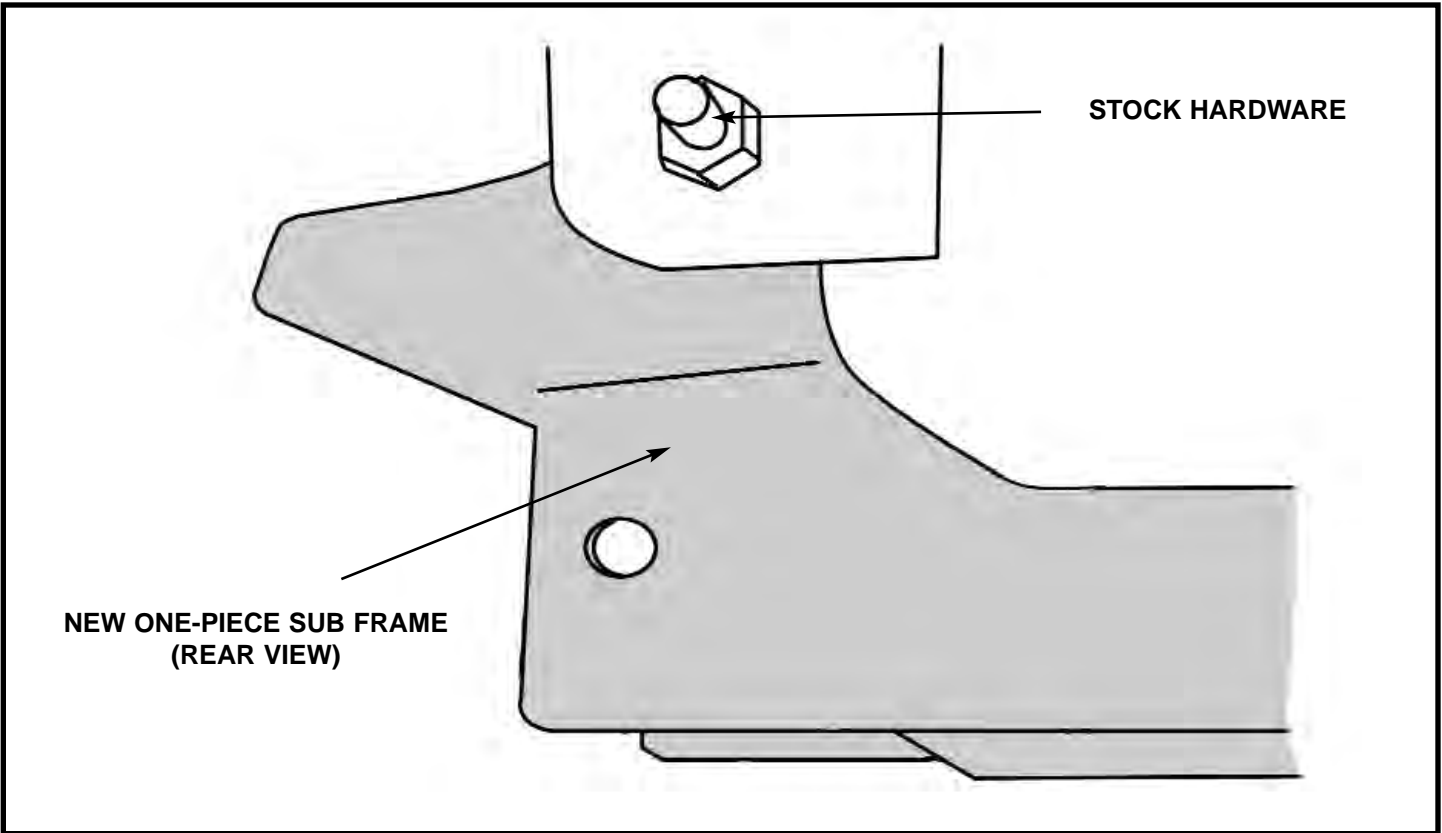


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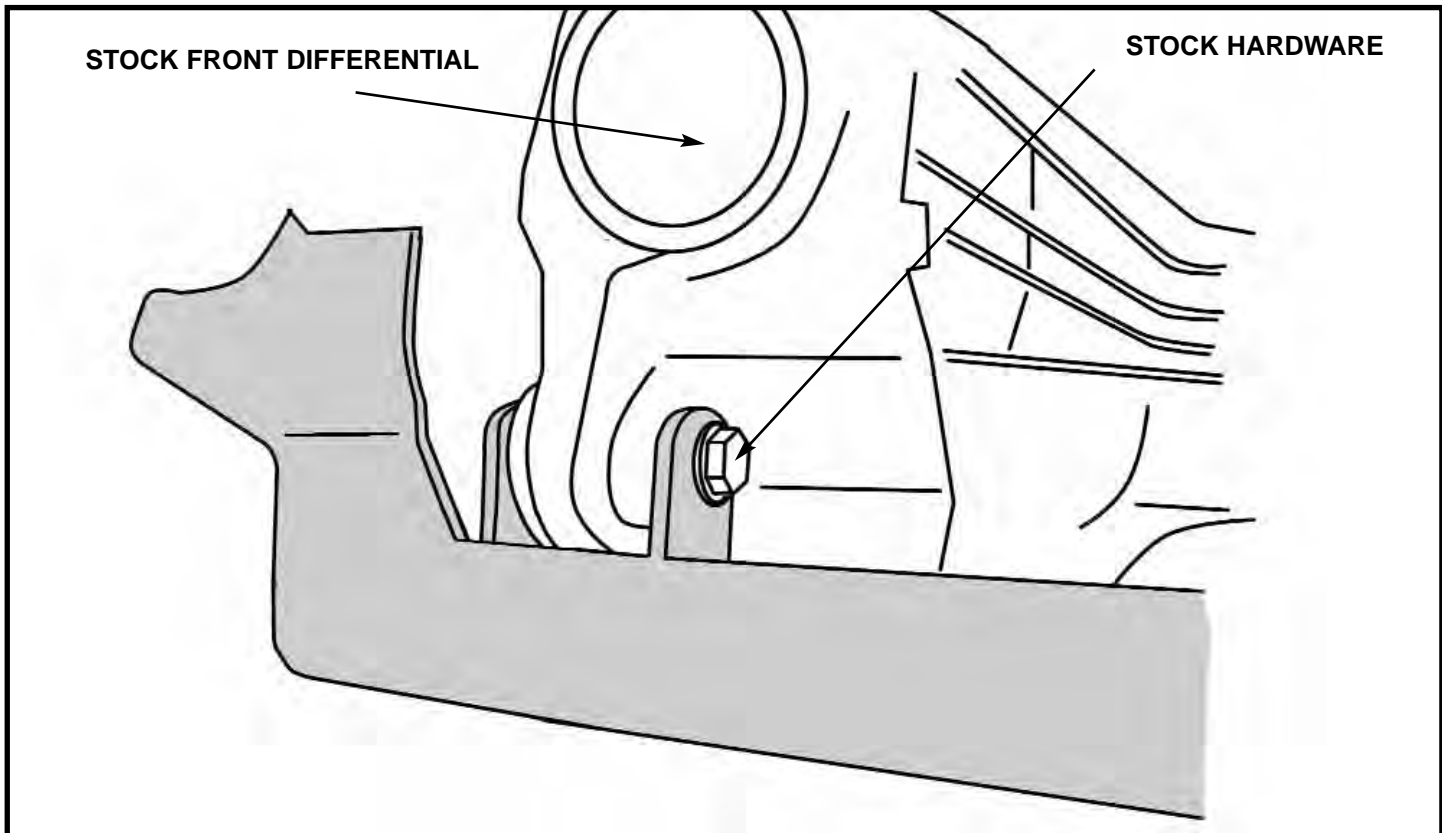


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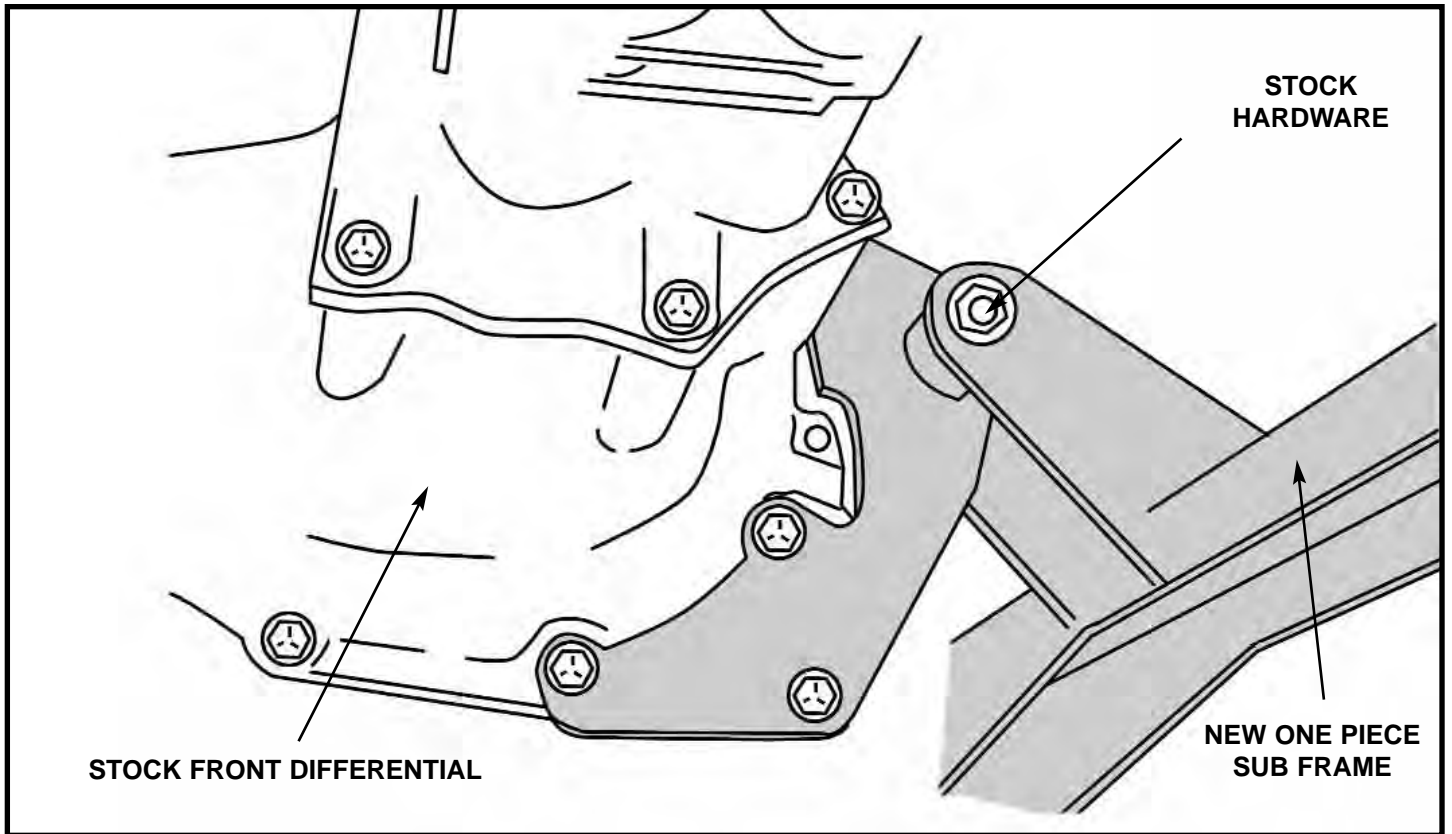


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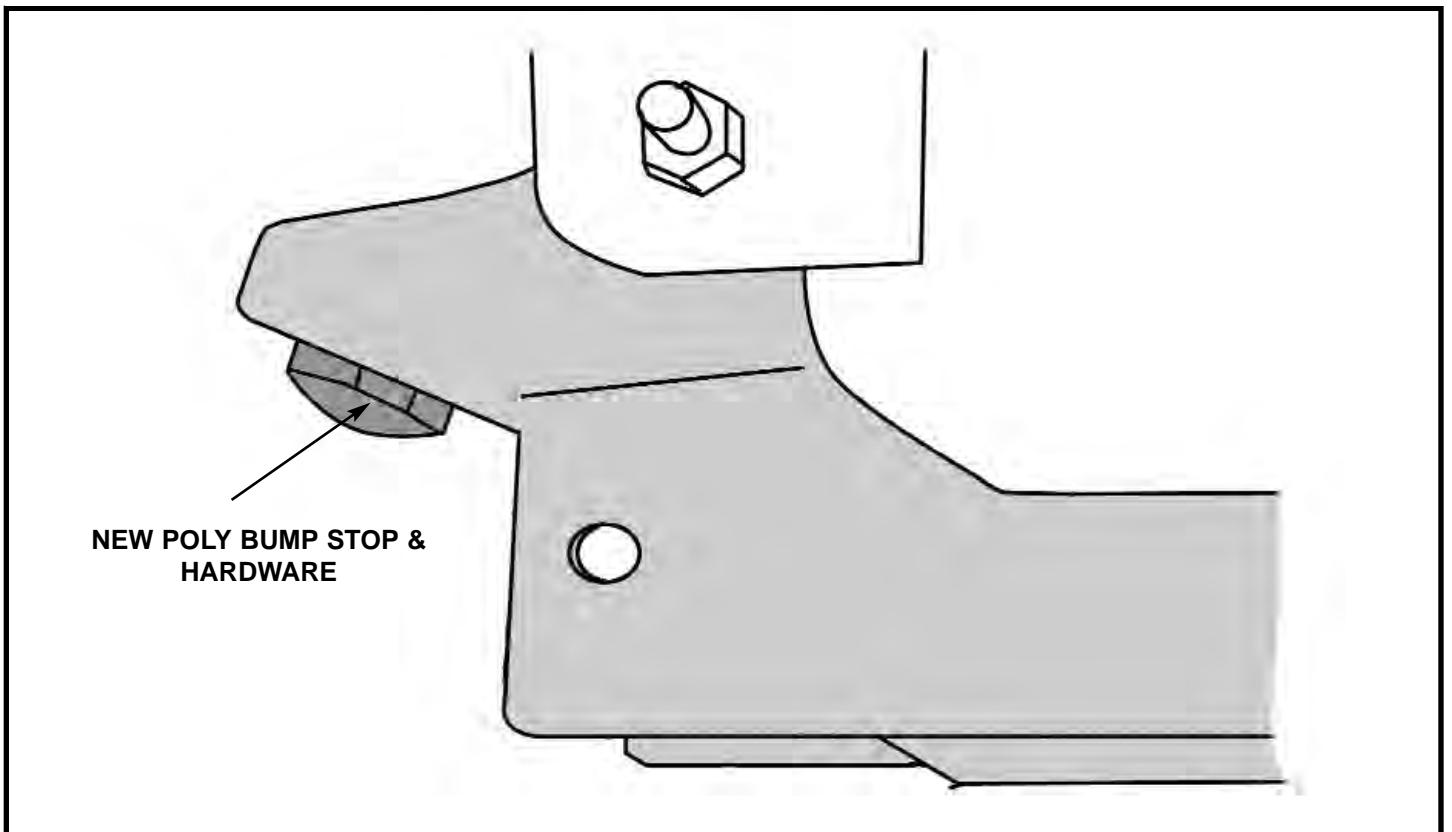


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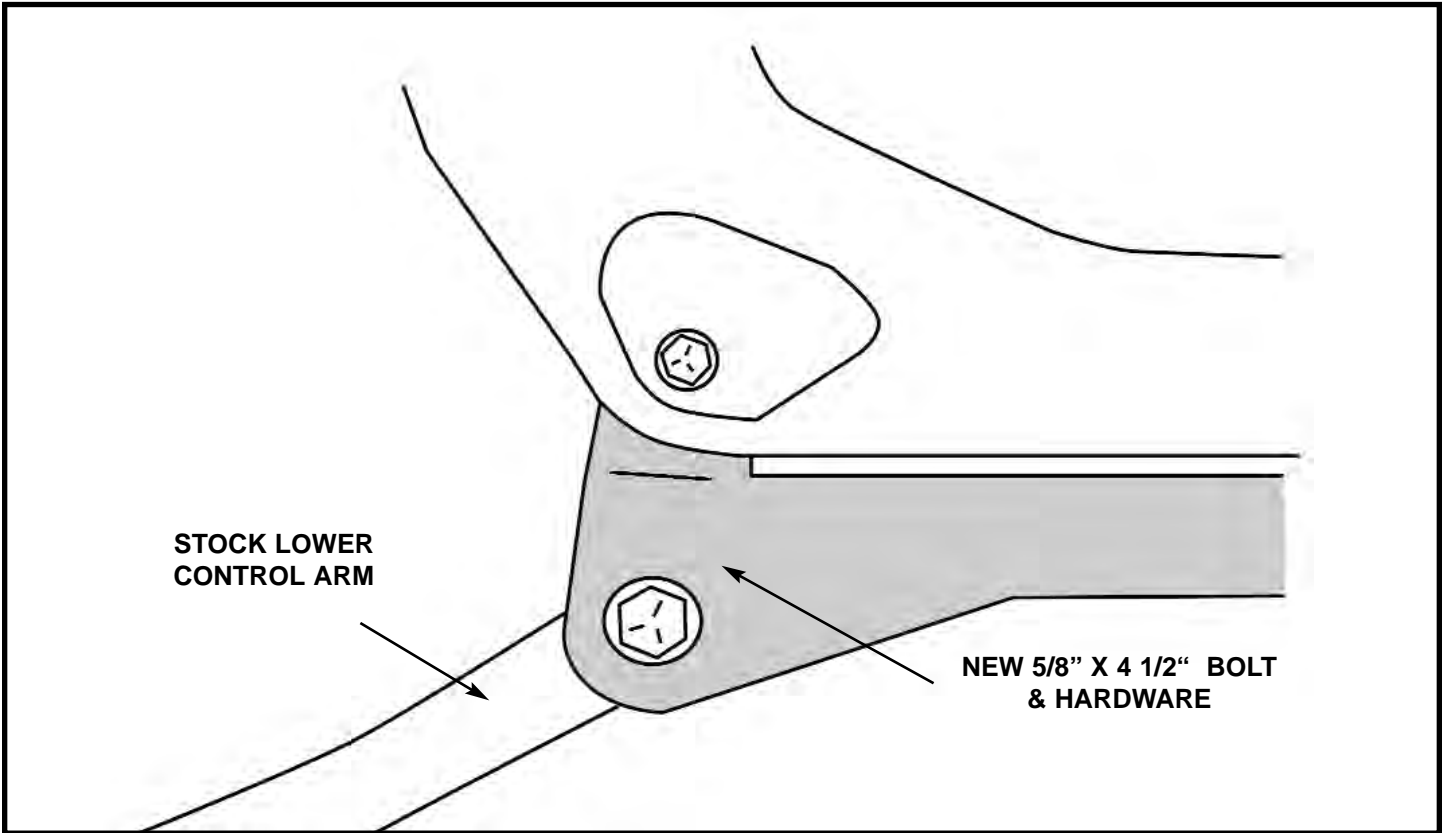


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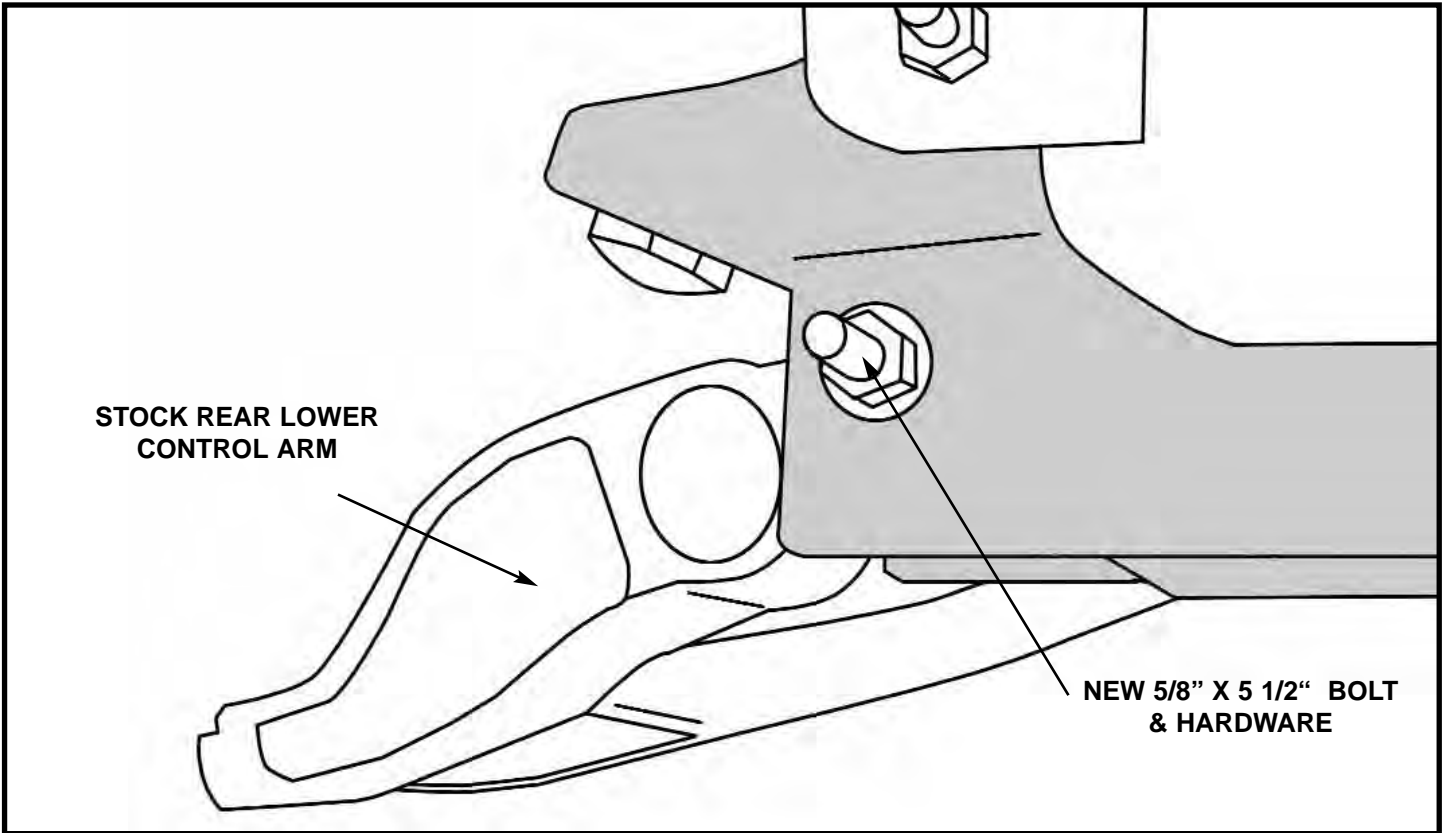


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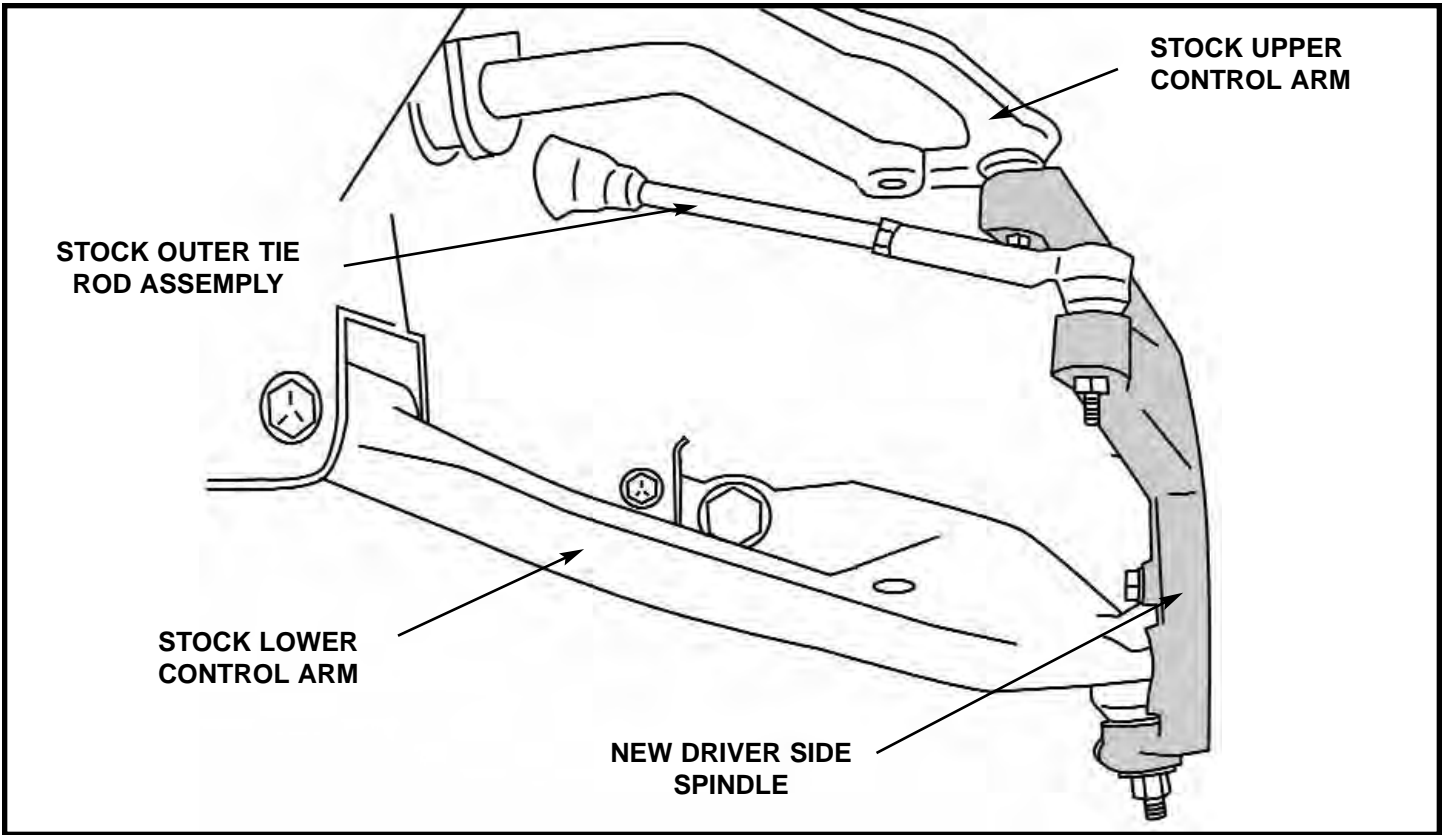


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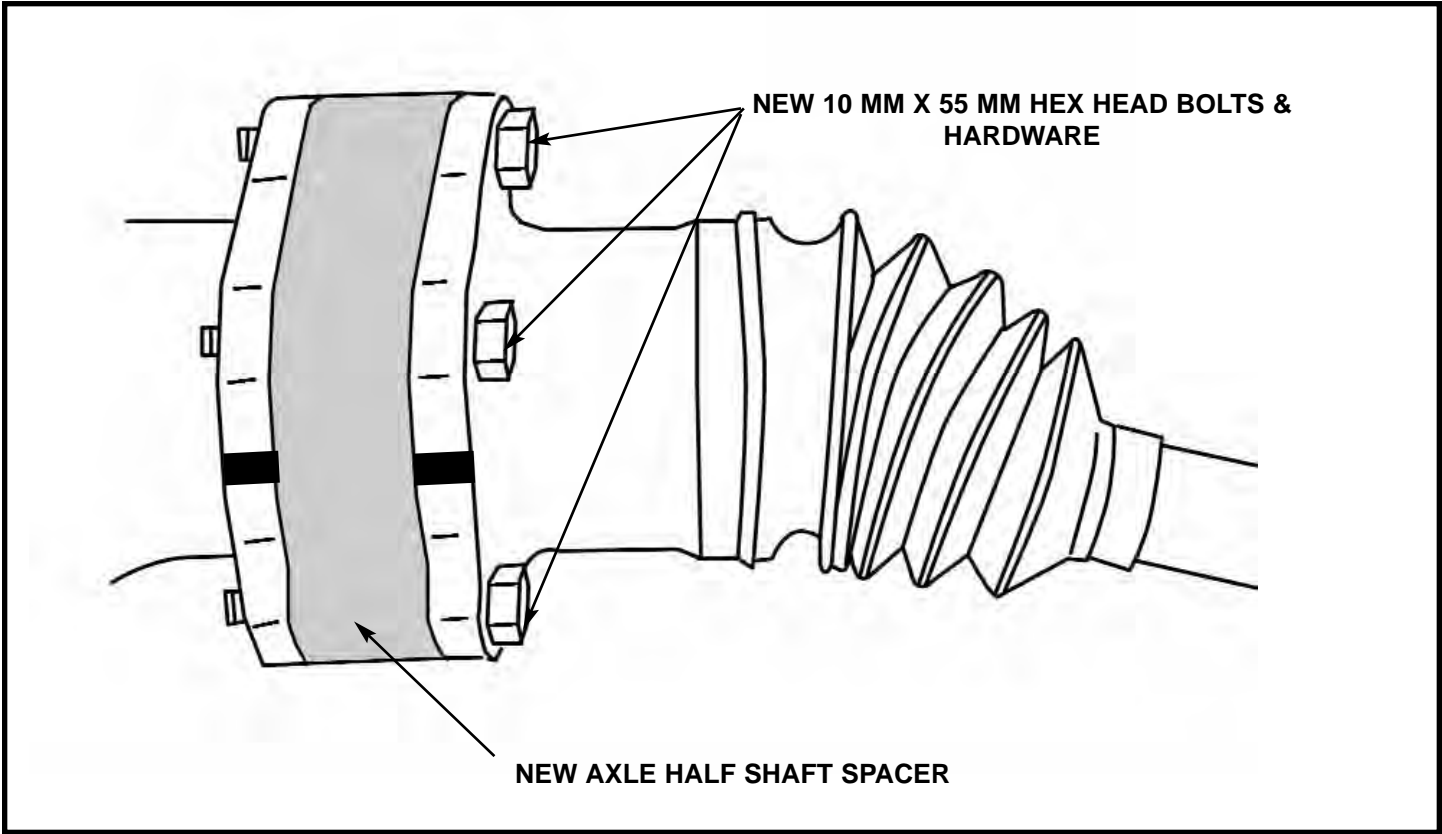


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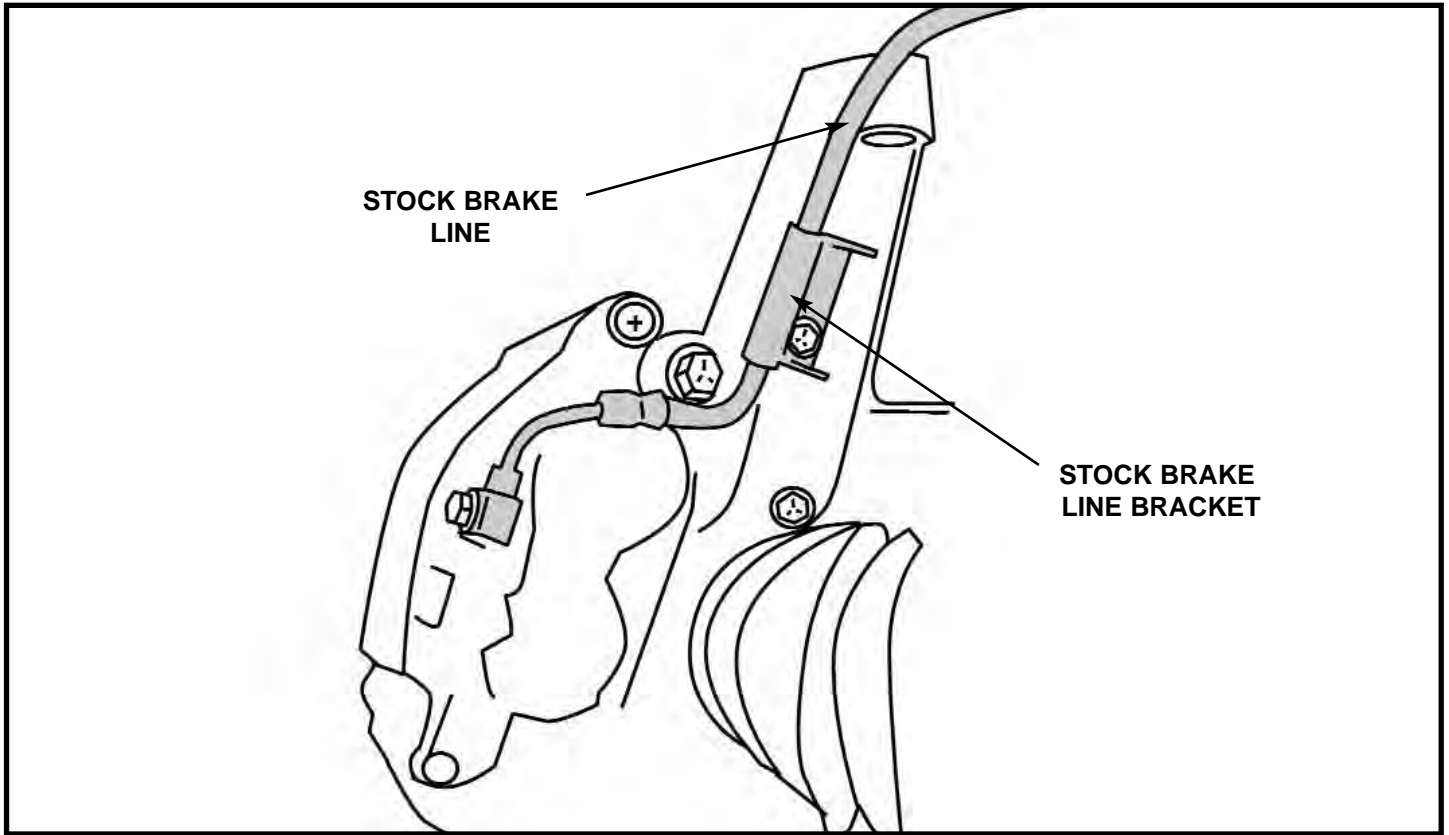


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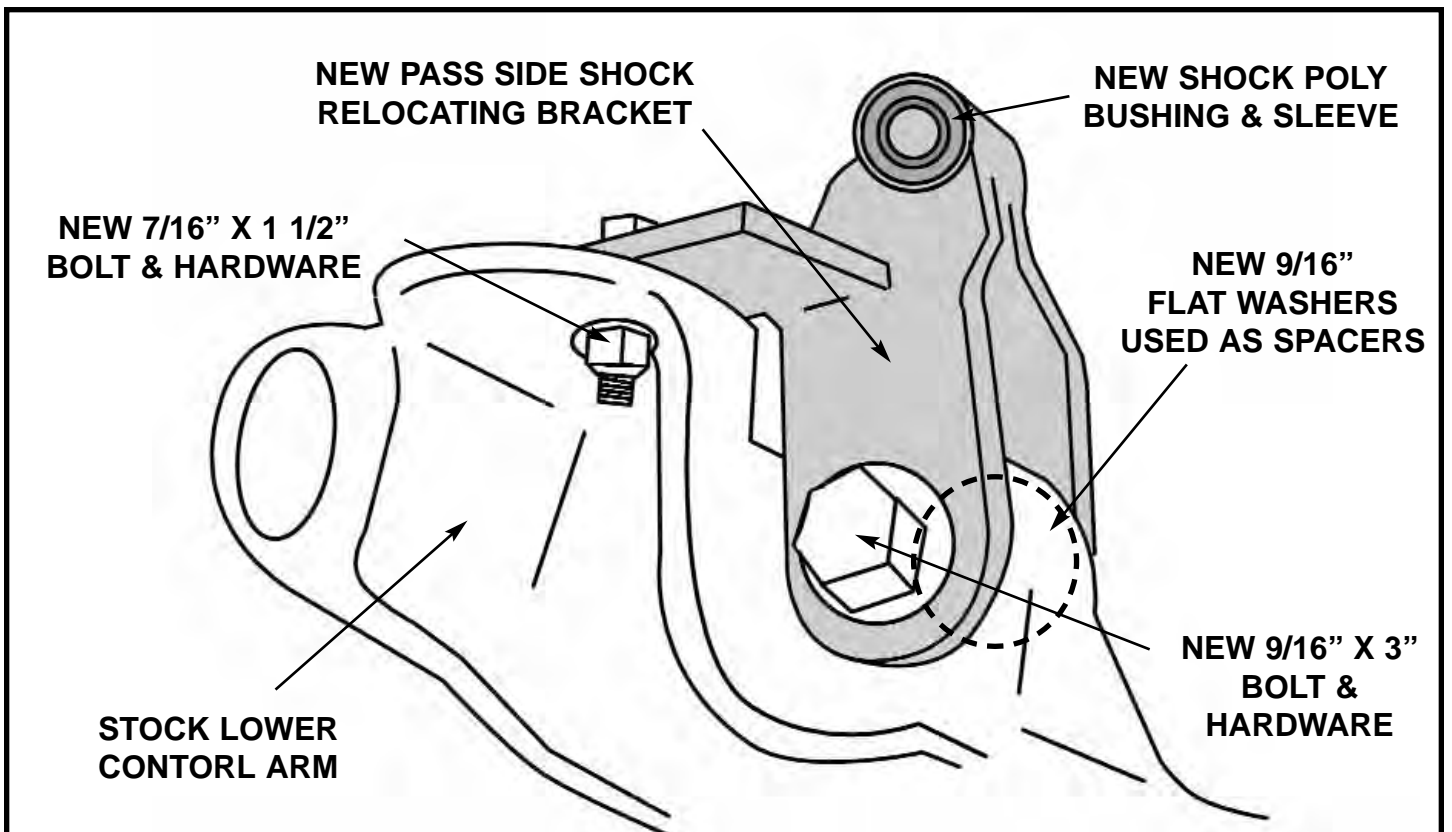


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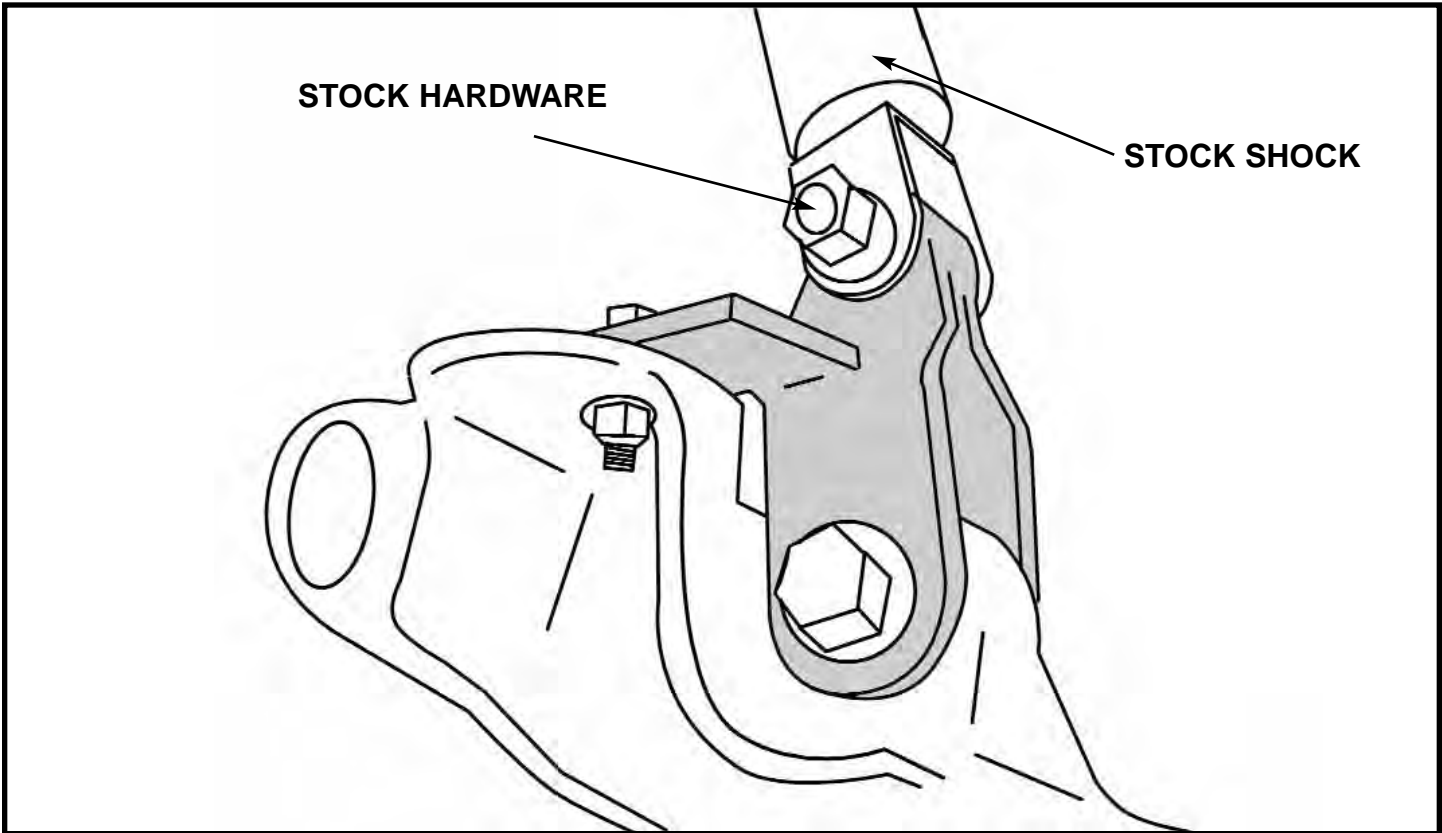


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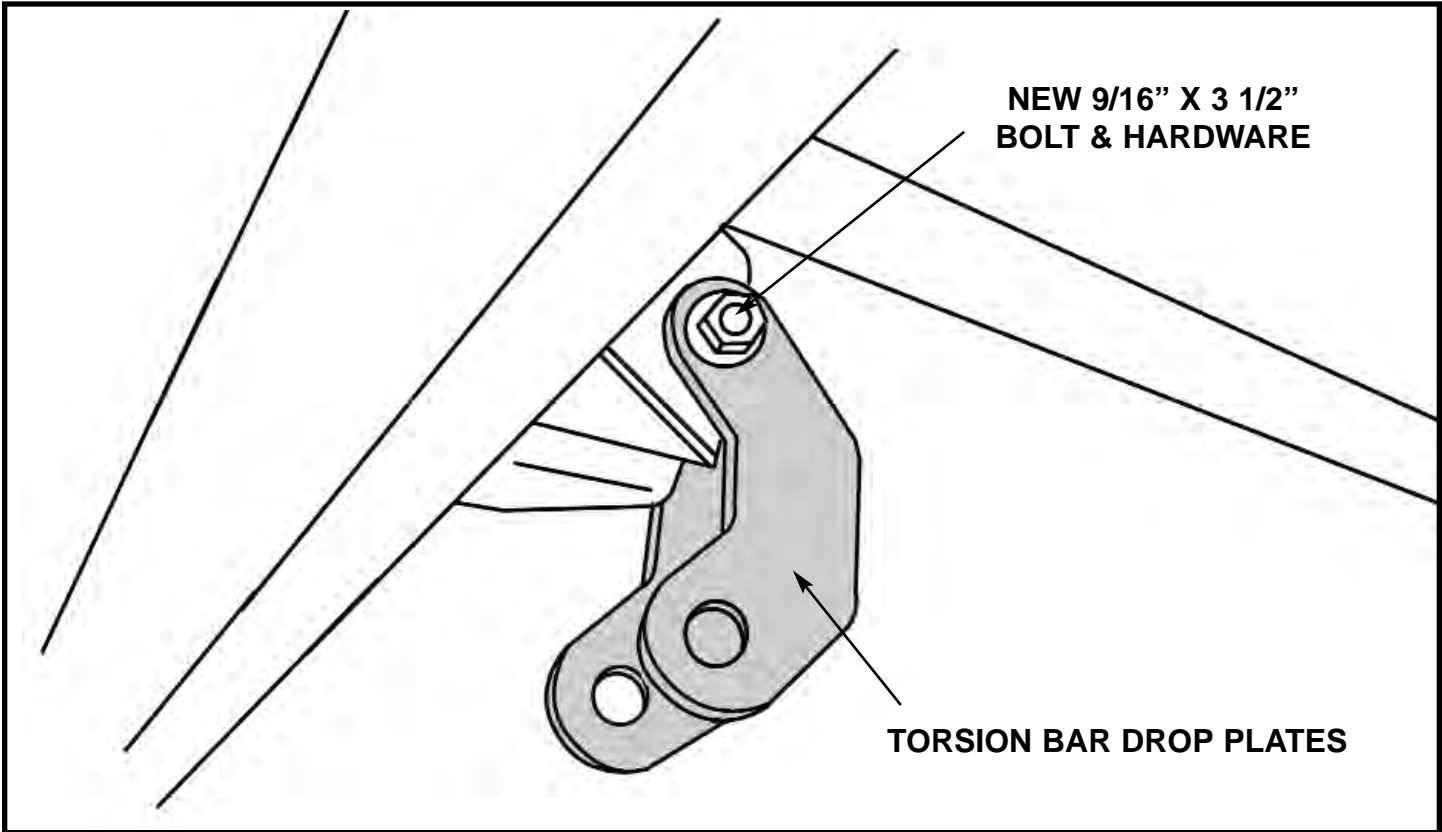


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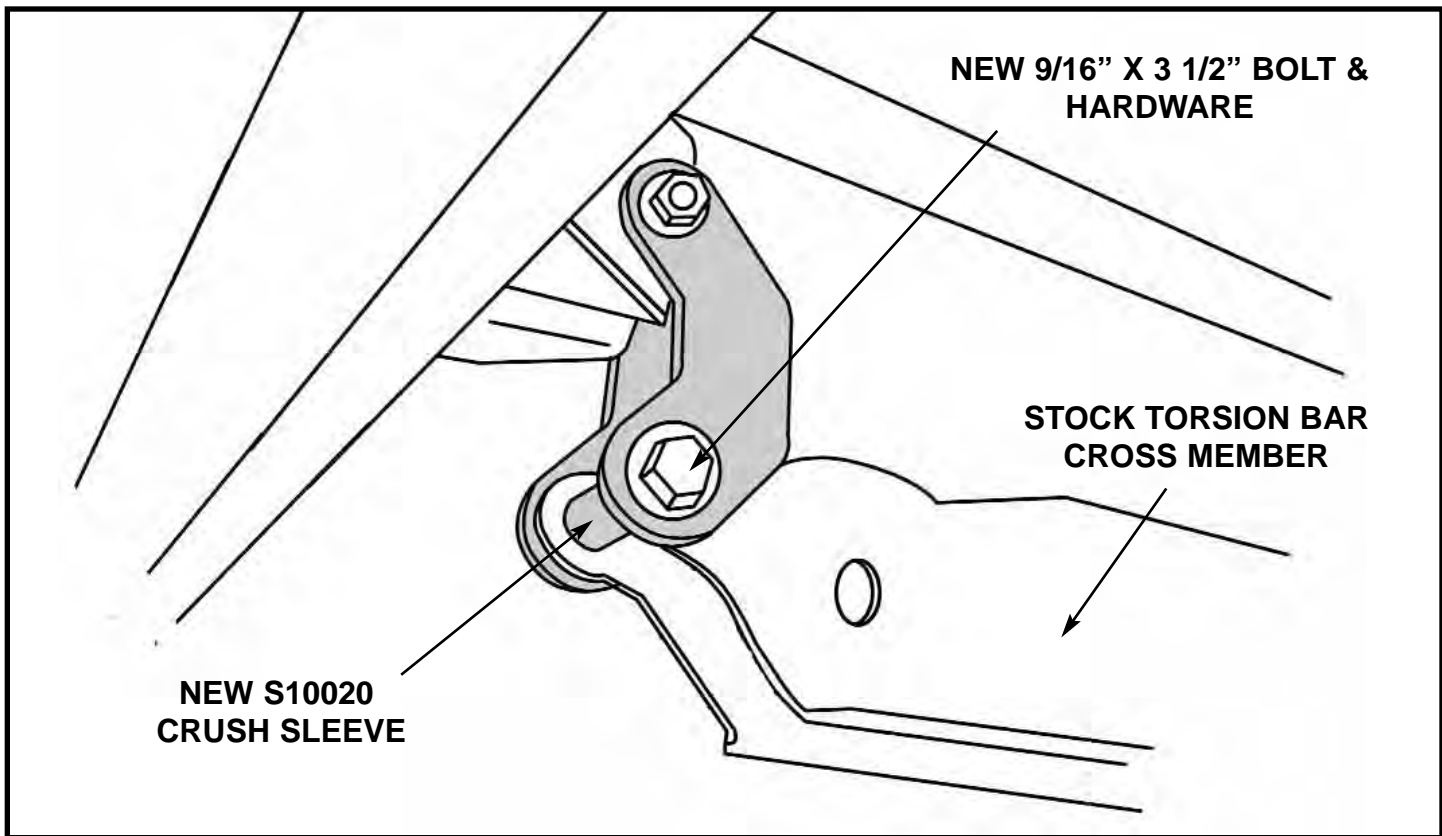


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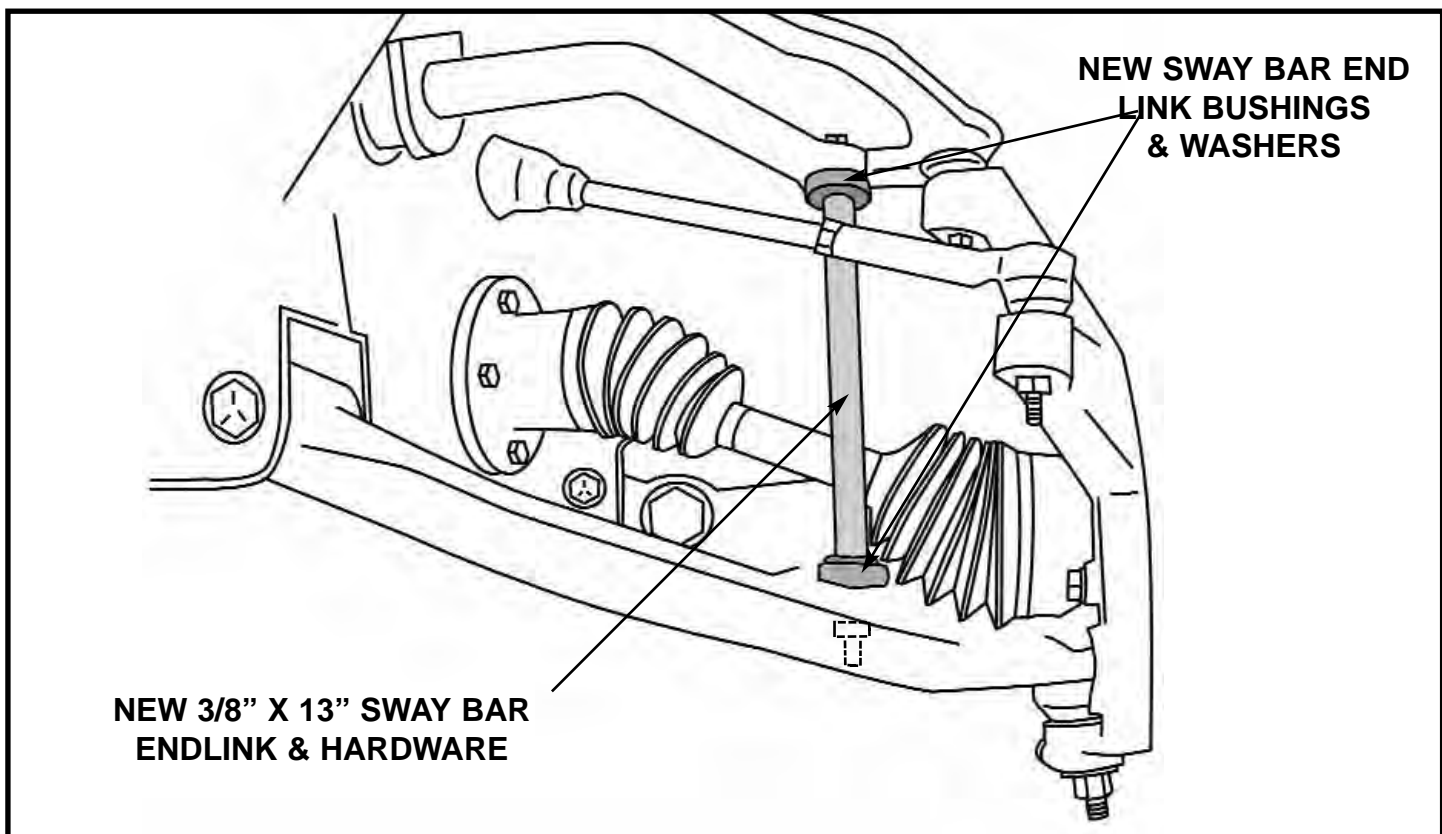


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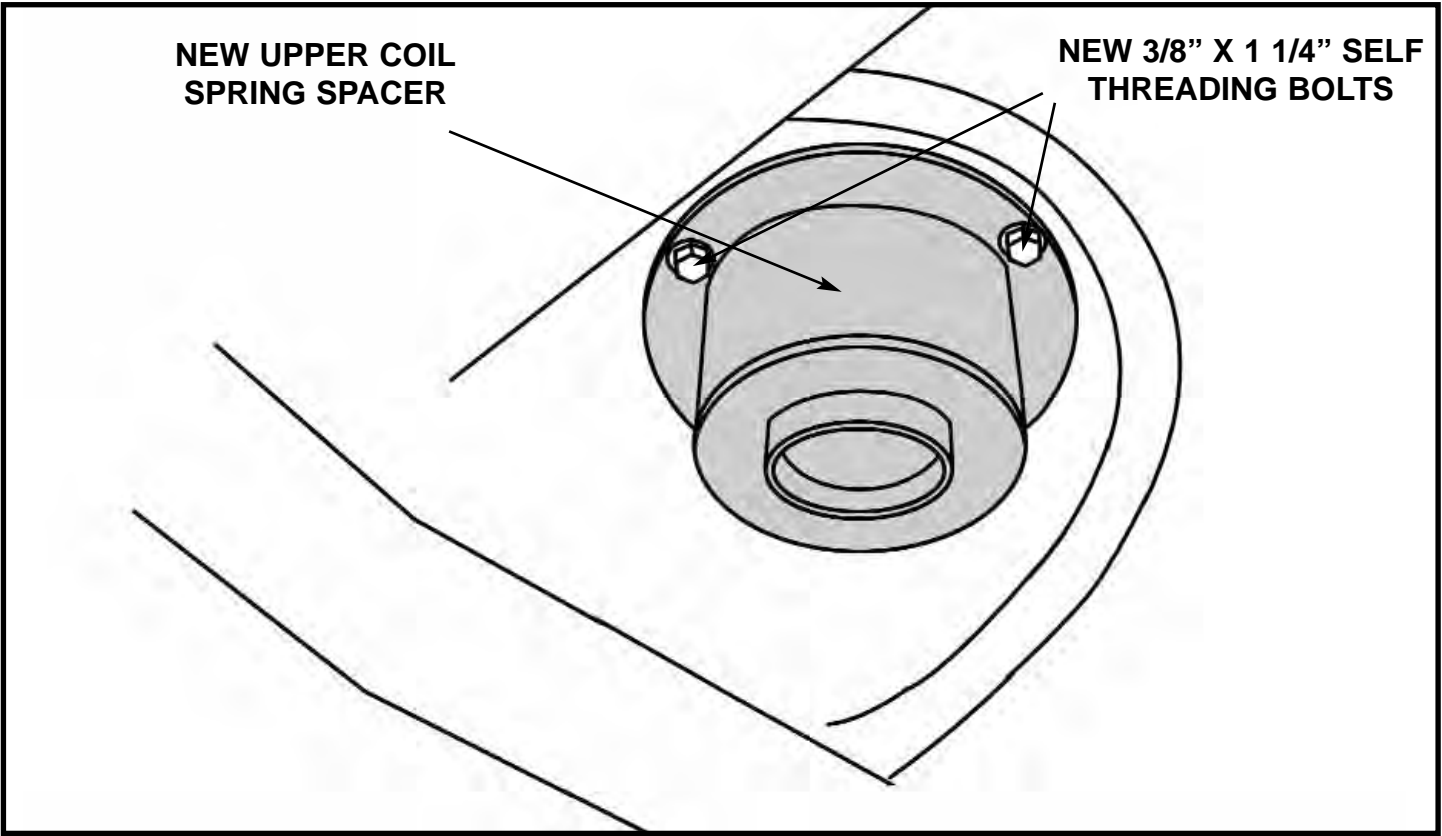


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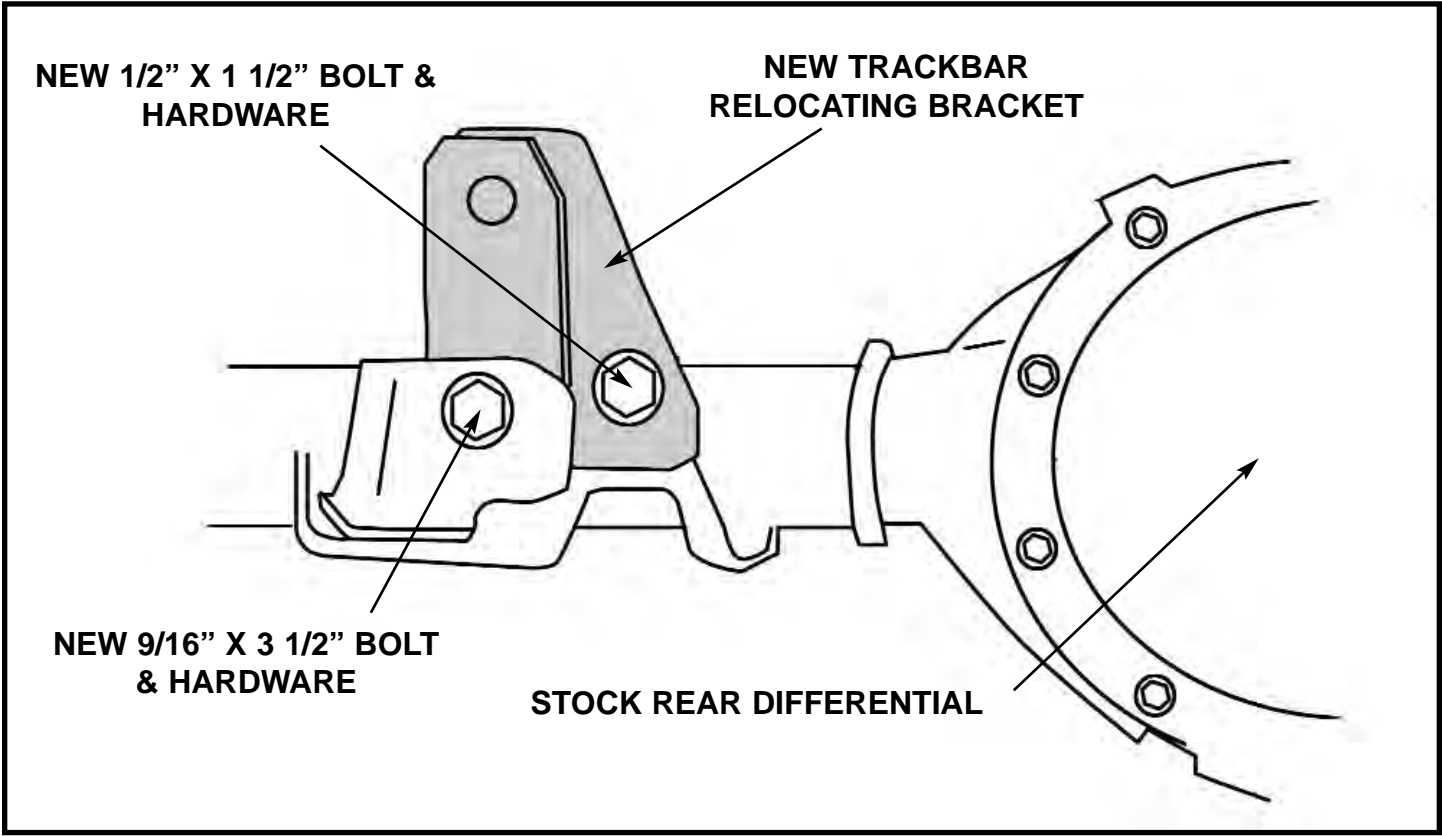


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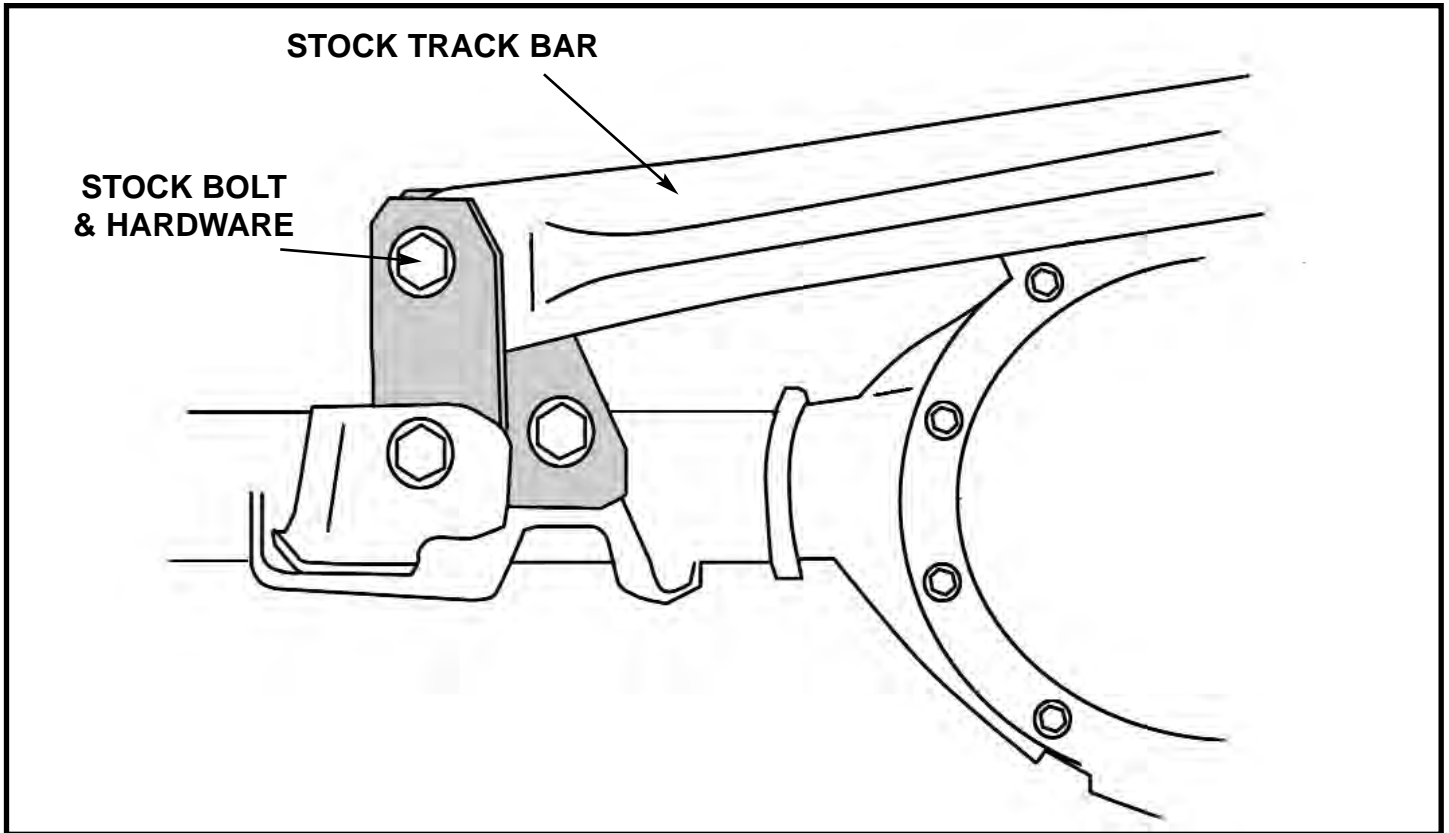


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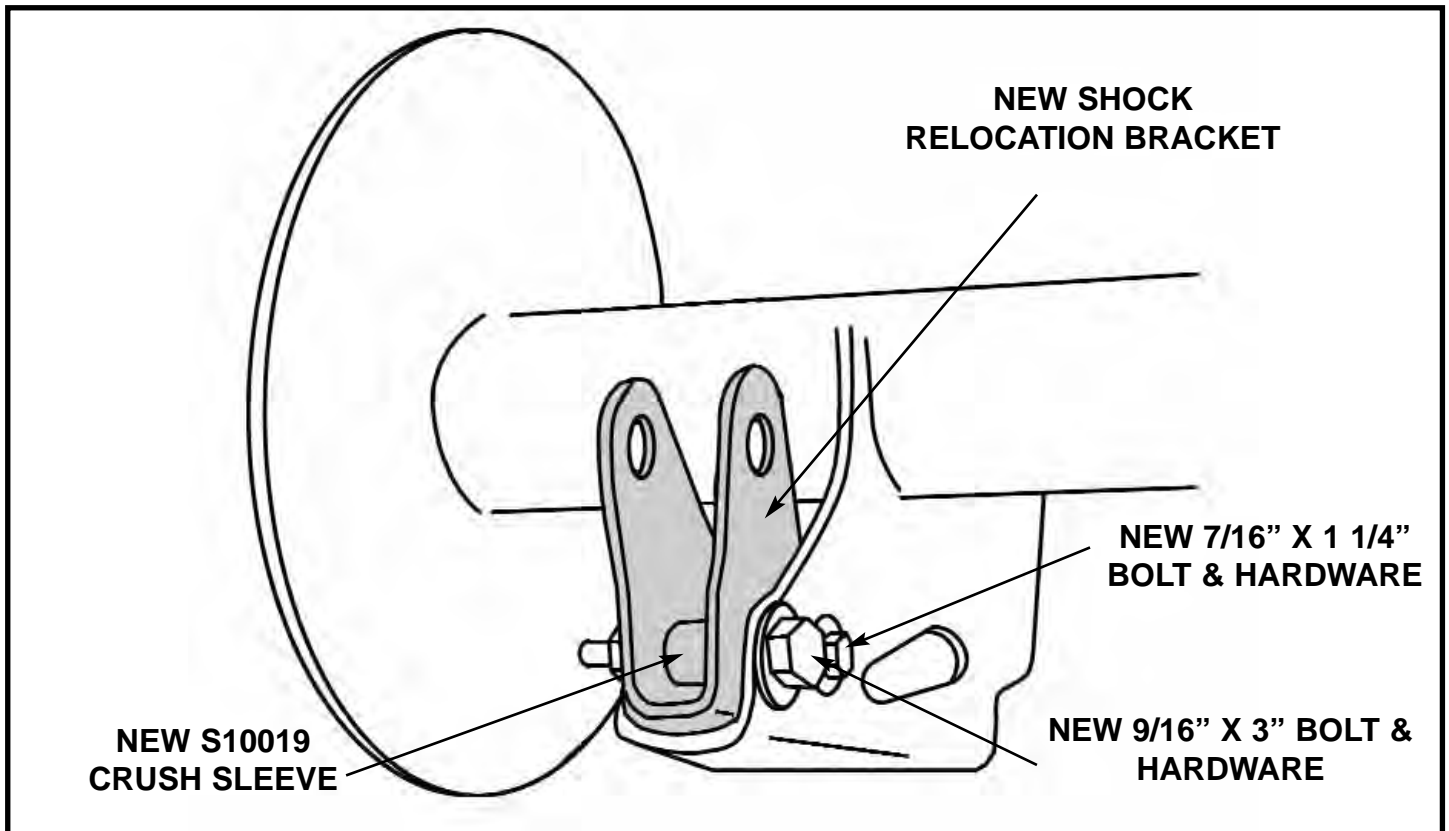


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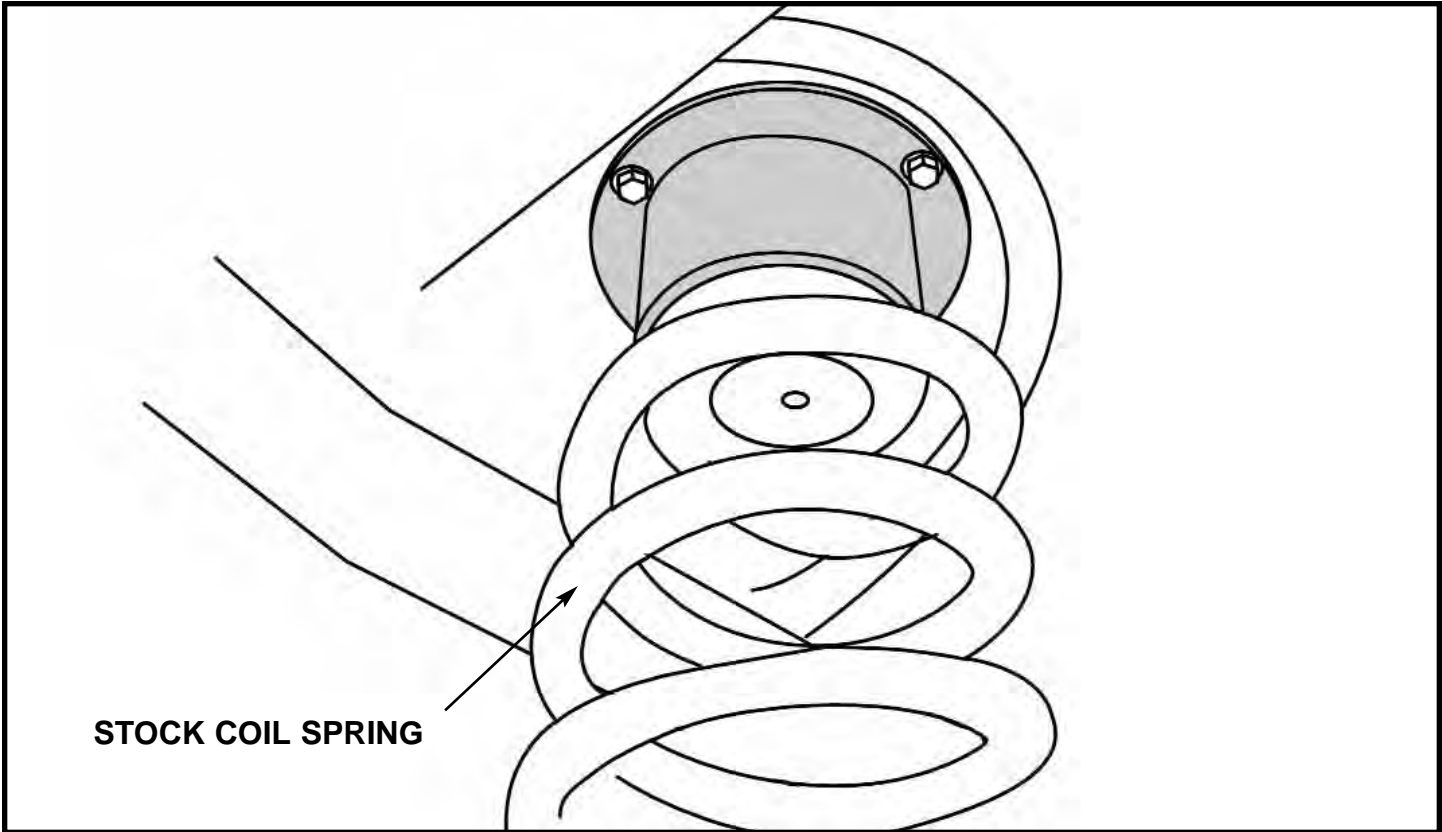


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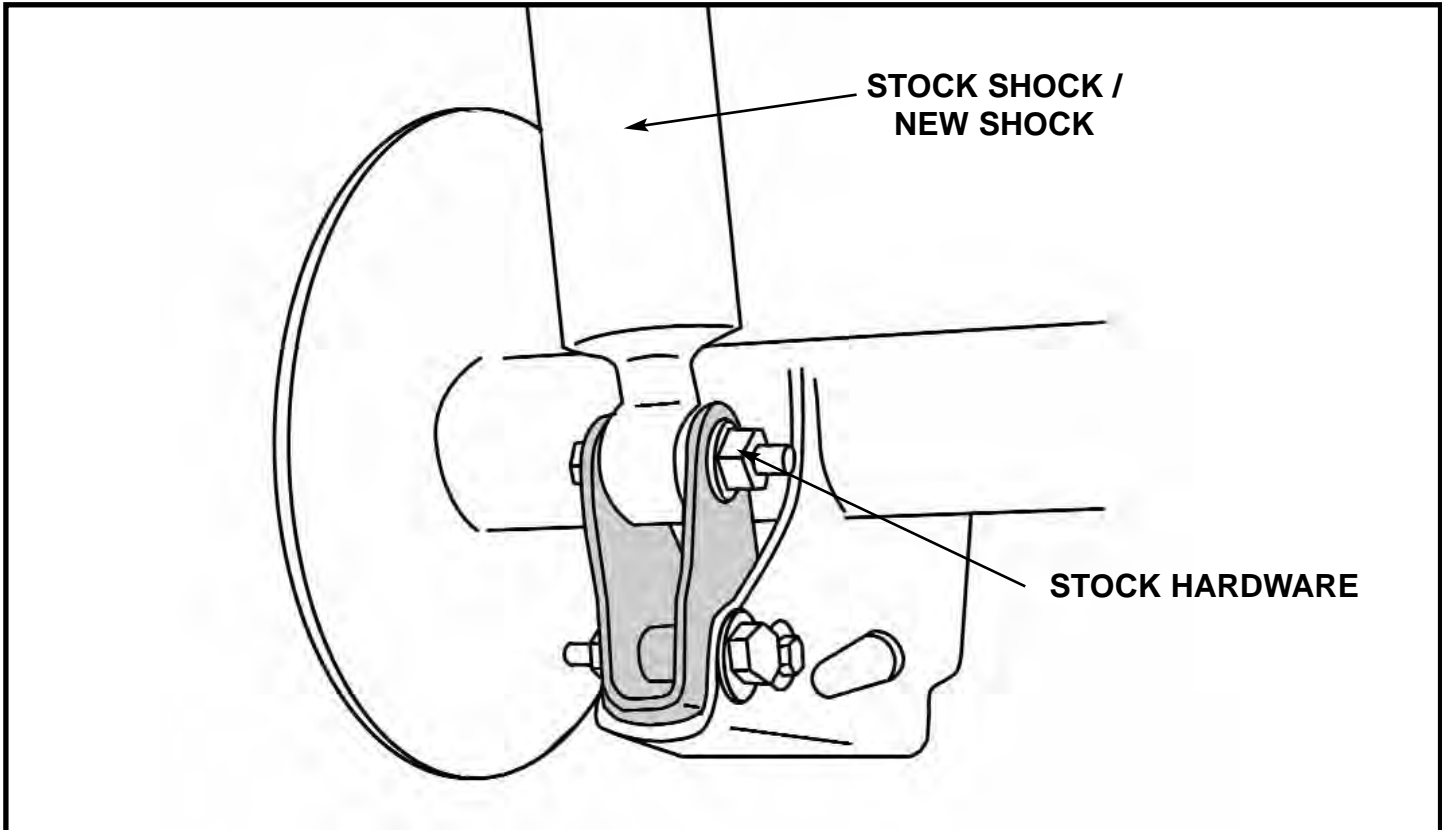


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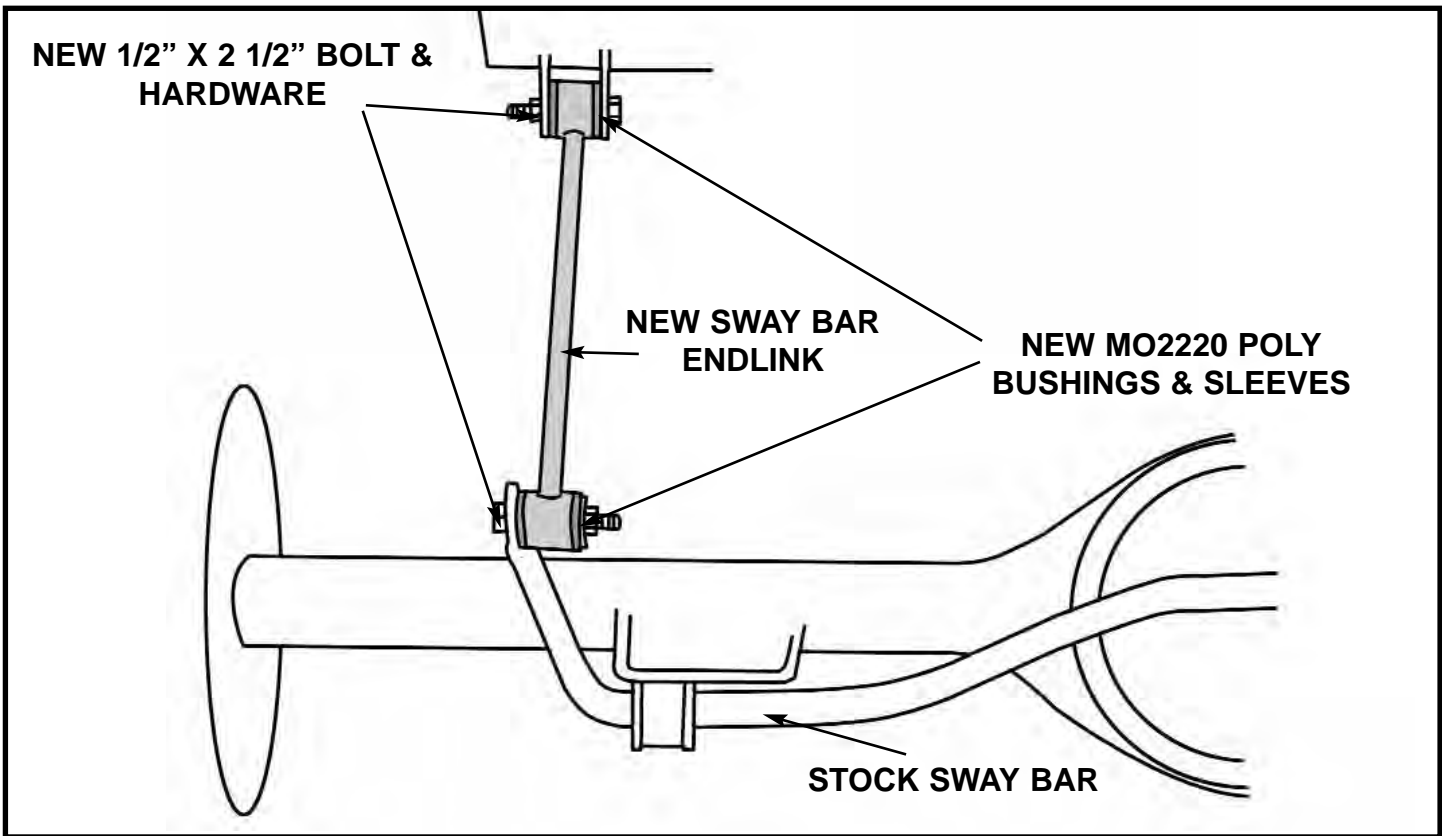
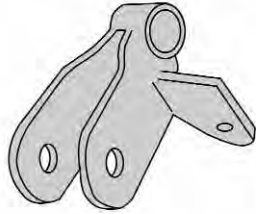


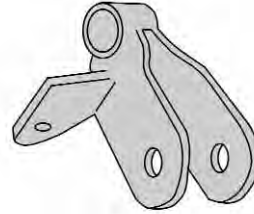
ILLUSTRATION # 33



PASSENGER SIDE
DIFFERENTIAL
DROP BRACKET
C411SN-07 / QTY 1



DRIVER SIDE FRONT SHOCK
RELOCATION BRACKET
C411SN-23 / QTY 1



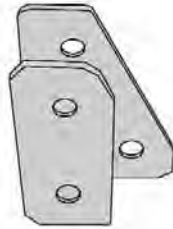
PASS. SIDE FRONT SHOCK
RELOCATION BRACKET
C411SN-24 / QTY 1



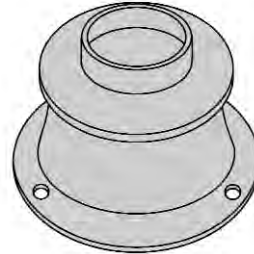
DRIVER & PASS SIDE
REAR SHOCK
RELOCATION BRACKET
C411SN-25 / QTY 1
C411SN-26 / QTY 1



DRIVER & PASS SIDE
TORSION BAR
RELOCATION BRACKET
C411SN-27 / QTY 2
C411SN-28 / QTY 2



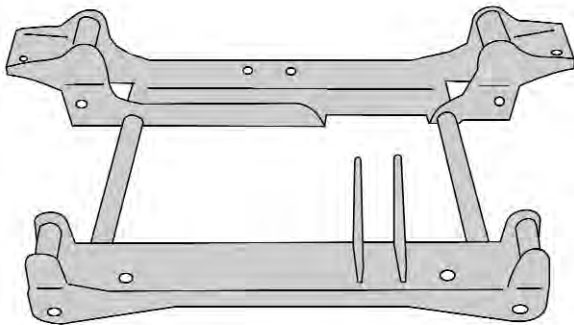
REAR TRACK BAR
RELOCATION BRACKET
C411SN-29 / QTY 1



REAR COIL SPRING
SPACER
C411SN-30 / QTY 2



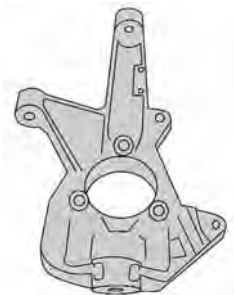
REAR SWAYBAR
ENDLINKS
SB-01 / QTY 2



ONE PIECE LOWER SUB FRAME
C411SN-33 / QTY 1



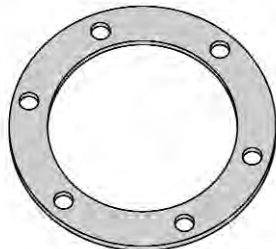
DRIVER SIDE
SPINDLE
C411SN-35 / QTY 1



PASSENGER SIDE
SPINDLE
C411SN-33 / QTY 1



DRIVER SIDE DIFFERENTIAL
RELOCATION BRACKET
C411SN-37 / QTY 1



DRIVER & PASS SIDE AXLE
SPACERS
9804 / QTY 2