Rough Country 736.20 Installation Instructions

736.20

Part number: 736.20

trailfortress.com/rough-country-4-5-inch-lift-kit-736-20

Scan for fitment, price and install help



1990-1995 TOYOTA 4-RUNNER KIT 5”KIT

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 product layout on the last page on these instructions. 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

As a general rule, the taller a vehicle is, the easier it will roll. 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 question exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

This suspension system was developed using a Maximum tire size of a 33X12.50 on 8” wheel with 3.75” back spacing. **Note** if wider tires are used, offset wheels will be required and/or trimming may be required.

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.

INSTALLING DEALER - 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.

Tools Needed:

22mm Wrench
21mm Wrecnch
12mm Wrench
19mm Wrench
17mm Wrench
24mm Wrench
15mm Wrench
13mm Wrench
14mm Wrench
19mm Wrench
1/2” Wrench
7/16” Wrench
3/4” Wrench
9/16” Wrench
Hammer
Floor jack
Jack stands
Pry bar
WD-40 or similar penetrating oil
Flat Head Screwdriver

Torque Specs:

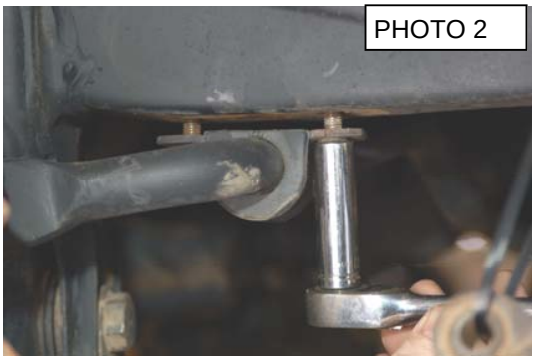
Size	Grade 5	Grade 8
5/16”	15 ft/lbs	20 ft/lbs
3/8”	30 ft/lbs	35 ft/lbs
7/16”	45 ft/lbs	60 ft/lbs
1/2”	65 ft/lbs	90 ft/lbs
9/16”	95 ft/lbs	130 ft/lbs
5/8”	135 ft/lbs	175 ft/lbs
3/4”	185 ft/lbs	280 ft/lbs

	Class 8.8	Class 10.9
6MM	5 ft/lbs	9 ft/lbs
8MM	18ft/lbs	23 ft/lbs
10MM	32ft/lbs	45ft/lbs
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs
16MM	130ft/lbs	165ft/lbs
18MM	170ft/lbs	240ft/lbs

FRONT INSTALLATION INSTRUCTIONS

1. Chock the rear tires and lift the front of the truck with a floor jack. Place jack stands under the frame rails . Lower the vehicle on the jack stands. Never work under an unsupported vehicle.
2. Remove the tires and wheels.
3. Remove the stock shock absorbers using a 21 & 22 wrench.
4. Remove the brake caliper bolts from the knuckle using a 17mm wrench and secure out of way. Do not let the brake caliper hang by the brake line. Doing so could cause damage to the brake line.
5. Remove sway bar from the frame rail using a 12mm wrench and from the factory lower control arm using a 14mm wrench. **See Photo 1 & 2**.Remove the front skid plate. (if equipped).


PHOTO 1


PHOTO 2

6. Remove the cotter pin on the tie rod and remove nut using a 19mm wrench. Strike the end of the knuckle to dislodge the tie rod. Retain the hardware for reuse
7. Remove the cotter pins from the upper and lower ball joint castle nuts and loosen the lower ball joint nuts using a 22mm wrench, but do not remove. Using a hammer, strike the knuckle as shown in **Photo 3 & 4** to dislodge the ball joint on the upper and lower ball joints.


PHOTO 3


PHOTO 4

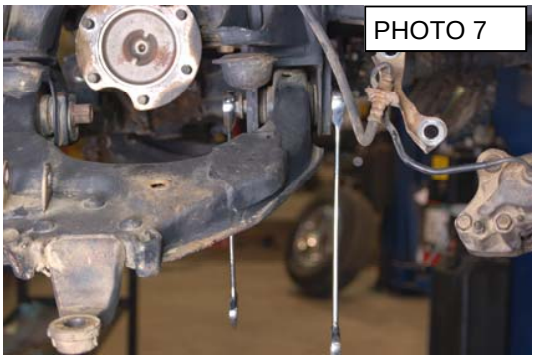
8. Using a 17mm wrench remove the 6 nuts that secure the front half shaft to the differential. **See Photo 5**.
9. Remove the tie rod mount from the knuckle by removing the two bolts as shown in **Photo 6**.Using a 19mm wrench.
10. Remove the axle/knuckle assembly from the vehicle.

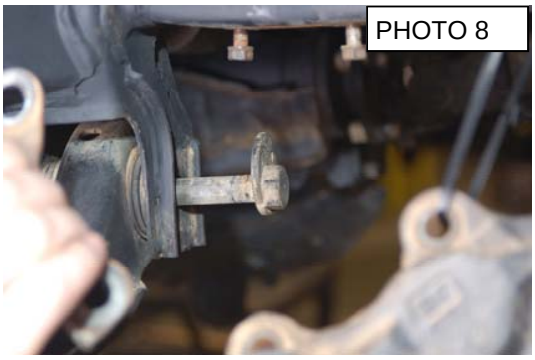

PHOTO 5


PHOTO 6

ROUGH COUNTRY
SUSPENSION SYSTEMS

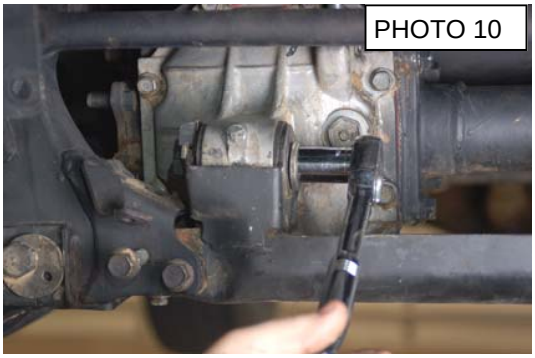
11. Loosen and remove lower control arms using a 22mm & 24mm wrench as shown in **Photo 7 & 8**. Retain the hardware for reuse. Remove the lower control arms from the vehicle.


PHOTO 7


PHOTO 8

12. On the front cross-member, remove the 4 bolts securing the cross-member to the frame using a 17mm wrench as shown in **Photo 9**. Retain hardware for reuse.
13. Remove the differential bolt as shown in **Photo 10** using a 15mm wrench. Retain hardware for reuse. Remove the factory cross-member and retain for reuse.


PHOTO 9


PHOTO 10

14. Remove driveshaft from the differential as shown in **Photo 11** using a 13mm wrench. Retain hardware for reuse. Secure driveshaft out of harms way.

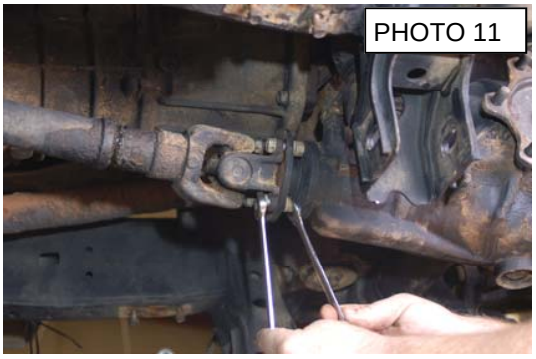
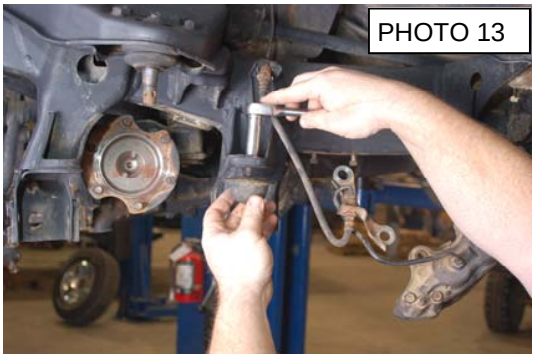
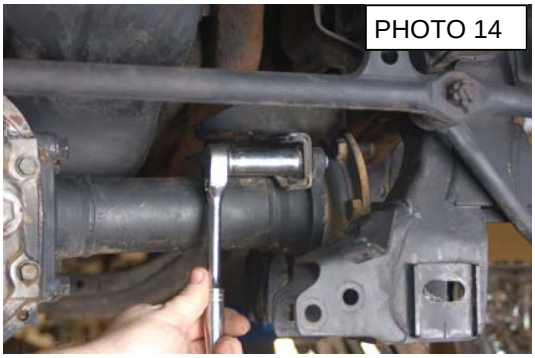

PHOTO 11

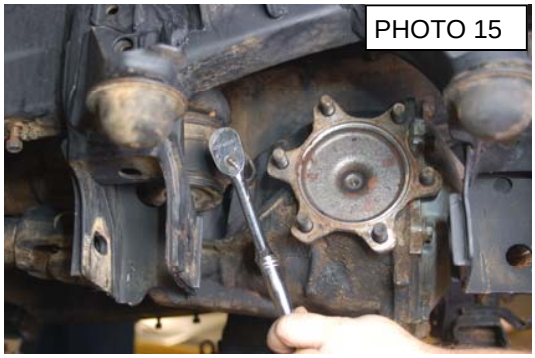

PHOTO 12

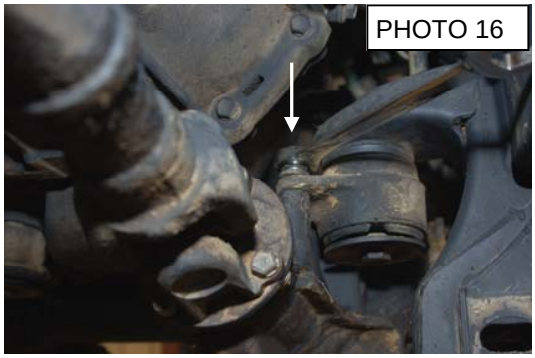
15. Remove the two factory bump-stops from the frame using a 14mm wrench as shown in **Photo 12 & 13.**
16. Support the differential with a floor jack and remove the hardware on the drivers side as shown in **Photo 14** using a 17mm wrench.
17. Retain the bump-stops / hardware for reuse.


PHOTO 13

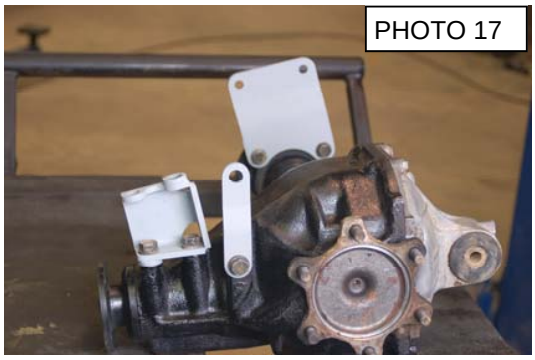

PHOTO 14

18. With the differential still supported, remove the passenger side hardware securing the differential to the frame as shown in **Photo 15 & 16** using a 17mm wrench. Retain hardware for reuse. Remove the differential from the vehicle.


PHOTO 15


PHOTO 16

19. Install the new Rough Country drop brackets on the differential as shown in **Photo17** using the stock hardware and a 17mm wrench. Do not fully tighten at this time.
20. Reinstall the differential in the vehicle and install the supplied 2- 7/16" x 1 1/4" bolts on the driver side. Install the 1-7/16" x 1 1/2" & 1-7/16 x 1 1/4" bolt in the passenger side. **See Photo 18**. The longer 1 1/2" bolt will install on the Passenger side upper bracket forward hole.


PHOTO 17

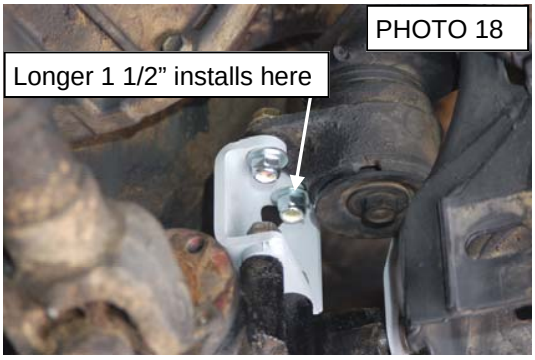
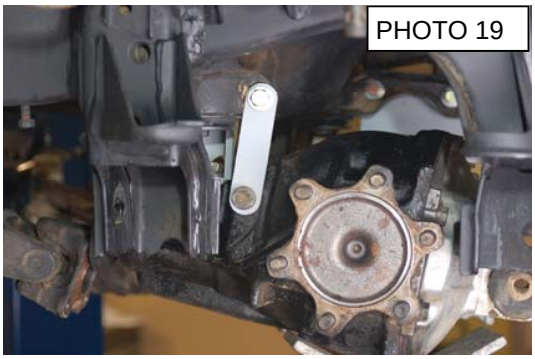
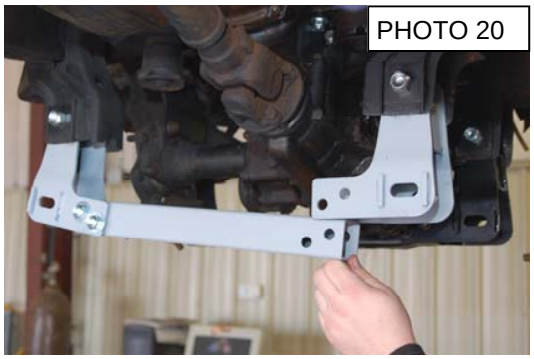
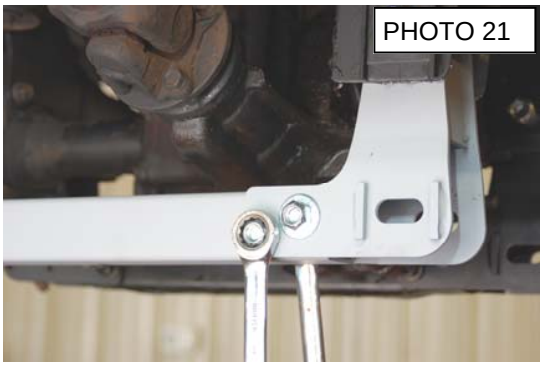


PHOTO 18

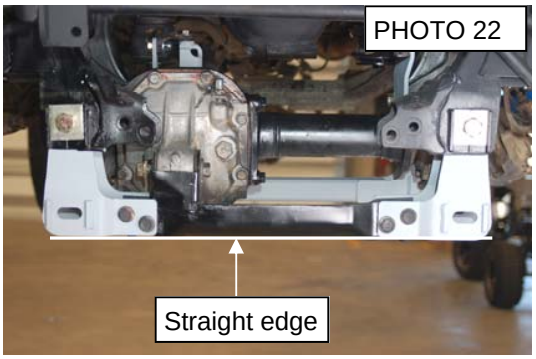
21. Install the 1– 7/16" x 1 1/4" bolt as shown in **Photo 19** on the passenger side bracket. Do not tighten at this time.
22. Install the new rear cross-member brackets as shown in **PHOTO 20** in the stock mounts with the supplied 5/8" x 4" hardware / square washers using a 24mm wrench.
23. Install the center tube in the drop down brackets using the supplied 14mm x 85mm bolts/washers & nuts. Tighten using a 19mm socket /wrench at this time. **See Photo 21.**

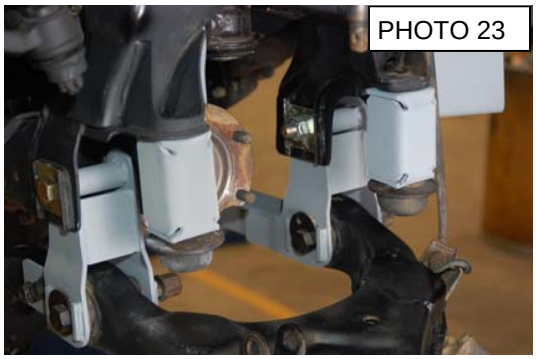

PHOTO 19


PHOTO 20

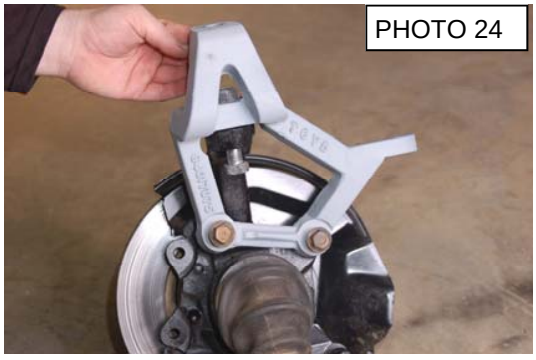

PHOTO 21

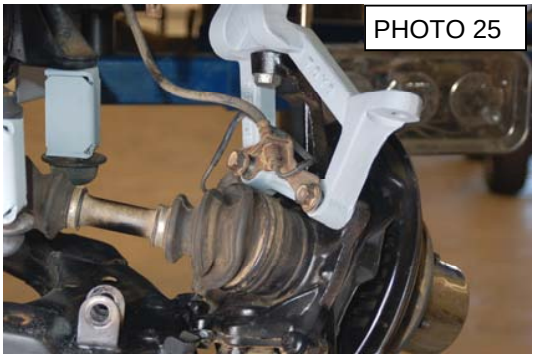
24. Install the factory cross-member section removed in step 13 with the factory hardware using a 17mm wrench. Also install the factory hardware on the differential mount using a 15mm wrench. **See Photo 22**.A straight edge must be used on the bottom of the two new brackets and the factory center bracket to assure the brackets are straight. Tighten the 4 factory center cross-member bolts. The cross-member must be straight to allow the vehicle to be re-aligned.
25. Install the factory lower control arms in the drop brackets with factory hardware and using a 22mm & 24mm wrench. Do not tighten at this time.
26. Install the factory bump-stops on the new bump-stop extension brackets as shown in **Photo 23** with the factory hardware and install on the stock location using the supplied 3/8" x 1" bolts / hardware and tighten using 14mm wrench.





27. Install the knuckle adapter on the stock knuckle as shown in **Photo 24** using the stock hardware. Do not tighten the two knuckle bolts at this time. The brake line bracket will be installed in a later step after the knuckle is installed on the truck. Insert the supplied 5/8" x 2.5" bolt through the stock upper ball joint location and tighten using a 24mm wrench.
28. Install the lower ball joint on knuckle assembly into the lower control arm as shown in **Photo 25** with the factory hardware and using a 22mm wrench. Make sure the cv shaft is on the studs on the differential. Tighten shaft to differential with factory nuts using a 17 wrench. Install the brake line bracket on the knuckle with stock hardware and using a 19mm wrench. Tighten knuckle hardware ,ball joint nut and install the cotter pin.





29. Install the factory sway bar on the new drop brackets as shown in **Photo 26** with the supplied 5/16" x 1" bolts, washers, & nuts. Install the factory sway bar links onto the lower control arm in the stock location with factory hardware. Tighten hardware



30. Install the tie rod into the knuckle with factory hardware and tighten using a 19mm wrench.
31. Install the knuckle on the upper ball joint with factory hardware and tighten using a 22mm wrench. Install cotter pin.
32. Tighten all cross-member hardware and differential hardware at this time. **Note:** Tighten the alignment bolts making sure the cams are center. An alignment will be needed as soon as installation is completed. **NOTE: For alignment, both sides inner and outer tie rod ends may need to be trimmed approximately 1/2" to allow tie rod end to be threaded into the alignment sleeve for proper adjustment. Please note this may not have to be performed on all vehicles.**
33. Remove the brake line clip securing the brake line to the frame. Using a hacksaw or cutoff wheel, carefully cut a groove in the stock bracket to allow the brake line to be removed. Install the new brake line extension brackets as shown in **Photo 27** with the supplied 3/8" x 1" bolts and hardware. The large washer will install on top of the stock mount. Carefully reroute the metal line taking caution not to damage the line.
34. Install the new Rough Country shock absorbers as shown in **Photo 28** in the stock location with stock hardware and tighten using a 22mm ,21mm wrench & 9/16 wrench for the upper nut.

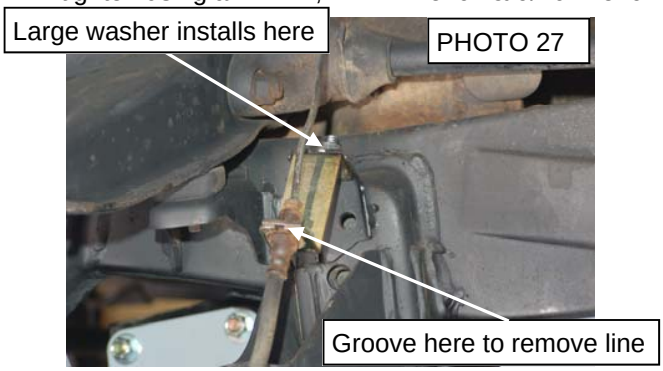


PHOTO 27



PHOTO 28

35. Install the tires/wheels.
36. Jack up the front of the vehicle and remove the jack stands. Lower the vehicle to the floor.
37. Double check all hardware to ensure all fasteners are tight.

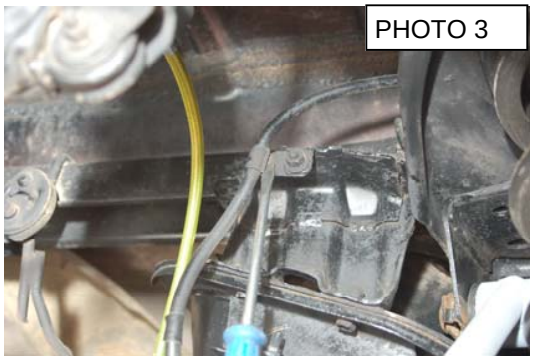
REAR INSTALLATION INSTRUCTIONS

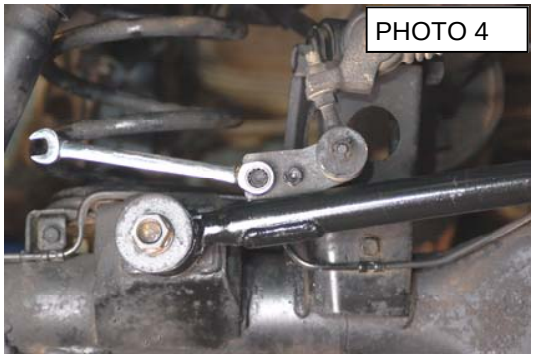
1. Chock the front wheels.
2. Jack up the rear of the vehicle and place the jack stands under the frame rails. Lower the vehicle on the jack stands. Remove the wheels / tires.
3. Using a 12mm wrench remove the stock sway bar link from the frame. Using a 17mm wrench, remove the nut from the lower sway bar link. Remove from the vehicle. **See Photo 1**.
4. Slightly jack up the rear of the vehicle to take the pressure off the shocks. Remove the shocks using a 14mm wrench on the top and a 17mm wrench on the bottom. Remove the shocks from the vehicle.
5. Remove the stock brake line from the frame using a 17mm & 10mm wrench. **See Photo 2**. Remove the brake line from the axle using a 17mm wrench.
6. Install the new brake line in the factory location using factory hardware. **Note:** The brake line is installed at this time to allow the axle to be lowered enough to remove the stock coil springs.


PHOTO 1

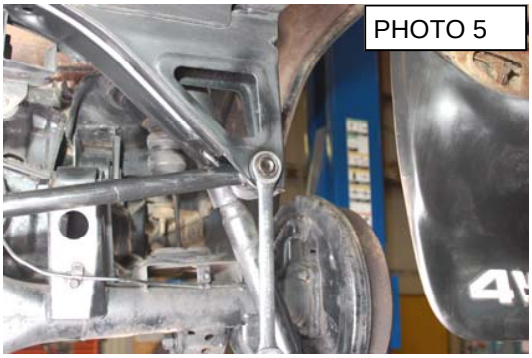

PHOTO 2

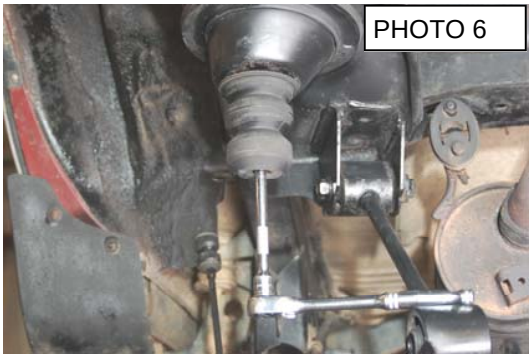
7. Using a flat head screwdriver, pry the bracket shown and slightly pull the line to allow slack in the speed sensor wire. **See Photo 3.**
8. Remove the two bolts that secure the brake proportioning valve to the track rod using a 12MM wrench. **See Photo 4.**


PHOTO 3

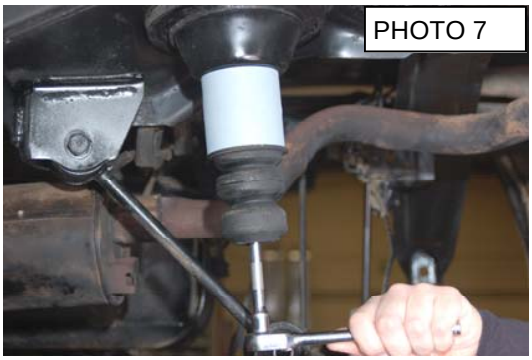

PHOTO 4

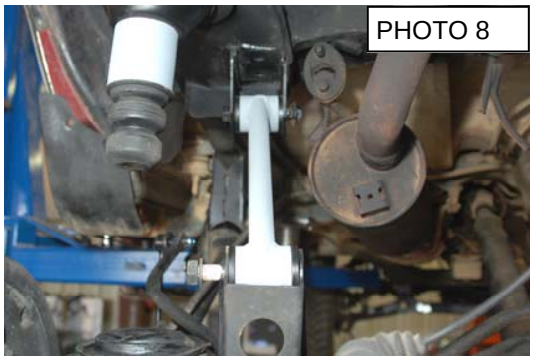
9. Remove the track bar from the axle and the frame using a 22mm wrench. **See Photo 5.**
10. Lower the axle and remove the coil springs
11. Remove the factory bump stops using a 12mm socket. **See Photo 6**.


PHOTO 5

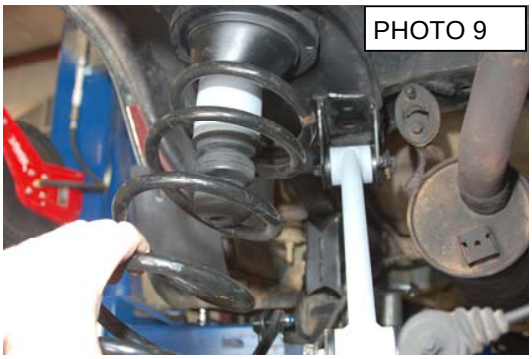

PHOTO 6

12. Install the new bump stop spacers & factory bump stops with supplied 8mm x 95mm bolts, washers., using a 13mm wrench. **See Photo 7**.
13. With the rear supported with a floor jack, loosen the control arms using a 22mm wrench. Replace with new control arms, making sure the offset goes to the top. **See Photo 8**. Do not tighten at this time.


PHOTO 7


PHOTO 8

14. With the axle lowered, install the new coil springs. **See Photo 9.** Jack up the axle to seat the coil springs.
15. Install the supplied shock absorbers part # 651896 in the factory mounts with supplied bushings using a 17mm wrench for the bottom and a 14mm wrench for the top.
16. Using the supplied template as a guide; mark and drill the 5/8" hole for the new track rod bracket. **See Photo 10.**


PHOTO 9

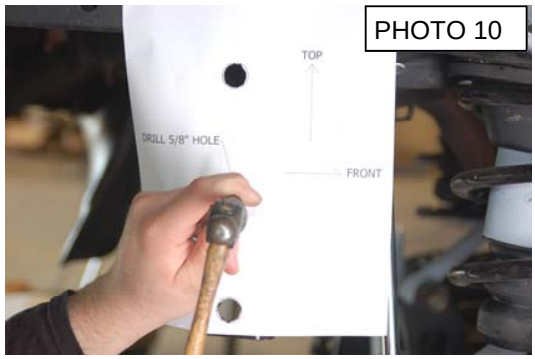
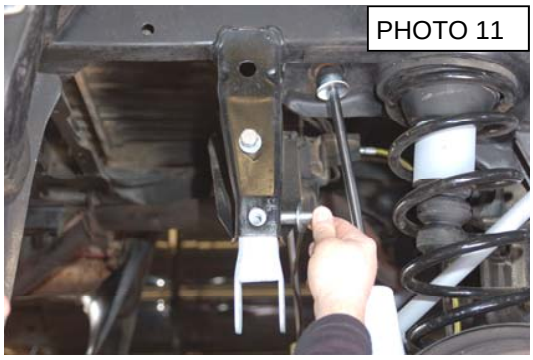
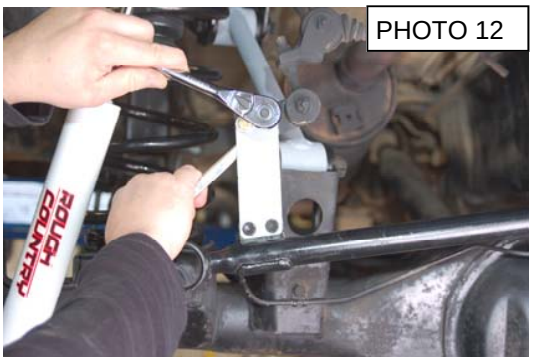


PHOTO 10

17. Install the new track rod bracket with the supplied 1/2" x 2 1/4" bolt, washers & nuts in hole that was drilled. Install the supplied 5/8" x 3 1/2" long bolt in the lower hole as shown in **Photo 11.** Do not tighten at this time**.** Be sure to install the 5/8" bolt from the front of the bracket to allow shock clearance.
18. Install the track rod in the new drop bracket with the stock hardware using a 22mm wrench.

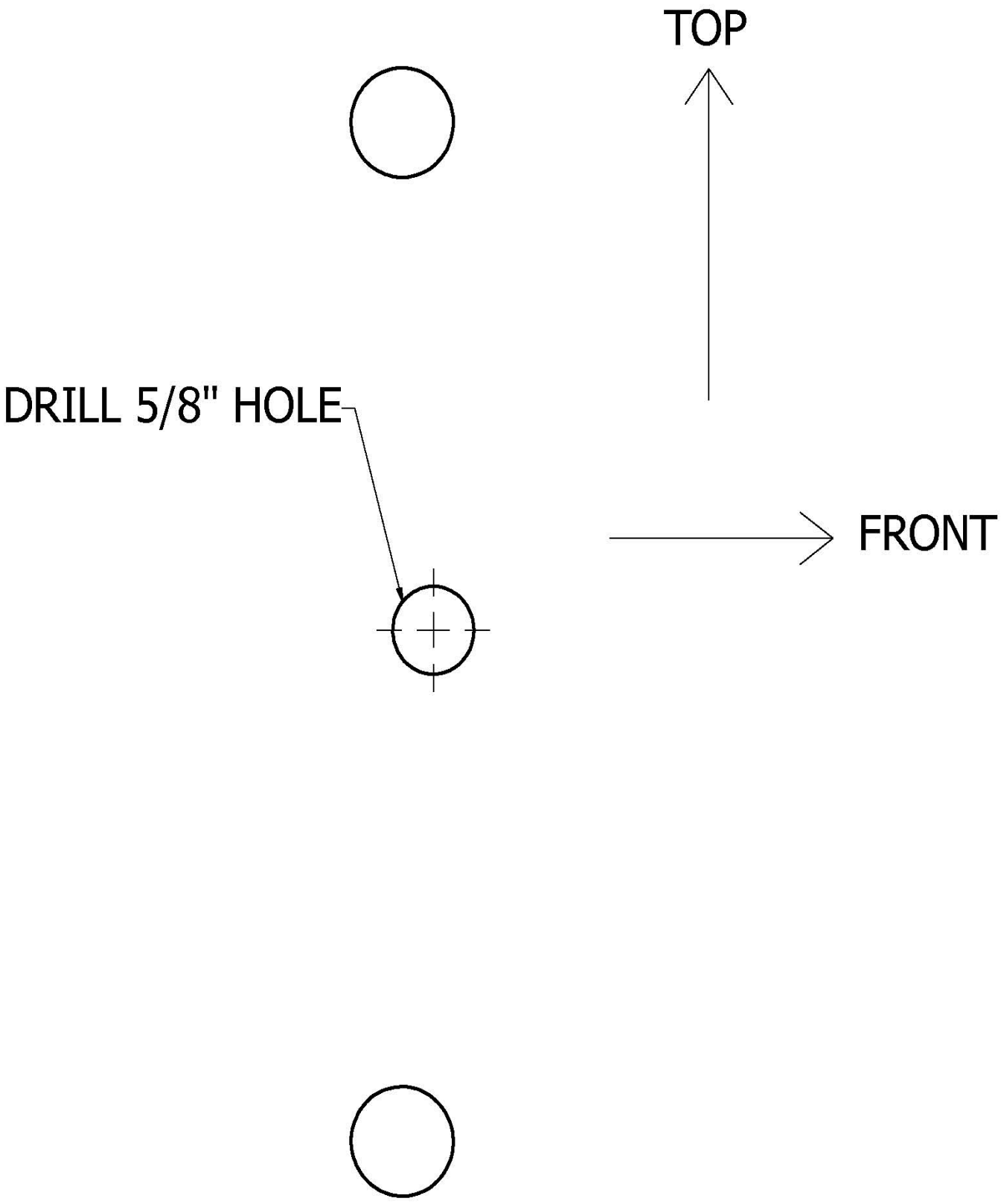

PHOTO 11


PHOTO 12

19. Install the bracket on the track rod with factory hardware using a 12mm wrench. Install the stock bracket on new bracket with the supplied 5/16" x 1" bolts using a 13mm wrench. **See Photo 12.**
20. Using a 13mm wrench, install the upper sway bar link on the sway bar. **See Photo 13.**
21. Insert the sleeves in 1770bag11 in the eyelet and install using the supplied 12mm x 65mm Bolts & lock nuts. Tighten using a 19mm socket. **See Photo 13.**
22. Install the tires/wheels on the vehicle and remove the jack stands. Lower vehicle to the ground and install the track rod on the axle mount. Tighten track bar hardware using a 22mm wrench.
23. Tighten the control arm bolts using a 22mm wrench.


PHOTO 13

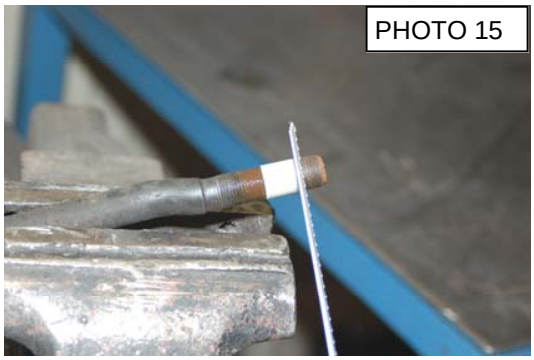
DRILLING TEMPLATE



STEERING MODIFICATION INSTRUCTIONS

For alignment, both sides inner and outer tie rod ends may need to be trimmed approximately 1/2” to allow tie rod end to be threaded into the alignment sleeve for proper adjustment. Please note this may not have to be performed on all vehicles. Mark end to be trimmed with tape and trim using a hack saw or reciprocating saw, making sure to trim evenly. **See Photo 14 & 15.**





MAINTENANCE INFORMATION

It is the ultimate buyers responsibility to have all bolts/nuts checked for tightness after the first 100 miles and then after every 1000 miles. Wheel alignment steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles.

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. Bump stops and extensions must be in place on all vehicles! Note: allowing suspension to over extend by neglecting to install or maintain stops and extensions may cause serious damage to OE and related components.
4. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
5. Readjust headlights to proper settings if applicable.
6. Check turning clearances. Making sure all parts allow for full turning radius.

FINAL RIDE HEIGHT ADJUSTMENT INSTRUCTIONS

Jack up the front of the vehicle and adjust the torsion bar adjuster bolt and set ride height by turning the bolt clockwise. Be sure to grease the adjuster bolt before adjusting. Lower the vehicle to the ground and manually bounce the vehicle. Check ride height. If more list is desired to Level the vehicle front to back repeat the process above until desired height is achieved.

PRODUCT LAYOUT—KIT CONTENT



Diff. Drop Fasteners
4—7/16” 1.25” Bolts
1—7/16” 1.5” Bolt
5—7/16” Lock Nuts
10-7/16” Washers

Cross Mbr Fasteners
4- 5/8” x 4” Bolts
4—5/8” Nuts
8-Square washers
4-14mm x 85mm bolts
4-14mm Lock nuts
8-Flat Washers

Knuckle Fasteners
2—5/8” 2 1/2”” Bolt
2—5/8” Nuts
2-Cotter pins

Sway Bar Fasteners
4 - 5/16” 1” Bolts
4—5/16” Nuts
8—5/16” Washer

Brake Line Fast.
2 - 3/8” 1” Bolts
2—3/8” Nut

Bump Stop Fast
4—3/8” 1” Bolt
4—3/8” Nuts
8—3/8” Washer

Rear Bumstop Fasteners
2-8mm x 95mm Bolts

Rear Brake Proportioning Valve Bracket
2-5/16” x 1” bolts
4-Washers
2-5/16” Nuts

Rr Trk Bar Brkt Hrdwre
1-5/8” x 3 1/2” Bolt
2-5/8” Washers
1-5/8” Nut
1-1/2” x 1 1/4” Bolt
2-1/2” Washers
1-1/2” Nut

Rr Sway Bar Link Hardware
2-3/8” Lock Nuts
4-Cup Washers
4-Stud Bushings
2-12mm x 65mm Bolts
2-12mm Lock Nuts