TRAIL FORTRESS

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Rough Country 71800 Installation Instructions

71800

Part number: 71800

trailfortress.com/rough-country-6-inch-lift-kit-71800

Scan for fitment, price and install help

ROUGH COUNTRY SUSPENSION SYSTEMS®

TOYOTA 2022 Tundra 6” Lift Kit with Rear Air Bag

Thank you for choosing Rough Country for all your suspension needs.
Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read instructions before beginning installation. Check the kit hardware against the parts list. Be sure you have all needed parts and know where they go. Also please review the tool list and make sure you have the necessary tools to install the kit.

PRODUCT USE INFORMATION

⚠WARNING As a general rule, the taller a vehicle is, the easier it will roll. We strongly recommend, because of rollover possibility, that seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur. Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. Do not add, alter, or fabricate any factory or after-market parts to increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered. We will be happy to answer any questions concerning the design, function, and correct use of our products.

This suspension system was developed to accommodate a **Maximum tire size of 35 x 12.50 on an 20x9” 0mm Offset. Larger tires or different wheel offsets will need to be verified prior to use.**

⚠NOTICE **NOTICE TO DEALER AND VEHICLE OWNER**

Any vehicle equipped with any Rough Country product should have a “Warning to Driver” decal installed on the inside of the windshield or on the vehicle’s dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics. It is your responsibility to install the warning decal and forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service life.

⚠NOTICE Note to installer : Before installation begins we recommend that a test drive be performed. While driving check for uncommon sounds and/or vibrations . What you feel and hear during the test drive will only magnify once lift kit is installed. Advise you to discuss possible issues identified from drive with customer before proceeding to install this kit.

Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16”	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8”	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16”	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2”	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16”	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8”	135ft/lbs	175ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4”	185ft/lbs	280ft/lbs	18MM	170ft/lbs	240ft/lbs

Kit Contents

71230991
Driver Knuckle x1
Passenger Knuckle x1

71800991
6” Kit Box
94004613-1 (Cam Bolt Bag) x1
71230BAG6 x1
71230BAG7 x1
71230BAG4 x1
71230BAG8 x1
71800BAG5 x1
Bump Stop x2
Bump Stop Extension x2
RC Crossmember Badge x1
Front Brake Bracket x1
Axle Brake Line Bracket x3
Rear Track Bar Bracket x1
Rear Track Bar Bracket Shim x1
FRT Driver Sway Bar Drop x1
FRT Pass Sway Drop x1
Driver Upper Brake Line Bracket x1
Pass Upper Brake Line Bracket x1
FNT Lower Brake Line Brackets x2
Rear Airbag Spacers x2
Rear Driver Sway Bar Drop x1
Rear Pass Sway Bar Drop x1
Rear Upper Control Arm Bracket x2
Rear Driver Bump Stop x1
Rear Pass Bump Stop x1
Rear Shock Extension x2
Pass Rear Shock Bracket Brace x1
Dr Rear Shock Bracket Brace x1
Rear Airbag Sensor Arm x2
Tundra 6” Instruction sheet x1
Knuckle Shims x2

71230993
Tundra Rear Crossmember x1
Tundra Front Crossmember x1

71230994
Tundra 6” Upper Strut Spacers x2
10mm Stud Bag x2

71230995
Tundra Front Skid Plate x1
Tundra Skid Plate x1

Cam Bolt Bag
Cam Bolts x2
Flange Lock Nuts x2
18MM Cam Bolt Set x4
Cam Washer x2

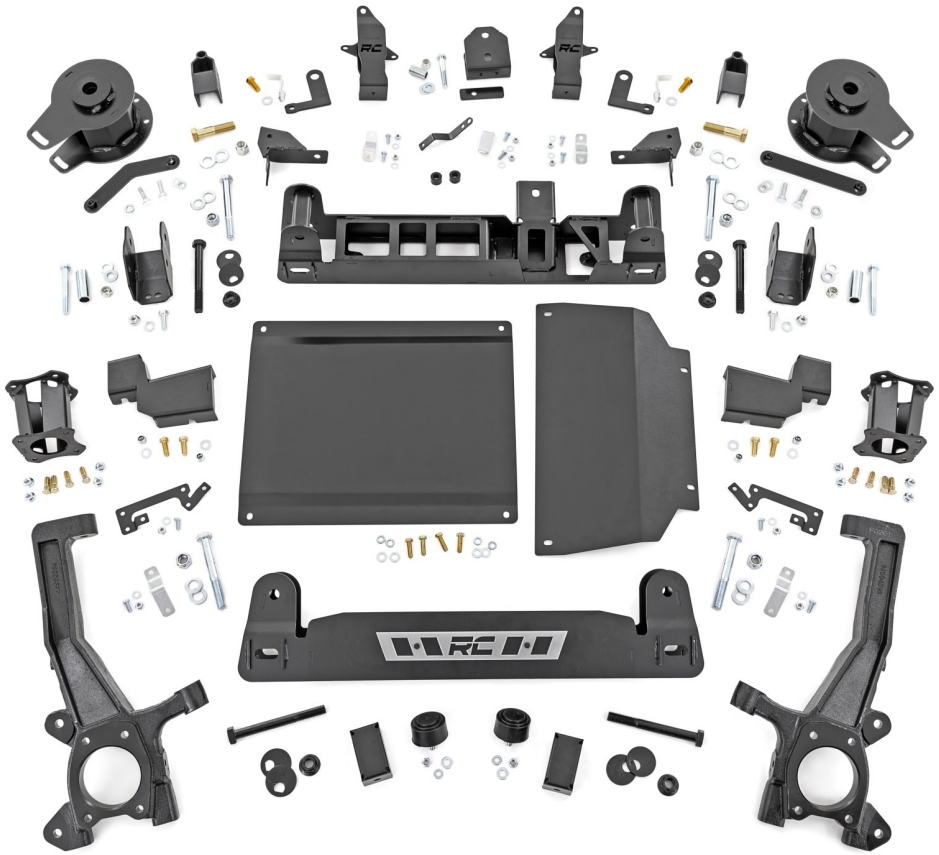
71230BAG6
7/16-14 X 1.25 Hex Bolt x4
7/16 Flat Washer x4
7/16-14 Nylock Nut x4
18mm Flat Washer x8
18mm-2.5mm Nylock Nut x4
18mm-2.5mm x 140mm Hex Bolt x2
18mm-2.5mm x 150mm Hex Bolt x2
6mm-1.0 Nylock Nut x2
6mm-1.0 x 20mm Hex Head Bolt x2
3/8-16 x 1.25 Hex Bolt x4
3/8 Flat Washer x6
3/8 Lock Washer x6
3/8-16 Hex Nut x2
10mm-1.25 x 35mm Hex Bolt x5
10mm Lock Washer x4
10mm Flat Washer x7
10mm-1.25 Serrated Nut x5
10mm-1.25 x 50mm Bolts x2

71230BAG7
5/16-18x 3/4 Hex Head Bolt x12
5/16 Flat Washer x12
5/16 Flange Lock Nut x12
Upper Arm Spacer x2
Control Arm Sleeve x2
14mm-2.0 x 110mm Hex Head Bolt x2
14mm-2.0 Nylock Nuts x3
5/8 Flat Washer x6
12mm-1.75 Flange Lock x2
12mm-1.75 x 35mm Hex Head Bolt x2
12mm Flat Washer x2

71230BAG4
1/2” x 1-1/4” Bolts x2
1/2” Flat Washers x2
3/4” x 3-1/2” Bolts x2
3/4” Lock Nuts x2
3/4” Flat Washers x4

71230BAG8
Rear Brake Line Relocation Brackets x5
FNT Lower Brake Line Brackets x2
Rear Track Bar Bracket Shim x1

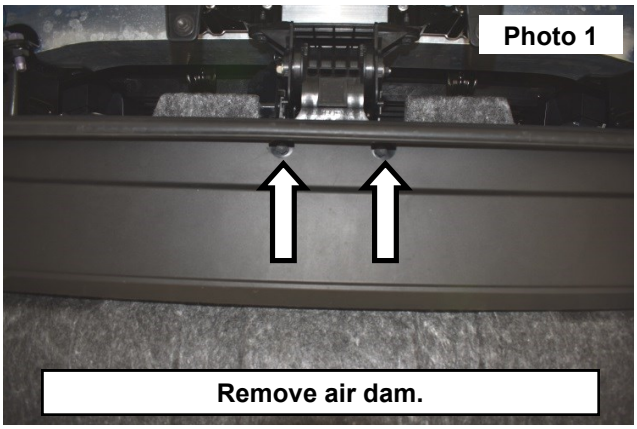
71800BAG5
3/8” x 1-1/4” Bolts x4
3/8” Flat Washers x6
3/8” Lock Nuts x6
5/16” x 3/4” Bolt x1
5/16” Flat Washer x1
5/16” Flange Lock Nut x1

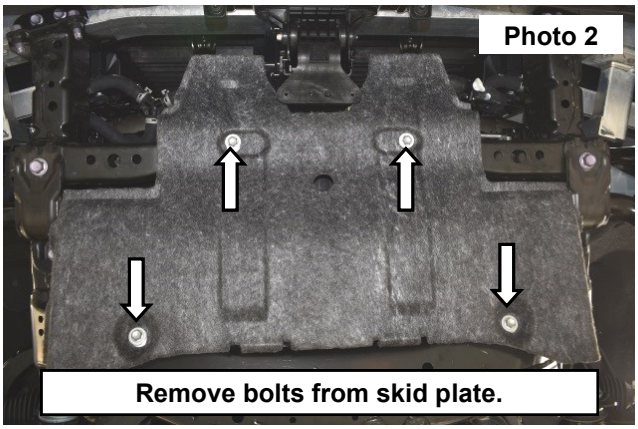


Tools Needed:
10mm Socket/Wrench
12mm Socket/Wrench
13mm Socket/Wrench
14mm Socket/Wrench
15mm Socket/Wrench
17mm Socket/Wrench
19mm Socket/Wrench
22mm Socket/Wrench
24mm Socket/Wrench
43mm Socket/Wrench
1/2” Socket/Wrench
9/16” Socket/Wrench
5/8” Socket/Wrench
3/4” Socket/Wrench
1-1/8” Socket/Wrench
Trim Remover Tool

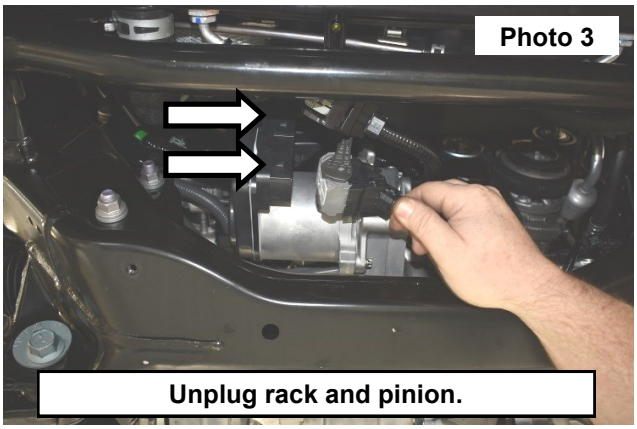
FRONT INSTALLATION INSTRUCTIONS

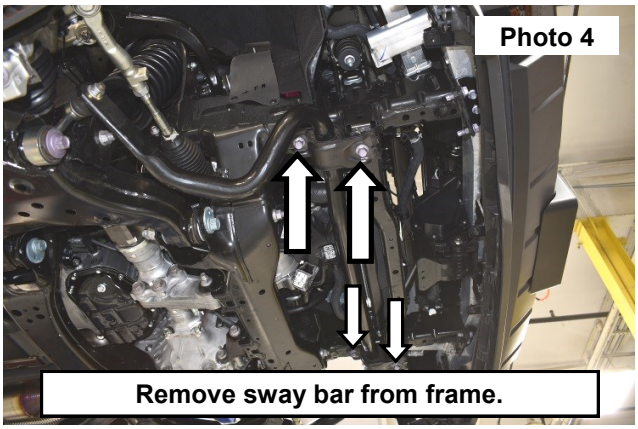
1. Lower the vehicle to the lowest ride height setting and disconnect the battery.
2. Jack up the front of the vehicle and place on jack stands. Remove the front wheels.
3. Remove 2 bolts from the center of the air dam using a 10mm socket/wrench to release the air dam. **See Photo 1**.
4. Remove the 4 bolts from the skit plate using a 12mm socket/wrench. **See Photo 2**.



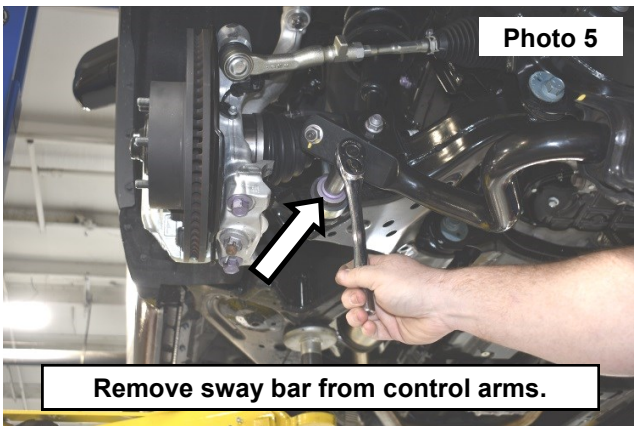


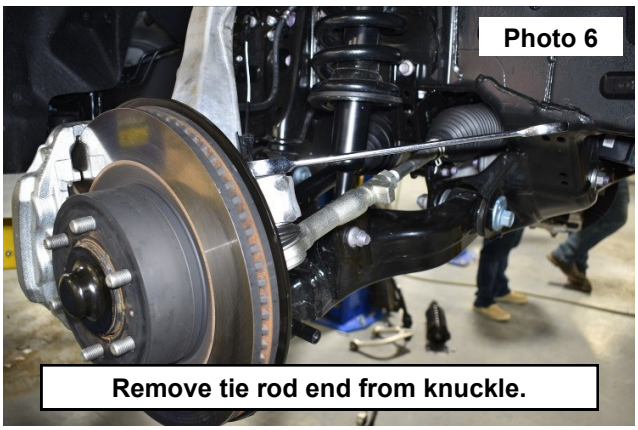
5. Unplug the rack and pinion. **See Photo 3**.
6. Remove the sway bar from the frame using a 17mm socket/wrench. **See Photo 4**.



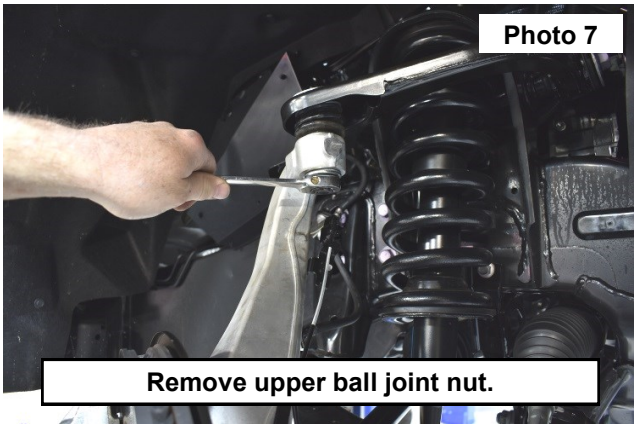


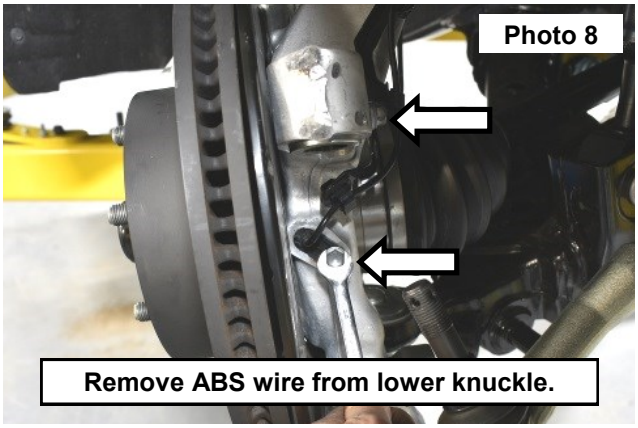
7. Remove the sway bar from the control arms using a 19mm socket/wrench. **See Photo 5**.
8. Remove the tie rod end from the knuckle using a 24mm socket/wrench. **See Photo 6**.



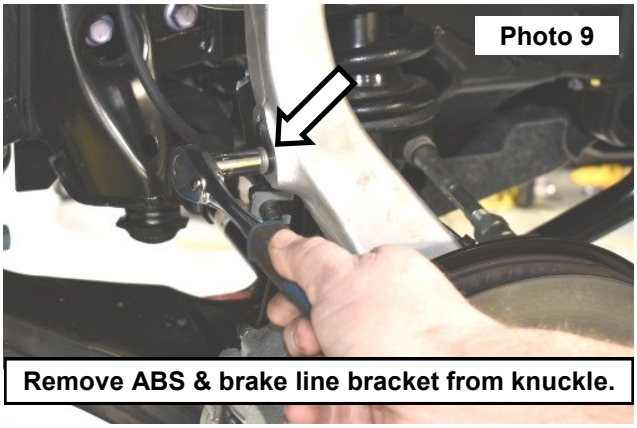


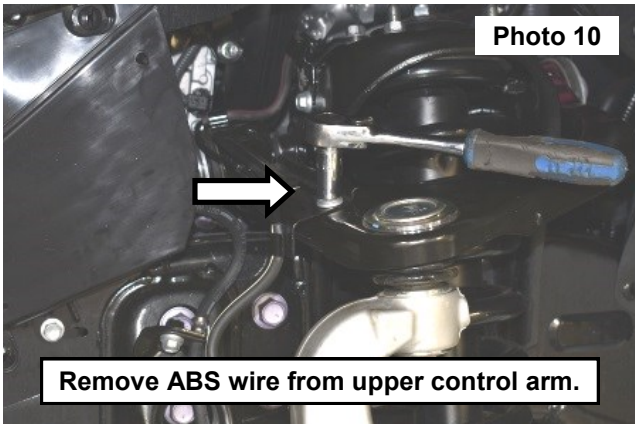
9. Remove the J-clip from the upper ball joint nut and remove the nut using a 19mm socket/wrench. **See Photo 7**.
10. Remove the ABS wire from the lower knuckle using a 10mm socket/wrench. **See Photo 8**.



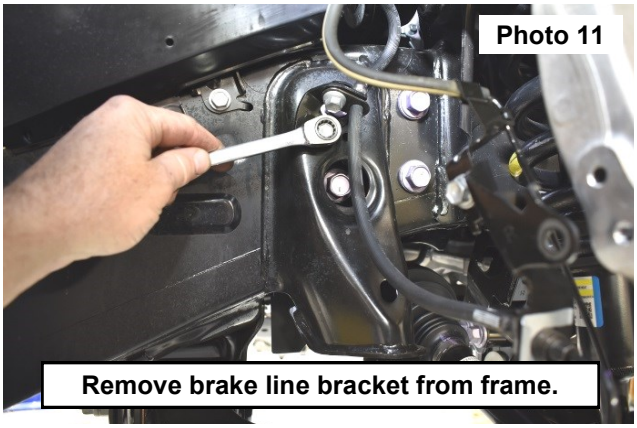


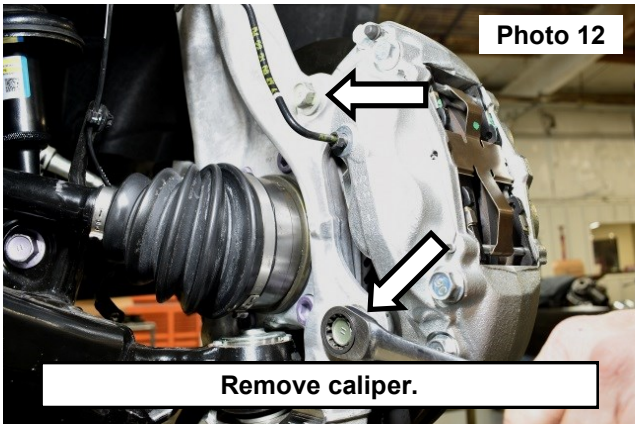
11. Remove the ABS wire and brake line bracket from the knuckle using a 10mm & 12mm socket/wrench. **See Photo 9**.
12. Remove the ABS wire from the upper control arm using a 10mm socket/wrench. **See Photo 10**.



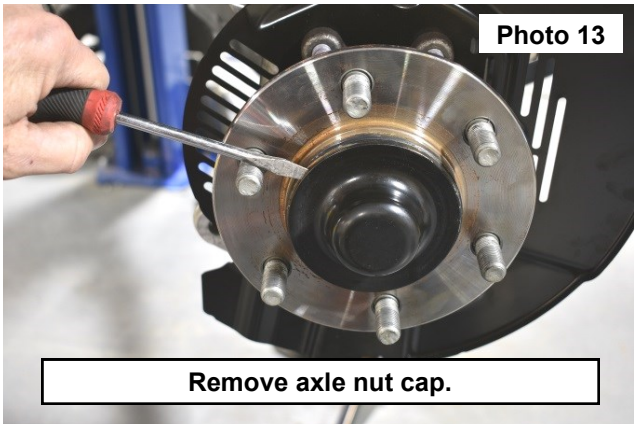


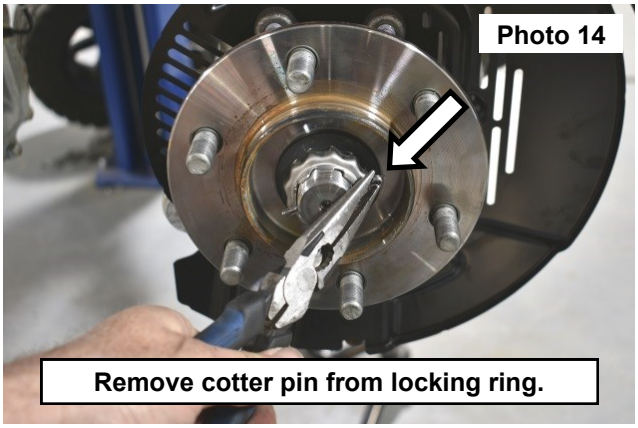
13. Remove the brake line bracket from the frame using a 12mm socket/wrench. **See Photo 11**.
14. Remove the brake caliper from the knuckle using a 19mm socket/wrench. **See Photo 12**.
    NOTE: After removing caliper, hang it using hooks or rest on a stand--do NOT hang it from the brake line.



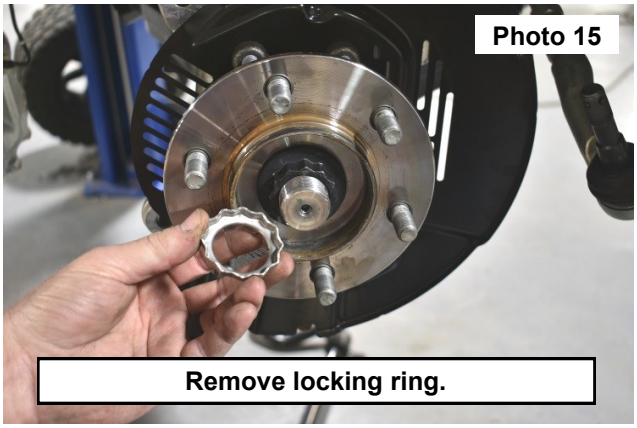


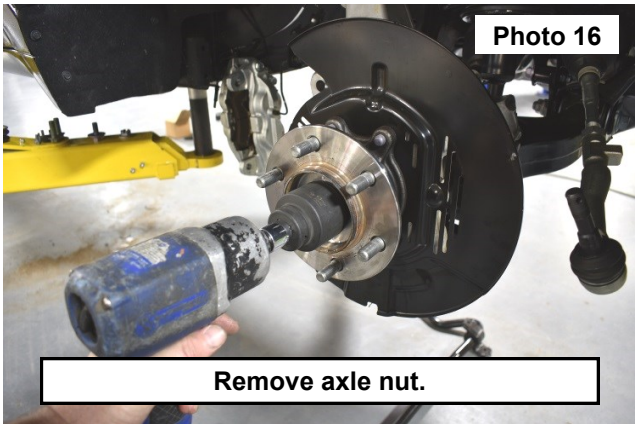
15. Remove the rotor, axle nut cup, and the cotter pin from the locking ring. **See Photo 13** and **Photo 14**.



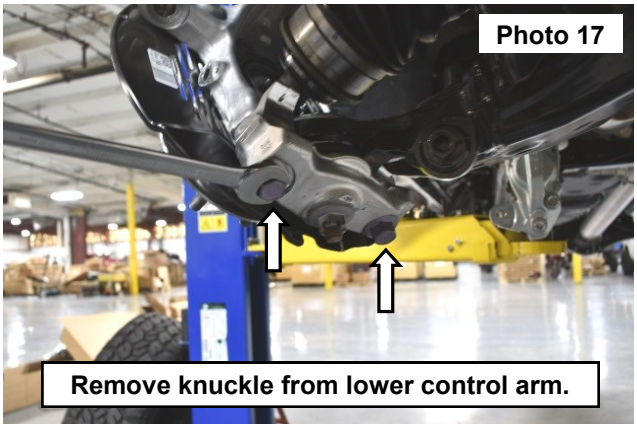


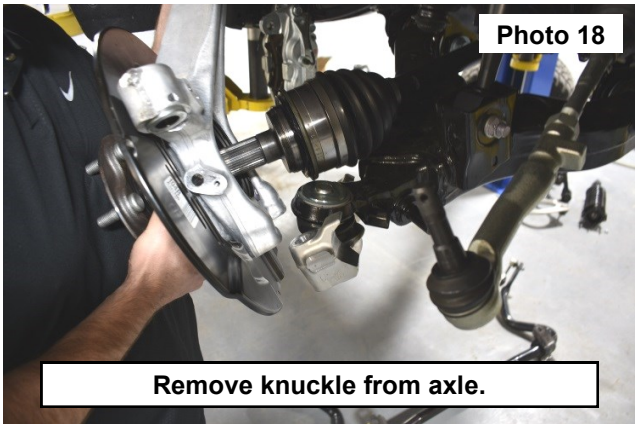
16. Remove the locking ring and remove the cotter pin using a 43mm socket. **See Photo 15** and **Photo 16**.



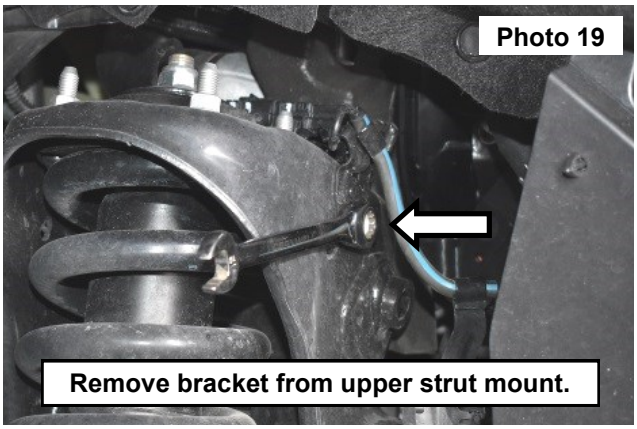


17. Remove the bolts for the knuckle from the lower control arm using a 22mm socket/wrench. **See Photo 17**.
18. Remove the knuckle from the axle. **See Photo 18**.





19. Remove the bracket from the upper strut mount using a 12mm socket/wrench. **See Photo 19**.
20. Remove the adaptive ride wiring cover using a small flat head screw driver to press down on the clips. **See Photo 20 -21**.

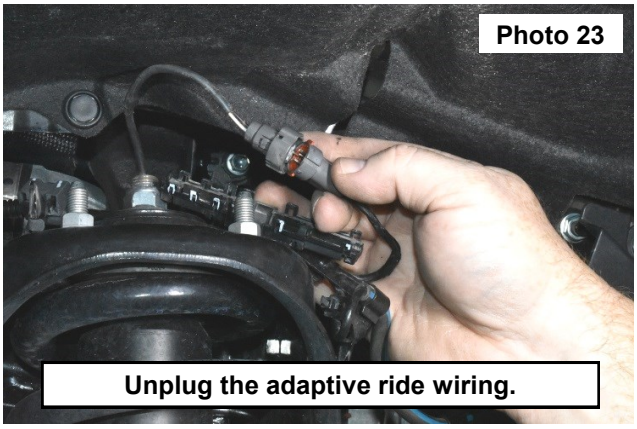


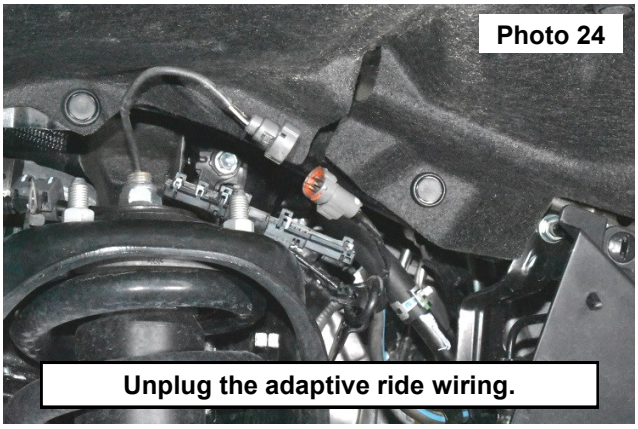


21. Unplug the adaptive ride wiring using a small flat head to release the plug. **See Photo 22-24**.

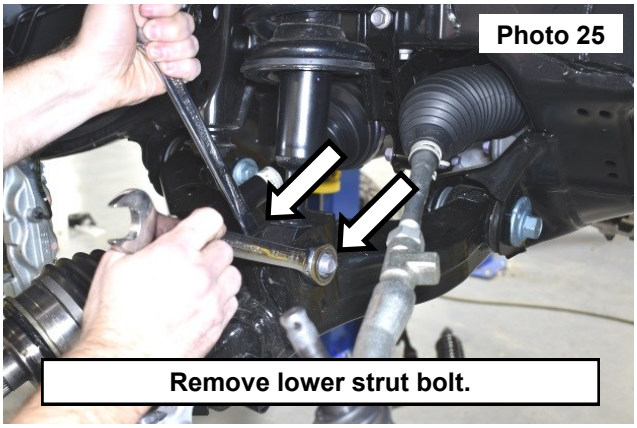


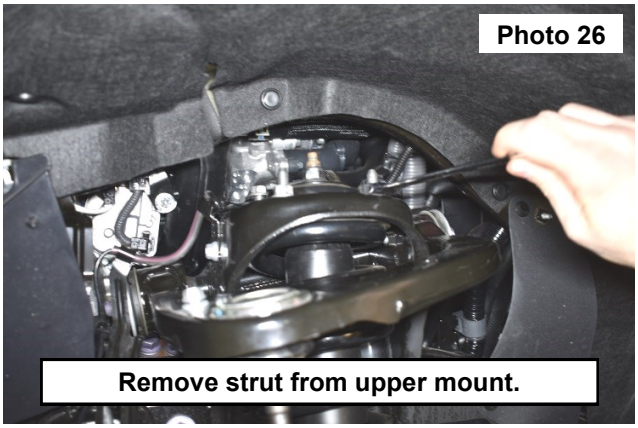




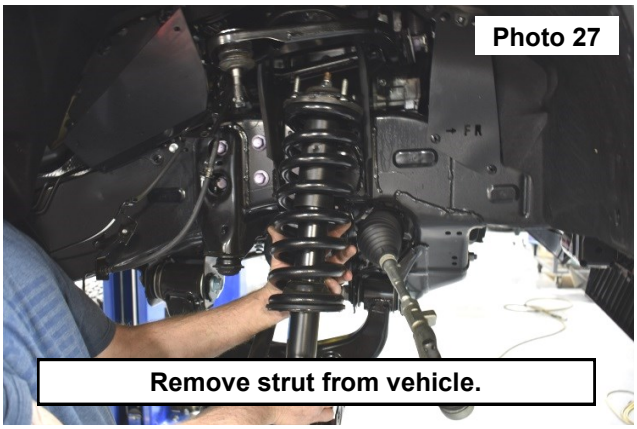


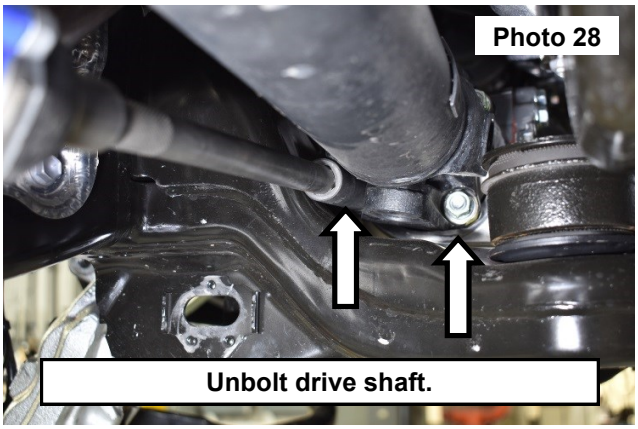
22. Remove lower strut bolt from the control arm using two 22mm wrenches. **See Photo 25**.
23. Remove the nuts from the upper strut mount using a 14mm wrench. **See Photo 26**.



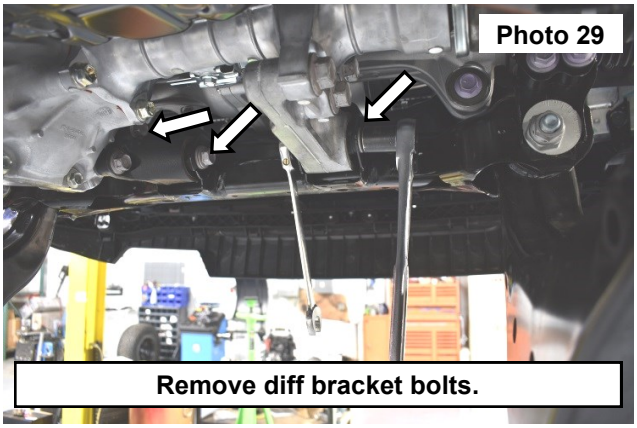


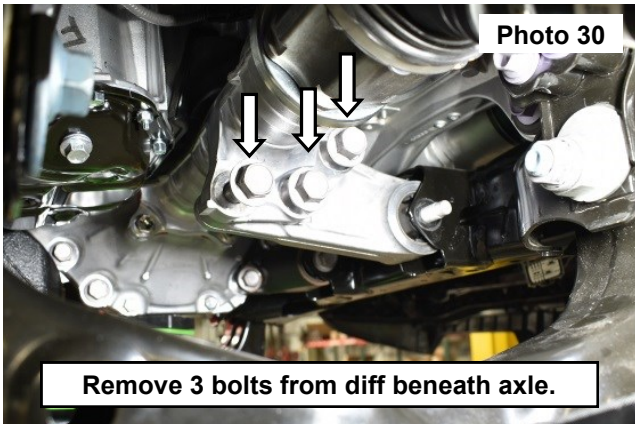
24. Loosen lower control arm cam bolts using two 24mm sockets/wrenches to allow the lower control arm to drop and remove the strut from the vehicle. **See Photo 27**.
25. Unbolt the drive shaft using a **14mm** socket. **NOTE: Make sure the drive shaft is supported -- do not let it hang down**. **See Photo 28**.



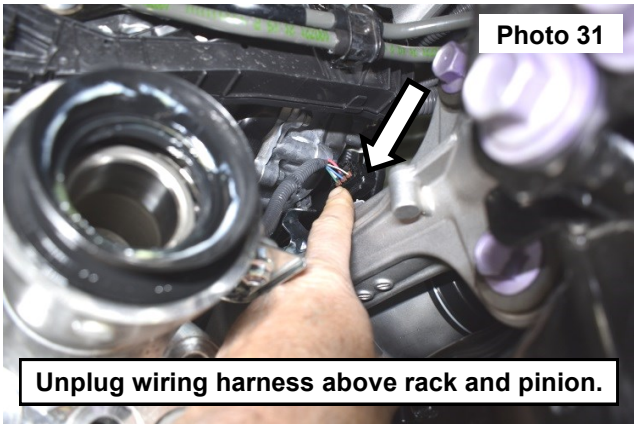


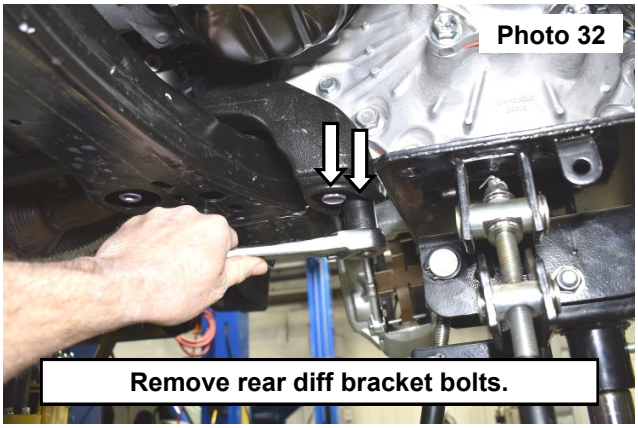
26. Support the differential with a jack stand and remove hardware on the pass side of the diff that attach the diff bracket to the frame using two 19mm sockets/wrenches. **See Photo 29**. Retain Hardware.
27. Remove the 3 bolts from the diff bracket beneath the axle using two 22mm socket/wrenches. **See Photo 30**. Retain Hardware.



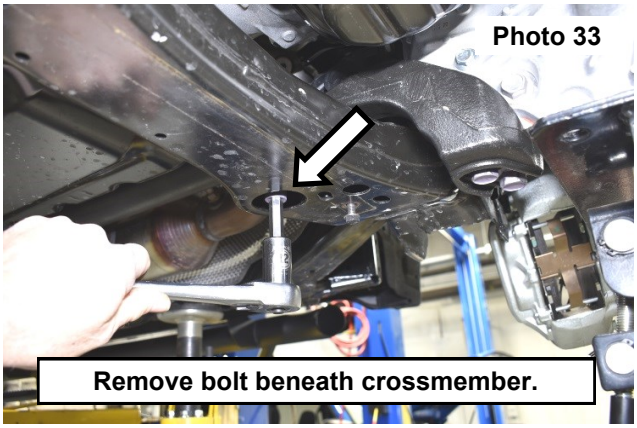


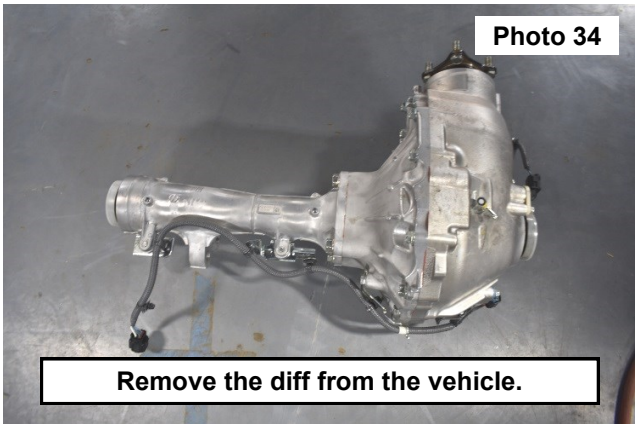
28. Unplug the diff wiring harness above the rack and pinion. **See Photo 31**.
29. Remove the rear diff bracket bolts using a 22mm socket. **See Photo 32**.



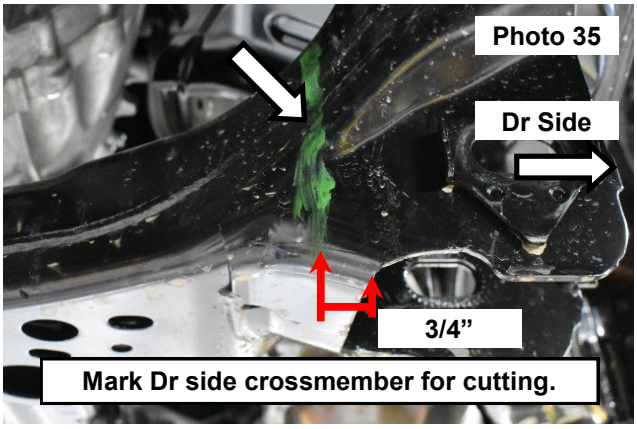


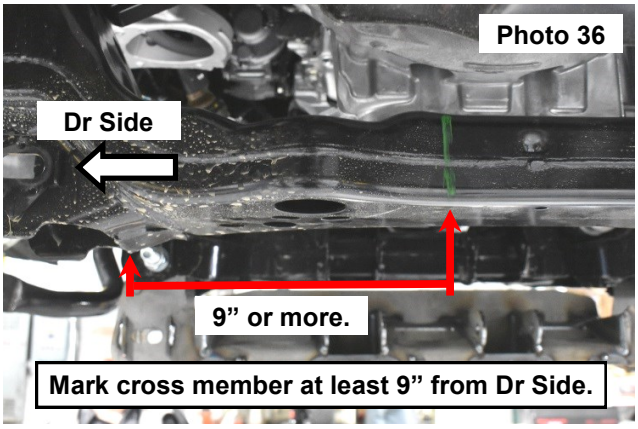
30. Remove the bolt beneath the crossmember using a 12mm Allen wrench. **See Photo 33**.
31. Remove the diff from the vehicle. **See Photo 34**. **Axles were removed for picture purposes but is not required**.



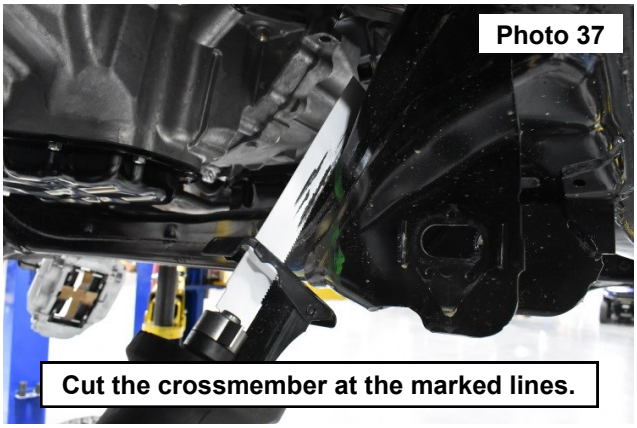


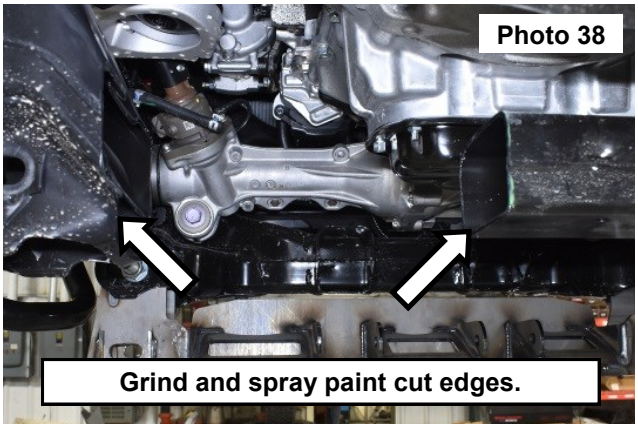
32. Mark a line using a paint pen on the Dr side of the crossmember about 3/4” from the edge. **See Photo 35**.
33. Mark another line at least 9” from the Dr side edge to make enough room for the diff to drop down. **See Photo 36**.



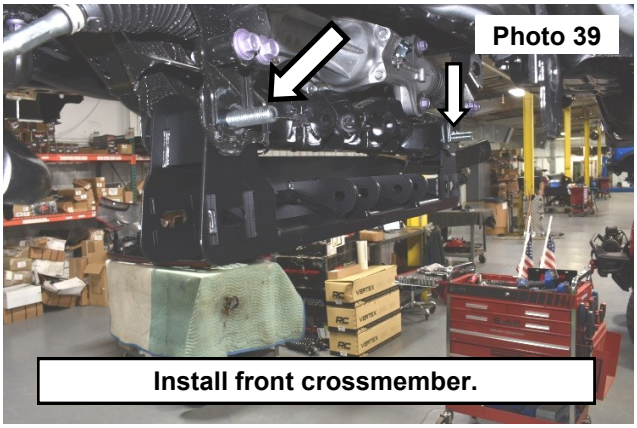


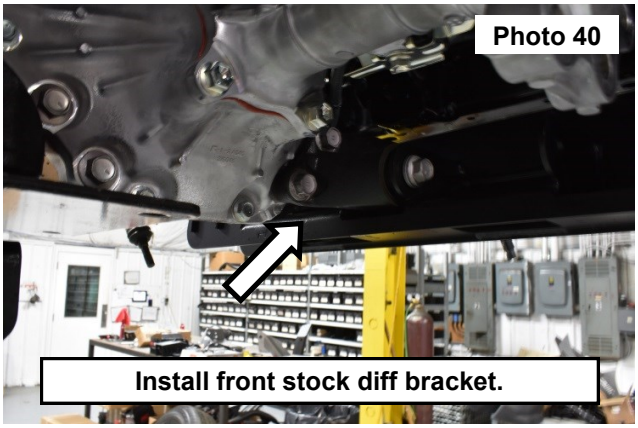
34. Cut the crossmember at the marked lines using a reciprocating saw. **See Photo 37**.
35. Grind down any sharp edges and spray paint the cut edges to prevent rusting. **See Photo 38**.



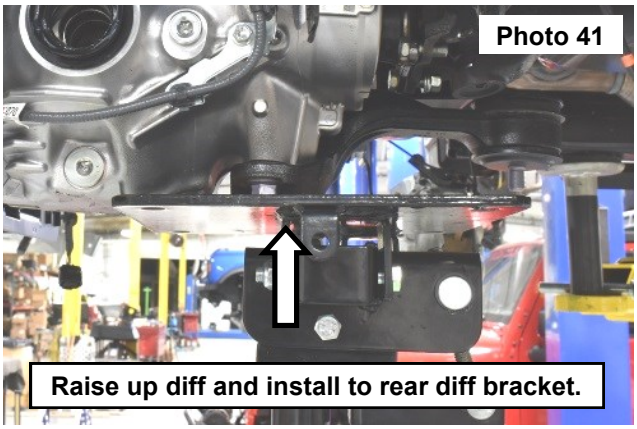


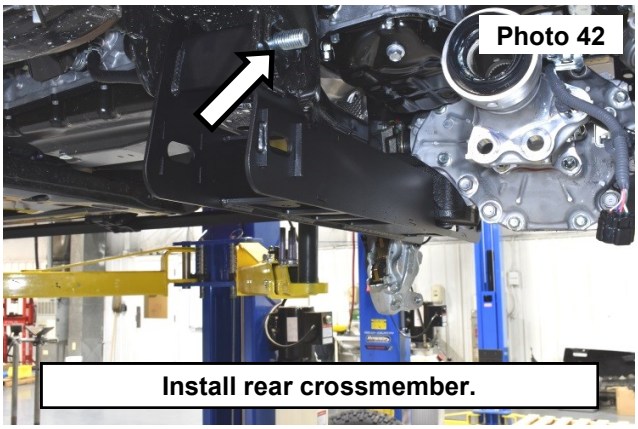
36. Install the front crossmember badge using the supplied hardware. Then install into the vehicle using the supplied hardware in the lower control arm mounting locations. Use the supplied 18mm x 140mm bolts, nuts, and washers and tighten using 1-1/16" socket/wrench. **See Photo 39**.
37. Install the stock front diff bracket into the front crossmember using OE hardware. Then raise up the diff using a jack and install diff to the front diff bracket. **See Photos 40.**



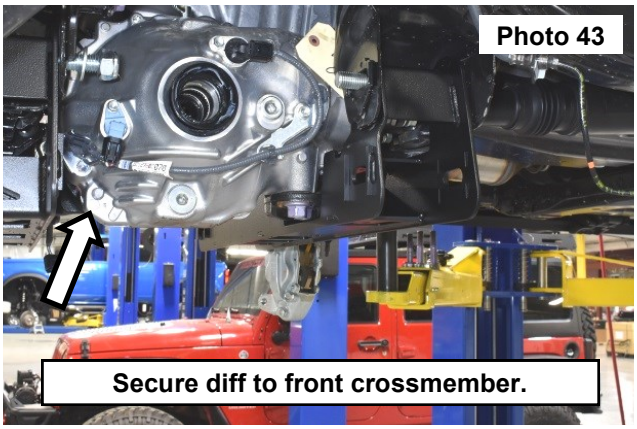


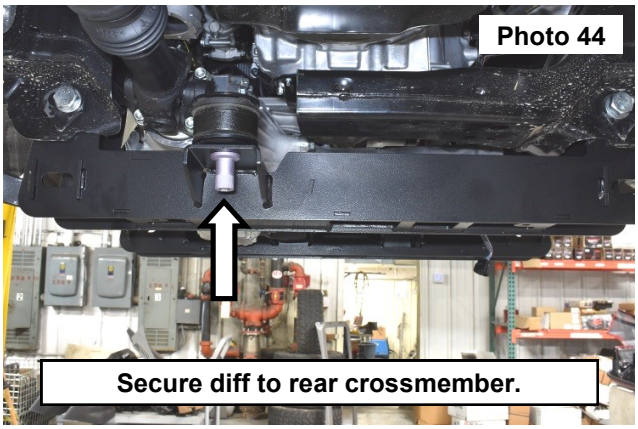
38. Install the OE rear diff bracket onto the diff using the OE hardware. **See Photo 41.**
39. Install the supplied rear crossmember in the lower control arm mounting locations. Use the supplied 18mm x 150mm bolts nuts, and washers and tighten using 1-1/16" socket/wrench. **See Photo 42**.



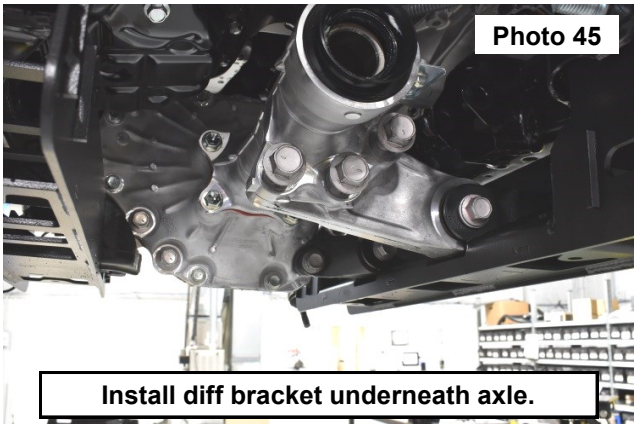


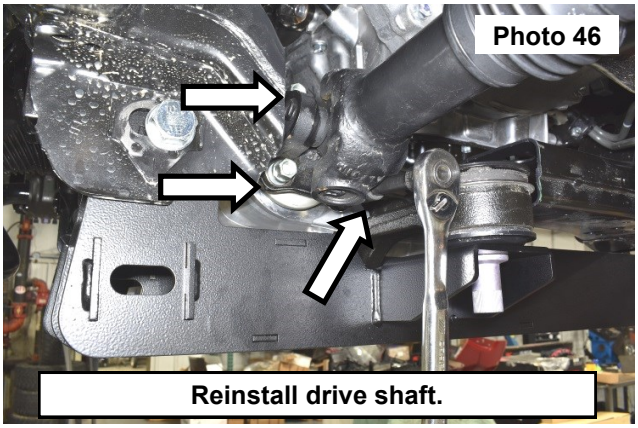
40. Secure the diff to the rear crossmember using the stock hardware. **See Photo 43** and **Photo 44**.



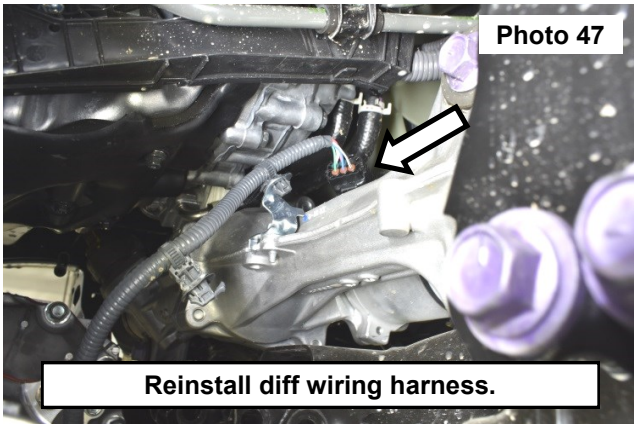


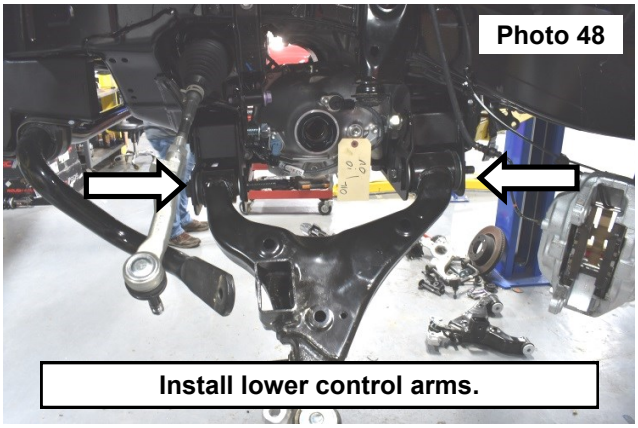
41. Install the stock diff bracket beneath the axle on the passenger side using stock hardware. **See Photo 45**.
42. Reinstall the drive shaft to the differential. **See Photo 46**.



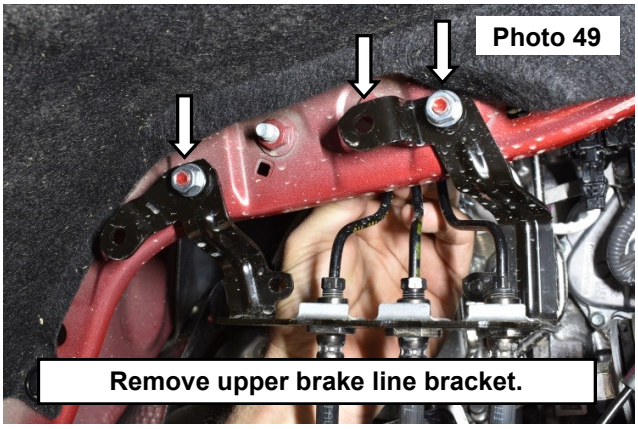


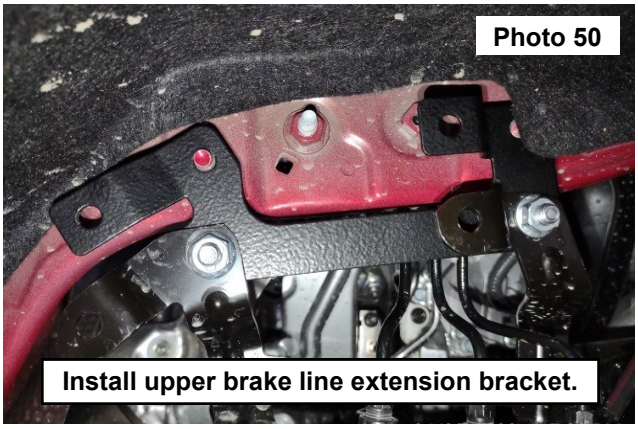
43. Reinstall the diff wiring harness above the rack and pinion. **See Photo 47**.
44. Install the lower control arms to the new crossmembers with the supplied 18mm x 140mm cam bolts, washers, and nuts in the front and 18mm x 160mm cam bolts, washers, and nuts in the rear using two 1-1/16” socket/wrenches. **See Photo 48**.



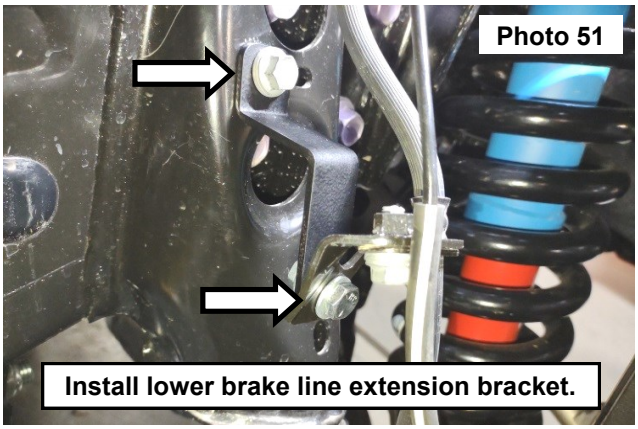


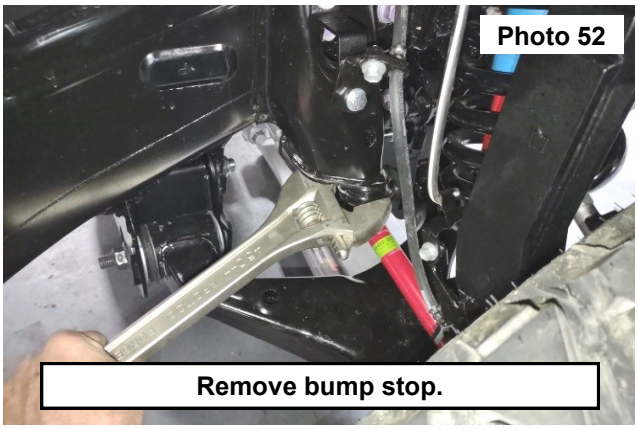
45. Remove the plastic covering over the upper brake line bracket with a flat head and remove the upper brake line bracket using a 13mm wrench. **See Photo 49**.
46. Install the upper brake line extension bracket with the stock hardware at the body and the supplied 5/16” x 3/4” bolts, flange nuts, and washers to secure the extension to the bracket using a 13mm socket/wrench. **See Photo 50**.



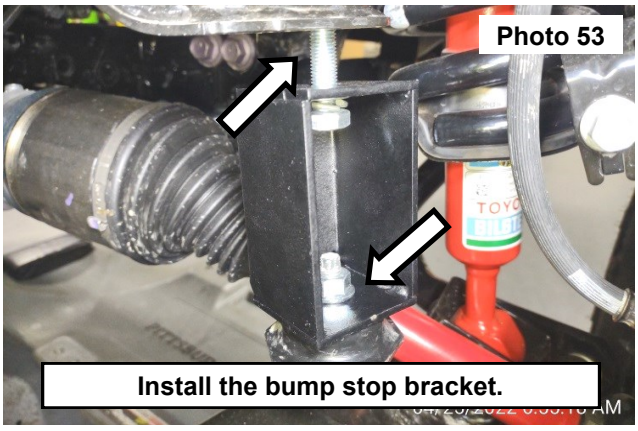


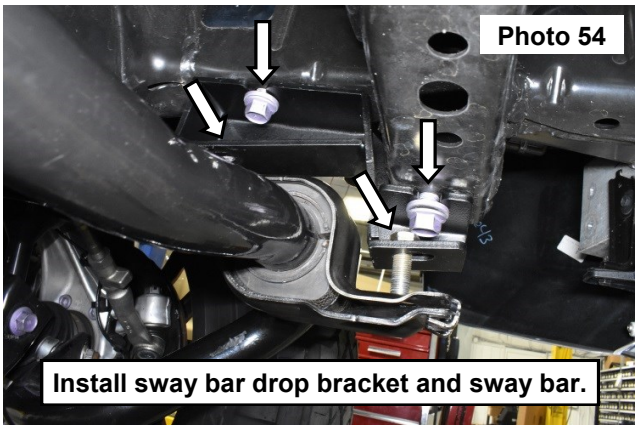
47. Remove the lower brake line bracket and install the lower brake line extension bracket with the stock hardware at the body and the supplied 5/16” x 3/4” hardware to secure the extension to the bracket using a 13mm socket/wrench. **See Photo 51**.
48. Remove the bump stop. **See Photo 52**.



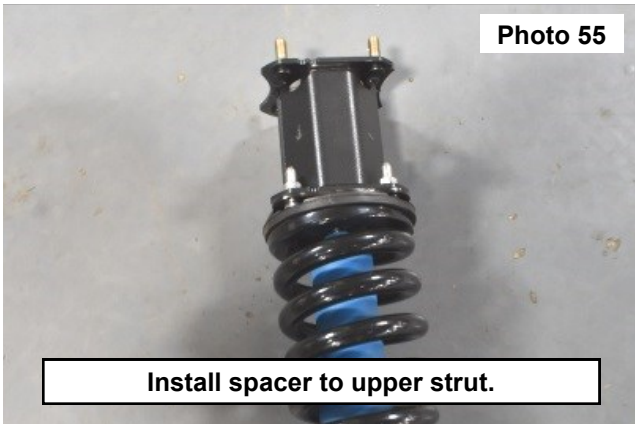


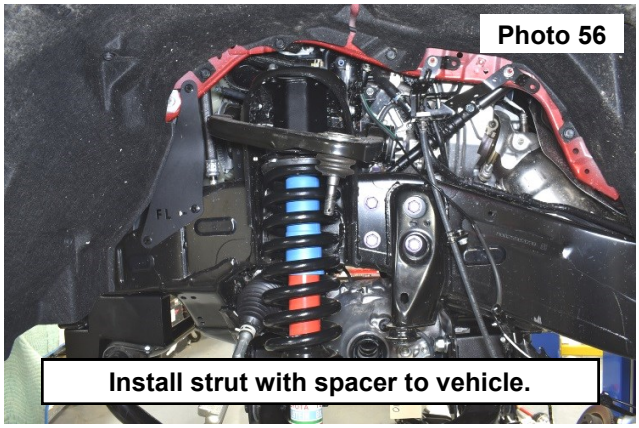
49. Install the bump stop extension to the bump stop with the supplied 10mm serrated flange nut and install extension to the vehicle using the supplied 10mm x 35mm bolt, flat washer, and lock washer. **See Photo 53**.
50. Install the sway bar drop brackets to the stock mounting location using the stock hardware and secure the sway bar to the drop brackets with the supplied 7/16” x 1-1/4” bolts, nuts, and washers using a 5/8” wrench. **See Photo 54**.



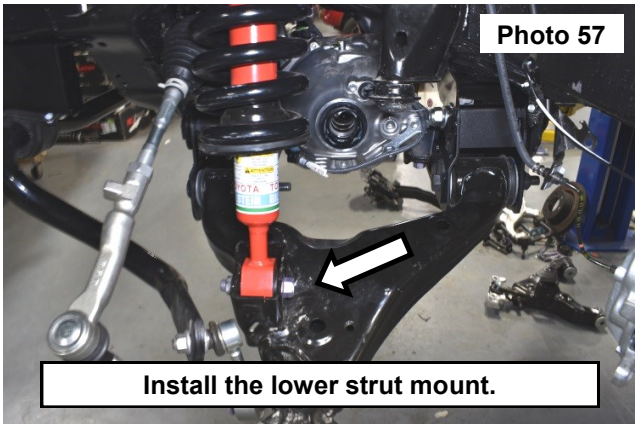


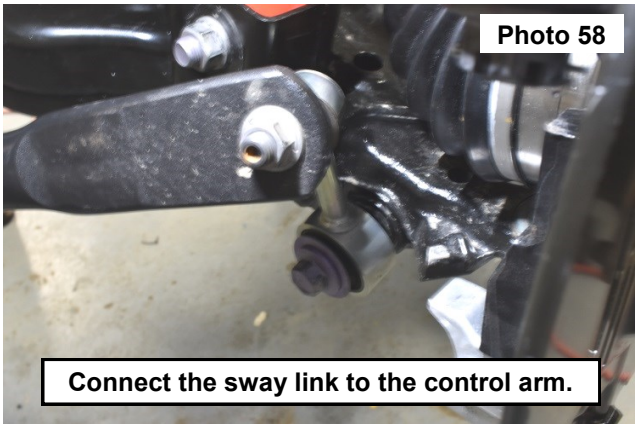
51. Install the 10mm studs (10MMSTUDBAG-2) to the upper strut spacer using the supplied hex and jam nut, and install the spacer to the strut using the stock hardware. **See Photo 55**.
52. Install the strut with the spacer using the supplied 10mm nuts (10MMSTUDBAG-2). **See Photo 56**.



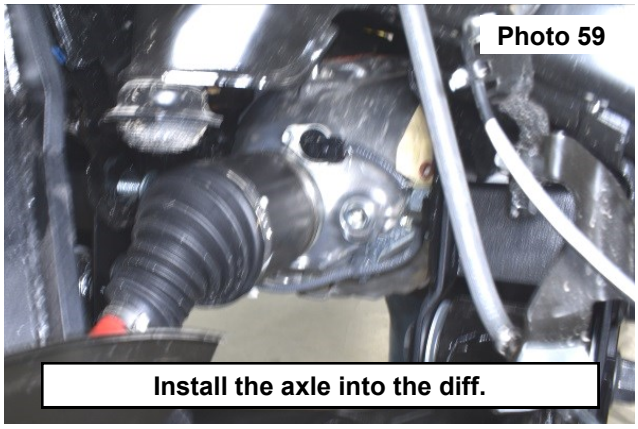


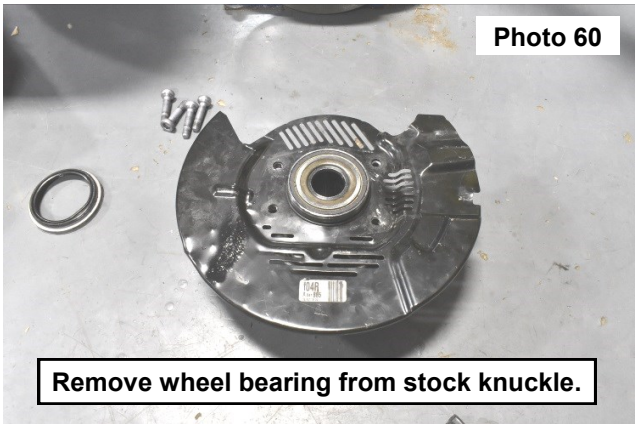
53. Install the lower strut mount to the control arm. Secure using the factory hardware, Do not fully tighten the bolt. This will be done once on the ground. **See Photo 57.**
54. Connect the lower sway link to the control arm using the OE bolt. Tighten using a 19mm socket. **See Photo 58.**



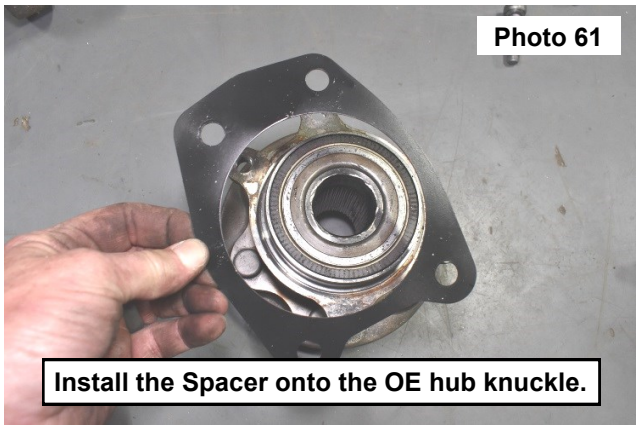


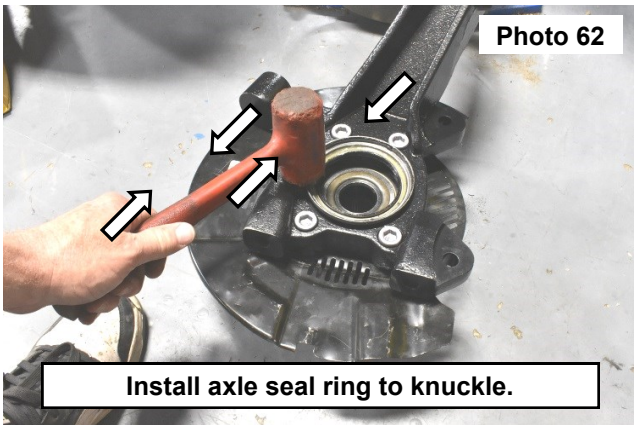
55. Install the axle into the diff. **See Photo 59.**
56. Remove the wheel bearing and dust shield from the stock knuckle. **Discard the Dust shield. See Photo 60**.



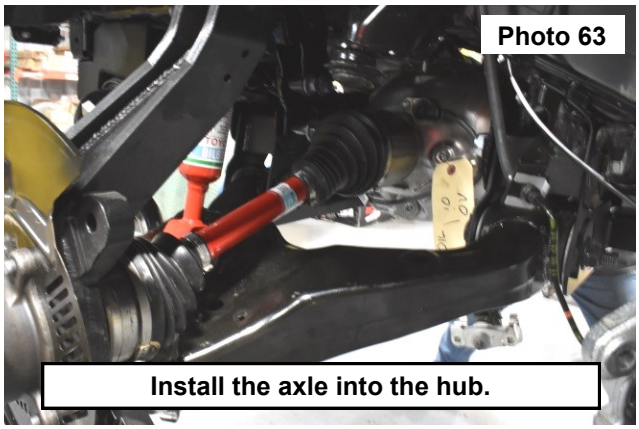


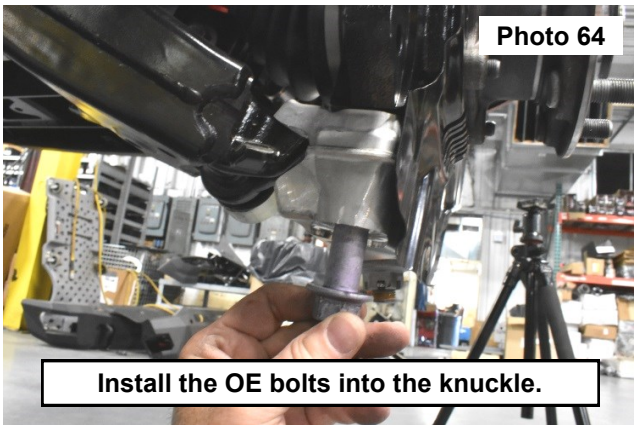
57. **Discard the Dust shield.** Install the wheel bearing spacer onto the hub, then secure the knuckle ono the hub using OE hardware. **See Photo 61**.
58. Install the axle seal ring to the knuckle using a dead blow hammer. **See Photo 62**.



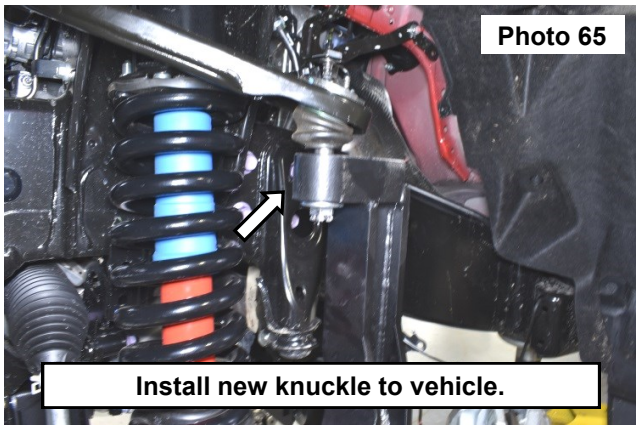


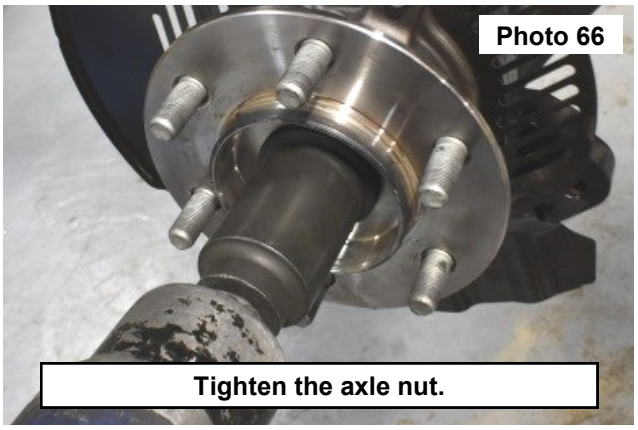
59. Place the axle into the hub in the knuckle. **See Photo 63.**
60. Install the new knuckle to the lower control arm mount. Secure using the (2) OE bolts. Tighten using a 22mm socket. **See Photo 64.**



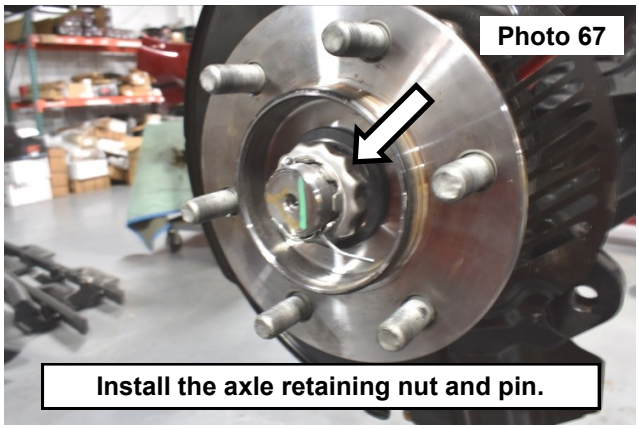


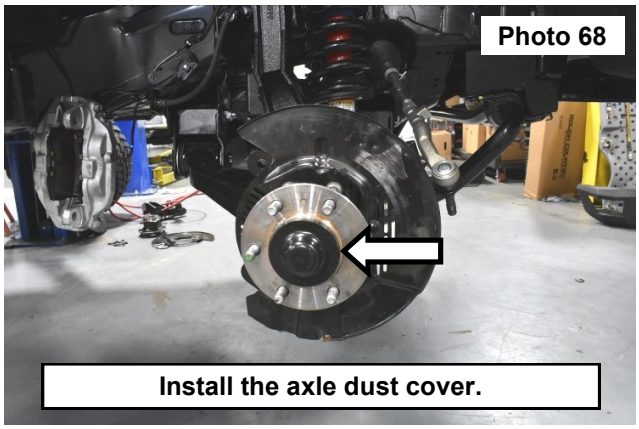
61. Support and raise up the lower control arm. Then connect the upper ball joint to the knuckle using the OE hardware. Tighten using a 19mm socket and reinstall the ball joint retaining clip. **See Photo 65.**
62. Secure the axle using the OE axle nut. Tighten using a 43mm socket. **See Photo 66.**



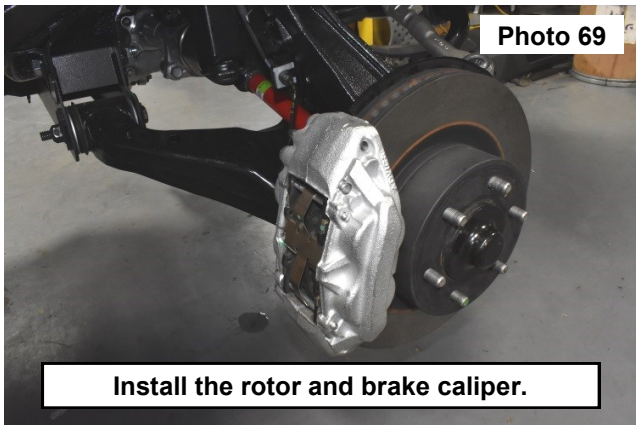


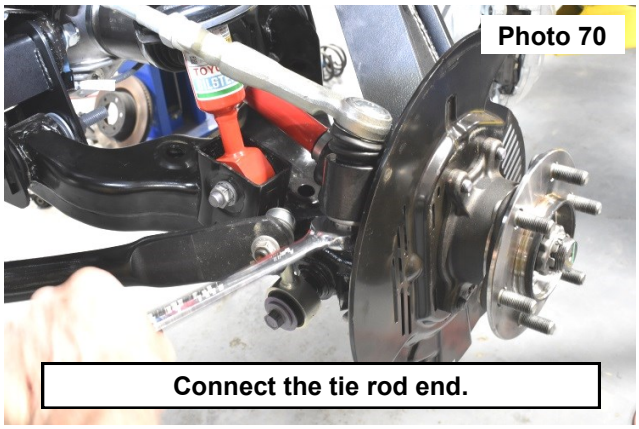
63. Install the locking ring and cotter pin onto the axle. **See Photo 67.**
64. Install the dust cover onto the hub. **See Photo 68.**



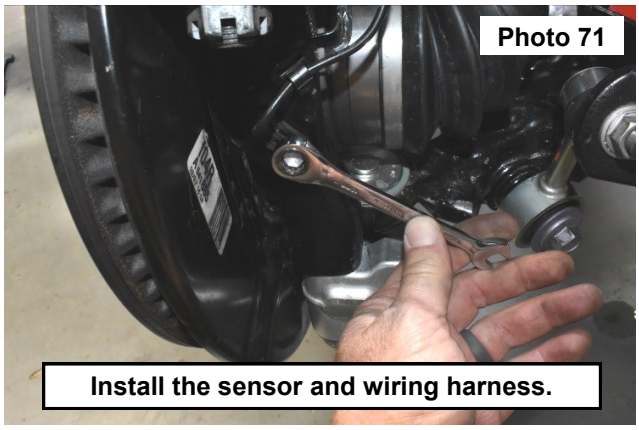


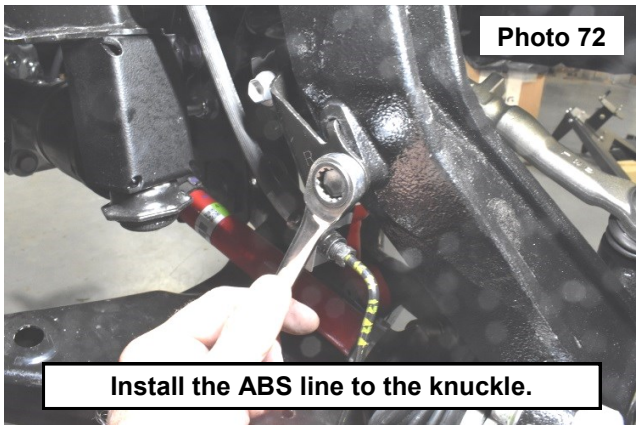
65. Install the rotor and brake caliper onto the knuckle. Secure the brake caliper using the (2) OE bolts. Tighten using a 19mm socket. **See Photo 69.**
66. Install the tie rod end into the knuckle. Tighten using a 24mm wrench. **See Photo 70.**



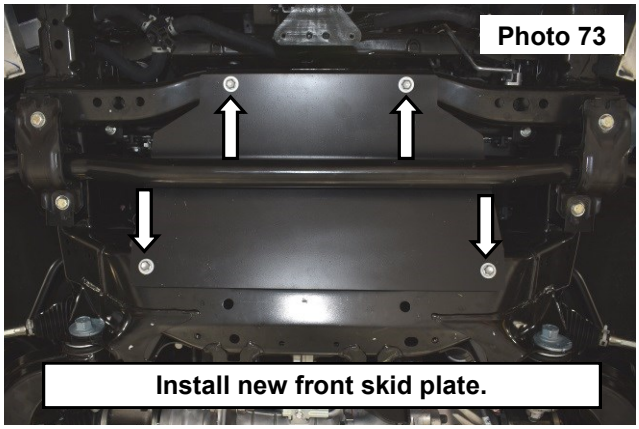


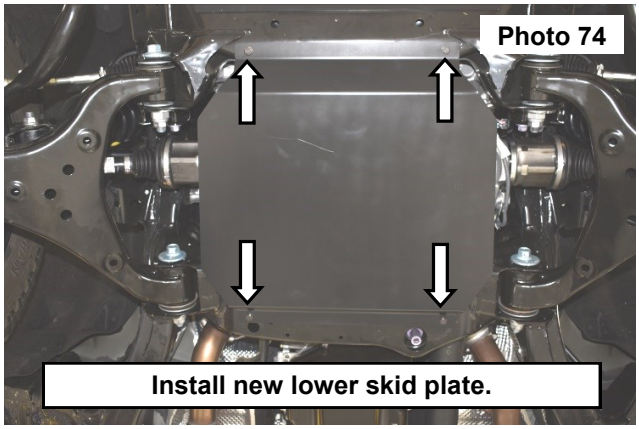
67. Install the ABS sensor and wiring harness onto the knuckle. Tighten using a 10mm socket. **See Photo 71.**
68. Install the brake line bracket to the knuckle. Tighten using a 10mm socket. **See Photo 72.**
69. Reconnect the adaptive ride plug and install the wiring cover.
70. Reconnect the rack and pinion plug.



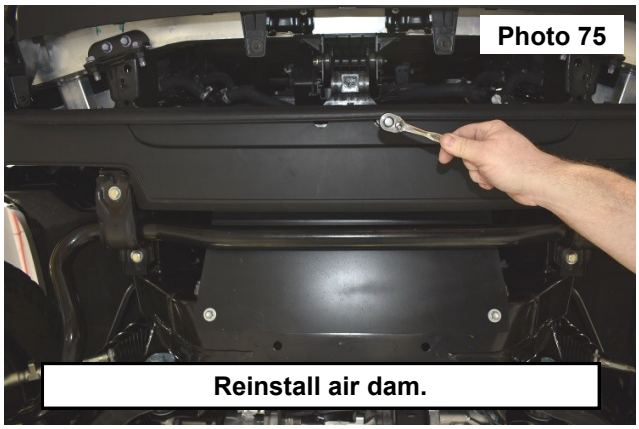


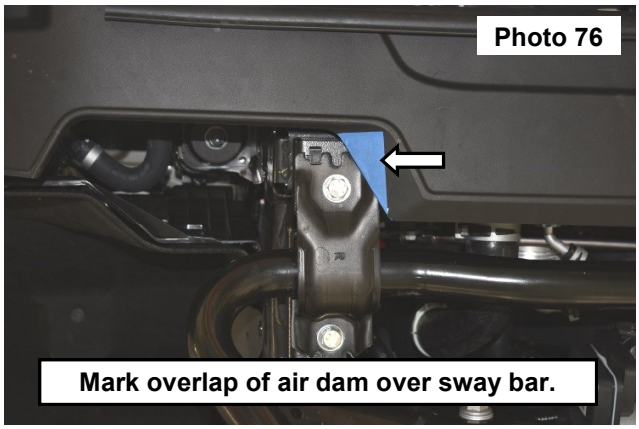
71. Install the new front skid plate using stock hardware. **See Photo 73**.
72. Install the new lower skid plate using the supplied 3/8” x 1-1/4” Bolts using a 9/16” socket/wrench. **See Photo 74**.



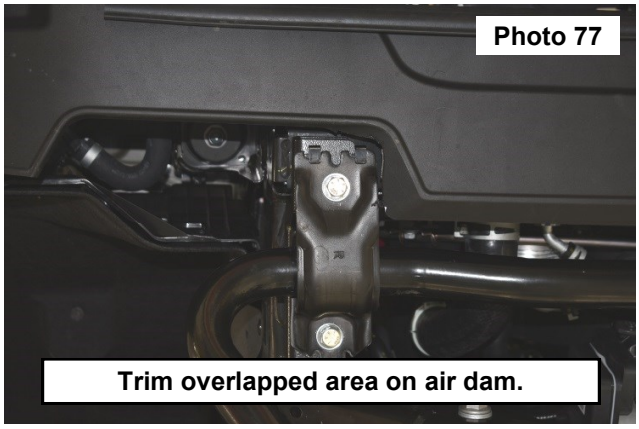


73. Reinstall the air dam. **See Photo 75**.
74. Mark the overlap of the air dam over the sway bar bracket. **See Photo 76**.





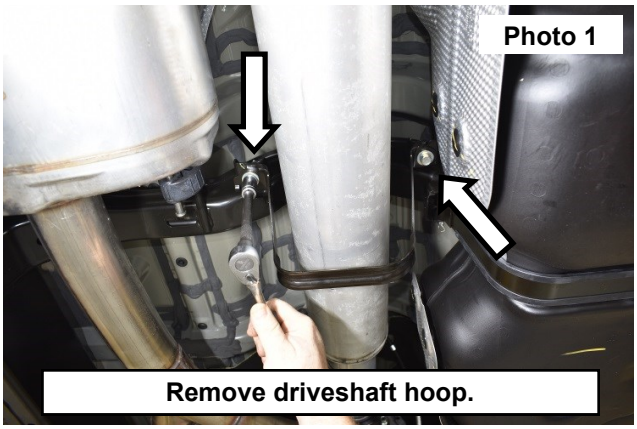
75. Trim the overlapped area on the air dam, Shown clearing the sway bar drop. **See Photo 77**.
76. Install the wheels and tires onto the vehicle. Using a jack lift up and remove the jack stands.

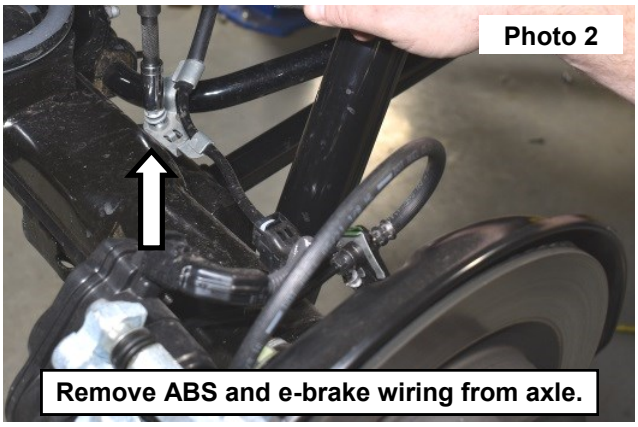



PLATINUM
TOYOTA

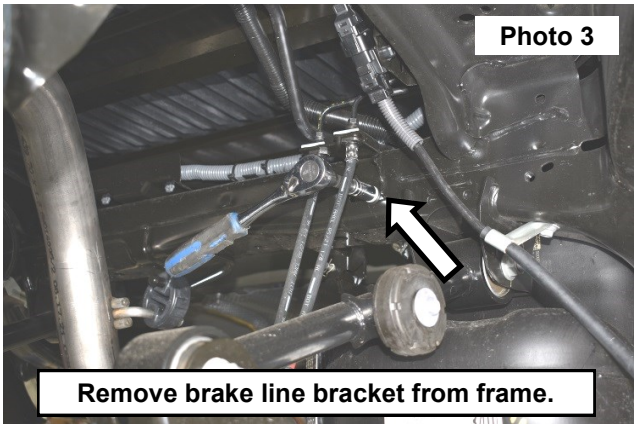
REAR INSTALLATION INSTRUCTIONS

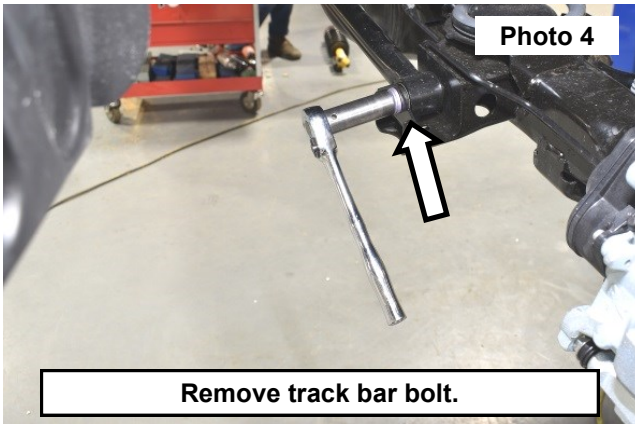
1. Jack up the rear of the vehicle and place on jack stands. Remove the rear wheels.
   NOTE: Support the axle before beginning tear down.
2. Remove the driveshaft hoop using a 14mm socket/wrench. **See Photo 1**.
3. Remove the ABS and e-brake wiring harness from the axle on the Dr and Pass sides using a 12mm socket/wrench. **See Photo 2**.



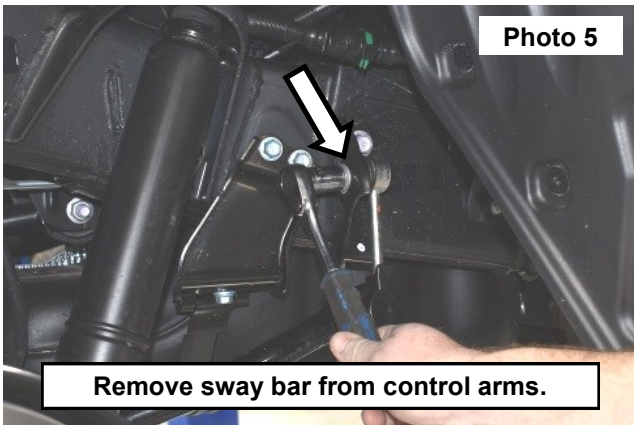


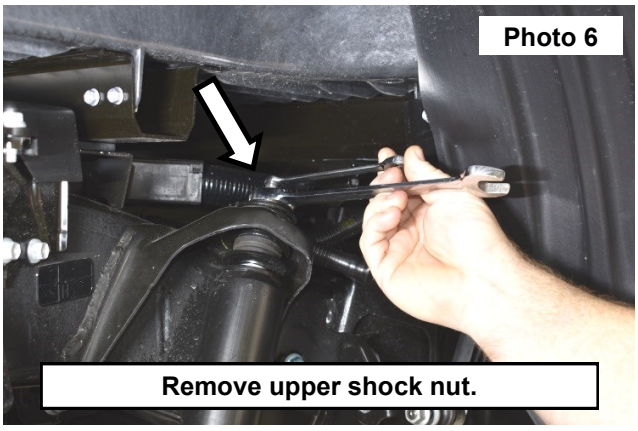
4. Remove the brake line bracket from the frame using a 12mm socket/wrench. **See Photo 3**.
5. Remove the track bar bolt using a 19mm socket/wrench. **See Photo 4**.



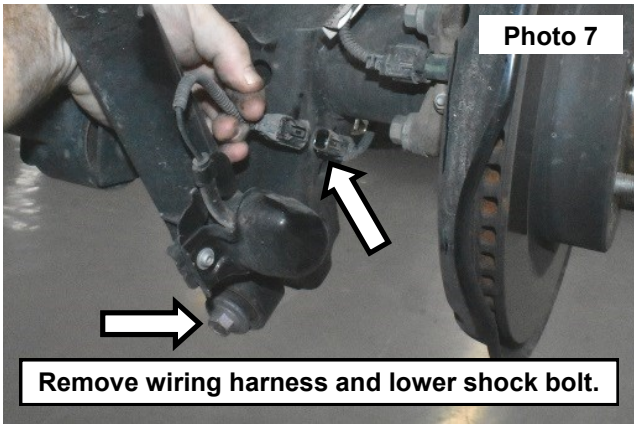


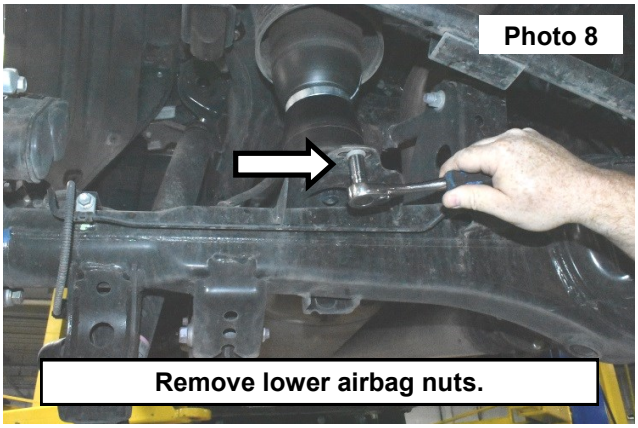
6. Remove the sway bar link nut on Dr and Pass sides using a 17mm socket/wrench. **See Photo 5**.
7. Remove the upper shock nut using a 19mm wrench and 8mm wrench to hold the stem. **See Photo 6**.



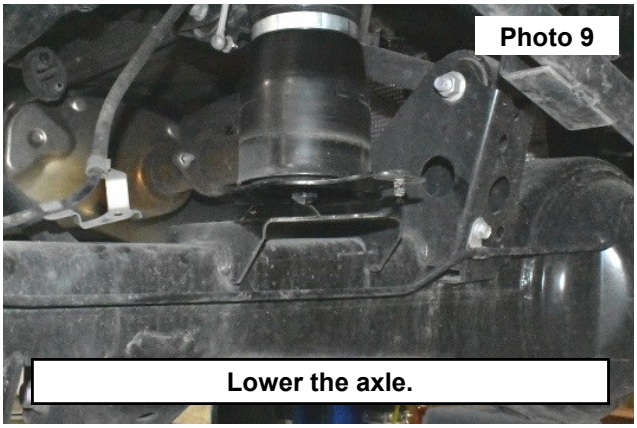


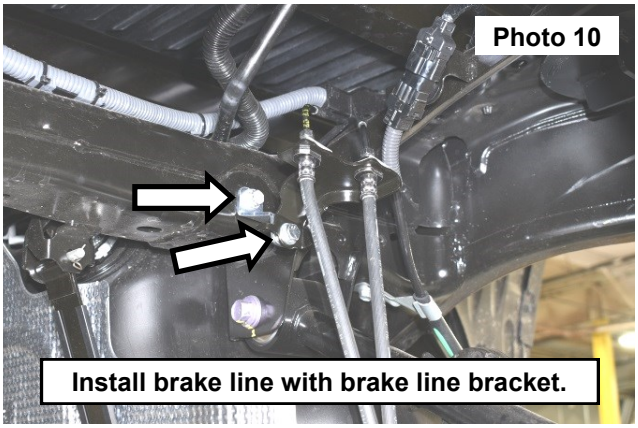
8. **Support rear axle to prevent damage to ride height sensor bracket on passenger upper control arm.** Remove the rear adaptive shock wiring harness and remove the lower shock bolt using a 17mm socket/wrench.
   See Photo 7.
9. Deflate the airbag to the lowest setting and remove the lower nuts using a 12mm socket/wrench. **See Photo 8**.





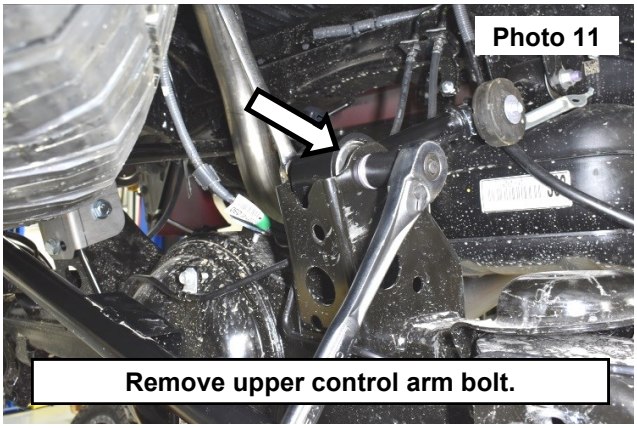
10. Raise the truck up or lower the axle to allow for the airbag spacer to fit. **See Photo 9**.
11. Install the brake line with brake line bracket to the frame using the stock bolt at the frame and the supplied 5/16” x 3/4” bolts, washer, and nut using 1/2” socket/wrench. **See Photo 10**.

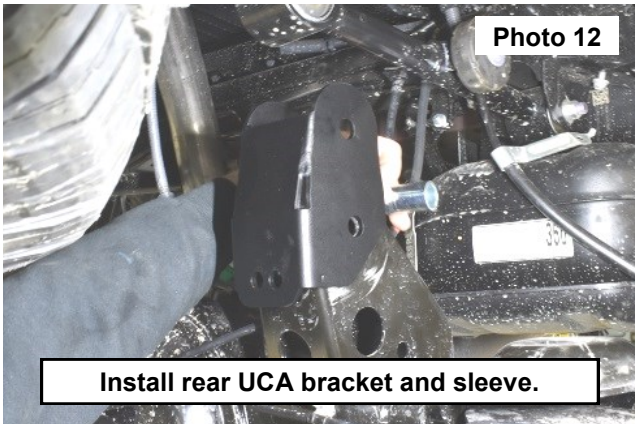




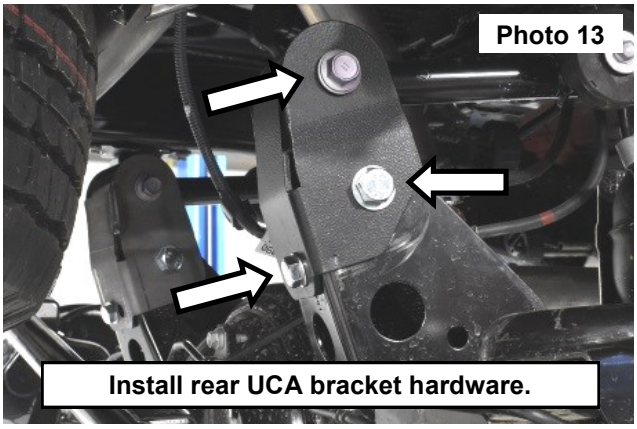
NOTE: Make sure brake lines do not rub against the top of the frame by bending away from frame slightly.

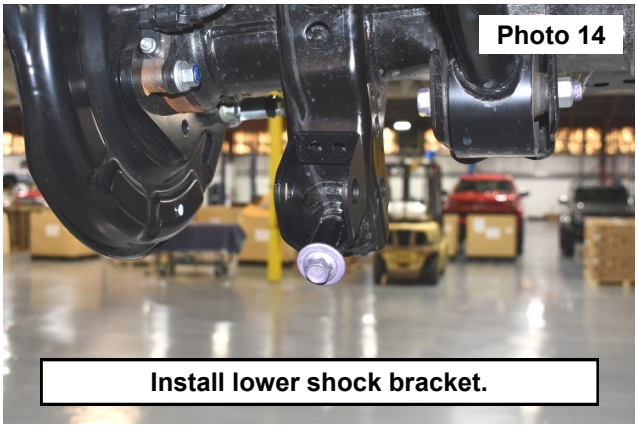
12. Remove the upper control arm bolt at the axle. **See Photo 11**.
13. Install the rear upper control arm relocation brackets and the 1” x 2.75” sleeve. **See Photo 12**.



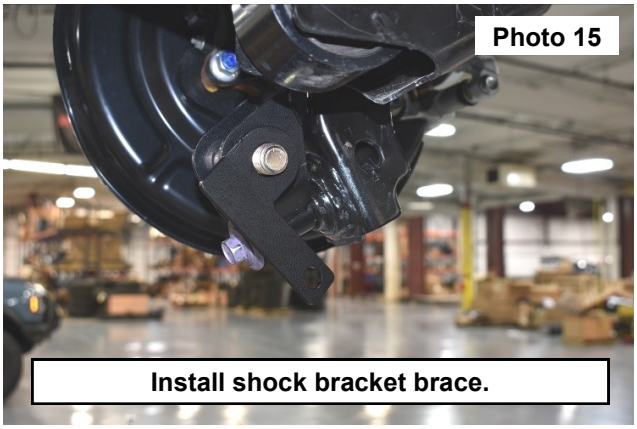


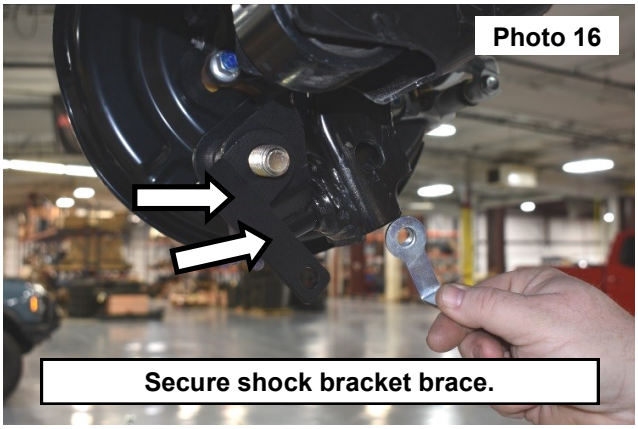
14. Secure the rear upper control arm bracket using the supplied 14mm x 110mm bolt, nut, and washers (21mm socket/wrench), supplied 12mm x 35mm bolt, flange nut, and washer (18mm socket/wrench), and stock hardware. **See Photo 13**.
15. Install lower shock bracket using stock hardware. Do not fully tighten. **See Photo 14**.



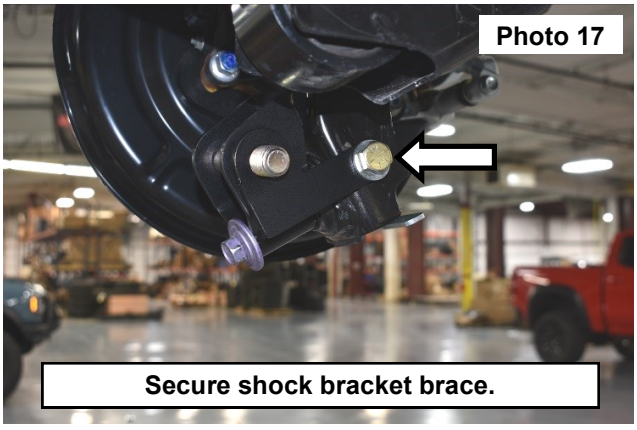


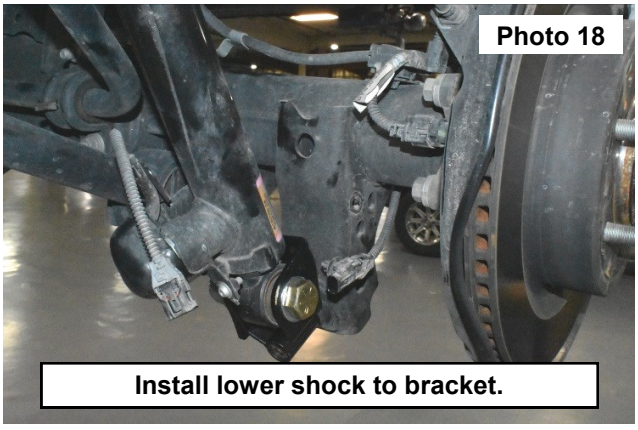
16. Insert the 3/4” x 3.5” bolt through lower shock bracket and hang the shock bracket brace on bolt. **See Photo 15**.
17. Secure the shock bracket brace with the supplied flag nut and 1/2” x 1.25” bolt using a 3/4” socket/wrench. **See Photo 16** and **Photo 17**.



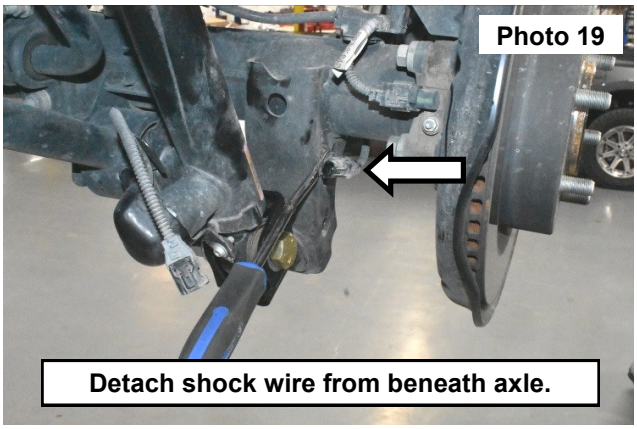


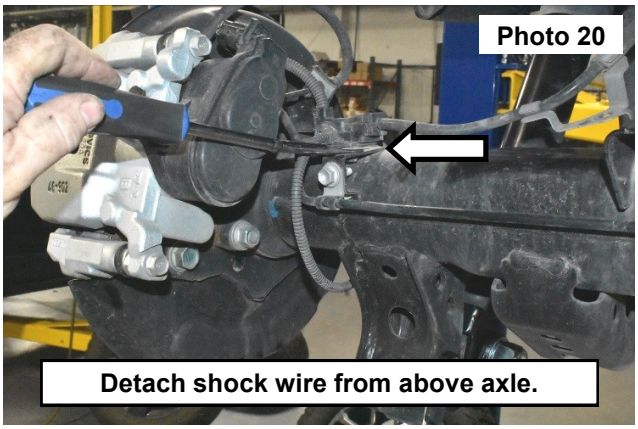
18. Install the shock to the lower shock extension with the 3/4” bolt, nut and washer using two 1-1/8” sockets/wrenches. **See Photo 18**.



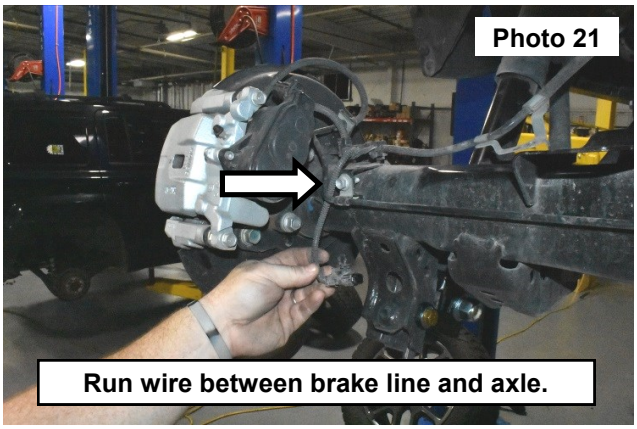


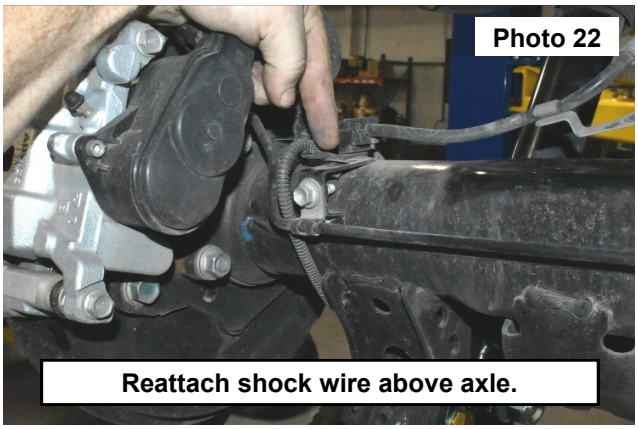
19. Detach the shock wire from beneath the axle using a trim remover tool. **See Photo 19**.
20. Detach the shock wire from above the axle using a trim remover tool. **See Photo 20**.



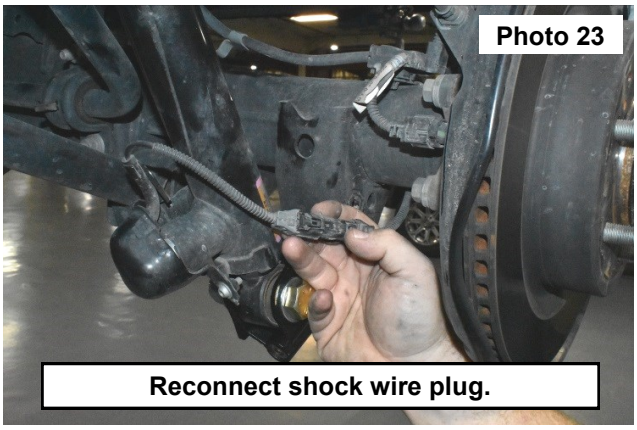


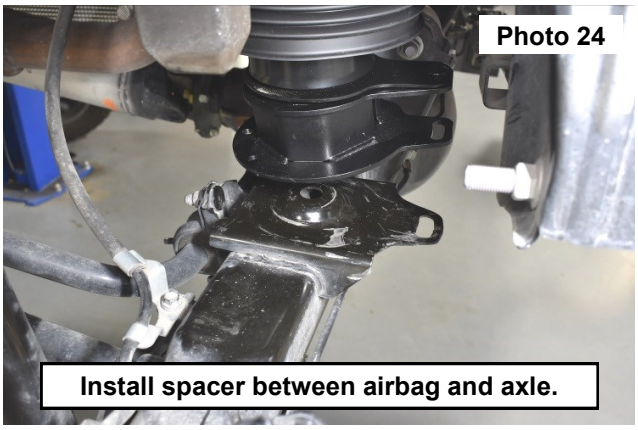
21. Run the shock wire between the brake line and axle to give some more slack. **See Photo 21**.
22. Reattach the shock wire above the axle. **See Photo 22**.
23. Reconnect the shock wire plug. **See Photo 23**.



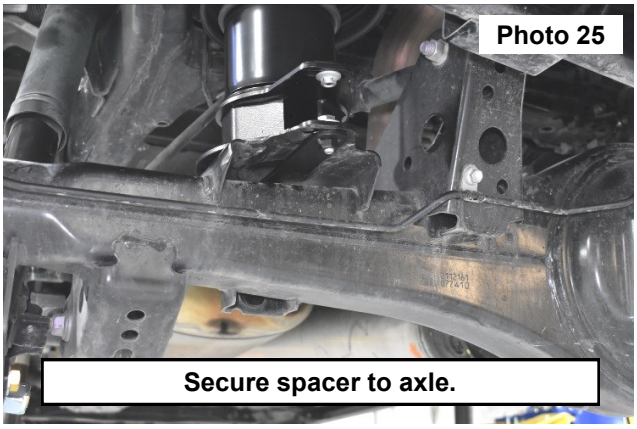


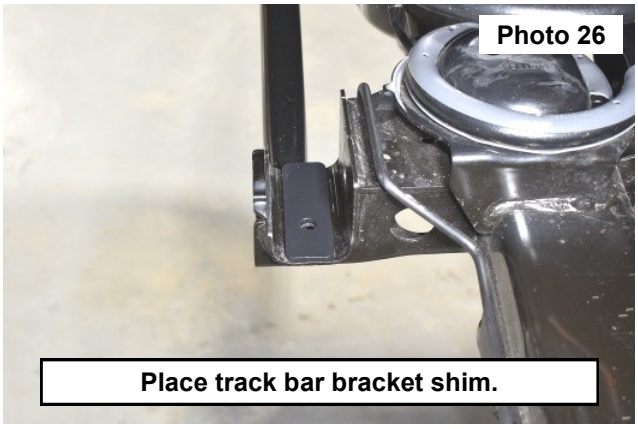
24. Install the airbag spacer between the airbag and axle using the stock nut. **See Photo 24**.



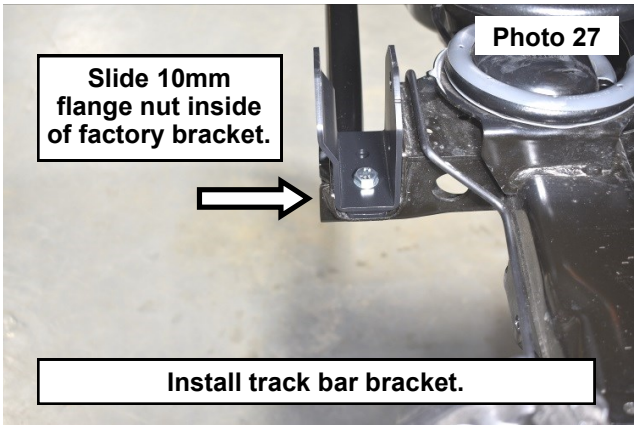


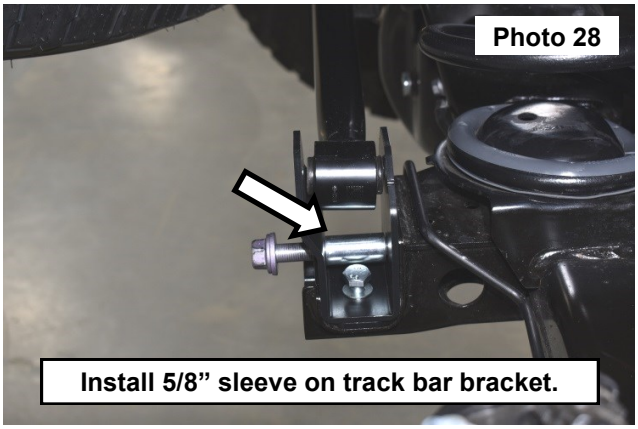
25. Secure the airbag spacer to the axle with the supplied 3/8” x 1-1/4” bolts, flat washer, lock washer, and flag nut using a 9/16” socket/wrench. **See Photo 25**.
    NOTE: The straight flag nut is the Dr side and the curved flag nut is the Pass side.
26. Place track bar bracket shim on the stock track bar bracket location with hole toward Pass side. **See Photo 26**.



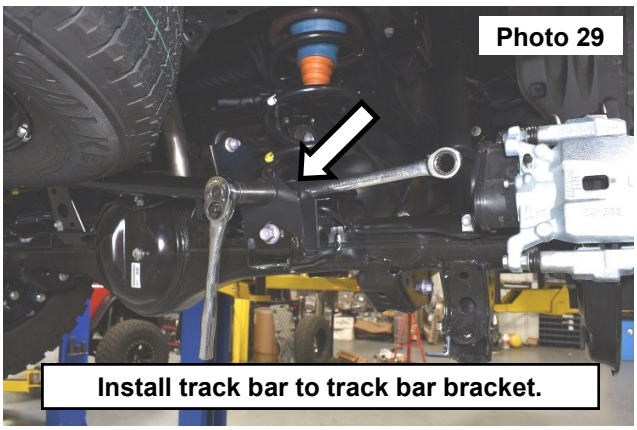


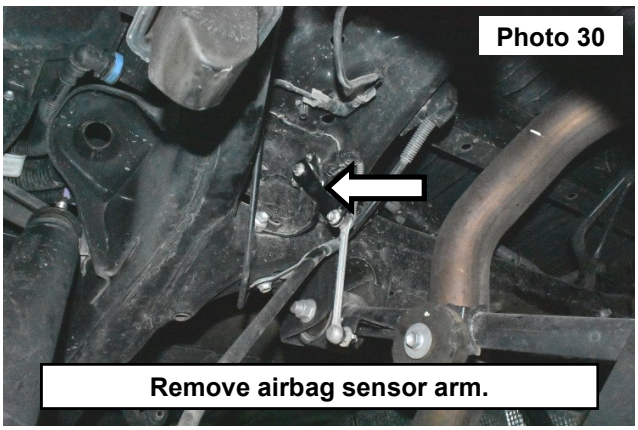
27. Install the track bar bracket with the supplied 10mm x 35mm bolt, washer, and flange nut using a 15mm and 17mm socket/wrench. Slide the supplied 10mm flange nut inside of the factory track bar bracket. **See Photo 27**.
28. Install the 5/8” sleeve in the track bar bracket using the stock hardware. **See Photo 28**.



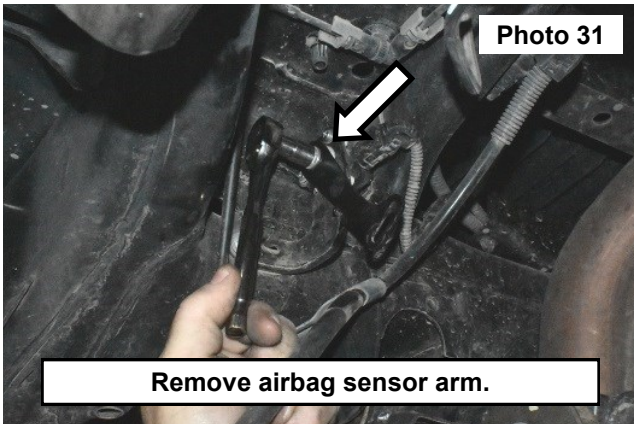


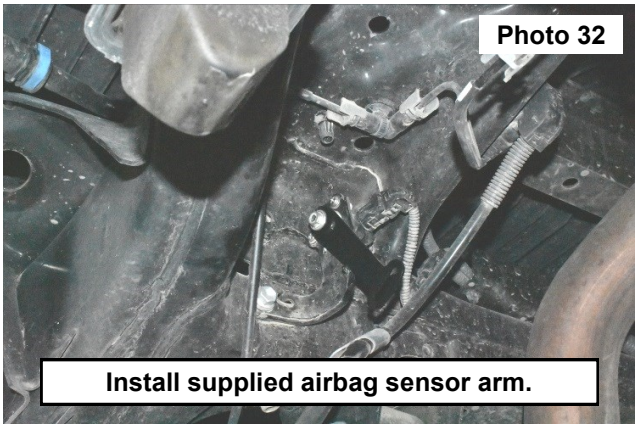
29. Install the track bar to the track bar bracket using the supplied 14mm x 80mm bolt and nut using two 22mm sockets/wrenches. **See Photo 29**.
30. Remove the airbag sensor bracket using a 10mm socket/wrench. **See Photo 30** and **Photo 31**.



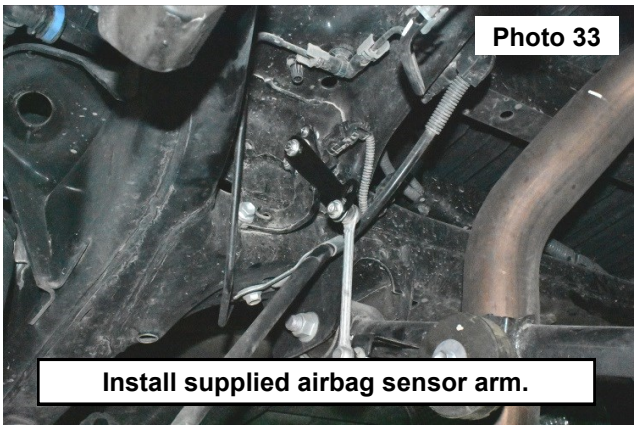


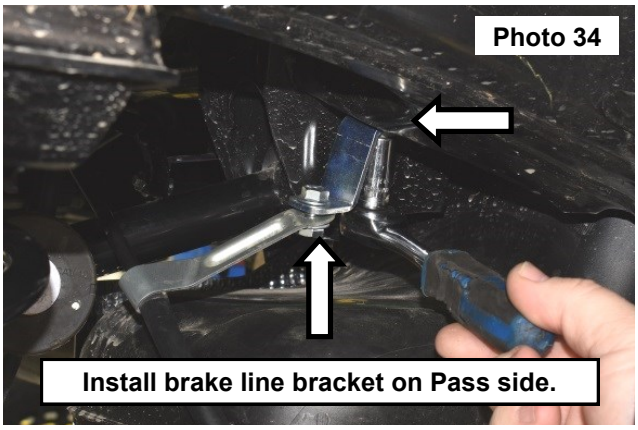
31. Install the supplied airbag sensor bracket using the stock hardware. **See Photo 32** and **Photo 33**.
NOTE: Install the arm in the center of the grooved slot and test lift height. If the rear needs to be lowered, move the arm towards the bottom of the slot and if the rear needs to be raised, move the arm towards the top of the slot.

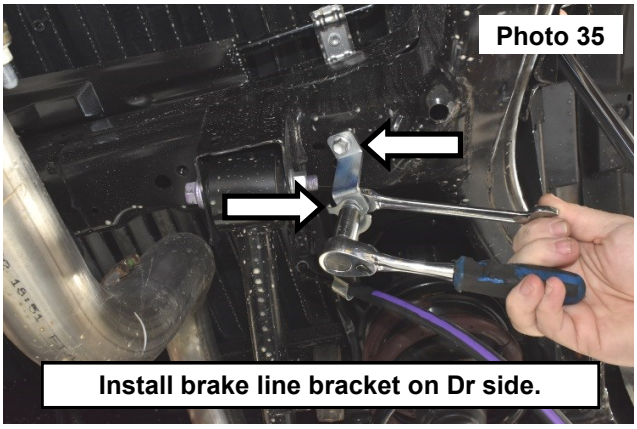


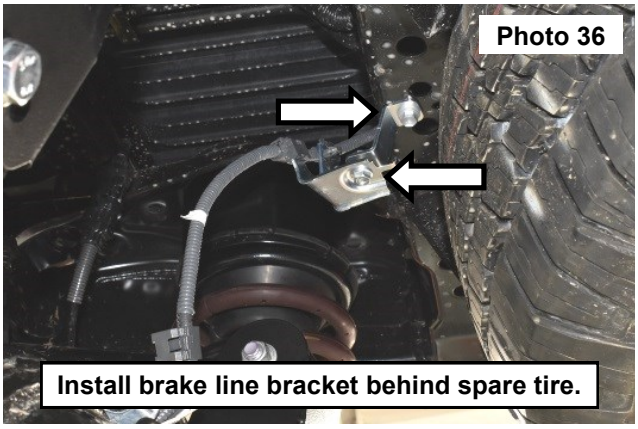


32. Install the supplied brake line brackets on the passenger side, driver side, behind the spare tire, and above the drive shaft with the stock bolts at the frame and the supplied 5/16” x 3/4” bolts, washer, and nut at the brake lines using 1/2” socket/wrench. **See Photo 34, 35, 36, and 37**.
NOTE: Make sure brake lines do not rub against the top of the frame by bending away from frame slightly.

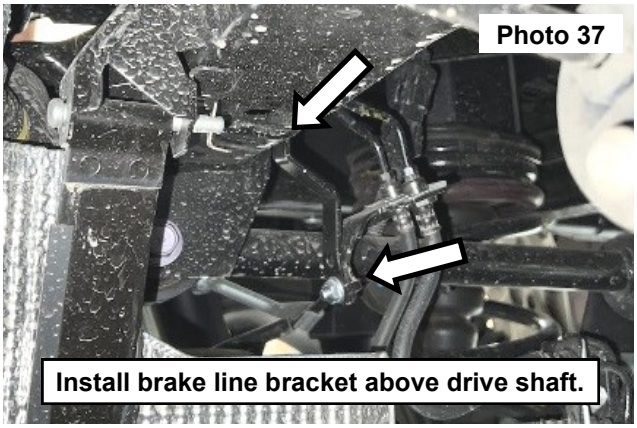


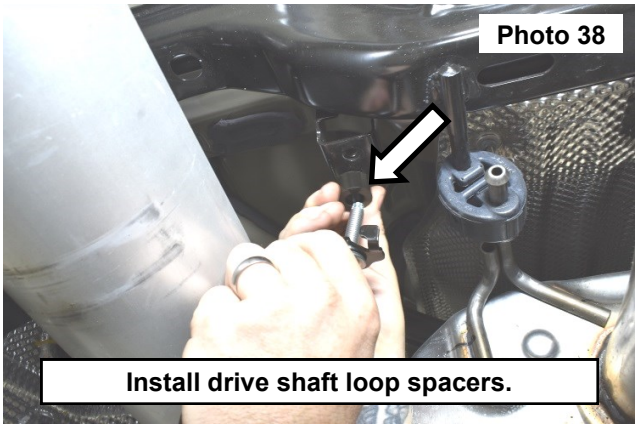




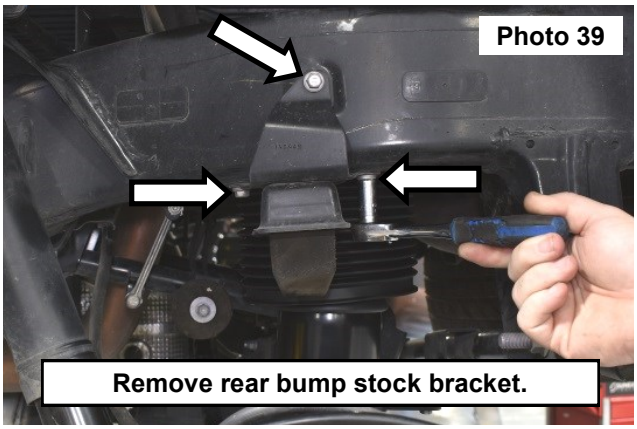


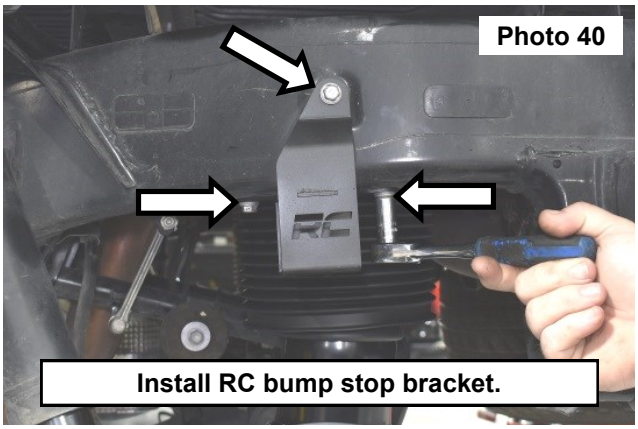
33. Reinstall the drive shaft loop with the cylindrical spacers. **See Photo 38**.





34. Remove the rear bump stop brackets from the Dr/Pass sides using a 12mm socket/wrench. **See Photo 39**.
35. Install the supplied RC bump stop brackets on the Dr/Pass sides using the stock hardware. **See Photo 40**.





36. Install the supplied bump stop to the RC bracket using the supplied hardware. **See Photo 41** and **Photo 42**.





37. Reinstall the remainder of the components in reverse order of tear down.
38. Reconnect the battery.
39. Put on wheels and lower.

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