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Rough Country 65970 Installation Instructions

6-Inch Lift Kit with V2 Shocks for Jeep Wrangler TJ (1997-2006)

Part number: 65970

trailfortress.com/rough-country-6-inch-lift-kit-65970

Scan for fitment, price and install help

92PERF166300B

ROUGH COUNTRY SUSPENSION SYSTEMS®

1663BAG7

97-06 JEEP TJ/LJ LONG ARM KIT

Thank you for choosing Rough Country for your suspension needs.

Rough Country recommends a certified technician installs 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 all the instructions before beginning the installation. Check the kit hardware against the kit contents. Be sure you have all the needed parts and understand where they go. Also please review the tools needed list and make sure you have needed tools. If you have any questions please call us at 800-222-7023.

PRODUCT USE INFORMATION

⚠WARNING As a general rule, the taller a vehicle is the easier it will roll. We strongly recommend seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Braking performance and capabilities are decreased when significantly larger/heaver tires and wheels are used. Take this into consideration while driving. Also, speedometer recalibration is necessary when larger tires are installed.

Do not add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands, lifts, voids all warranties. 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.

Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced

⚠NOTICE The 4" suspension system was developed for 33x12.50x15 tire on an after market 8" wide wheel with 3.75" of back spacing. The 6" kit was developed for 35x12.50x15 tire on an after market 8" wide wheel with 3.75" of back spacing. Due to the inconsistency of vehicles when manufactured and the various options available, the amount of actual lift gained by this lift kit will vary. On models outfitted with extra bolt-on equipment and accessories, Rough Country offers new coil spring isolator pads made from polyurethane to boost ride height 3/4". These are available for the front or rear.

This kit features Rough Country's adjustable joint design. Adjustable end tool is included in kit. Assemble the joints per the separate instruction sheet Part # 92RCJ120 provided.

- *With the installation of this kit and larger tires it is highly recommended that an aftermarket stabilizer(s) be added.*
- *A drive-shaft/SYE combination is highly recommended for the 4' kit and a necessity on the 6" kit to correct rear driveshaft angles and prevent vibration.*
- *Additionally, the exhaust system must be modified by an exhaust specialist to clear all components.*
- *On Rubicon models the air compressor for the air lockers on the frame by the rear of the skid plate will have to be relocated. Refer to installation instructions for detail.*

⚠NOTICE **NOTICE TO DEALER AND VECHICLE OWNER**

Any vehicle equipped with any Rough country product must have the "Warning to Driver" decal installed on the sun visor or dash. The decal is to act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics. **INSTALLING DEALER**—It is your responsibility to install the warning decal and to forward these installation instructions on to the vehicle owner for review and to be kept in the vehicle for its service life.

We hope installing your Rough Country lift kit is a positive experience. Please note that variations in construction and assembly in the vehicle manufacturing process will virtually ensure that some parts may seem difficult to install. The use of pry bars and tapered punches for alignment is considered normal and usually does not indicate a faulty product. However, if you are uncertain about some aspect of the installation process, please feel free to call our tech support department at 800-222-7023. We do not recommend that you modify the Rough Country parts in any way as this will void any warranty expressed or implied.

KIT CONTENTS

This kit is packaged in 8 boxes. Please makes sure you have all the need parts and understand where they go prior to beginning installation. Please use the attached picture to match parts to their descriptions shown below.

1661C-4" KIT / 1662C-6" KIT
- Fr Coil Springs (A)
- Rr Coil Spring

1052 Fr Adj Track Rod Kit
- 1-Track Rod Body (D)
- 1-Track bar Bracket (E)
- *1085Bag:*
- *For Front Track Rod Bracket*
  - 2-Frame Crush Sleeves
  - 1-1/2" x 1 3/4" Bolt
  - 2-1/2 x 4 1/2" Bolt
  - 7-1/2" Flat Washer
  - 3-1/2" Lock Nuts
- *For Front Adjustable Track Rod*
  - 2-7/16" x 2 3/4" Bolt
  - 4-7/16" Flat Washers
  - 2-7/16" Lock Nut
  - 1-3/4" Jam Nut
  - 2-Track Bar Bushings
  - 1-Track Bar Sleeve (ID 7/16")
  - 1-Heim Joint
  - 2-Heim Spacers

1075-Rr Adj Track Rod Kit
- 1-Track Rod Body & Heim End (F)
- *1086Bag:*
- For Rear Track Rod
  - 1-Sleeves
  - 2-Bushings
  - 1-Jam Nut
  - 2-Heim Spacers

1663Box5:
- 1-Dr Side Control Arm Mount (G)
- 1-Pass Side Control Arm Mount (H)
- 1-Rear Track Bar Bracke(I)
- 1-Rubicon Compressor Bracket
- 2-Front Upper Adj Arms (J)

1663Box6:
- 2-Front Lower Adj Arms (K)
- 4-Large Arm Ends
- 4-Small Arm Ends
- *1663Bag1:*
- *For Control Arm Mounts:*
  - *4-1/2" x 4" Bolts*
  - *8-1/2" Washers*
  - *4-1/2" Lock nuts*
- *For Transfer Case Skid Plate*
  - *6-9/16 x 4 1/2" Bolts (97-02)*
- *OR 6-12mm x 65mm Bolts (03-06)*
  - *6-Flat Washers*
- *For Front Lower Control Arms*
  - *2-9/16" x 4" Bolts*
  - *4-9/16" Flat Washers*
  - *2-9/16" Lock Nuts*
- *For Front Upper Control Arms*
  - *2-10mm x 80mm Bolts*
  - *4-10mm Flat Washer*
  - *2-10mm Lock Nuts*
- *1663Bag5:*
- *For Rear Lower Control Arm:*
  - *2-9/16" x 7" Bolts*
  - *4-9/16" Flat Washers*
  - *2-9/16" Lock Nuts*
- *For Rear Track Bar Bracket*
  - *2-5/16" x 1" Bolt*
  - *4-5/16" Flat Washers*
  - *2-5/16" Lock Nuts*
  - *1-12mm x 65mm Bolt*
  - *1-12mm Flange Lock*
  - *1-Crush Sleeve*
- *For use with Rubicon Models:*
  - *For Compressor Bracket*
  - *4-5/16" x 1" Bolts*
  - *4-5/16" Lock Nuts*
  - *8-5/16" Flat Washers*
- 4-Lower End Component Bag
- 4-Upper End Component Bag
- 1-Adjustable End Tool Bag

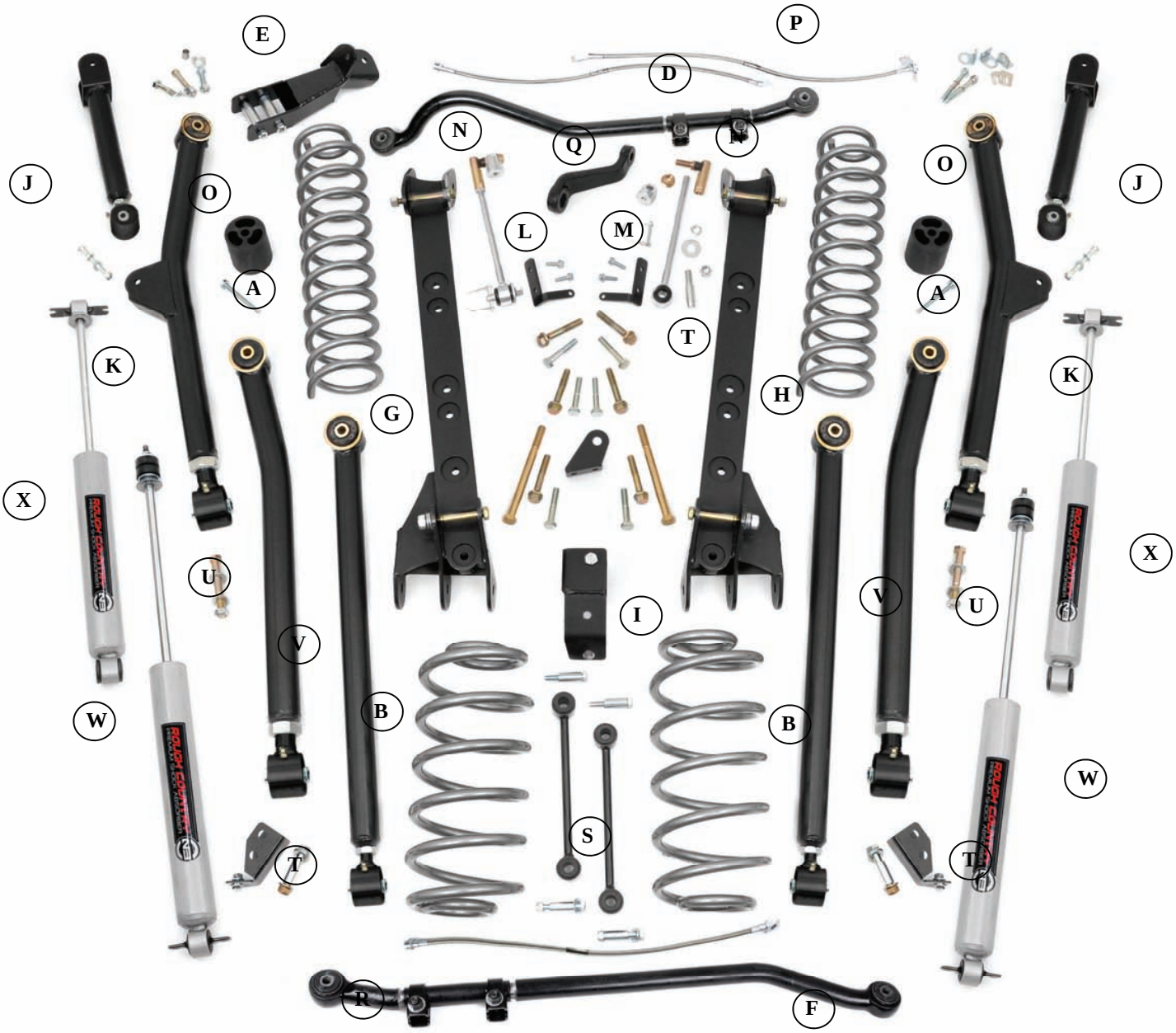
1663Box3
- 1-Dr Side Fr Mnt Disc Brkt (L)
- 1-Pass Fr Mt Disc Brkt (M)
- 2-Front Sway Bar Links (N)
- 2-Fr Bump Stop Pucks (O)
- 2-Front Stainless Brake Lines (P)
- 1-Pitman Arm (Q)
- 1-Rear Stainless Brake Line (R)
- 2-Rear Straight Sway Bar Links (S)
- 2-Rear Shock Re-locator (T)
- 1-Hardware Bag
- *1663Bag3:*
- *For Front Bump Stop*
  - *2-3/8" x 3 1/2" Self Tapping Bolt*
- *For Fr Brake Lines*
  - 4-3/8" Brake Washers
  - 2-Frame Brackets
  - 2-Brake Clips
- *For Rear Brake Line:*
  - *1-Brake Line Bracket*
  - *1-Brake Line Clip*
- *For Rear Shock Bracket*
  - *2-12mm x 65mm Bolts*
  - *2-12mm Flange Lock Nuts*
  - *2-5/16" x 3/4" Bolts*
  - *4-5/16" Flat Washers*
  - *2-5/16" Lock Nuts*
  - *2-Crush Sleeve*
  - *4-7/16" Flat Washers*
- *For Rear Sway Bar*
  - 4-10mm ID Sleeves
  - 4-10mm x 60mm Bolts
  - 2-10mm Lock Nuts
  - 2-10mm Flat Washers

- *Sway Bar Disconnect Bag:*
- *For Fr Sway Bar Disconnect:*
  - 4-1/4" x 3/4" Bolts
  - 4-1/4" Flat Washers
  - 2-3/8" x 1 1/4" Bolts
  - 2-3/8" Flat Washers
  - 2-Fr Disconnect Mounts
  - 2-Disconnect Pins
  - 2-Hitch pins
  - 2-Rod Ends
  - 2-1/2" Nuts
  - 2-1/2" Flat Washer
  - 2-1/2" Flange Lock Nut
  - 2-1/2" Jam Nut

1663Box4
- 2-Rear Lower Adj Arms (U)
- 2-Rear Upper Adj Arms (V)

66130Box:
- 2-Front Shocks (W)
- 2-Rear Shocks (X)

KIT CONTENTS



IMPORTANT PRE—INSTALLATION INSTRUCTIONS

Prior to beginning this installation it is always good to use a penetrating oil and spray all fasteners that will be removed. Typically the transfer case bolts and the pitman arm are difficult to remove without having done this step.

TOOLS NEEDED:

Prior to beginning installation please re-read the instructions and make sure you have all the tools needed to complete installation. Listed below are the minimum tools required.

- Spring Compressor
- Silicone spray
- Drill assortment
- Hammer
- Combination wrenches
- Torx key socket
- File
- Floor jacks
- Wheel chocks
- 1/2” drill motor
- 11/32” Drill bit
- 17/32” Drill bit
- 29/32” Drill bit
- Torque wrench
- 1/2 drive ratchet and sockets
- Allen wrenches
- Large “C” clamps and /or bench vise
- Heavy duty jack stands
- Safety glasses
- Anti-seize compound

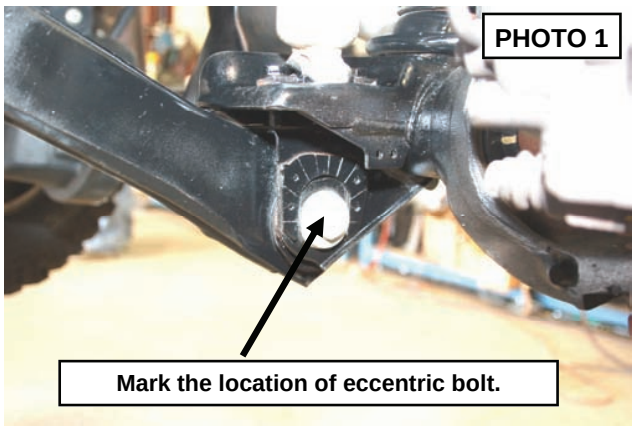
TORQUE SPECS:

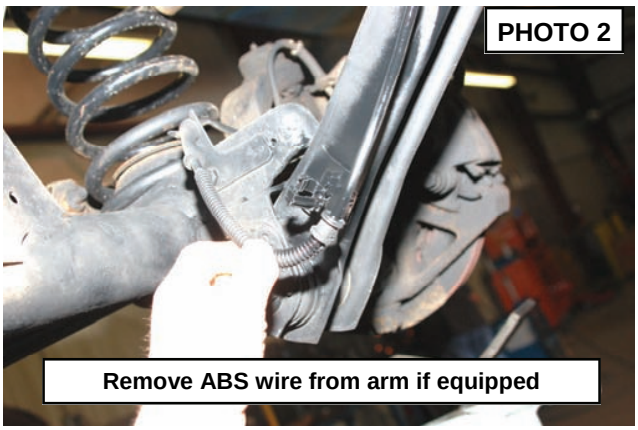
Listed below are generic torque specs that are to be used when no specific spec is listed in the instructions. Please note it is extremely important to tighten all fasteners to the proper specs.

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
1/2”	65 ft/lbs	90 ft/lbs
9/16”	95 ft/lbs	130 ft/lbs
5/8”	135 ft/lbs	175 ft/lbs
3/4”	185 ft/lbs	280 ft/lbs

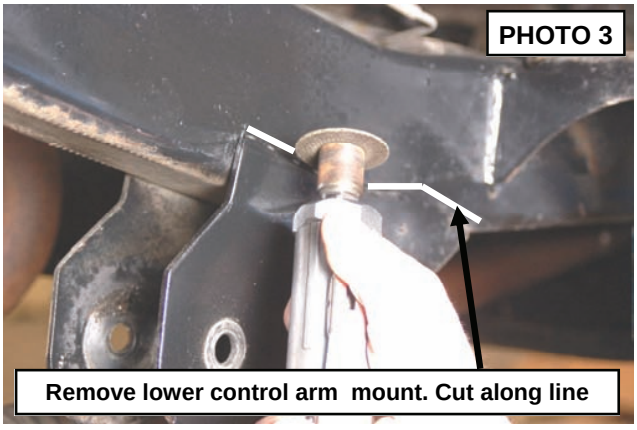
FRONT INSTALLATION

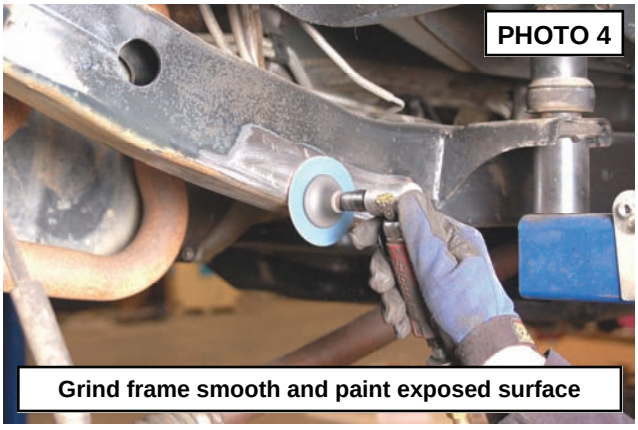
1. Place the vehicle on a level surface. The vehicle will need to be placed on jack stands front and rear to install the long arm kit.
2. Remove the front tires and wheels.
3. From inside the engine compartment, remove the upper stud nut, retainer and grommet from both of the front shocks using a 15mm socket.
4. Remove both of the front sway bar end links using a 15mm wrench for the upper and a 18mm wrench for the lower. Retain lower link hardware for re-use.
5. Place a floor jack underneath the axle for support and complete the removal of the front shock absorbers from the lower mount using a 13mm Socket. Retain the stock lower hardware for reuse.
6. Do not reuse the original factory shocks.
7. If your axle is equipped, mark the position of the lower control arm cam bolt and axle brackets for installation reference. **See Photo 1**. If equipped with ABS brakes, remove the sensor wires and clamps for the inside of the lower arms and save clamps for re-use. **See Photo 2.**



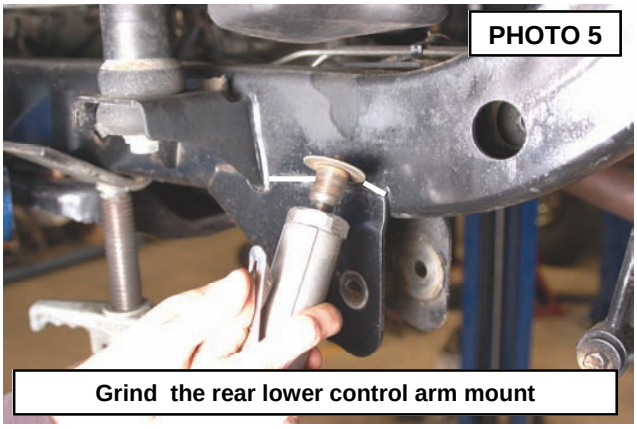


8. Remove the track rod from the axle and from the frame using a 15mm (axle) & 18mm wrench (frame). Retain the axle hardware for reuse.
9. Remove the coil spring clip located on the bottom coil seat on the driver side of the vehicle using a 13mm socket. Retain the clip and hardware for reuse.
10. Remove the brake caliper from the axle using a 13mm socket and secure out of harms way.
11. Lower the axle and remove the coil spring. A coil spring or strut compressor may be needed to remove the stock coil spring.
12. Support the front axle and remove the stock lower control arm by removing the nut, cam, and cam bolt (if equipped) from the axle bracket and then removing the nut and bolt from the frame bracket doing one side at a time using a 21mm socket & wrench. Retain the stock hardware.
13. Remove the upper arm from the mount using a 15mm wrench. Do not retain stock hardware.
14. Cut the stock lower control arm mounts from the frame as shown in **Photo 3** by cutting the weld that secures the bracket to the frame using a cutting wheel or similar cutting tool. Take care not to cut in to the frame rail.
15. After the bracket is removed, grind the surface smooth as shown in **Photo 4** and paint the area to prevent rusting

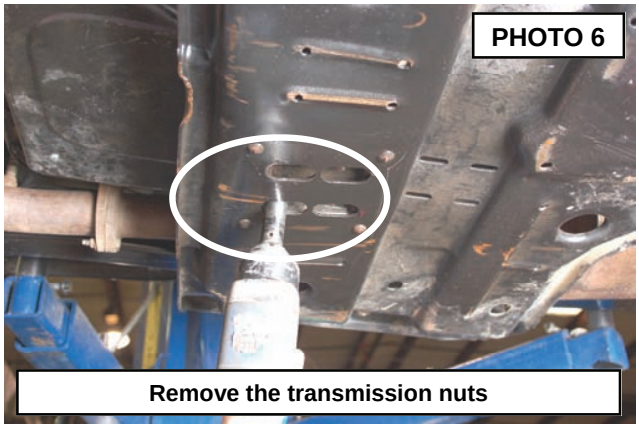




16. On the rear of the vehicle, remove the stock shocks from the vehicle using a 13mm socket on the upper and a 18mm socket / wrench on the lower mount. Retain hardware for reuse.
17. Remove the rear track rod from the axle using a T55 Torx bit and a 15mm & 18mm wrench on the frame. Retain the hardware for reuse.
18. Lower the axle and remove the coil springs. Remove the rear sway bar links using a 15mm socket / wrench. Retain the upper hardware for reuse
19. Support the rear axle. Remove the brake line from the upper control arms using a 13mm wrench. Remove the lower control arms using a 21mm wrench & socket. Retain the factory axle hardware.
20. Remove the upper control arms from the rear axle using a 15mm socket / wrench. Retain axle hardware for reuse.
21. Cut the stock rear lower control arm mounts from the frame as shown in **Photo 5** by cutting the welds that secures the bracket to the frame using a cutting wheel or similar cutting tool. Take care not to cut in to the frame rail. Paint the exposed surface to prevent rusting.
22. Remove the transmission nuts as shown in **Photo 6** with a 13mm socket to allow the skid plate to be removed. Retain the factory hardware. **On Rubicon models, remove the compressor bracket from the skid plate using a 13mm wrench. Retain the hardware for reuse. Removal of the compressor from the vehicle is recommended to ease in installation.**



Grind the rear lower control arm mount



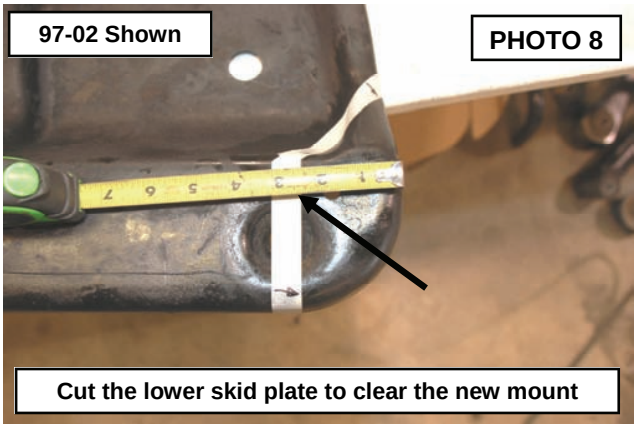
Remove the transmission nuts

23. Support the factory skid plate and remove the 6 bolts (3each side) that secure it to the frame using a 3/4" socket. Retain the factory hardware. **See Photo 7**. If equipped with a forward skid plate (present on most auto transmission models) remove at this time using a 13mm & 3/4" wrench. This skid plate will not be reused**.** Lower the main skid plate and remove for trimming. **Make sure stock lines are not pulled or overextended.**
24. **On 97-02 models** , measure back 2 3/8" on the <u>drivers side only</u> rear corner of the skid plate and mark with tape. **See Photo 8**. Cut using a reciprocating saw. This done to allow clearance for the new lower control arm mount. Grind the edges smooth. **On 03-06 models** measure back 2 3/4" from hole edge as shown on both sides of the skid plate and 6 1/2 from the sides and cut using a reciprocating saw. **See Photo 9.**

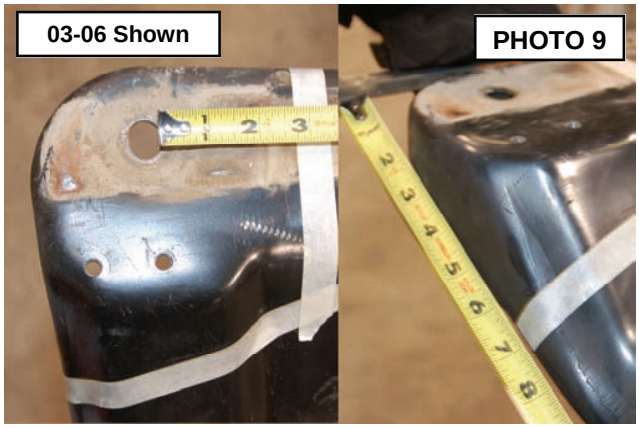


Remove the skid plate from the vehicle

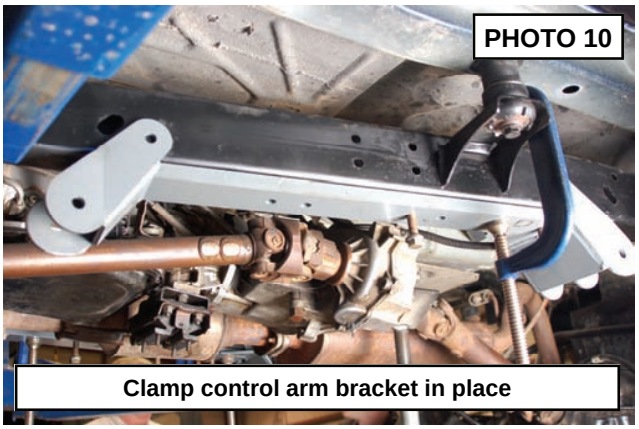
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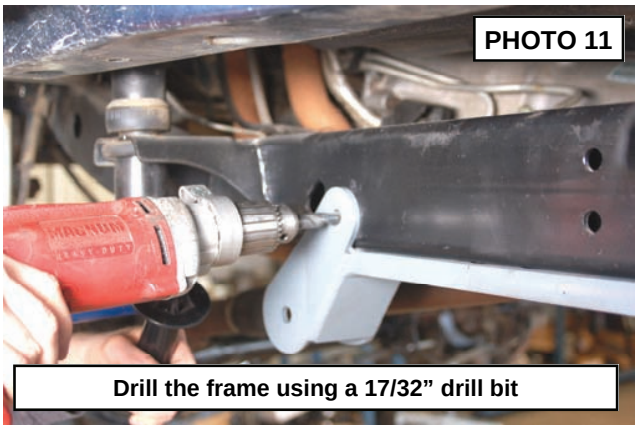
Cut the lower skid plate to clear the new mount



25. Align the holes in the frame with the new control arm bracket and install the factory skid plate bolts. Clamp in place using a large c-clamp. **See Photo 10.**
26. Using the new bracket as a guide, drill using a 17/32" drill bit through the inner and outer frame rail. **See Photo 11.** NOTE: The drill must be kept level for the frame holes to align with the new bracket. **Note: Use caution when drilling the frame rail to avoid any lines on the inside of the frame rail, including fuel lines and brake lines.**

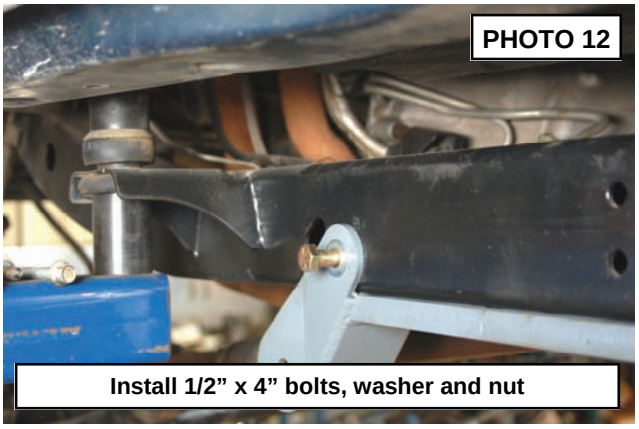


Clamp control arm bracket in place

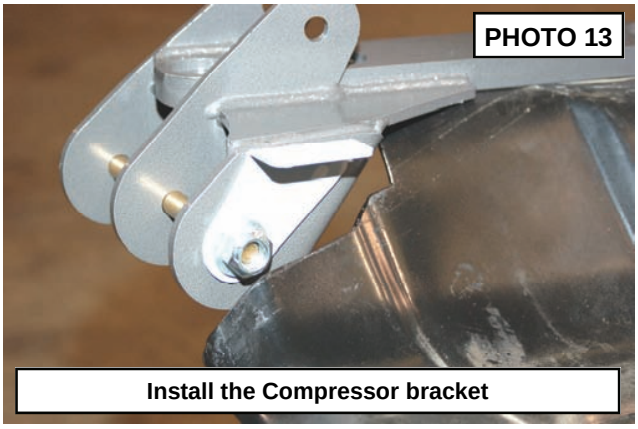


Drill the frame using a 17/32" drill bit

27. Install the supplied 1/2" x 4" bolts, washers and nuts as shown in **Photo 12** through the frame rail and tighten using a 3/4"wrench. Repeat steps 29-31 for the opposite side.
28. On Rubicon Models, the compressor bracket will be installed on the rear lower control arm bolt as shown in **Photo 13**. Temporarily insert 9/16" x 7" bolt at this time and continue to next step.

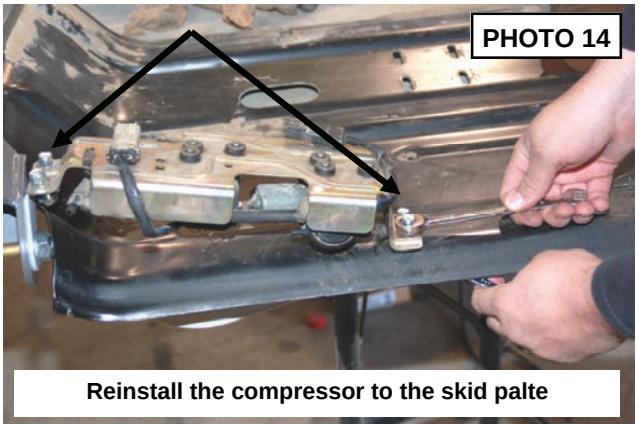


Install 1/2" x 4" bolts, washer and nut



Install the Compressor bracket

29. Using the stock compressor bracket as a guide, align the hole in the frame mount bracket and drill two holes using 11/32" drill bit and secure to the skid plate using the supplied 5/16" x 1" bolts, washer and nuts. The compressor will be secured to the new bracket with the supplied 5/16" x 1" bolts, washer and nuts. **See Photo 14.**
30. Reinstall the skid plate with the supplied 1/2" x 4 1/2" for 97-02 Models and 12mm x 65mm bolts & washers for 03 and up models. Tighten the 1/2" bolts using a 3/4" socket and the 12mm using a 19mm socket **See Photo 15.**

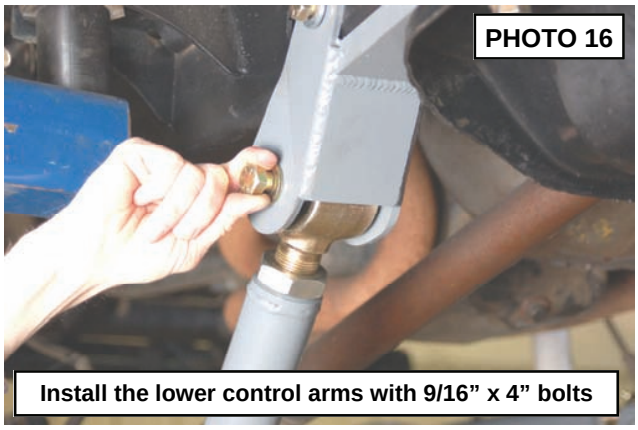


Reinstall the compressor to the skid palte



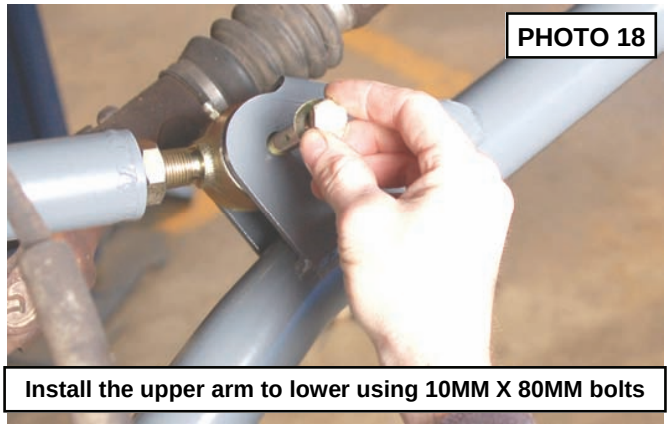
Install Skid Plate with supplied Bolts

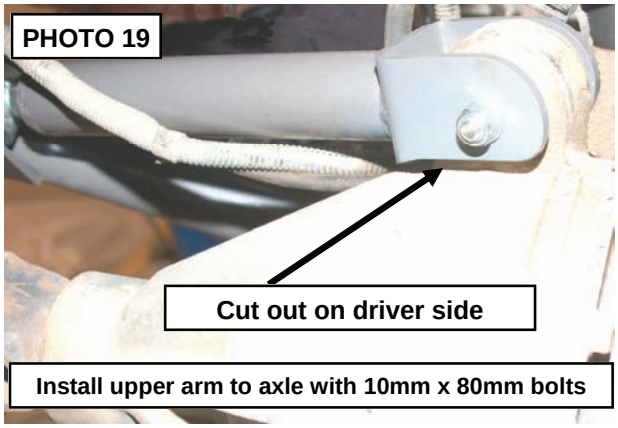
31. Adjust the lower front arm to a length of **29 3/4”** from center of end to center of bushing. Tighten jam nut using an adjustable wrench.
32. Install the new front lower control arm in the new mount with the supplied 9/16” x 4” bolts, washers / nuts making sure the joint is centered. Do not tighten at this time. **See Photo 16.**
33. Install the lower control arm on the axle with the factory hardware. **See Photo 17.** Do not tighten at this time.



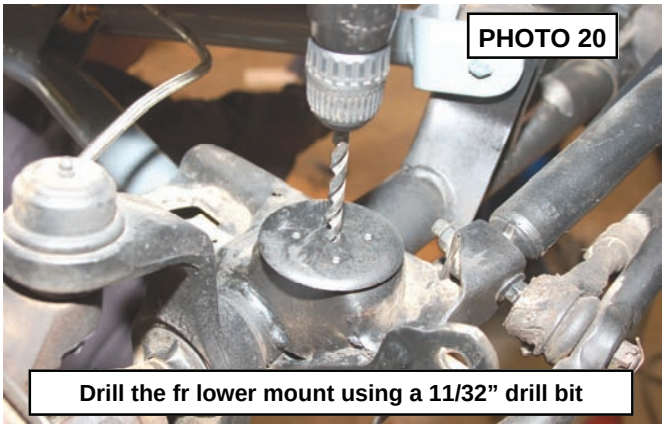


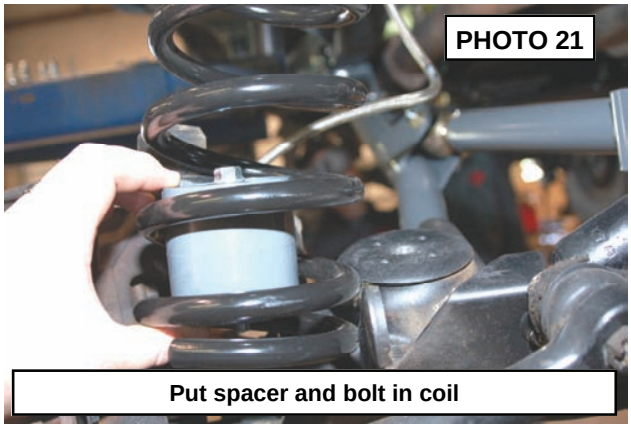
34. Assemble the front upper control arm and adjust to a length of **15 1/4”** from center of hole to center of bushing. Install on the new lower control arm with the supplied 10mm x 80mm bolt, washers / nuts. **See Photo 18.** Do not tighten at this time. Tighten jam nut using an adjustable wrench.
35. Install the new upper arm to the axle using the supplied 10mm x 80mm bolt, washers & nuts. Do not tighten at this time. **See Photo 19. If installing on a vehicle equipped with a Dana 44 front axle, be sure to install the arm on the drivers side with the cut out over the differential to allow clearance. See Photo 19.**





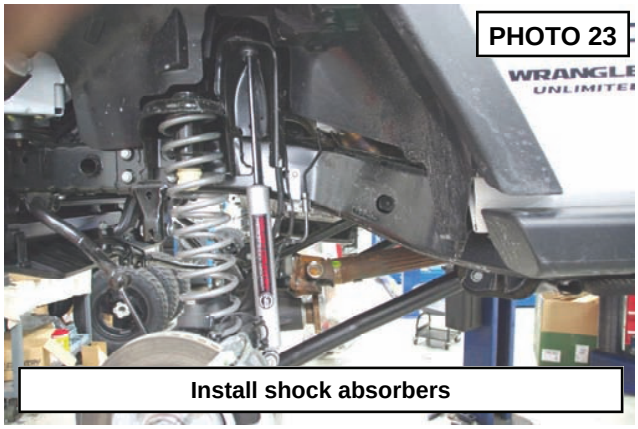
36. Drill the lower coil mount as shown in **Photo 20**using a 11/32 drill bit.
37. Slide the bump stop extension in the new coil as shown in **Photo 21** with the supplied 3/8” x 3 1/2” self taping bolt and install the coil spring in the factory location, making sure the coil is fully seated in the lower mount.



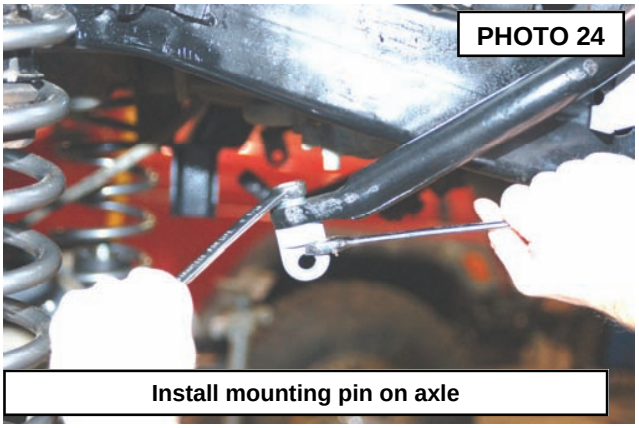


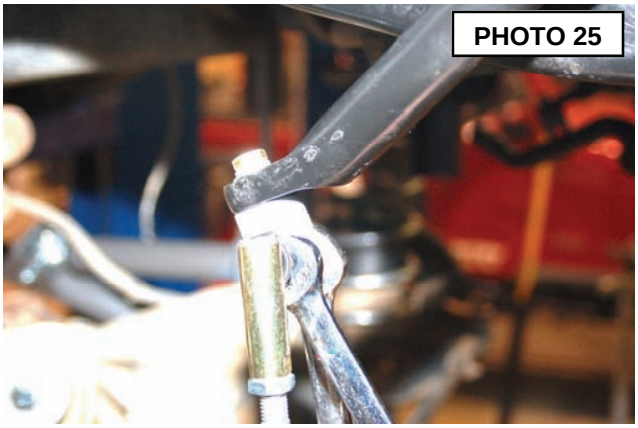
38. Tighten the bump stop extension bolt with a 9/16 wrench. Do not over torque the bolt. **See Photo 22.**
39. Remove the cotter pin and nut from the drag link at the pitman arm. Retain the nut to be reused. Separate the drag link ball stud from the pitman arm with a puller tool. Do not use a pickle fork.
40. Mark the position of the original pitman arm. Remove the nut and washer from the steering gear box. Align and install new pitman arm on the steering gear shaft. Install the washer and nut. Tighten to 185 ft. lbs.
41. Locate the front shock absorber and install in the factory lower mounts with the factory hardware—these shocks are designed to have piston mounted up. **See Photo 23**. Install the new upper stud bushings and tighten the upper mounting point using a 9/16" wrench, slightly bulging the bushing. Do not over tighten stud bushing. Tighten the bar pin on the bottom of the shock with the stock hardware using a 12mm wrench.


PHOTO 22
Install self tapping bolt in drilled hole


PHOTO 23
Install shock absorbers

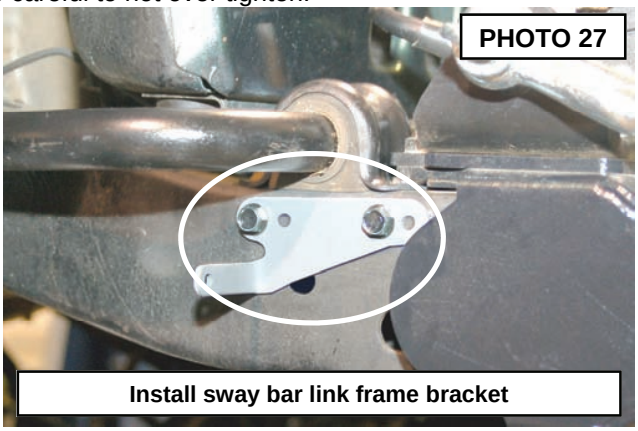
42. Install the upper sway bar mount on the top of front sway bar where the stock link was secured, using the supplied 3/8" x 1.25" bolt, lock washer, and washer**.** Tighten using a 9/16" wrench making sure the mount is straight. Note that washer will conform to sway bar surface and be pulled in. **See Photo 24.**
43. Assemble the sway bar link with the link body, the jam nut and rod end Adjust the sway bar to a length of 11 1/4" from top to bottom. Tighten the jam nut against the rod end using a 5/8" & 3/4"wrench.
44. Install the link on the upper sway bar mount with the supplied 1/2" flange lock nut as shown in **Photo 25**. Tighten using a 5/8" & 3/4" wrench.


PHOTO 24
Install mounting pin on axle

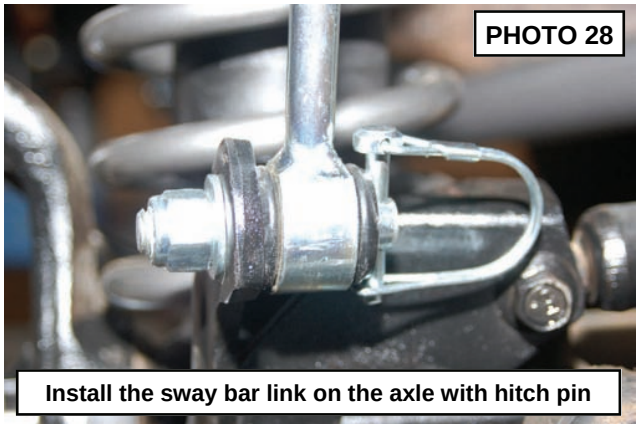

PHOTO 25

45. Install the supplied pin on the axle as shown in **Photo 26**. Tighten using a 3/4" wrench.
46. Remove the bolts securing the plastic shroud to the frame and install the driver and passenger side frame mount brackets in the holes shown for the 4" disconnect kit using the factory holes and the supplied 1/4" x 3/4" bolts & washers. **See Photo 4.** Tighten using a 7/16" wrench, be careful to not over tighten.

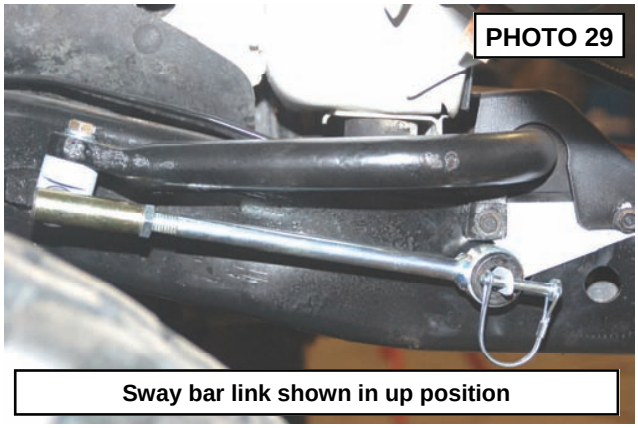

PHOTO 26
Install mounting pin on axle


PHOTO 27
Install sway bar link frame bracket

47. Swing the sway bar link down and install on the lower axle mounting pin. Install the disconnect pin. **See Photo 28. It may be necessary to install the link on the axle after the vehicle is on the ground.**
48. When disconnecting the sway bar, remove the sway bar link and place it on the frame mount as shown in **Photo 29** to keep the sway bar link from interfering with front end components.

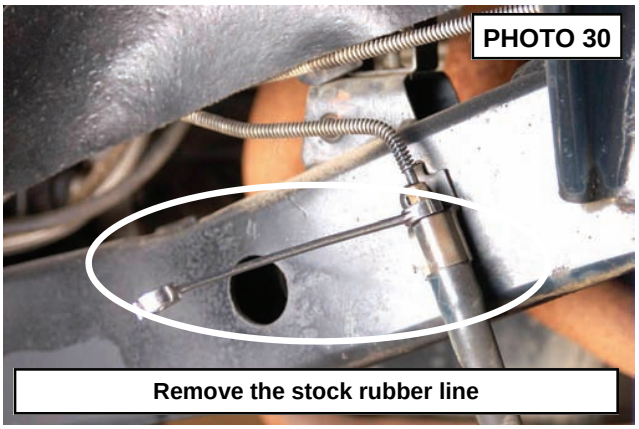


Install the sway bar link on the axle with hitch pin

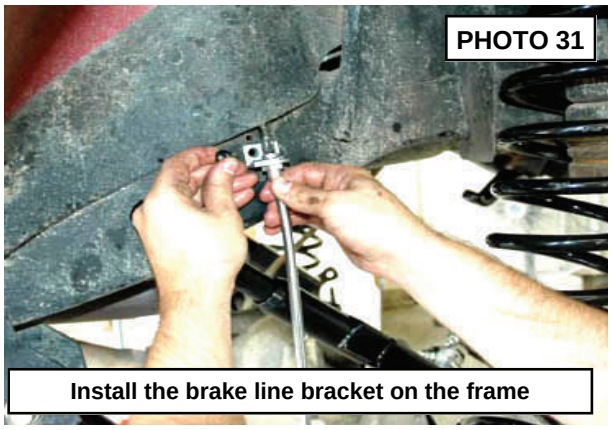


Sway bar link shown in up position

49. Remove the stock front brake line from the metal line at the frame rail using a 3/8" wrench. Remove the brake line from the caliper using a 14mm socket. Retain stock hardware to reinstall the brake line. A catch pan is recommended to avoid a fluid mess. **See Photo 30.**
50. Remove the stock line from the frame rail using a T30 Torx head bit. Retain the bolt for reuse.
51. Install the new brake line bracket on the frame rail as shown in **See Photo 31** with the stock hardware using a T30 Torx head bit. Install the new Rough Country brake line on the stock metal line and install supplied brake line clip. Install on the caliper with stock caliper bolt and brake line washers using a 14mm socket. Install the caliper on the axle and tighten using a 13mm socket.

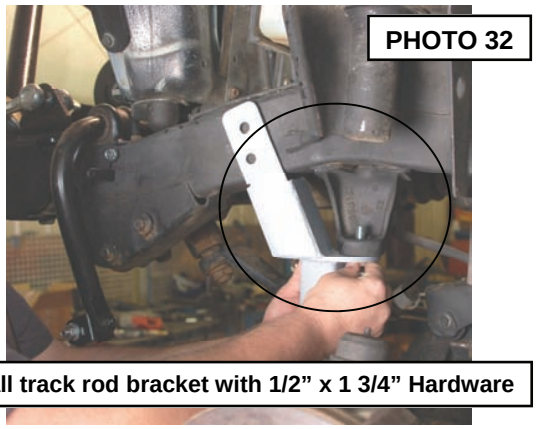


Remove the stock rubber line

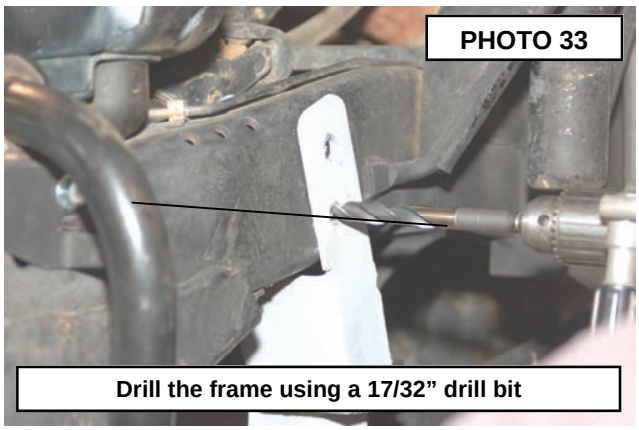


Install the brake line bracket on the frame

52. Install the track rod bracket as shown with the 1/2" x 1 3/4", washer & nut in the stock track rod mount. Make sure the bracket is flat against the frame. Snug but do not fully tighten at this time. **Photo 32.**
53. Using the bracket as a guide, mark and drill the two side holes through the inner and outer frame as shown in **Photo 33** using a 17/32" drill bit. **Make sure to keep the drill level when drilling.**

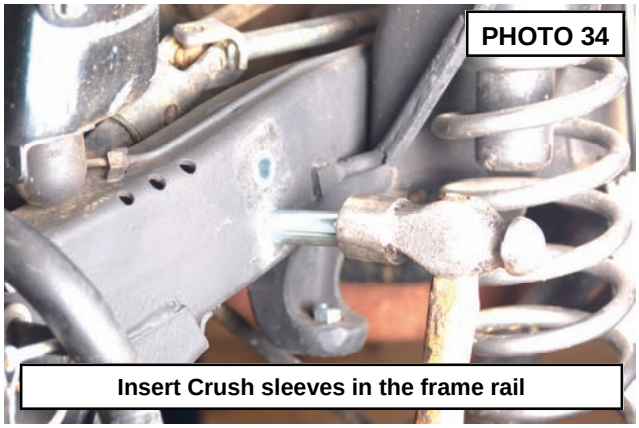


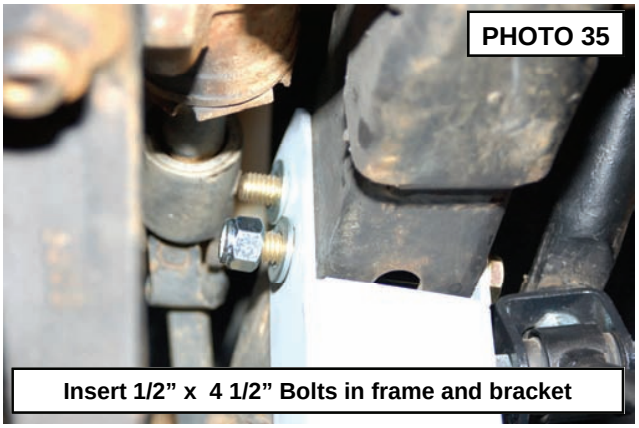
Install track rod bracket with 1/2" x 1 3/4" Hardware



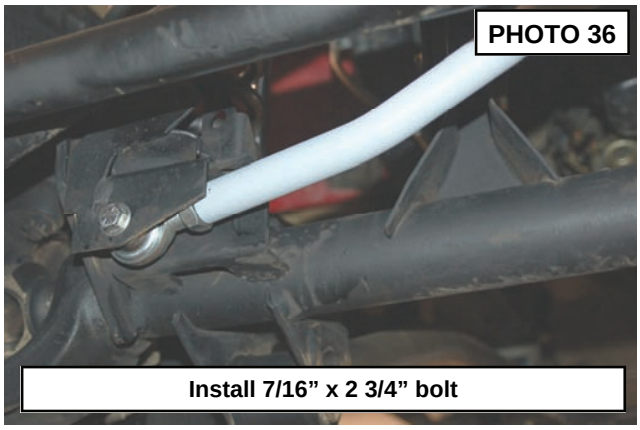
Drill the frame using a 17/32" drill bit

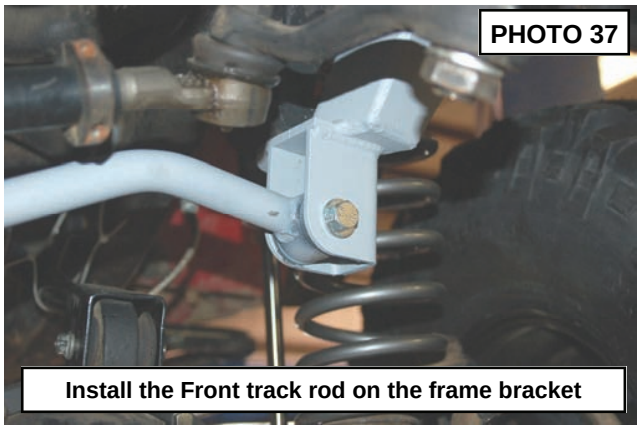
54. Remove the bracket and enlarge the outside holes only using a 29/32” bit.
55. Install the supplied crush sleeves as shown in **Photo 34** and reinstall the bracket.
56. Reinstall the track rod bracket and secure to the frame using the supplied 1/2” x 4 1/2” bolts, washers and nuts & 1/2” x 1 3/4” bolt & nut in the stock location. Tighten the 1/2” x 1 3/4” bolt to 65ft/lbs with a 3/4”socket and the 1/2” x 4 1/2’ bolts using a 3/4” wrench /socket to 80ft/lbs. **See Photo 35.**


PHOTO 34
Insert Crush sleeves in the frame rail


PHOTO 35
Insert 1/2” x 4 1/2” Bolts in frame and bracket

57. Install the supplied bushings and sleeves in the track rod body and install the heim joint, spacers and jam nut. Adjust to a length of **33 1/2”** from end to end for a starting point.
58. Install in the factory axle mount with the supplied 7/16” x 2 3/4” bolt, washers & nut. Do not tighten at this time. **See Photo 36. The hardware will be tightened with the weight of the vehicle on the suspension.**
59. Install the track rod in the factory mount on the axle with the supplied 7/16” x 2 3/4” bolt, washers & nut. Do not tighten at this time. **See Photo 37. It is important to center the vehicle over the axle to ensure proper tracking and alignment. After the vehicle is on the ground, adjust as necessary to center the body over the axle.**


PHOTO 36
Install 7/16” x 2 3/4” bolt


PHOTO 37
Install the Front track rod on the frame bracket

60. Moving to the rear of the Jeep. **TJ Jeeps:** Adjust the lower control arms to **27 3/4”** and the upper control arms to **29”** long center of end to center of bushing. **On LJ Jeeps:** Adjust the lower arms to 38 3/4” and adjust the upper control arms to 39” from center of end to center of bushing.
61. Install the new rear lower & upper control arm in the new mount with the supplied 9/16” x 7” bolts. Washers / nuts making sure the lower arm joint is centered in the mount. Do not tighten at this time. **See Photo 38.**
62. *If installing on a Rubicon Model*, reinstall the compressor bracket on the bolt as shown in Step 33.

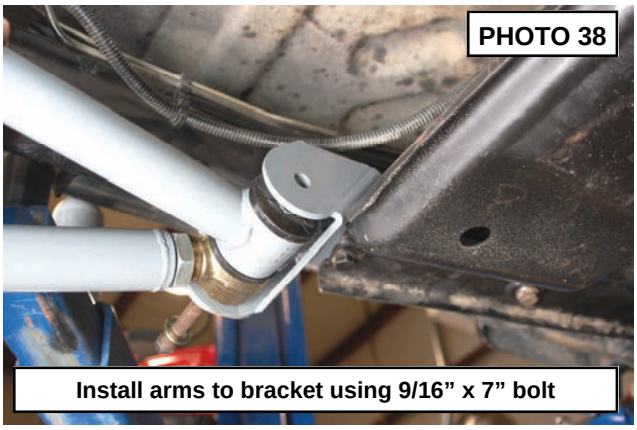
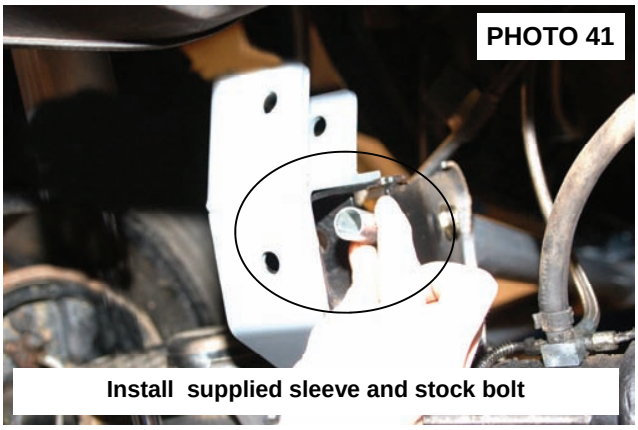

PHOTO 38
Install arms to bracket using 9/16” x 7” bolt

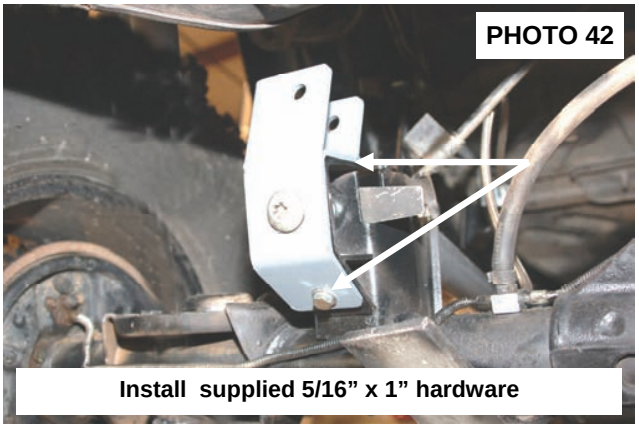

PHOTO 39
Install the arm to axle with stock hardware

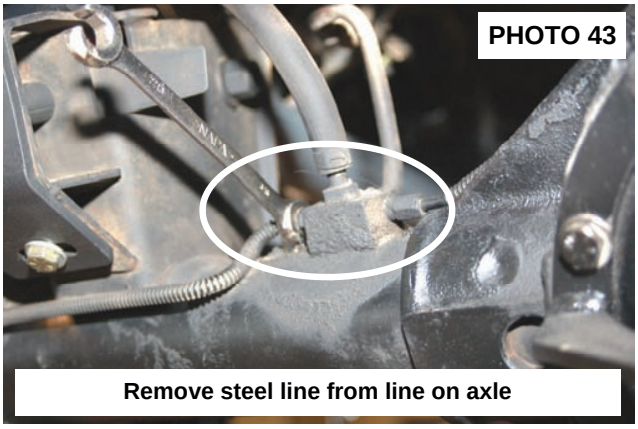
63. Install the upper arm on the axle using the stock hardware. Do not tighten at this time. **See Photo 40.**
64. Locate the new track rod bracket and install on the rear axle mount as shown in **Photo 41** with the supplied crush sleeve using the stock bolt and flag nut. Tighten using a T55 torque head bit.



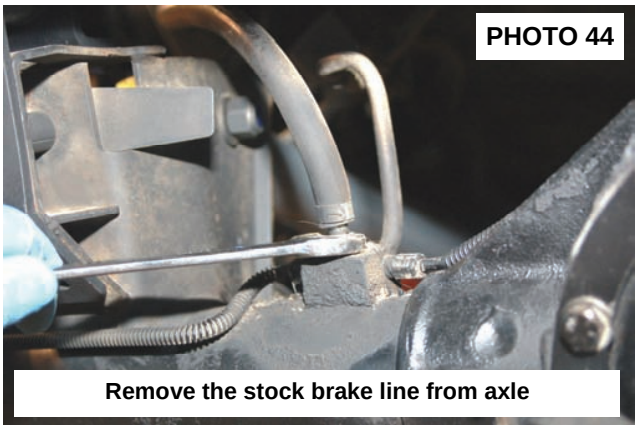


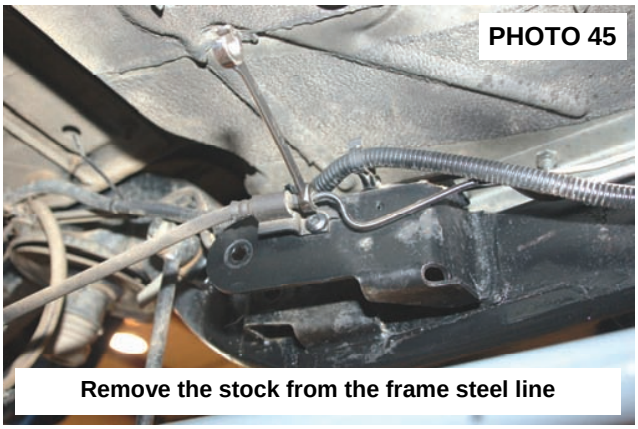
65. Install the supplied 5/16” x 1” bolts, washers & nuts in the bracket as shown in **Photo 42.** Tighten using a 13mm wrench.
66. Install the track rod on the frame mount on the passenger side using the factory hardware. Do not tighten at this time. The track rod will be installed on the axle and tightened on both ends after the vehicle has been lowered to the ground and is supporting it own weight. This is done to ensure the axle is centered under the body.



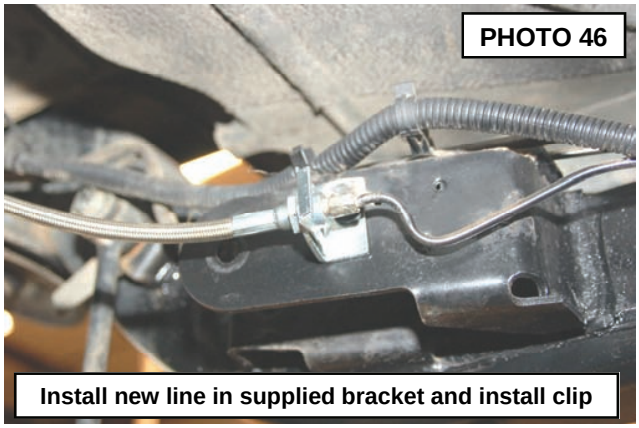


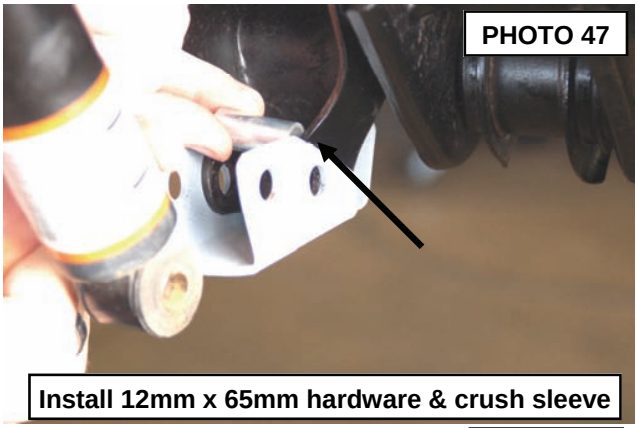
67. Separate the stock rubber line from the steel line at the axle using a 3/8” brake line wrench and remove the stock brake line from the axle using a 9/16” wrench. **See Photo 43 & 44.**
68. Separate the steel line from the rubber line on the frame as shown on **Photo 45** and remove the rubber line from the frame using a T30 torque head bit. Retain the factory hardware.





69. Install the supplied brake line bracket with the factory hardware on the frame. Install the brake line to the bracket on the frame and secure with the supplied clip. **See Photo 46.**
70. Install the brake line on the axle to the hard lines using a 3/8" brake line wench. Secure the new brake line to the axle with the stock hardware using a 9/16" wrench.
71. Install the new Rough Country coil springs making sure the rubber damper in positioned in the upper mount. It will be necessary to use a coil spring or strut compressor to install the new coil springs.
72. Install the lower shock bracket as shown in **Photo 47** with the supplied 12mm x 65mm bolts, flange locknuts with supplied crush sleeves. Do not tighten at this time.
73. Install the supplied 5/16" x 3/4" bolts, washers & nuts as shown in **Photo 48** in the shock bracket. Tighten the 5/16" bolts using a 13mm socket and wrench.

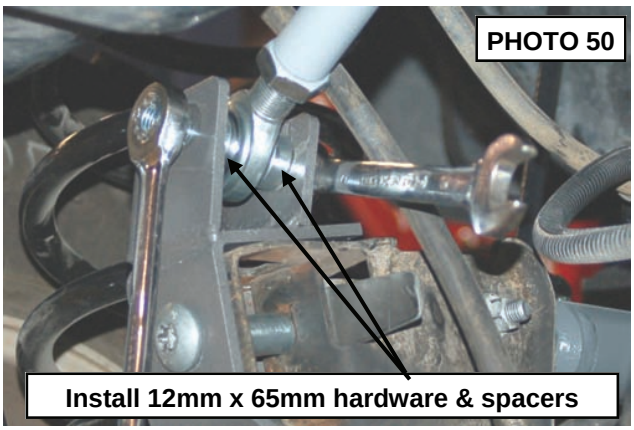






74. Install the rear Rough Country **2.2 Shock absorber Part #660576** on the upper mount and install the supplied flat washers as shown in **Photo 49** on the lower shock mounts with the factory hardware. Tighten bolts using a 15mm & 18mm wrench. (Stock shocks shown in picture). **RCX 2.2 Series shock absorbers are designed to be installed with the piston down and body up.**
75. Install the wheels / tires and tighten the lug nuts to the factory specifications using crossing pattern.
76. Remove the jack stands and lower the vehicle to the ground.
77. On the front lower control arms; align the reference marks on the adjustment cams and lower arm axle brackets and tighten to 85 ft. lbs using a 21 socket & wrench. Tighten the upper using a 15mm socket & wrench. Repeat for the rear of the vehicle. Tighten front track rod in mounts using a 15mm socket / wrench.
78. On the rear, make sure the body is centered over the axle and adjust the track rod to 33 1/4" or adjust as necessary to center the vehicle over the axle and install in the new track rod bracket with the supplied 12mm x 65mm bolt, washer, flange nut and spacers. Tighten to 55 ft/lbs using a 18mm & 19mm wrench and snug the jam nut using a 1 1/2" wrench. **See Photo 50. It is important to center the vehicle over the axle to ensure proper tracking and alignment.**





79. Assemble the new sway bar links with the supplied 10mm sleeves.
80. Install the new sway bar links on the sway bar with the supplied 10mm x 60mm bolts, washers and lock nuts. **See Photo 51.**
81. Install the sway bar link on the frame using the stock flag nuts and the supplied 10mm x 60mm bolts and washers. **See Photo 52.**

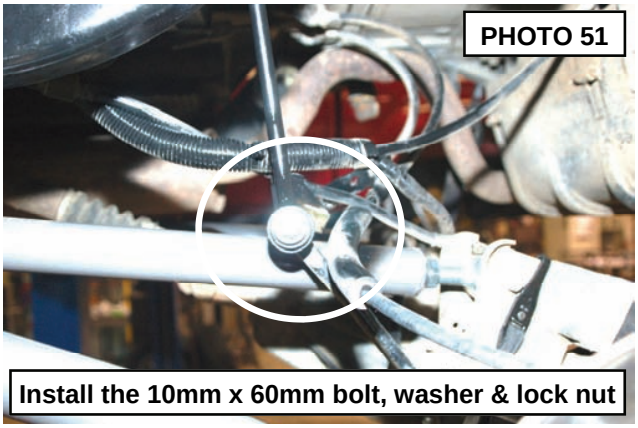


PHOTO 51

Install the 10mm x 60mm bolt, washer & lock nut

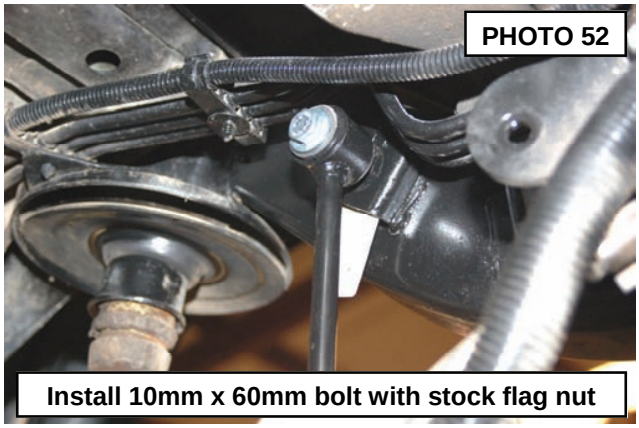


PHOTO 52

Install 10mm x 60mm bolt with stock flag nut

NOTES:

POST INSTALLATION

1. Rotate driveshaft and check for interference at differential yoke and u-joint. If necessary, lightly dress casting(s) and/or U-joint tabs in order to eliminate binding.
2. Bleed brake lines and test brakes before driving. Check for leaks.
3. Have a qualified alignment center realign front end to factory specs. As a general rule you set caster to the minimum of the factory spec and set toe-in to the maximum.
4. Install Warning to Driver decal on sun visor.
5. Adjust headlights to proper settings
6. Grease all control arms and periodically grease as required.
7. All components must be retightened after 500 miles, and every three thousand miles after installation.
8. The factory exhaust must be modified / rerouted to have adequate clearance on all fixed and moving components.
9. A CV type driveshaft and slip yoke is recommended for the 4" kit and a necessity for the 6" kit to avoid drive shaft vibration.

TROUBLESHOOTING TIPS

Problem: Driveline Vibrations
Possible Solution: Check all u-joints to insure that there is no wear on the existing hardware caps. Even a new vehicle can cause vibrations in the angle on the U-joint is changed after being run for even a short period of time.
Possible Solution: The transfer case drop brackets must be installed with the 4" lift, if you do not plan to run a slip yoke eliminator.

Problem: Your Jeep does not steer, or track correctly.
Possible Solution: The steering geometry is corrected when the pitman arm is installed. If the steering is short or offset after installing the lift with the pitman arm, the alignment shop should adjust the linkages on the front axle to line the steering geometry back.
Possible Solution: If you are experiencing bump steer or axle float after the alignment, you will need to check the track bar to ensure that the tie rod end is not worn or damaged. This will allow the axle to float from side to side.

Problem: You experience "High Speed Wobble" after hitting bump at 35-40mph.
Possible Solution: "Death wobble" is usually a combination of items and typically there is not one easy fix. We recommend you follow these steps when trying to identify source. Start by looking for any loose movement in the steering. Watch the tie-rod ends where they connect to the steering knuckle arms. Watch the drag link and the ends. Watch the track bar—it should remain tight without side to side movement when dry turning. Make sure your tires are balanced—we recommend they be "road force" balanced. Lack of proper caster angles may be the problem. Last but not least is the steering stabilizer. A new stabilizer will not fix the problem, but a worn out one will make the situations worse.

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.