



92158400

08-10 F250 6" SUSPENSION 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 parts list. 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.

PRODUCT USE INFORMATION

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/heavier 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, and/or combining body lift with suspension 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.

This kit is packaged as a leveling kit—raising the front 6" and the back 5". If you desire a different look or if the vehicle has a tool box or added weight in the rear, please consult with your sales representative about block / u-bolt options.

This 6" suspension system was developed for **37x12.50x17** tire on an after market wheel w/ 4.5" back spacing.

NOTICE TO DEALER AND VEHICLE 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 too the vehicle owner for review and to be kept in the vehicle for its service life.

Kit Contents:

9295	Diesel Coil Springs
OR	
9296	Gas Coil Springs
1580Box1	Upper Control Arms
1580Box2	Adj Lower Control Arms
1584Box1	Stabilizer Drop Brackets
	Track Bar Bracket
	Control Arm Bracket
	Sway Bar Link
	Hardware Bags
	Pitman Arm
	Stainless Front Lines
1580Box4	Shock Box
6111	Add-a-leaf
6578	3" Block and U-Bolt Kit
OR	
6539	Rear Block / u-bolt kit for use with vehicles w/o factory rear overloads

Tools Needed:

8mm Wrench	1 1/8" Wrench
10mm Wrench	1 13/16" Wrench
12mm Wrench	Jack Stands
15mm Wrench	Jack
17mm Wrench	Drill
17mm Socket	Drill Bits-13/16-7/8
18mm Wrench	
18mm Socket	
19mm Wrench	
21mm Wrench	
24mm Socket	
30mm 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
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 INSTALLTION INSTRUCTIONS

1. Block the rear wheels of the vehicle. Raise the front of the vehicle and support the frame with jack stands. Remove the front wheels and tires and set aside. Position a hydraulic jack under the front axle and raise the jack until the front suspension begins to compress
2. Disconnect the track bar from the driver side frame bracket, using a 30mm wrench.
3. Disconnect the sway bar end links from the axle and the sway bar, using a 18mm wrench. Remove end links and retain the hardware for reuse. **See Photo 1.**
4. Remove the bump stop from the cup shaped bracket. Remove the bracket from the frame rail using 10mm wrench. **See Photo 2.**

Photo 1



Photo 2



5. Disconnect the ABS sensor wire from the lower spring seat and the radius arm, using a 8mm wrench.
6. Unbolt the brake line brackets from the axle, using a 10mm wrench. Remove the vacuum line from the clamp on the axle.(If equipped with automatic hubs). Remove the stock brake line from the stock steel line and install the supplied braided brake lines in the factory location with the factory hardware. **Please note there is a driver and passenger side brake hose . Photo 3** shows the passenger side new line being installed. Bleed brake system.
7. Using a 19mm wrench remove the nut, retaining washer and rubber bushing from the upper shock mounts. Using a 18mm wrench remove the lower shock bolts. Retain hardware for re-use.
8. Carefully lower the jack until the coil springs are free. Remove the coil springs from the vehicle. Note: use of a coil spring compressor may be required for spring removal.
9. Support both driver and passenger radius arms with jack stands. Using a 24mm wrench, and socket remove the bolt holding the radius arm to the frame. Using a 24mm wrench, and socket remove the bolts holding the radius arm to the axle. Retain stock hardware for reuse.
10. Insert bushings, and sleeves from kit bag into the upper control arm. **See Photo 4.**

Photo 3



Disconnect Vacuum Line (Auto Hubs only)

Photo 4



11. Insert the radius arm drop bracket into the stock location. Bolt into place using the supplied 3/4" x4.75" bolt, crush sleeve, nut and washer in the bracket. Do not tighten at this time. **See Photo 5.**
12. Attach the upper control arm to the radius arm bracket in the top hole. Bolt into place using a 3/4" x4.75" bolt, nut and washer provided in the kit bag. Do not tighten at this time
13. Attach the control arms to the axle using the stock hardware. **See Photo 6. It may be necessary to use the rear nut from the frame mount due to some models having the radius arm nut welded to the radius arm.**

Photo 5

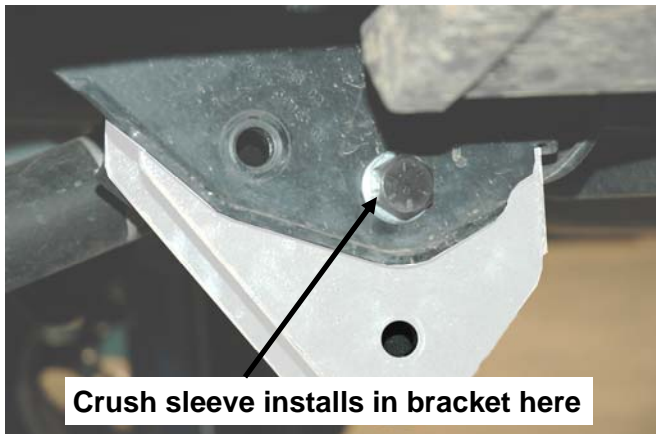


Photo 6



14. Attach the lower control arm to the axle using the stock hardware. Do not tighten at this time.
15. Insert the joint end of the lower control arm into the radius arm drop bracket. Bolt into place using a 3/4" x4.75" bolt, nut and washer provided in the kit bag. Using a 1 7/8" wrench tighten the jam nut against the body of the arm. Center of end to center hole of opposite end should be 36 1/8" **See Photo 7.**
16. Reattach the ABS wire to the upper control arm. **See Photo 8.**
17. Repeat step 12-17 on the opposite side.

Photo 7



Photo 8



18. Using a 21mm wrench and 18mm wrench socket remove the factory track bar bracket. Retain stock hardware for re-use.
19. Remove the cotter pin and nut using a 24mm wrench, from the drag link end where it attaches to the pitman arm. Dislodge link with a tie rod end puller, or a pickle fork. Note: replace the link if any stud looseness is detected, or if you can twist the studs in its socket with your fingers. Using a 34mm socket, remove the nut from the steering sector and remove the pitman arm with a puller tool. Inspect the splines on the shaft for excessive wear, repair if needed.
20. Install new arm, lock washer, and nut. Using a 34mm or 1 13/16" socket, tighten bolt.
21. Attach the drag link stud to the pitman arm. Torque nut to factory specs, and install cotter pin. Check for adequate linkage clearances while turning steering wheel full lock in both positions
22. Position the Rough Country track bar bracket on the frame as shown and secure using the factory hardware. Tighten hardware using a 21mm & 18mm wrench. **See Photo 9.**
23. Using the nylon bump stop extension provided, place the extension between the frame and the bump stop cup. Bolt back into the original location using the 8mmx95mm bolt supplied using a 13mm wrench. Torque to 15 ft. lbs.
24. Lower the front axle enough to install the new coil springs. Position the coil springs in the lower coil buckets on the axle and rotate as necessary to be sure that the pigtail of the coil is indexed properly in the bucket. Position the factory rubber isolator on top of each coil, then raise the axle enough to seat the coil springs in the upper spring buckets.
25. Install the bushings and sleeves on the front gas shock absorbers part # 658459
26. Compress the front springs enough to install the front shocks. Bolt the lower end of the shock to the axle using the stock hardware , using a 18mm wrench. Attach the upper end of the shock using the stock hardware, and a 18mm wrench, tighten only enough to bulge the bushing.
27. Remove the factory steering stabilizer from the passenger factory frame mount using a 18mm wrench.
28. On the passenger side, install the new stabilizer bracket in between the frame and the factory sway bar mount with the factory hardware. **See Photo 10.**

Photo 9



Photo 10



29. On the driver side, remove the sway bar bracket from the frame using a 15mm wrench and install the supplied spacer plate as shown in **Photo 11** with factory hardware.
30. Reinstall the factory unit install in the new stabilizer bracket using the factory bolt that was removed from the factory steering stabilizer.

Photo 11



31. Install tires and wheels and lower the vehicle to the ground.
32. Line up the track bar with the hole in the new track bar bracket. You may have to start the truck and turn the wheels in the direction the track bar needs to go to help align the track bar with the hole. Install using the stock track bar bolt. Tighten bolt.
33. Install the new sway bar links in the factory location with the factory hardware and using a 18mm wrench. **See Photo 12.**
34. Tighten the radius arm hardware.
35. For vehicles with 2 piece drive shafts, support the driveshaft, using a 15mm socket remove the bolts from the carrier bearing bracket. Insert the carrier bearing spacer between the bearing bracket and body mount. Reattach the carrier bearing using the supplied 7/16"x 3 1/4" bolts and washers. Torque to 60 ft/lbs. **See Photo 13. Install bracket with flat part on the stock mount and the taper towards the front.**

Photo 12



Photo 13



REAR INSTALLTION

1. Chock front wheels and jack up the rear of the vehicle. Secure with jack stands on the frame rail.
2. Place a floor jack under the rear differential on the rear axle. Using a 18mm wrench for the upper, and 18mm and 15mm wrench for the lower, remove the stock shock absorbers, retain the stock hardware for reuse.
3. Using a 24mm socket, remove the stock u-bolts. Use the floor jack to lower the axle assembly to allow for lifted block installation..
4. Remove the spring eye bolts and nuts and remove the spring. If equipped: the top mounted block and top mounted overload spring must be removed. The top spring plate may need to be drilled out to accept the nut for the new spring center pin. Make sure before starting that you have access to a drill and a 13/16" to 7/8" drill bit. Have c-clamps in place on either side of each strap before center bolt is removed
5. Unbolt center pin and remove. Un-clamp leaf spring. **CAUTION** -Take care when releasing the c-clamps since the springs are under load and will "spring" apart when released.
6. Position add-a-leaf under the next longest leaf of the spring pack. Replace the shorter spring leafs under the helper leaf and clamp together, being careful to align the center pin holes in the spring leafs. If less lift is desired the leaf under the new add-a-leaf can be removed
7. Insert the new center pin supplied with the kit through the spring assembly with the head of the center pin in the same location as the stock pin. Re-compress the pack with the c-clamps, not center pin, to avoid stripping of nut/ bolt threads. Bolt together, being sure to align leafs. Cut off excess threads on the center pin with a hack saw. If applicable, re-form straps or install new bend straps. If heat is used on the straps, allow them to cool naturally and thoroughly before removing the c-clamps.
8. Replace spring on vehicle. Torque to 86-110 ft./lbs.
9. Install the Rough Country block in between the leaf spring and the axle. Jack up the axle and align the pins in the blocks and axle seat. Secure with new u-bolts and torque evenly to 85 ft/lbs.
10. Locate shock part number 658601 gas shock and assemble poly bushings and sleeve in shock. Using a 18mm wrench, for the upper, and a 19mm and 15mm wrench for the lower. Install using factory hardware on upper and lower shock mount
11. Install the tires and wheels
12. Jack up the rear of the vehicle and remove the jack stands. Lower the vehicle to the floor.

POST INSTALLTION INSTRUCTIONS

1. Have a qualified alignment center realign front end to
Caster min— 4.0 degree
Camber —0.6—.09 degree
Toe —.10— .15 degree
2. Install Warning to Driver decal on sun visor.
3. Re-torque all nuts, bolts, and especially u-bolts after the first 100 miles, again after another 100 miles and then check periodically thereafter.
4. All components must be retightened after 500 miles, and every three thousand miles after installation
5. Adjust headlights to proper settings.
6. Test brake system to make sure the lines has been properly bled.



Thank you for choosing Rough Country for your suspension needs.



FORD 2005-22 F-250 Vertex Coilover Conversion

Thank you for choosing Rough Country for all your vehicle needs.

Please read instructions before beginning installation. Check the kit hardware against the kit contents shown below. Be sure you have all needed parts and know where they go.

If question exist, please call us @1-800-222-7023. We will be happy to answer any questions concerning this product.

Check all fasteners for proper torque. Check to ensure for adequate clearance between all components.

Periodically check all hardware for tightness.

KIT CONTENTS:

Upper Coil Over Mount x2
Lower Coil Over Mount x2
Brake Line Relocation Bracket x2
Driver Vertex x1
Passenger Vertex x1
Front Shocks x2

TOOLS NEEDED:

10mm Wrench or Socket
18mm Wrench or Socket
21mm Wrench or Socket
22mm Wrench or Socket
7/16 Wrench or Socket
9/16 Wrench or Socket
30mm Socket
Drill Motor
.406 Drill Bit
Reciprocating Saw
Sander
Color Match Frame Paint
Paint Pen
Jack Stands
Jack

HARDWARE INCLUDED:

3/8-16 x 1.25 Hex Head Bolt x8
3/8" Washer x8
3/8-16 Flange Lock x8
14mm-2.0 x 40mm x2
14mm Lock Washer x2
14mm Flat Washer x10
14mm-2.0 x 75mm x4
14mm-2 Nylock Nut x4
1/4-20 x 1 Hex Head Bolt x6
1/4-20 Nylock Nut x6
1/4" Flat Washer x6

Torque Specs:

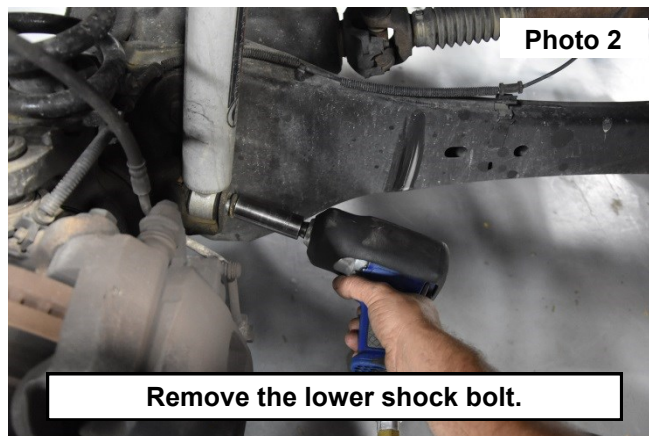
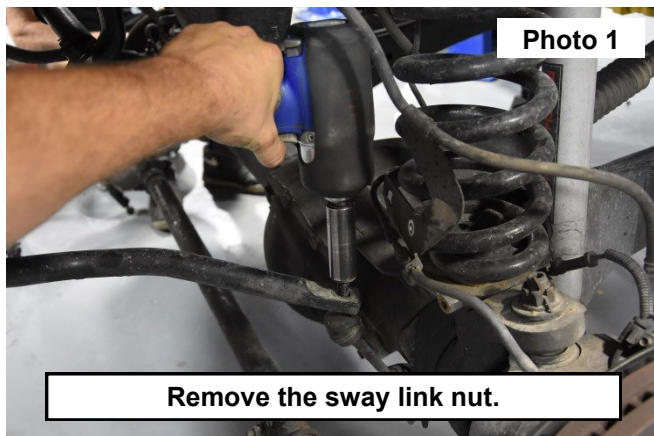
Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16"	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8"	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16"	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2"	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16"	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8"	135ft/lbs	175ft/lbs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



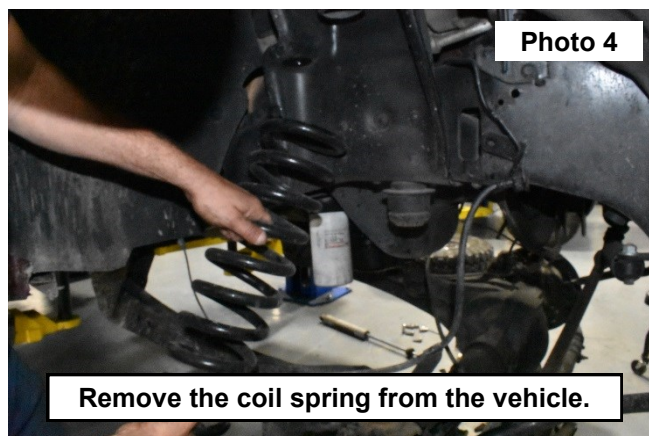
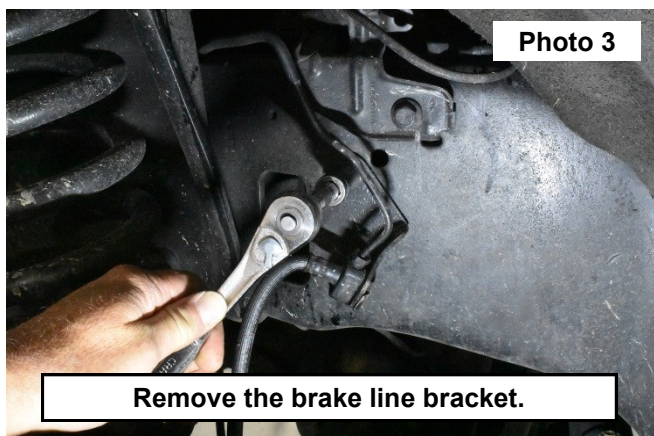


INSTALLATION INSTRUCTIONS

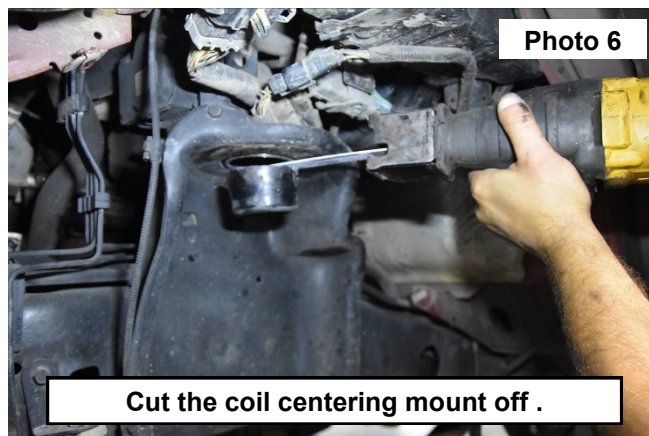
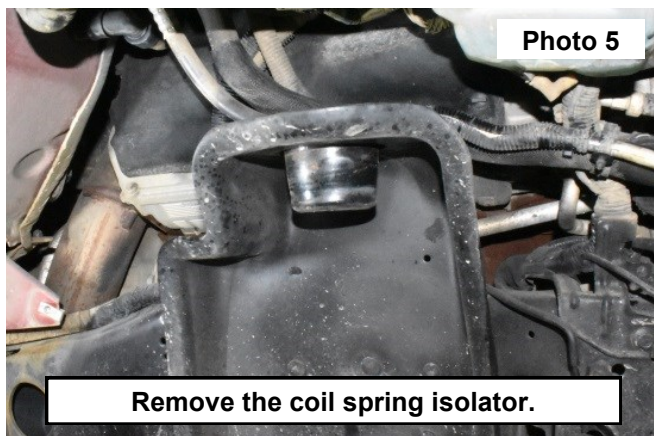
1. Lift up the front of the vehicle using a jack, place jack stands under the frame and lower the vehicle.
2. Remove the wheels and tires from the vehicle.
3. Support the axle using a jack and remove the front sway link nut from each side of the vehicle using an 18mm socket. **See Photo 1.**
4. Remove the trackbar bolt and bar from the frame mount using a 30mm socket.
5. Remove the brake line bracket from the axle mount using a 10mm socket.
6. Disconnect the abs line from the radius arm.
7. Remove the lower shock bolt using an 21mm socket. **See Photo 2.**
8. Remove the upper shock hardware using a 21mm wrench, then remove the shock from the vehicle.



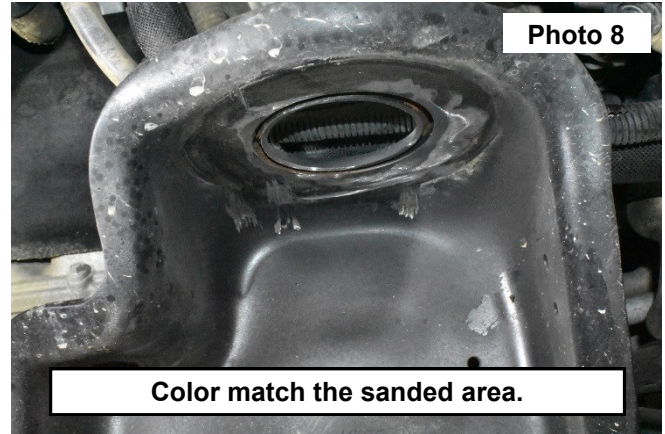
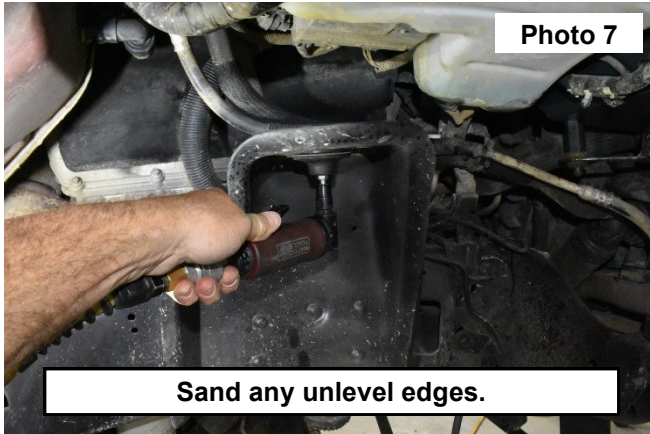
9. Remove the brake line bracket from the frame using a 10mm socket. **See Photo 3.**
10. Lower the jack down and remove the coil spring from the vehicle. **See Photo 4.**



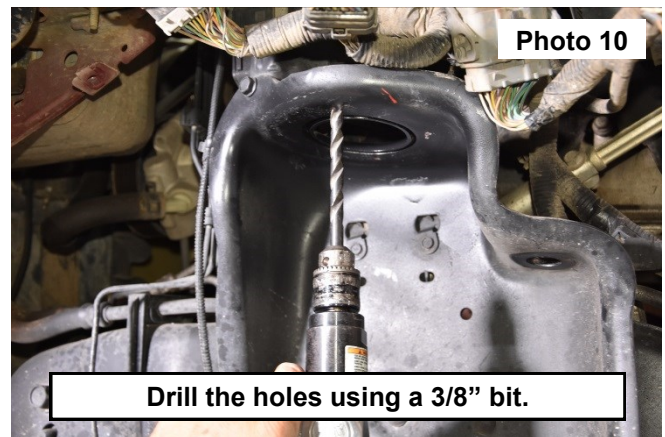
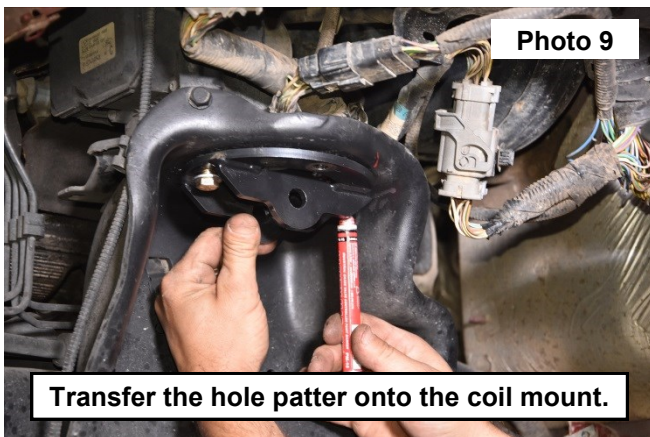
11. Remove the coil spring isolator. **See Photo 5.**
12. Cut along the top of the coil spring mount, removing the coil spring centering mount. Using a reciprocating saw. **See Photo 6.**



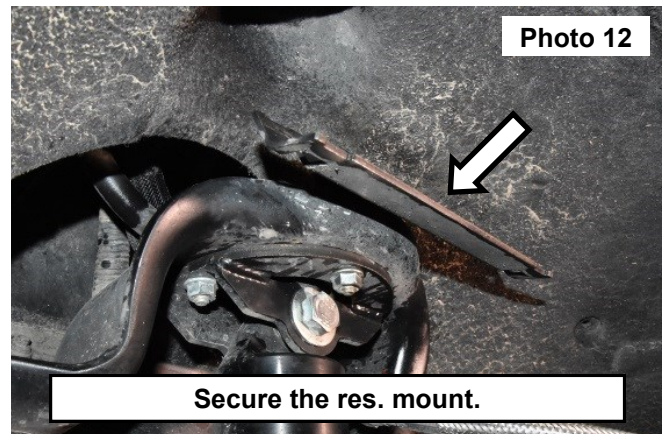
13. Sand the trimmed are flush with the coil mount and touch any sanded areas with color match spray paint. **See Photos 7 and 8.**



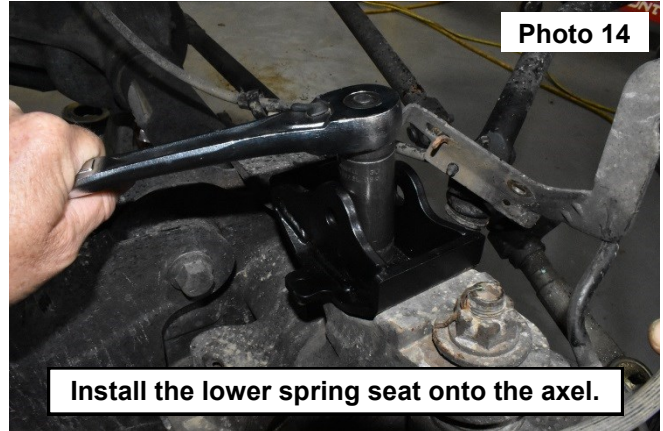
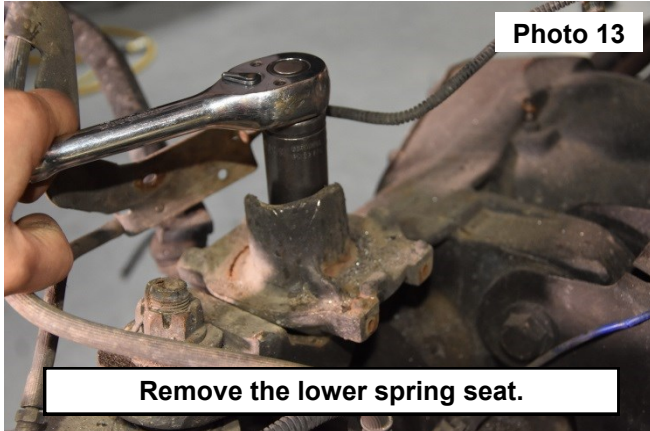
14. Using a paint pen to transfer the hole orientation of the coil mount. **See Photo 9.**
15. Use a 13/32" bit to drill each marked hole in the coil mount. **See Photo 10.**



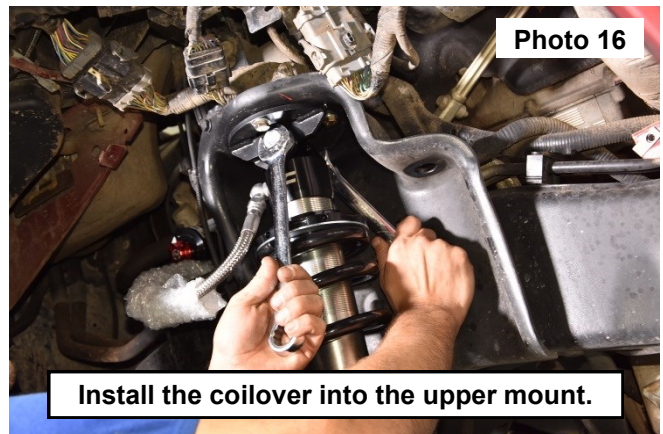
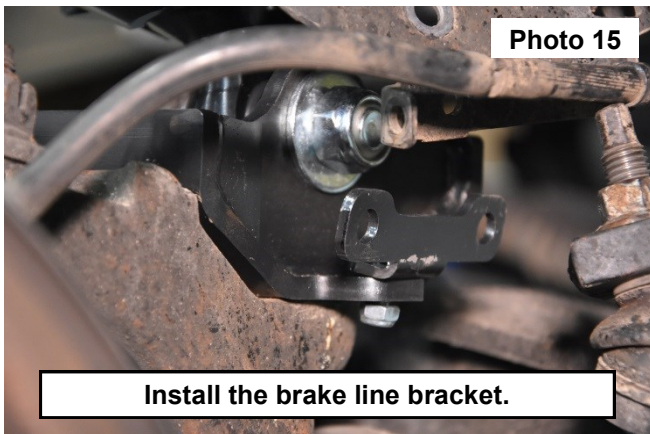
16. Install (2) of the supplied 3/8-16 bolts, and (2) 3/8" Washers into the upper bracket and place the coil over mount to the bottom of the coil seat. **See Photos 11 and 12.**
17. Secure the brackets using (2) of the supplied 3/8 Flange locks nuts. Tighten using a 9/16 wrench and socket.



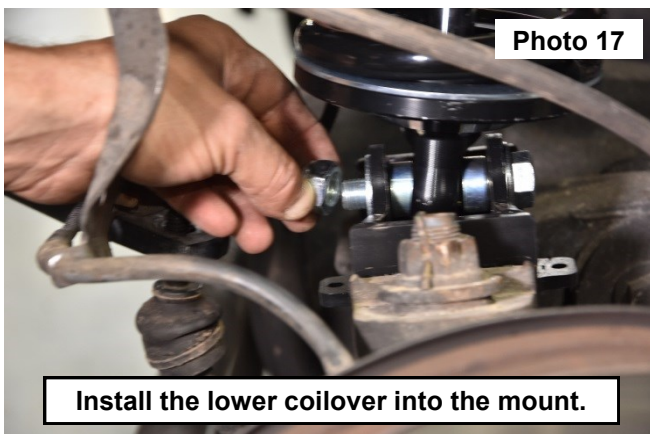
18. Remove the lower spring seat using a 21mm socket. **See Photo 13.**
19. Install the lower spring seat onto the axel. Then secure using (1) 14mm hex head bolt (1) 14mm Lock washer and (1) 14mm Flat washer. Tighten using a 22mm socket. **See Photo 14.**



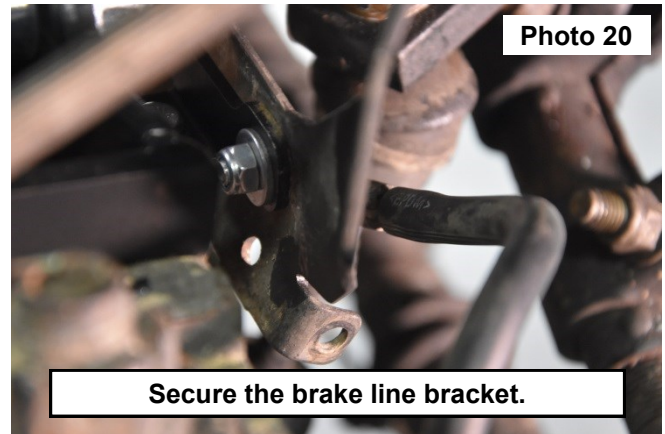
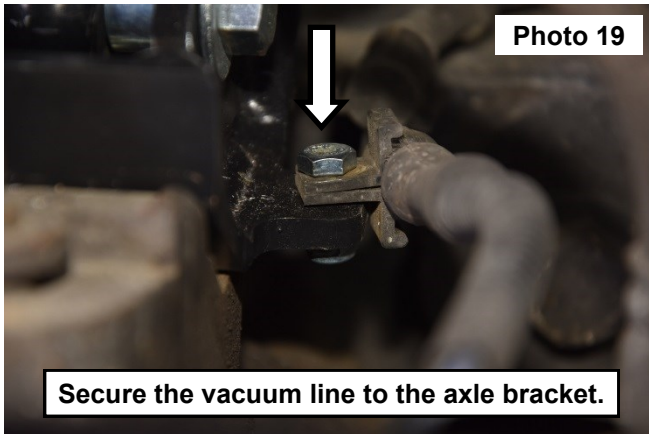
20. Install brake line bracket to front side of the axle mount using (1) 1/4-20 x 1" Hex head bolt (2) 1/4" Flat washers and (1) 1/4-20 Hex nut. Tighten the bracket parallel with the axle bracket using a 7/16 wrench and socket. **See Photo 15.**
21. Install the Vertex Coilover into the upper mount. Secure using (1) 14mm x 40mm Hex head bolt (2) 14mm Washers and (1) 14mm-2.0 Nylock nut. Tighten using a 22mm wrench and socket. **See Photo 16.**



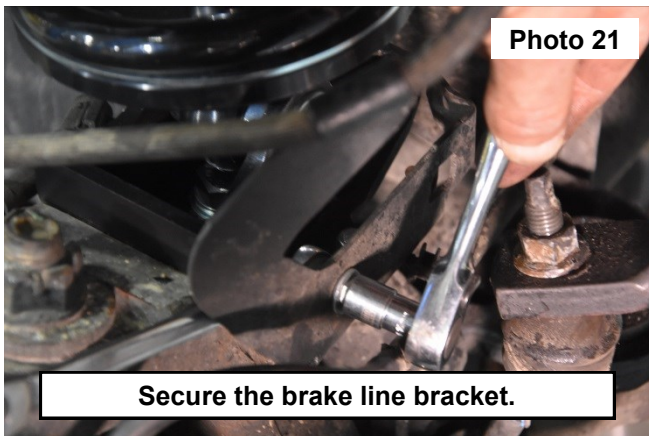
22. Raise the axle up and install the lower coilover mount into the bracket. Secure using (1) 14mm x 40mm Hex head bolt (2) 14mm Washers and (1) 14mm-2.0 Nylock nut. Tighten using a 22mm wrench and socket. **See Photo 17.**
23. Place the reservoir onto the mount and secure using (2) clamps around the mount and reservoir. Tighten using a flat bit driver. **See Photo 18.**



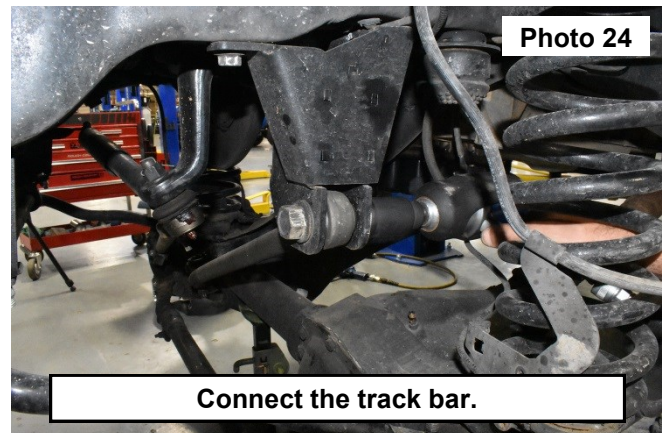
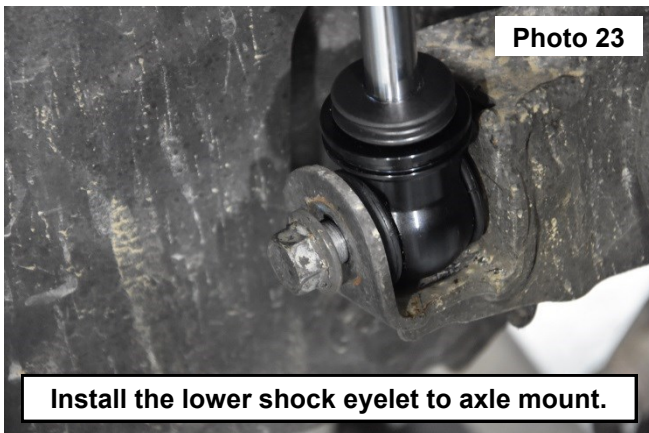
24. Secure the vacuum line to the rear of the axle bracket using (1) 1/4-20 x 1" Hex head bolt(2) 1/4" Flat washers and (1) 1/4-20 Hex nut. Tighten the bracket parallel with the axle bracket using a 7/16 wrench and socket. **See Photo 19.**
25. Secure brake line bracket to front bracket installed onto the axle bracket using (1) 1/4-20 x 1" Hex head bolt(2) 1/4" Flat washers and (1) 1/4-20 Hex nut. Tighten the bracket using a 7/16 wrench and socket. **See Photos 20 and 21.**



26. Install upper shock mount using the bushing stack supplied. Tighten the nut using a 22mm socket. **See Photo 22.**



27. Install lower shock eyelet into axle mount. Secure using OE bolt, tightening using an 19mm socket. **See Photo 23.**
28. Install the wheels and tires, remove the vehicle from the jack stands and lower onto the ground.
29. Connect the track bar into the frame mount, securing with the OE bolt. Tighten using a 30mm socket. **See Photo 24.**



30. Connect the sway links to the sway bar and secure using the OE nuts. Tighten using a 18mm socket.
31. Install the brake line into the frame mount using the OE bolt. Tighten using a 10mm socket.

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.

