TRAIL FORTRESS

BUILT FOR THE TRAIL. CHECKED FOR YOUR TRUCK.

Rough Country 55130 Installation Instructions

4-Inch Lift Kit with N3 Shocks for 2015–2020 Ford F-150 2WD

Part number: 55130

trailfortress.com/rough-country-4-inch-lift-kit-55130

Scan for fitment, price and install help

ROUGH COUNTRY SUSPENSION SYSTEMS®

1553BAG5

2015-19 F-150 2WD 4” & 6” Lift Kits

THANK YOU FOR CHOOSING ROUGH COUNTRY FOR 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 tools needed list and make sure you have needed tools.

PRODUCT USE INFORMATION

⚠WARNING 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. If questions exist we will be happy to answer them concerning the design, function, and correct use of our products.

The 4” suspension system was developed using a 33X12.50/18 tire with 18 x 9 wheel with 4 1/2” backspace. The 5” & 6”suspension systems were developed using a 35X12.50/18 tire with 18 x 9 wheel with 4 1/2” backspace. The lifts were designed to lift the front to level the vehicle. Due to manufacturing, dimension variances, and inflation all tire and wheel combinations should be tested prior to installation on all oversized / wider then stock tires We recommend a wheel not exceeding 8" in width be used with a minimum backspacing of 4.5" to a maximum of 5". When using a stock wheel, it must be 18” or larger and the maximum tire width is 11 1/2”.

⚠NOTICE **Vehicles will require the EPAS (Electronic Power Assist Steering) plugs to be disconnected prior to beginning installation of this kit. See installation instructions. Failure to disconnect these plugs may result in damage to the EPAS module resulting in an error message being displayed, which will require replacement of the EPAS module**

⚠NOTICE **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.

Tools Needed:

5mm Allen Wrench	Floor Jack
8mm Allen Wrench	Jack stands
8mm wrench /socket	Hammer
10mm wrench /socket	9/16 wrench /socket
12mm Wrench	1 1/16” Wrench
13mm wrench / socket	
15mm wrench /socket	
16mm wrench /socket	
18mm wrench /socket	
19mm wrench /socket	
21mm wrench /socket	
22mm wrench /socket	
24mm wrench /socket	
30mm wrench /socket	

Torque Specs:

Size	Grade 5	Grade 8
5/16”	15 ft/lbs	20 ft/lbs
3/8”	30 ft/lbs	35 ft/lbs
7/16”	45 ft/lbs	60 ft/lbs
9/16”	95 ft/lbs	130 ft/lbs

	Class 8.8	Class 10.9
10MM	32ft/lbs	45ft/lbs
18MM	170ft/lbs	240ft/lbs

Kit Boxes

55130 (4” Kit w/ N3 Rr Shocks):

1551BOX1
1553BOX3
1553BOX6
551BOX1
555BOX3
20165 x 2

55330 (6” Kit w/ N3 Rr Shocks):

553BOX1
1551BOX1
1553BOX3
1553BOX6
55BOX3

55175 (4” Kit w/ V2 Rr Shocks):

551BOX1
1551BOX1
1553BOX3
1553BOX6
555BOX3
760751

55370 (6” Kit w/ V2 Rr Shocks):

1551BOX1
1553BOX3
1553BOX6
553BOX1
557BOX4
760751

KIT CONTENTS

Kit Includes:

1553Box6:
- 1-Driver Side Knuckle
- 1-Pass Side Knuckles

1551Box1:
- 1-Fr Cross-Member
- 1-Rr Cross-Member

1553Box3:
- 1-Dr Side Sway Bar Bracket
- 1-Pass Side Sway Bar Bracket
- 2-Fr Brake Line Brackets
- 1-Rear E-Brake Bracket
- 1-Rear Brake Line Bracket
- 1-1553BAG1
- 1-551BAG1
- 1-1500
- 1-1553BAG5

551Box1:
- 1-1598BAG3
- 1-9/16BAG
- 4-9/16 x 3 x 11 Ubolts
- 2-Rr Blocks

555Box3:
- 2-Strut Spacer
- 1-10MMSTUDBAG-1

553Box1:
- 1-1263Bag2
- 1-1556Bag2
- 1-1598Bag3
- 1-9/16Bag
- 4-9/16 x 3 x 11 Ubolts
- 2-Rr Bumpstops
- 2-Rr Blocks

557Box3:
- 1-10MMSTUDBAG-1
- 2-660751 Rr Shocks
- 2-Strut Spacers

557Box4:
- 2-Strut Spacer
- 1-10MMSTUDBAG-1

20165 x 2:
- Rr N3 Shock

760751:
- 2-Rr V2 Shocks

1553Bag5:
- Instructions

1553Bag1:

For Rr / RrCross-Member:
- *2-18mm x 150mm Bolts*
- *4-18mm Flat Washers*
- *2-18mm Lock Nuts*

551Bag1:

For Front Brake Line Bracket:
- *2-5/16" x 3/4" Bolt*
- *2-5/16" Flat Washer*
- *2-5/16" Lock Nut*

For Sway Bar Brackets:
- *4-7/16" x 1.25" Bolts*
- *8-7/16' Flat Washers*
- *4-Lock Nuts*

For Rear Brake Line Brkt:
- *1-3/8" x 1' Bolt*
- *2-3/8" Flat Washers*
- *1-3/8" Lock Nut*

For Rear E-brake Bracket:
- *1-5/16" x 3/4" Bolt*
- *2-5/16" Flat Washers*
- *1-5/16" Lock Nut*

1500:

Cam Bolts
- 4-Cam Bolts

1556Bag2:

For Rear Bumpstops:
- *2-3/8" UBolts*
- *4-3/8" Nylock Nuts*

10MMSTUDBAG-1:

For Front Strut Spacers:
- *6-10mm Studs*
- *6-10mm Lock Washer*
- *6-10mm Hex Nuts*

1598Bag3:

For Rear Brake Line Brkt:
- *1-3/8" x 1' Bolt*
- *2-3/8" Flat Washers*
- *1-3/8" Lock Nut*

For Rear E-brake Bracket:
- *1-7/16" x 1" Bolt*
- *2-7/16" Flat Washers*
- *1-7/16" Lock Nut*
- *1-5/16" x 3/4" Bolt*
- *2-5/16" Flat Washers*
- *1-5/16" Lock Nut*

For Rear Blocks:
- *4-9/16" Axle U-Bolts*
- *8-9/16" Nuts*
- *8-9/16" Flat Washers*
- *4-3/8" Spring U-Bolts*
- *8-3/8" Nuts*
- *8-3/8" Flat Washers*

9/16Bag:

For Rear Blocks:
- *8-9/16" Nuts*
- *8-9/16" Flat Washers*

1263Bag2 (6" Kits Only):

For Rear Blocks:
- *4-7/16" UBolts*
- *8-7/16" Nylock Nuts*
- *8-7/16"" Flat Washers*

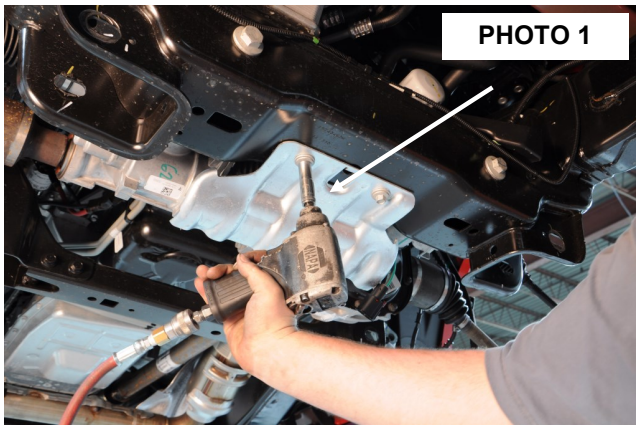
KIT COMPONENTS

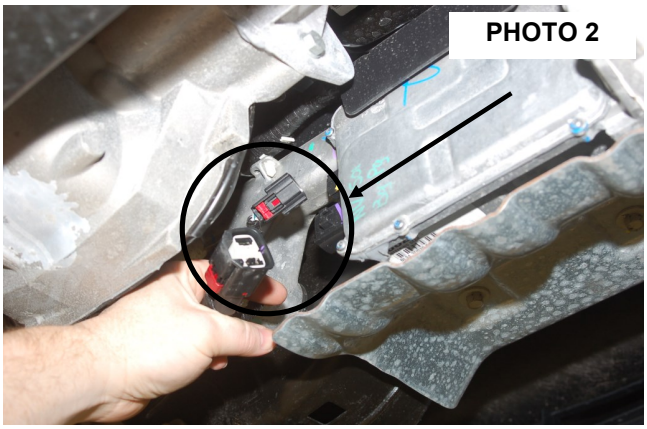


6” Kit Shown in Picture

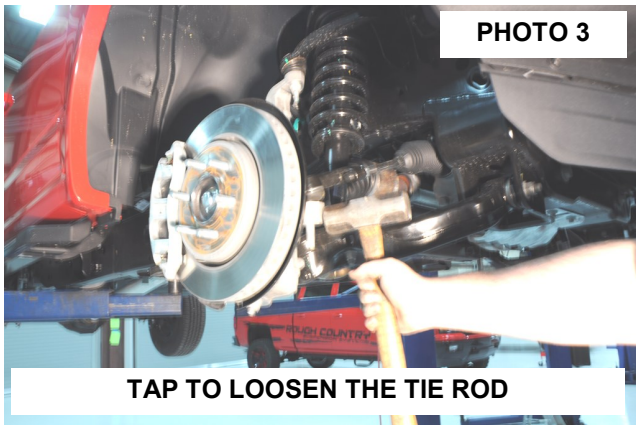
INSTALLATION INSTRUCTIONS

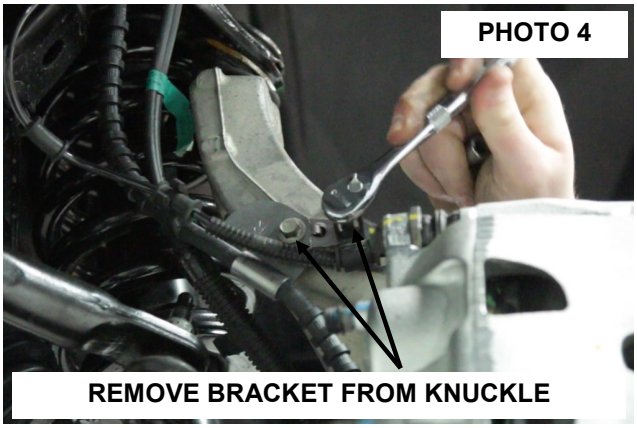
1. Chock the rear wheels and jack up the front of the vehicle.
2. Place jack stands under the frame rails and lower onto jack stands.
3. Remove the wheels/tires using a 21mm socket.
4. Remove the skid plate with a 13mm socket. **See Photo 1.**
5. Remove the EPAS (Electronic Power Assist Steering) Plugs as shown located on the steering assembly by the front differential. **See Photo 2.** **<u>This must be done BEFORE installation is started.</u>**



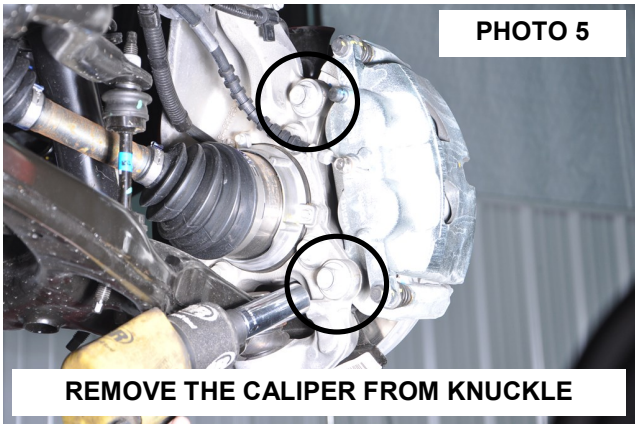


6. Remove tie-rod end using a 21mm wrench. Using the appropriate tool remove the tie-rod from the knuckle. **Photo 3.**
7. Remove the ABS and brake line bracket from the knuckle using a 8mm wrench for the ABS wire and a 10mm wrench for the brake line bracket. Retain hardware for reuse. **See Photo 4.**

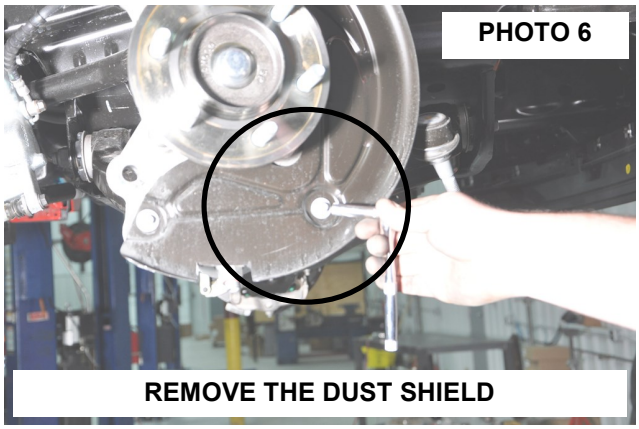


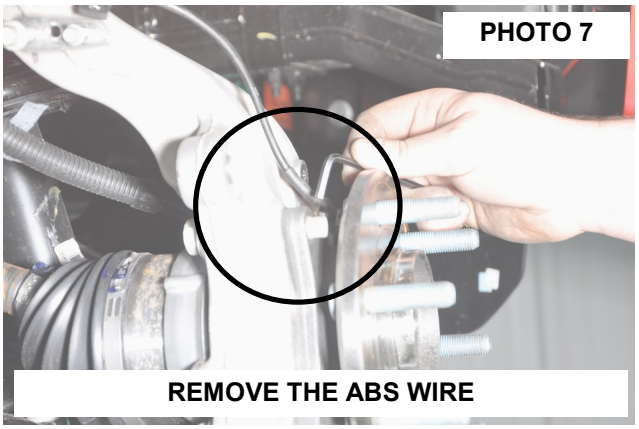


8. Using a 19mm socket or 21mm socket, remove brake caliper as shown in **Photo 5**. Hang caliper out of way. Do not let caliper hang by brake hose as this will damage hose. Retain hardware for reuse. Remove rotor.

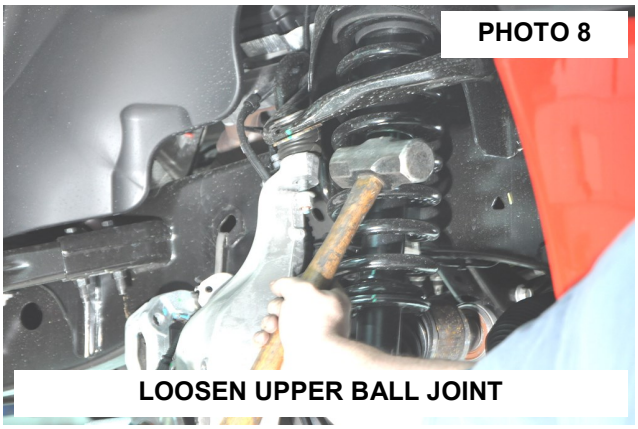


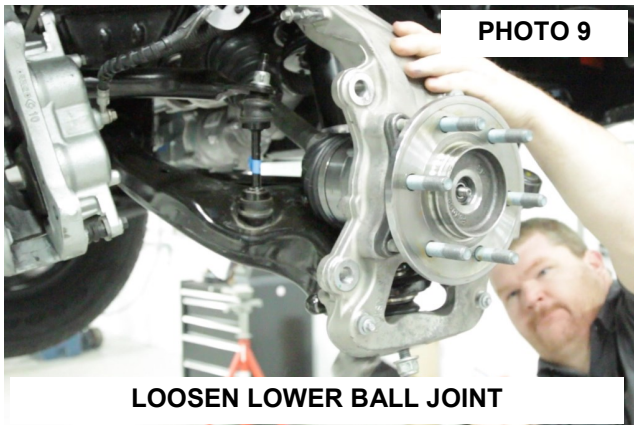
9. Remove the dust shield using a 8mm socket and dust cap. **See Photo 6.**
10. Remove the ABS wire from the bearing assembly using a 5mm allen wrench. **See Photo 7.**



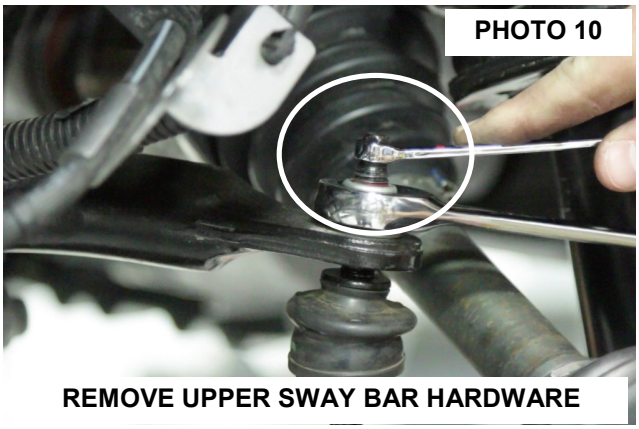


11. Loosen the upper ball joint nut using a 21mm wrench. Use the appropriate tool to release ball joint from knuckle. **See Photo 8.**
12. Loosen the lower ball joint using a 24mm wrench. Use the appropriate tool to release ball joint from knuckle. **See Photo 9.**

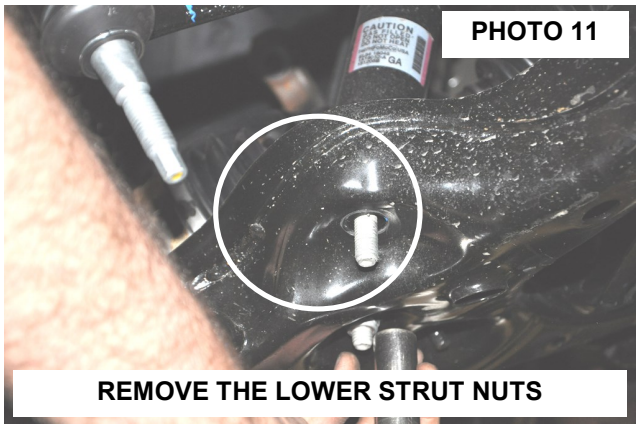


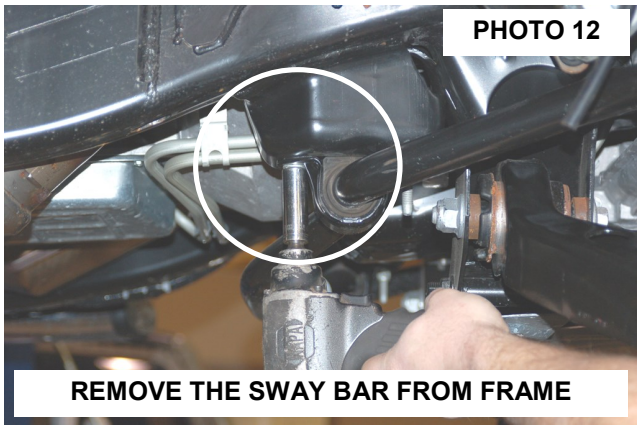


13. Remove the upper and lower ball joint nuts and remove the knuckle from the vehicle.
14. Remove the sway bar links from the sway bar using a 8mm and 19mm wrench. Retain hardware for reuse. **See Photo 10.**

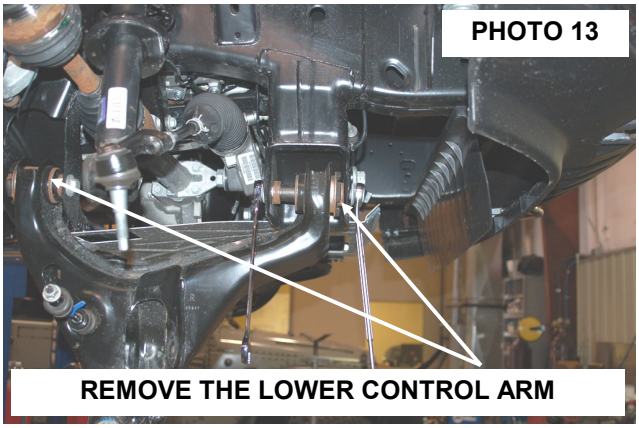


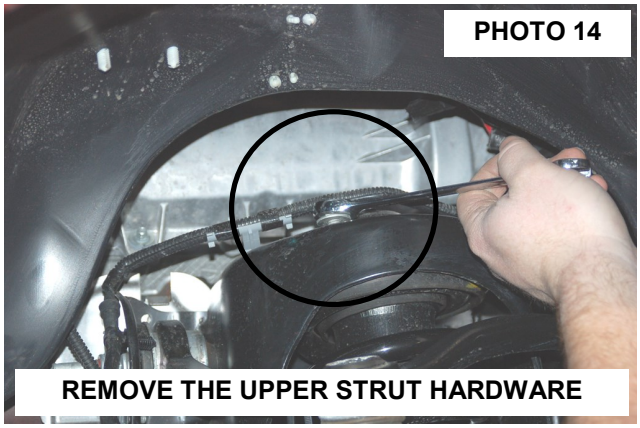
15. Remove the lower strut nuts using a 18mm socket. **See Photo 11.** Retain hardware for reuse.
16. Remove the sway bar from the frame mount using a 15mm socket. *Please note the position that the sway bar is installed from the factory to make sure it is reinstalled correctly.* Retain hardware for reuse. **See Photo 12.**



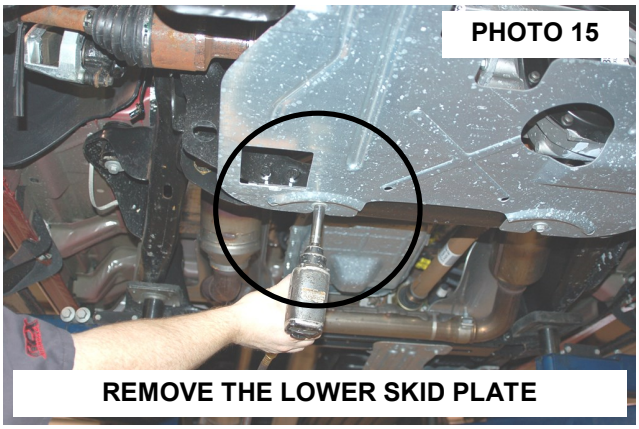


17. Remove the lower control arm using a 21mm and 1-1/16" wrench. Retain hardware for reuse. **See Photo 13.**
18. Remove the strut from the upper mount using a 15mm socket / wrench. Retain hardware for reuse. **See Photo 14.**

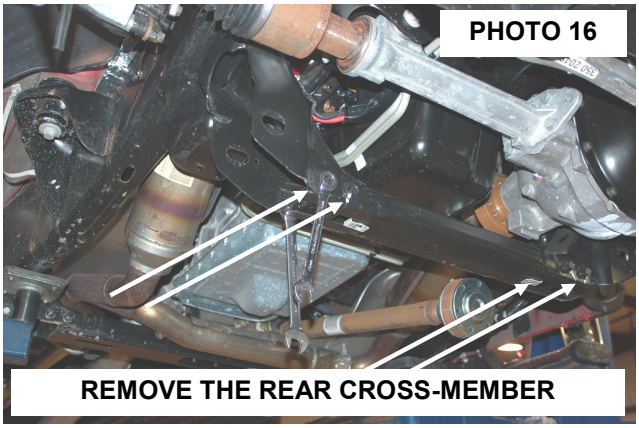


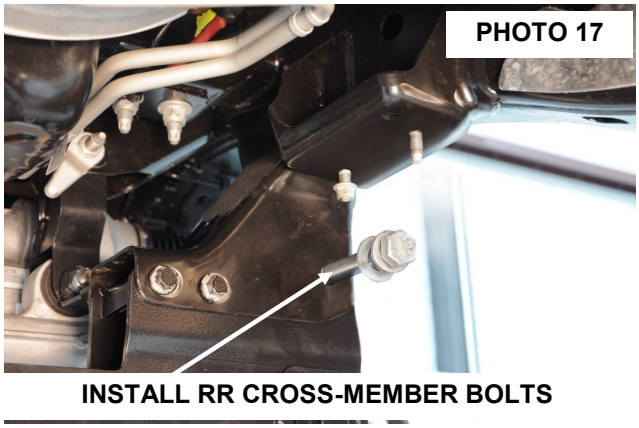


19. Remove the lower skid plate if equipped by removing the **4 bolts** using a 13mm socket. **See Photo 15.**



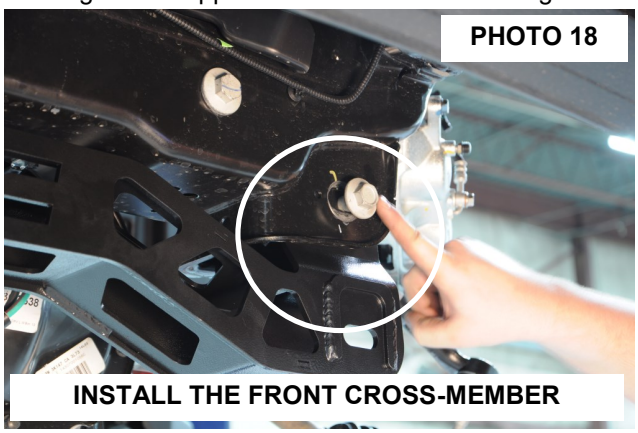
20. Remove the stock rear cross-member using a 15mm & 18mm socket. Retain hardware for reuse. **See Photo 16.**
21. Install the rear cross-member with the supplied 18mm x 150mm bolt. Do not tighten at this time. **See Photo 17.**

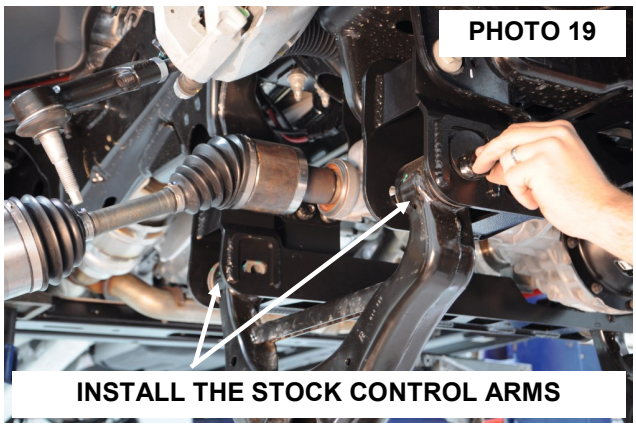




22. Install the front cross-member using the factory hardware. **See Photo 18**. Do not tighten at this time.
23. Install the lower control arms using the supplied 18mm x 160mm cam bolts, washers and nuts. **See Photo 19**. Do not tighten at this time.

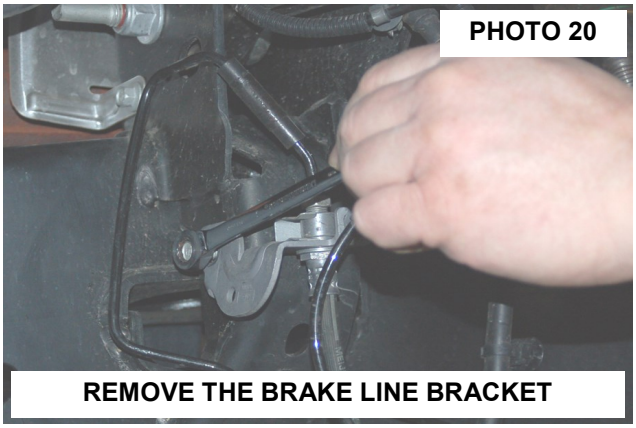
24. Tighten all upper cross-member bolts using a 21mm, 1 1/16" socket and 1 1/16" wrench.

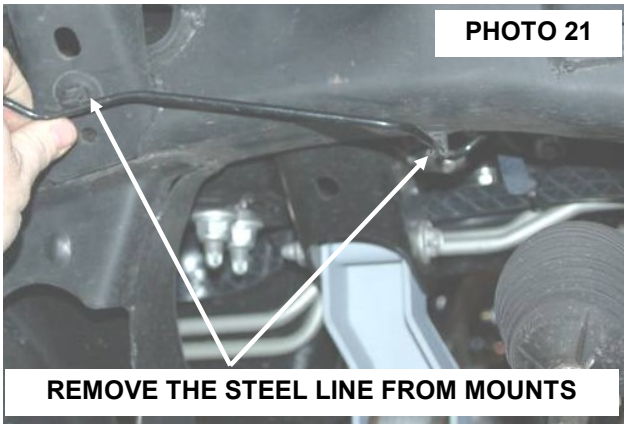




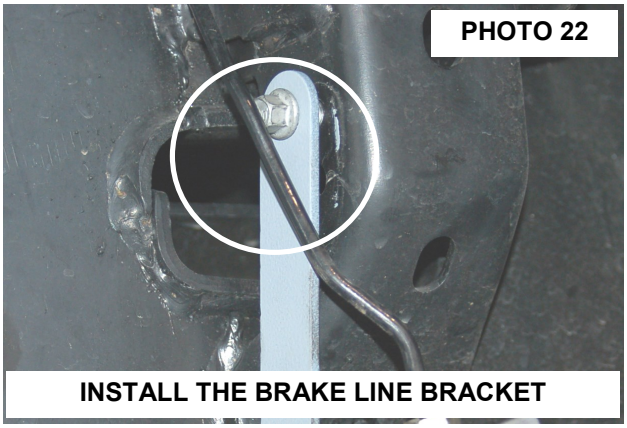
25. Tighten the sway bar drop mounts to the frame using the factory hardware with a 15mm socket.

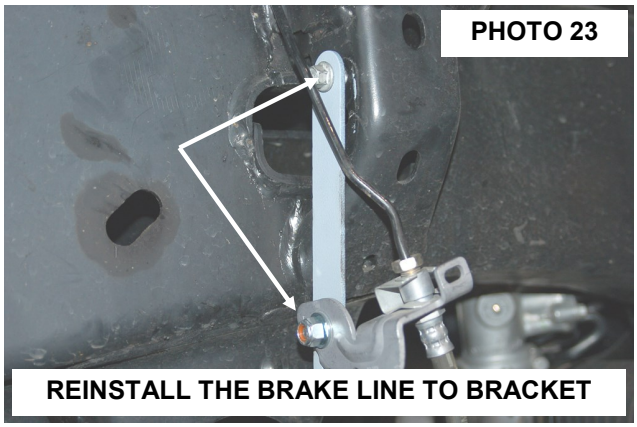
26. Using a 10mm wrench remove the brake line bracket from the driver and pass side frame. **See Photo 20.**
27. On the passenger side remove the brake line from the two factory clips. **See Photo 21.**



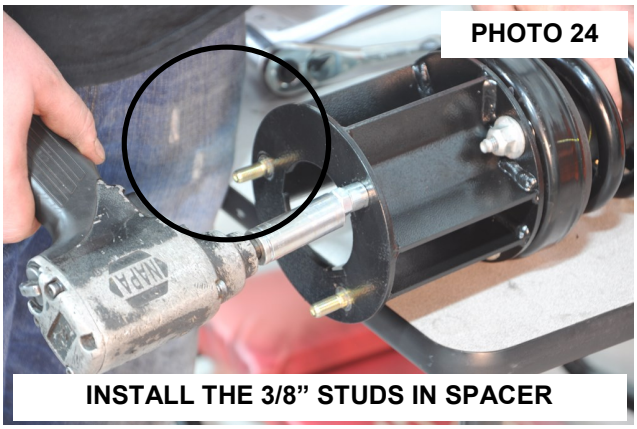


28. Install the new brake line bracket on the driver and passenger side with the stock hardware. **See Photo 22.**
29. Install the factory passenger side brake line in the new bracket using the supplied 5/16' x 3/4" bolt, washer and nuts. **See Photo 23.**

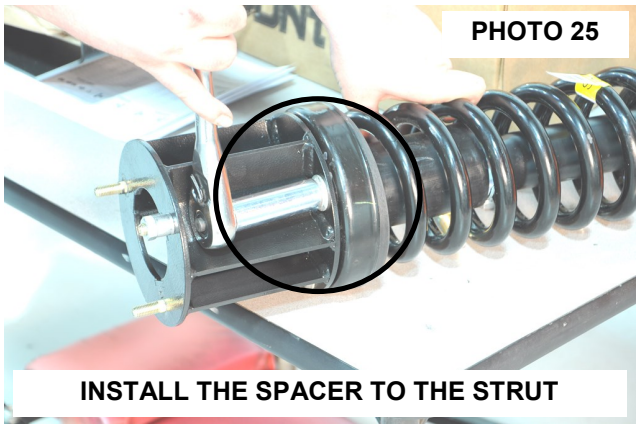


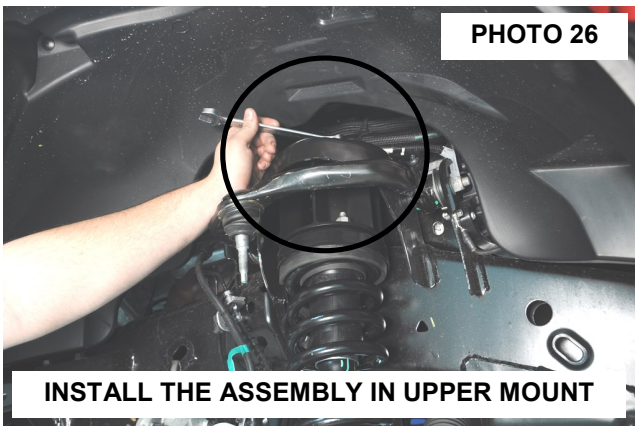


30. On the driver side, pull slightly on the brake line to allow the line to be installed on the new bracket. Secure the brake line to the new bracket with the supplied 5/16" x 3/4" bolt, washers and nut.
31. Using a 13mm socket / wrench, tighten the supplied brake line hardware and 10mm for the stock hardware.
32. Install the supplied 10mm studs in the strut spacers with a 17mm wrench as shown in **Photo 24**.

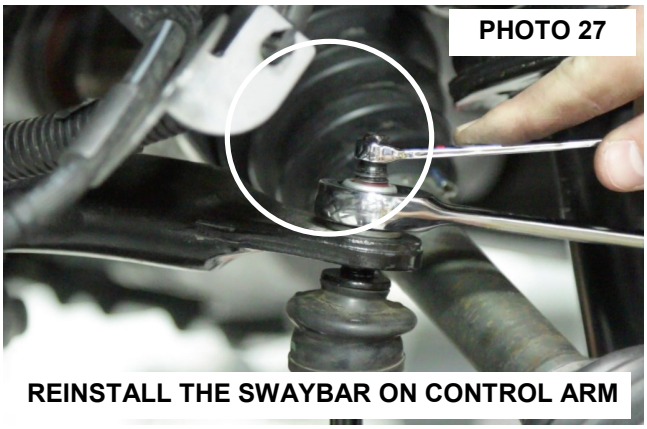


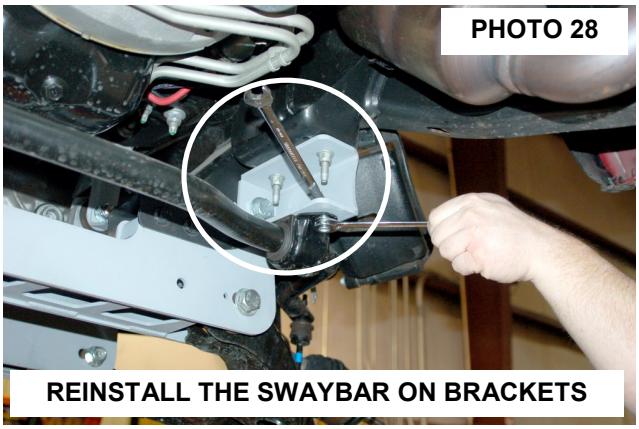
33. Using the stock hardware, install the strut spacers on the struts. Tighten using a 15mm socket. **See Photo 25.**
34. Install the strut with strut spacers installed in the stock upper mount. Secure with supplied 10mm nuts, washers and lock washers. **See Photo 26.** Do not tighten at this time.


PHOTO 25
INSTALL THE SPACER TO THE STRUT

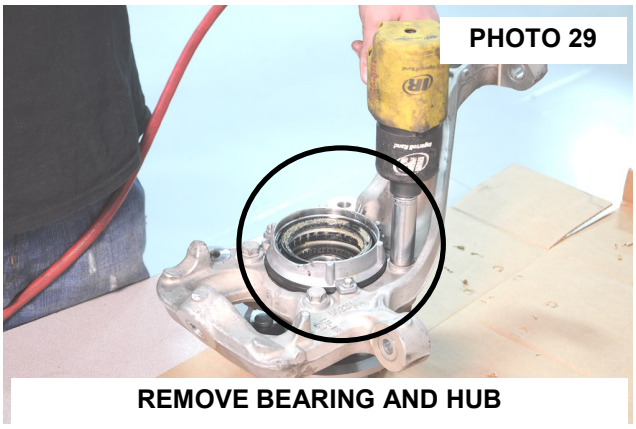

PHOTO 26
INSTALL THE ASSEMBLY IN UPPER MOUNT

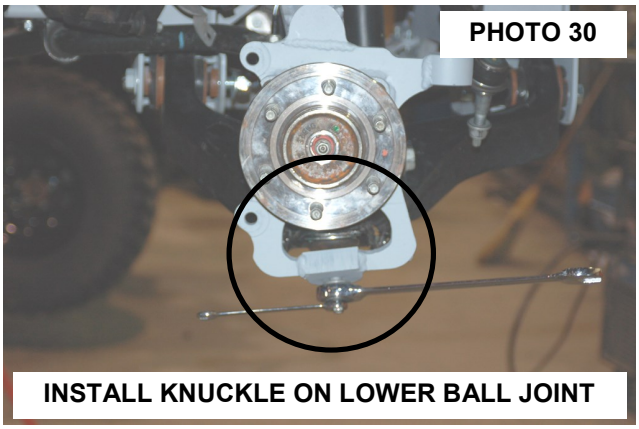
35. Install the lower strut in the lower control arm using the factory hardware. Tighten using a 18mm socket.
36. Tighten upper strut mount hardware using 17mm wrench.
37. Install the sway bar body on the sway bar links located on the lower control arms. Install nut to hold the sway bar in place but do not tighten at this time. **See Photo 27.**
38. Swing up the sway bar and install on the sway bar drop brackets using the supplied 7/16" x 1" bolts, washers and nuts. Tighten using a 18mm on the sway bar drop hardware and 18mm wrench on sway bar links on the lower control arms. **See Photo 28.**


PHOTO 27
REINSTALL THE SWAYBAR ON CONTROL ARM

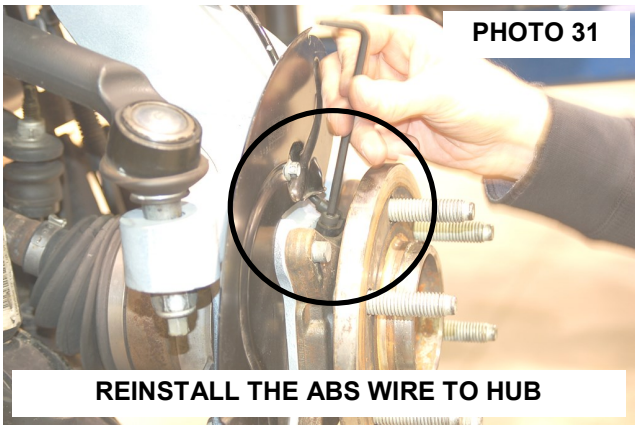

PHOTO 28
REINSTALL THE SWAYBAR ON BRACKETS

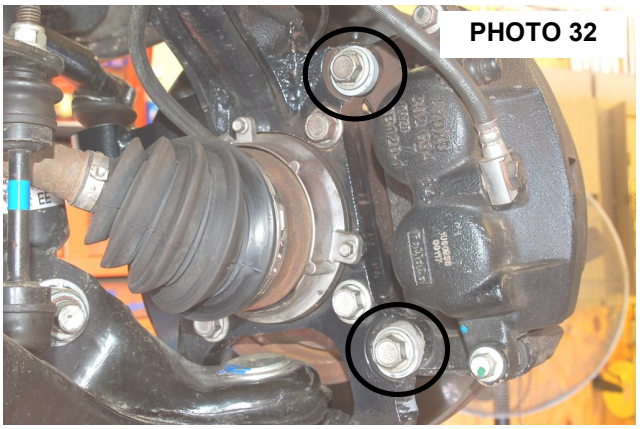
39. Remove the stock bearing assembly from the stock knuckle using a 18mm for the bearing and a 8mm for the locking hub mechanism. Install the bearing assembly on the lifted knuckle using the stock hardware. Tighten using a 18mm wrench. **See Photo 29.**
40. Install the new knuckles using the stock hardware on the lower ball joints, tighten using 24mm and a 12mm wrench. **See Photo 30. Do not use air impact on the upper and lower ball joint, tighten with hand tools.**


PHOTO 29
REMOVE BEARING AND HUB


PHOTO 30
INSTALL KNUCKLE ON LOWER BALL JOINT

41. Install the ABS wire on the bearing assembly using a 5mm allen wrench. **See Photo 31.**
42. Install the rotor and caliper on the knuckle with the stock hardware using a 19mm or 21mm wrench. Tighten hardware. **See Photo 32.**



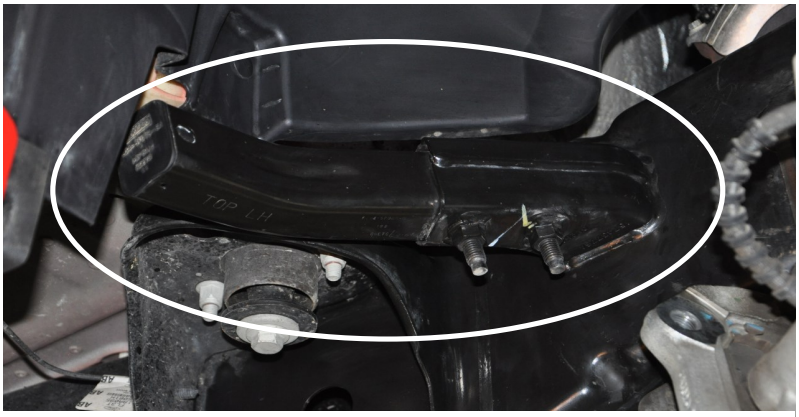


43. Make sure the vacuum hose and ABS wire are out of harms way. Using the supplied zip tie, secure the vacuum hose and ABS wire to the knuckle neck.
44. Install the tires and wheels using a 21mm socket. Remove the jack stands and lower the truck to the ground.
45. Tighten the lower control arm bolts using a 1-1/16” wrench and socket. **Torque to 240 ft/lbs.**

⚠WARNING Do not cut or remove factory crash bar if equipped.



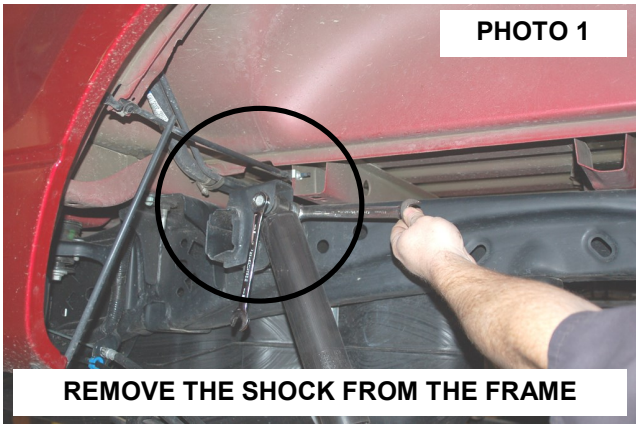
Front crash bar.



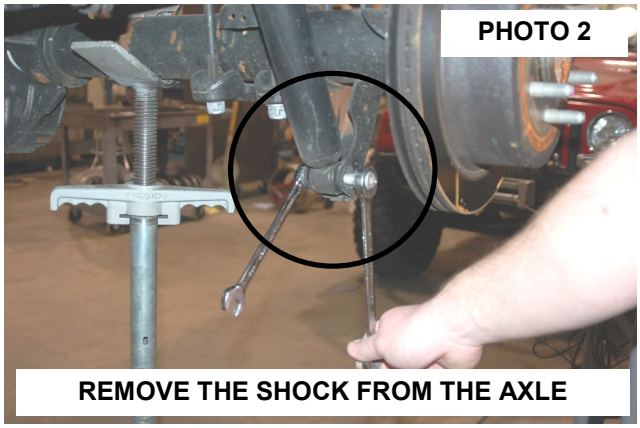
Rear crash bar.

REAR INSTALLATION

1. Chock the front tires and jack the rear the rear end up. Put jack stand under the frame rail and lower truck onto jack stands.
2. Remove tires and wheels using a 21mm socket.
3. Remove rear shocks from the upper and lower mount using 18mm and a 15mm wrench. **See Photo 1 & 2.** Retain the stock hardware.

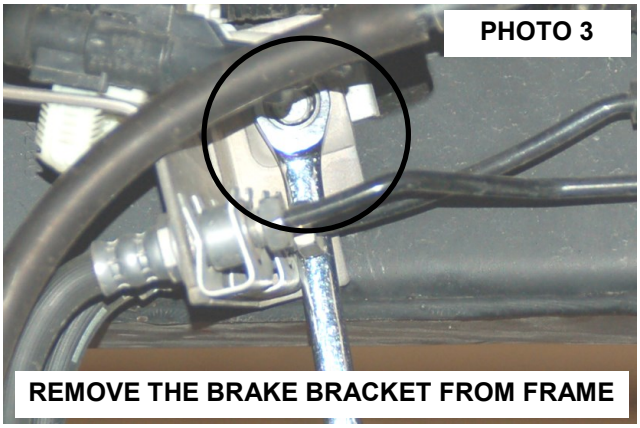


REMOVE THE SHOCK FROM THE FRAME

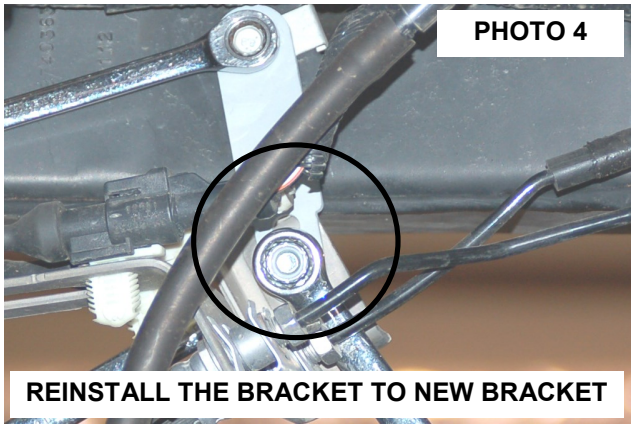


REMOVE THE SHOCK FROM THE AXLE

4. Using a 10mm wrench, remove the brake line assembly on the inner driver side frame rail. **See Photo 3.**
5. Install the brake line extension bracket on the frame using the stock hardware and tighten using a 10mm wrench. **See Photo 4.**
6. Install the brake line assembly to the new bracket using the supplied 3/8” x 1” bolt, washers and nut. Tighten using a 9/16” socket and wrench**. See Photo 4.**

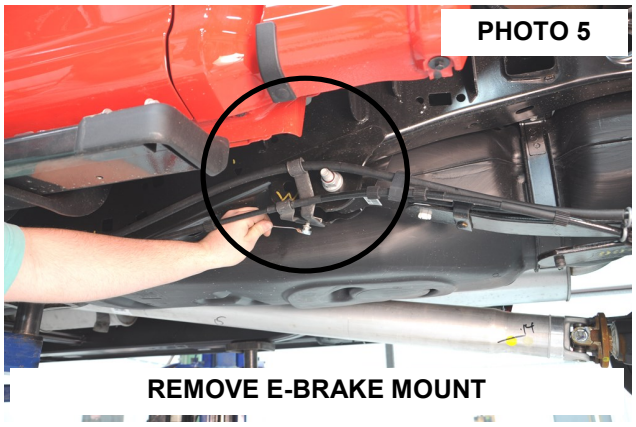


REMOVE THE BRAKE BRACKET FROM FRAME

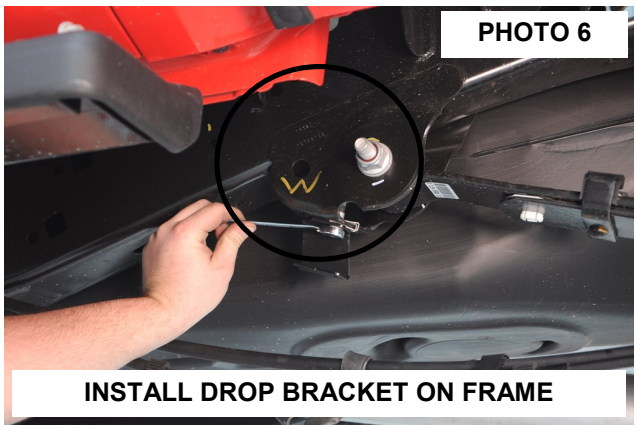


REINSTALL THE BRACKET TO NEW BRACKET

7. Remove the e-brake cable mount with a 10mm wrench as shown on the drivers side as shown in **Photo 5.**
8. Install the supplied e-brake bracket with the factory hardware. Tighten with a 10mm wrench. **See Photo 6.**

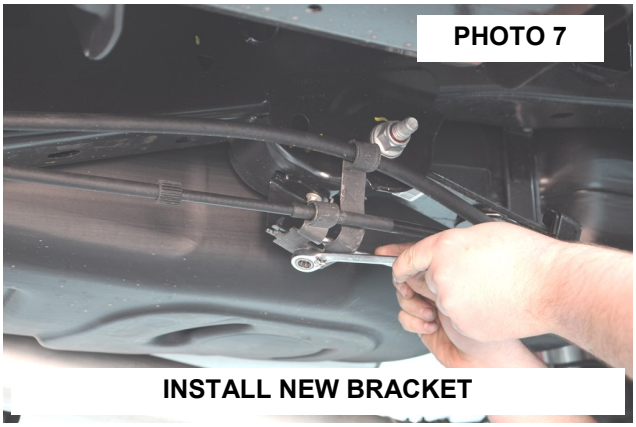


REMOVE E-BRAKE MOUNT

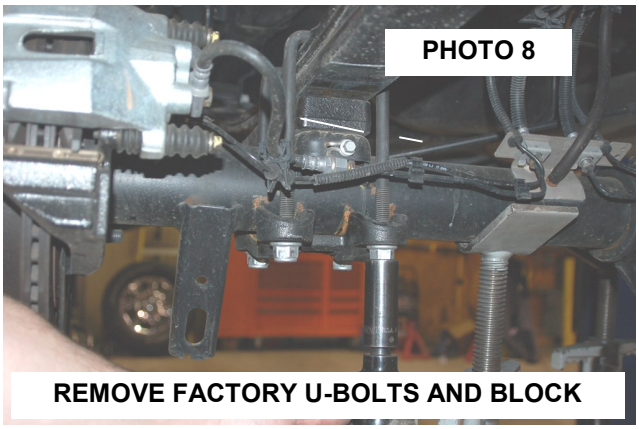


INSTALL DROP BRACKET ON FRAME

9. Install the e-brake cable mount to the new e-brake drop bracket using the supplied 5/16” bolt, washers, and lock nut. **See Photo 7.**
10. Using a jack support the rear end and remove U-bolts using a 21mm socket and remove the factory blocks. Retain factory block for the 4” kit. **See Photo 8.**

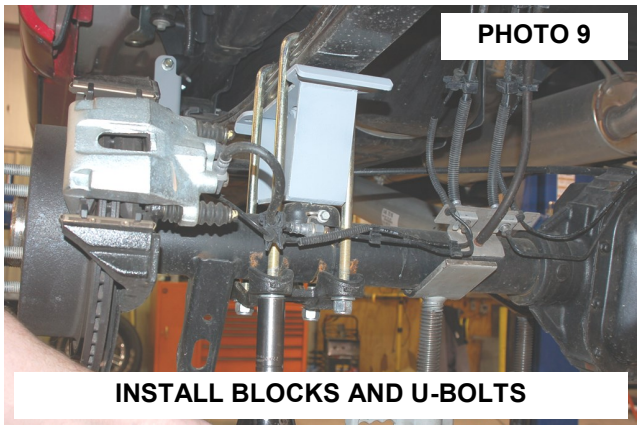


INSTALL NEW BRACKET

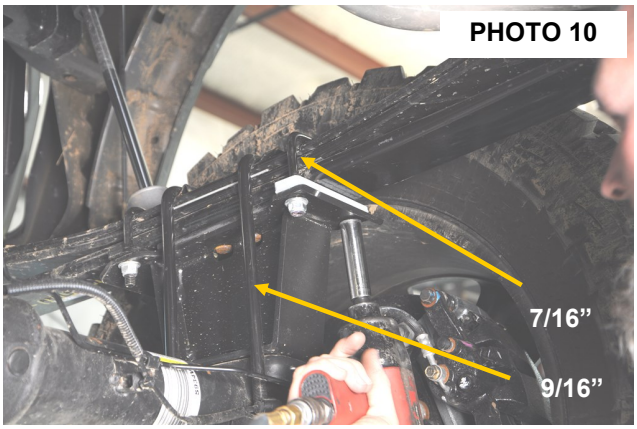


REMOVE FACTORY U-BOLTS AND BLOCK

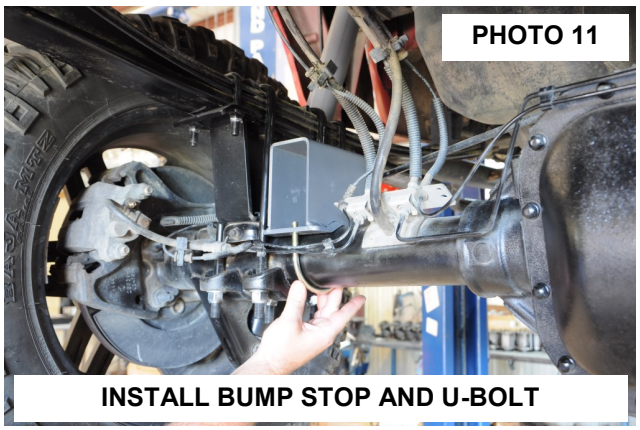
11. Install the supplied blocks on the block pin holes on the axle and raise the axle into place. **See Photo 9.** Note the 4” kit will have a standard block with the factory block while the 6” kit will use the Rough Country Anti-wrap design blocks.
12. Install the axle u-bolts and tighten using a 22mm socket.
13. For the 6” kits, install the upper leaf spring u-bolts over the leaf spring and into the blocks. Secure with supplied hardware and tighten using a 16mm socket. **See Photo 10.**



INSTALL BLOCKS AND U-BOLTS



14. Install the rear bump stop bracket if supplied with the 3/8” x 3.5” round u-bolt. Tighten with the 3/8” nylock nuts and a 9/16” socket. **See Photo 11.**
15. Install the new shock absorbers in the upper and lower mounts using the stock hardware. **If installing V2 rear shocks, refer to installation instructions included with those shocks.** Tighten using a 18 and 15mm wrench.
16. Install the tire and wheels.
17. Raise up the rear of the vehicle and remove the jack stands. Lower the vehicle to the ground



INSTALL BUMP STOP AND U-BOLT

POST INSTALLATION INSTRUCTIONS

1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering gear for interference and proper working order. Test brake system
2. Perform steering sweep. Check to ensure brake hoses have sufficient slack and will not contact rotating, mobile, or fixed members, adjust lines/brackets to eliminate interference and maintain proper working order. Failure to perform inspections may result in component failure
3. Readjust headlights to factory settings
4. Have vehicle aligned by a certified alignment professional.
5. Re-torque all nuts, bolts, and especially u-bolts after the first 100 miles, again after another 100 miles and then check periodically thereafter
6. All components must be retightened after 500 miles, and every three thousand miles after installation.

Thank you for purchasing a Rough Country Suspension System.

By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable , State, and Local laws and regulations regarding the purchase, ownership, and use of the item. It shall be the buyers responsibility to comply with all Federal, State and Local laws governing the sales of any items listed, illustrated or sold. The buyer expressly agrees to indemnify and hold harmless Rough Country, LLC for all claims resulting directly or indirectly from the purchase, ownership, or use of the items.