



Sport S/T3 Suspension Installation Guide

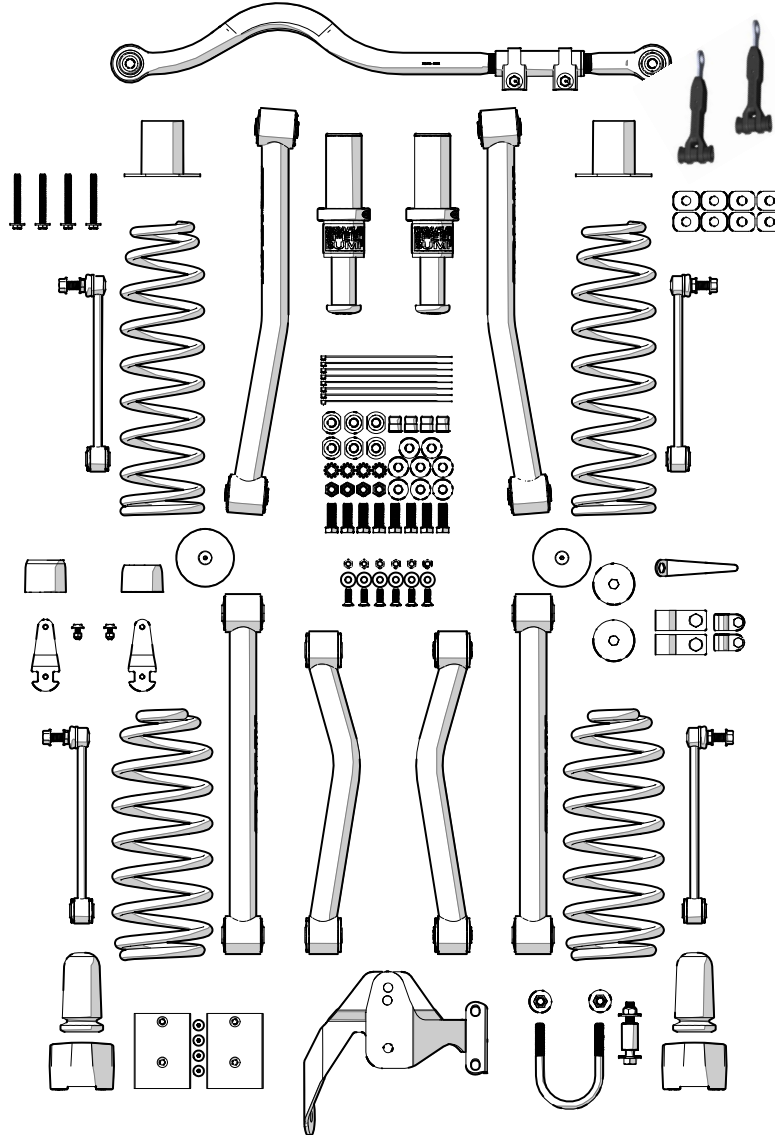
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#1258250-JK 2-Door Sport S/T3 (No Shocks)

#1258450-JK 4-Door Sport S/T3 (No Shocks)

#1258200-JK 2-Door Sport S/T3 (w/ Fox Shocks)

#1258400-JK 4-Door Sport S/T3 (w/ Fox Shocks)



Important Notes:

Prior to beginning this or any installation read these instructions to familiarize yourself with the required steps and evaluate if you are experienced and capable to personally perform these modifications. A factory service manual should be used in conjunction with these installation instructions.

Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local TeraFlex dealer for assistance.

ALL KITS		
PART NO.	DESCRIPTION	QTY.
954776	JK Rear Trackbar Bracket for 2.5" Lifts	1
600080	Hardware for JK Rear Trackbar Bracket	1
744500	JK Rear Swaybar Link 10.75" w/Swivel Stud	4
1467125	JK SpeedBump 1.25" Front Lower Bumpstop Pad Kit (1 Pair)	1
1953750	JK 3" Front SpeedBump Kit (Pair)	1
2610000	JK Exhaust Spacer Kit for 2012+ JKs with the 3.6 Pentastar	1
2653330	JK Front Lower Driver Sport Control Arm	1
2653332	JK Front Lower Passenger Sport Control Arm	1
2653340	JK Rear Lower Sport Control Arm	2
2653350	JK Rear Upper Sport Control Arm	2
1753418	JK Front Forged Monster Trackbar Kit	1
1101255	Universal Front Brake Line Anchor Kit, Pair, 5" Long/.50" Bolt Hole	1

600056 HARDWARE PACK ALL KITS		
PART NO.	DESCRIPTION	QTY.
1954605	JK SpeedBump 0.75" Rear Lower Bumpstop Subassembly	1
4304400	JK Rear Brake Line Extension Bracket Kit	1
467265	JK Rear Upper Speedbump Bumpstop Cup Extension	2
4951002	JK Front Lower and Rear Upper Coil Spring Retainer Kit Subassembly	1
4951705	Washer Subassembly JK FlexArm Bolts on Axles Front Lower and Rear Upper (Cam Bolt Locations)	1
4954300	JK Rear Lower Spring Retainer Kit	1
5036	Hardware Pack for JK Front Speedbump Jounce Tube Brace	1
946810	JK Front Spring Bucket Jounce Tube Brace for Speedbumps	2
992012	JK Rear Extended Microcellular Urethane Foam Bumpstop	2

Kit #1258250

PART NO.	DESCRIPTION	QTY.
1853100	JK 2 Door 3" Front Spring	2
1854100	JK 2 Door 3" Rear Spring	2

Kit #1258200

1853100	JK 2 Door 3" Front Spring	2
1854100	JK 2 Door 3" Rear Spring	2
909100	Retainer Bracket for Fox Shock Reservoir	2
153640	Remote Reservoir Relocation Hardware	1
1980200	JK Fox Shocks w/ Remote Reservoir (all 4)	1

Kit #1258450

PART NO.	DESCRIPTION	QTY.
1853200	JK 4 Door 3" Front Spring	2
1854200	JK 4 Door 3" Rear Spring	2

Kit #1258400

1853200	JK 4 Door 3" Front Spring	2
1854200	JK 4 Door 3" Rear Spring	2
909100	Retainer Bracket for Fox Shock Reservoir	2
153640	Remote Reservoir Relocation Hardware	1
1980200	JK Fox Shocks w/ Remote Reservoir (all 4)	1

Tools Needed

- Ratchet - 1/4" and 1/2"
- 1/4" Drive Socket Set - 1/4", 5/16", 10mm, 7/16"
- 1/2" Drive Swivel/Wobbly Sockets - 18mm, 21mm, 3/4"
- 1/2" Drive Socket Set - 18mm, 21mm, 3/4"
- 1/2" Extension - 12" Long
- Allen Wrench - 3/16", 5mm
- End Wrench Set - 7/16", 1/2", 9/16", 1-1/8", 13mm, 15mm, 16mm, 18mm, 19mm, 21mm
- Drill
- Drill Bit Set - 1/8", 1/4", 3/8", 1/2" - or step drill bit
- Reciprocating Saw and Bi-metal Blade
- Wire Cutters
- Locking Pliers
- Heel Pry Bar
- Hammer
- Chisel
- Measuring Tape
- Blue Loctite

Lift the vehicle and support it by the frame. Remove wheels and support the front axle. Loosen all the control arms bolts (front and rear), but do not remove.

Remove the exhaust skid plate/cross member using an 18mm.

The exhaust skid plate will not be reused.



1

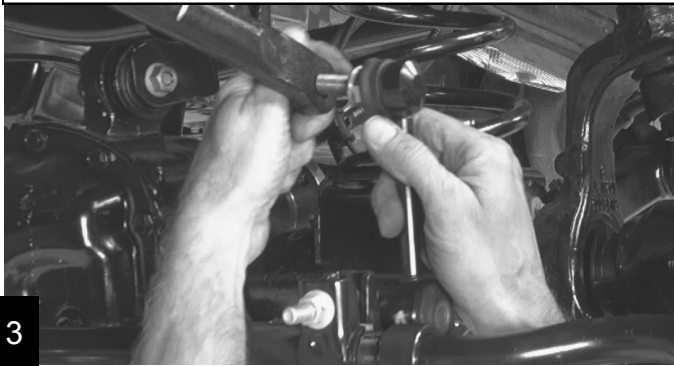
Front Installation

Remove the front driveline at the axle and support it up out of the way with a bungee or strap (15mm).

2

Remove front shocks. On 2012+ JK's, the passenger side upper shock mount is not accessible due to the battery tray. Use a pair of plyers and break out enough of the thin plastic to gain access to the 17mm nut.

Remove both swaybar links and retain the hardware.



3

2011+ JK's have brake line retainers located under the spring perches. Use vise grips or a heel bar to spread the bracket enough to free the brake line. Use a 10mm to remove and discard the bracket.



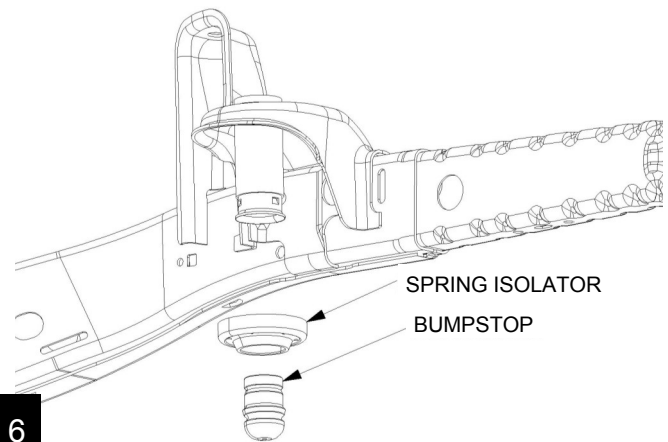
4

Unclip the ABS lines, and extend the breather tube by sliding the tube retainer clip down the shock tower 3". This will prevent the tube from being pulled tight during full axle droop.

Lower the axle and remove the front springs. Be sure to check for any lines that can be pulled or damaged.

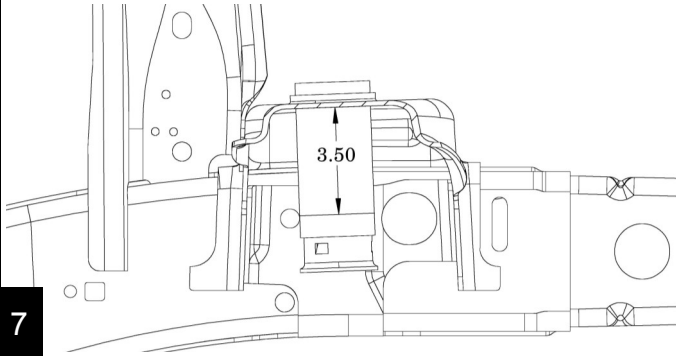
5

Remove the rubber spring isolators and the bump stops from the upper spring buckets.



6

With the isolator removed, measure down from the bottom of the spring bucket 3.5" and mark. As a cut guide, wrap a piece of tape around the jounce tube at the mark and use a reciprocating saw, or cut off wheel to make the cut along the marked line.

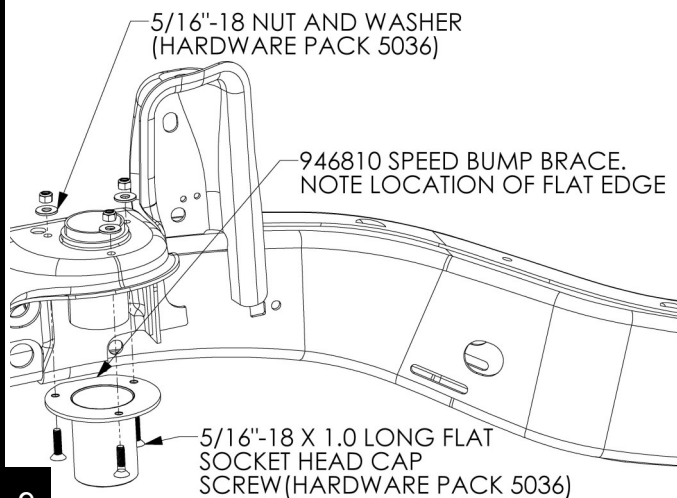


7

Position the SpeedBump support tube with the flat edge on the inside of the spring tower. (see step 9) Using the support tube as a guide, mark and center punch one hole. Pilot drill an 1/8" hole and final drill to 3/8".

Locate the jounce tube brace hardware bag (5036), and bolt the support tube into position with a single bolt. Using the support tube as a guide, pilot and finish drill the remaining two holes. Torque the socket head cap screws to 200 in-lbs. (22 N-m)

8



9

Trim any excess material until the support tube and the original tube are flush with each other. Finish all sharp edges on the outside and inside of the tube, it is important that the speed bump has a smooth, even surface to rest against.

Remove the clamp on the SpeedBump cylinder by loosening the socket head cap screw with a 3/16" Allen wrench. Test fit the SpeedBump in the factory jounce tube. If there are any slag or burrs in the tube that restricts the install, clean the tube as required.

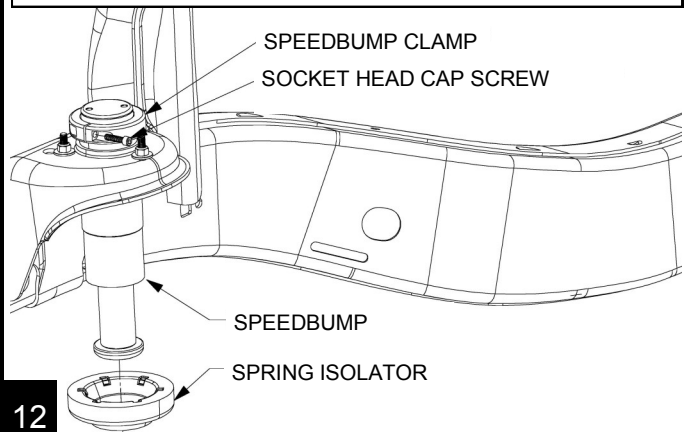
10

Coat the lower portion of the SpeedBump with black RTV silicone to help with noise and corrosion. Slide the bump stop into position.



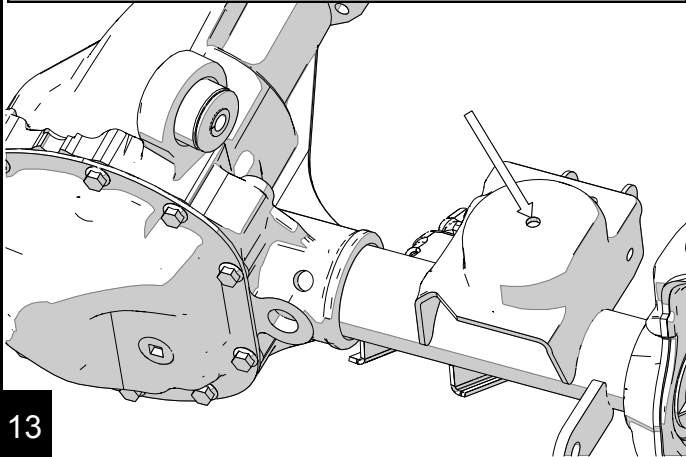
11

Apply pressure on the SpeedBump to make sure that it is completely seated and install retainer clamp. Torque to 74.5 in-lbs (8 N-m) and reinstall the factory isolator.

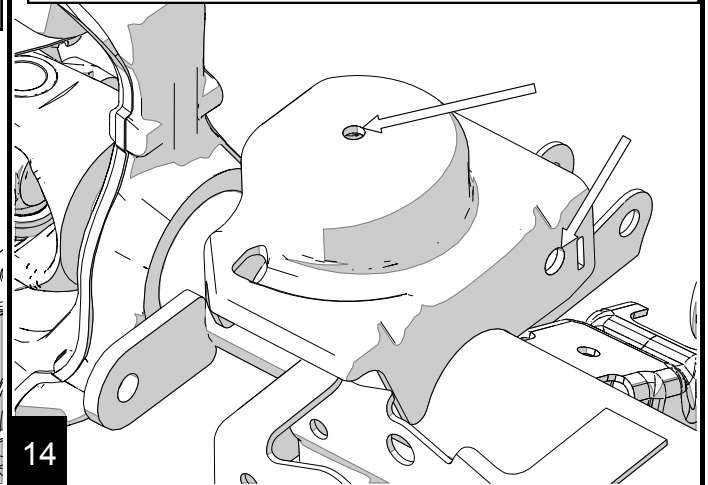


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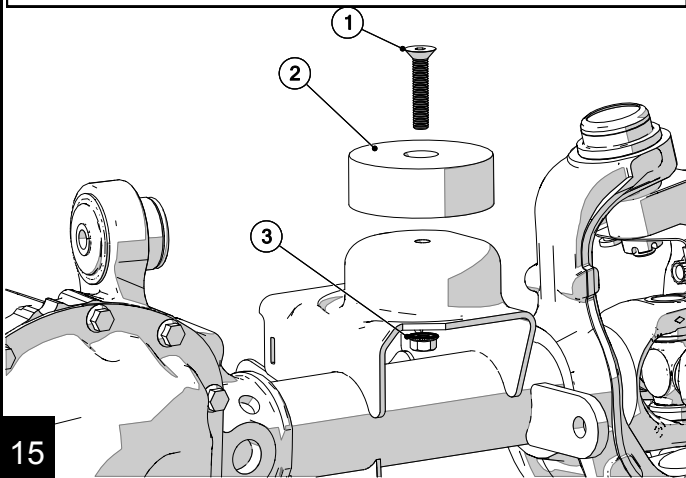
Locate the center of the front axle driver side spring pad and drill a 3/8" [9.5mm] hole in the center of the pad.



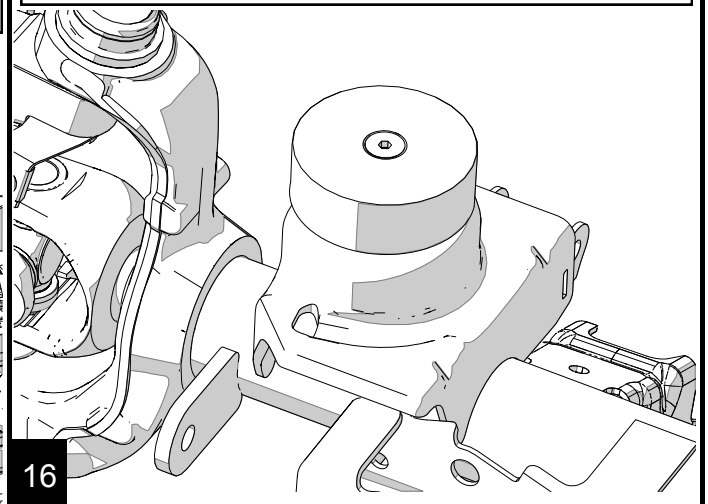
Repeat steps 13 and 14 for the front passenger side spring pad.



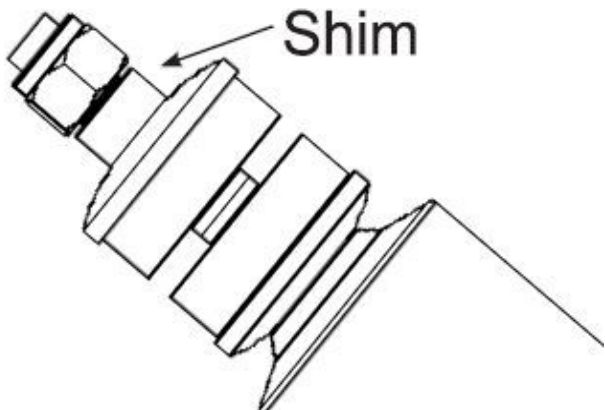
Install the 467125 (2) Speedbump pad on the axle coil spring pad using the 315 3/8" bolt (1) and the 3/8" Nut (3)



Repeat step 16 for the passenger side



Install the front upper shock mount with the small shim (if present). Tighten the nut to 20 ft-lbs (27 N-m). The lower shock mount will be installed after the installation of the front springs.



Skip to step 21 if not installing Fox Remote Reservoir shocks.

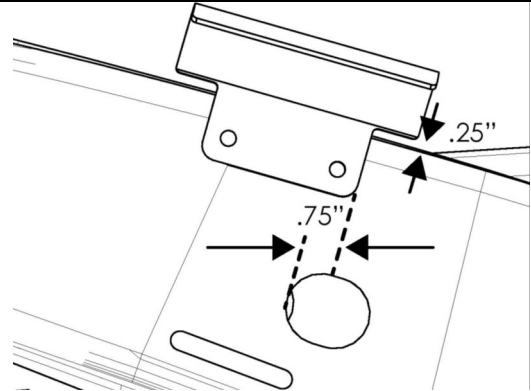
18

Locate the shock reservoir mount hardware bag (153640). The reservoir mount can be positioned where desired. Refer to the figure in step 20 for the recommended location. Mark the holes, and predrill using an 1/8" bit.

Use the self tapping screws to mount the shock reservoir bracket. Torque to 85 in-lbs (9.6 N-m). Then clamp the reservoir to the bracket using the supplied hose clamps.

19

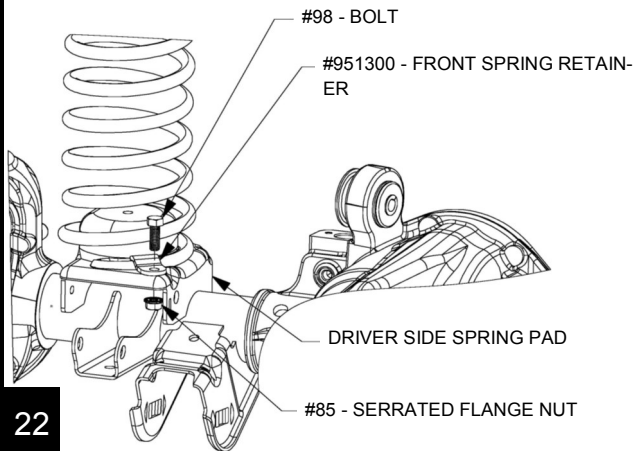
20



Locate the spring retainer hardware bag (4951002). The large retainer brackets with 1/2" hole are for the rear upper, set these aside for now. Use the small brackets with the 3/8" hole and 3/8" hardware for the front lower spring retainers.

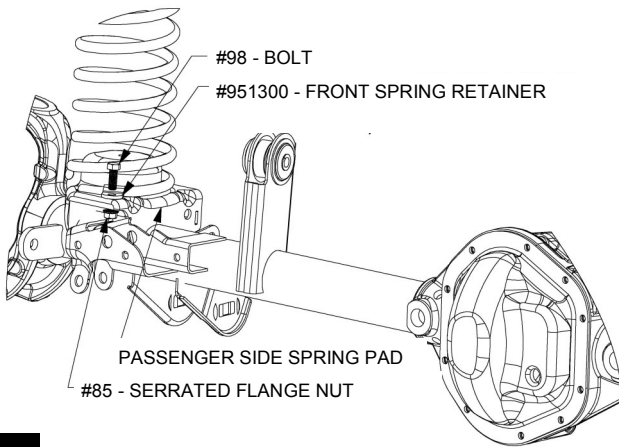
Use the front spring retainer bracket as a guide for drilling the mounting holes. Orient the retainers (as shown in step 22 and 23) and drill a 1/2" hole. The driver side will mount on the inside rear corner of the spring bucket and the passenger side will mount on the inside front corner of the spring bucket. Do not mount the spring retainers yet. These will be installed after the springs.

Note: This step is not necessary with Teraflex HD Front Housings.

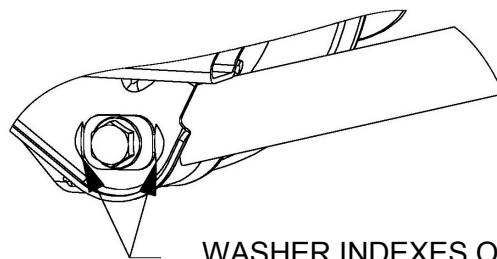


21

22



Locate the control arm washer kit (4951705). These washers will index between the cam-bolt tabs on the axle bracket. Remove the lower front driver control arm and install the new Sport Flexarm using the original hardware.

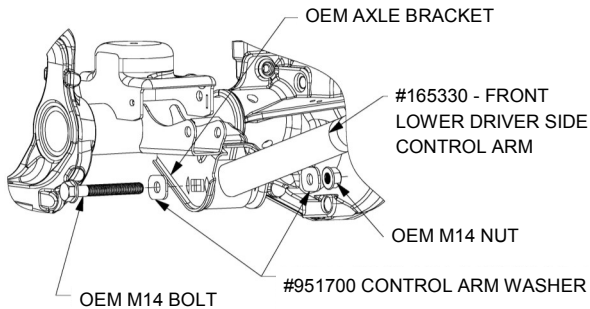


WASHER INDEXES ON CAM BOLT BOSSES

23

24

Note the orientation of the cam washers. Tighten just enough to hold washers in place. Do not torque. Repeat Steps 30 and 31 for the passenger side.



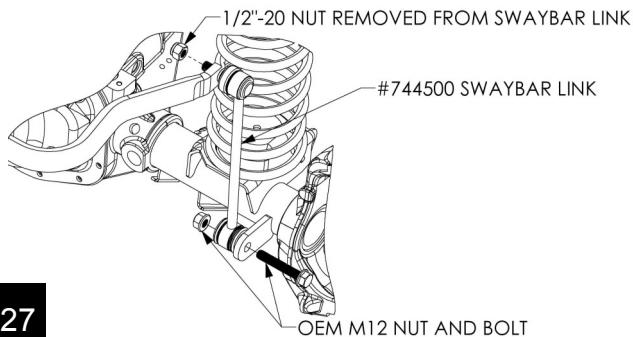
25

Install the front coil springs. Verify that the brake lines are routed between the spring and the shock to protect them from tire contact.

Install the front spring retainers and torque to 30 ft-lbs (40 Nm).

26

Install the new front upper swaybar link swivel stud on the outside of the swaybar arm using a 6mm Allen wrench and a 19mm wrench. The lower swaybar link eyelet mounts on the inside of the axle bracket. Use the factory lower swaybar bolts and torque to 75 ft-lbs. (102 Nm)



27

Installation of Brake Line Anchor

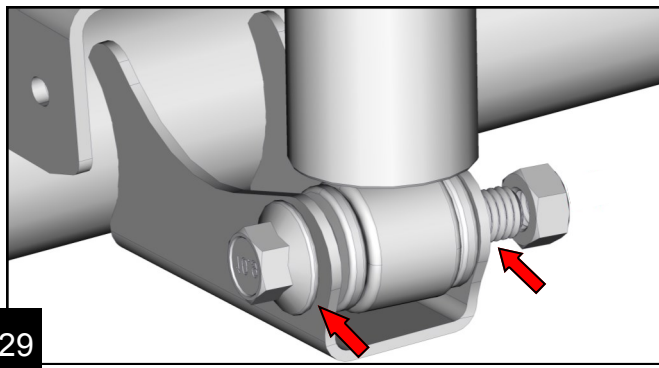
Use some cable ties to route the ABS and brake lines together so they are uniform and equal.

Note: Zip ties provided in the kit are for mounting the lines to the Anchor. Extra cable ties can be picked up from just about any hardware store.



28

The Rubber Brake Line Anchor can be mounted on the inside or outside of the bottom shock mount bolt.

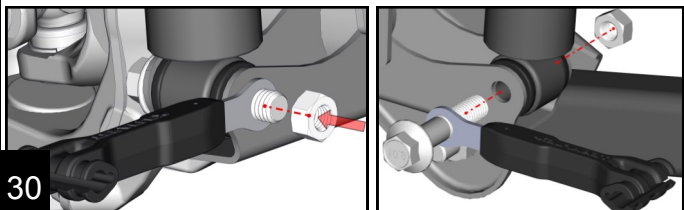


29

If there is plenty of length to your lines then mount the anchor on the inside, directly under the nut.

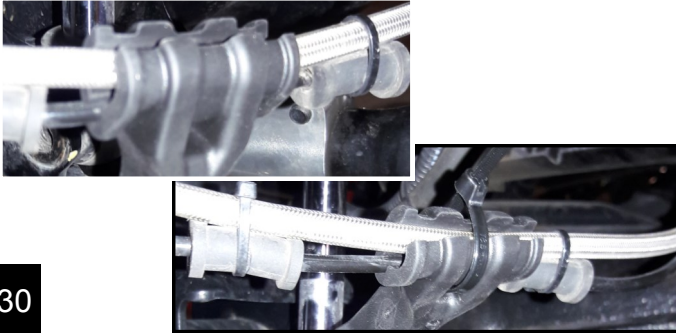
If your lines are stiff or length is an issue it might be better to install the anchor on the out side of the shock mount.

Notes: *Use a large screwdriver or pry bar under the shock to help install shock mount bolt.*
Do not tighten the shock mount bolt



30

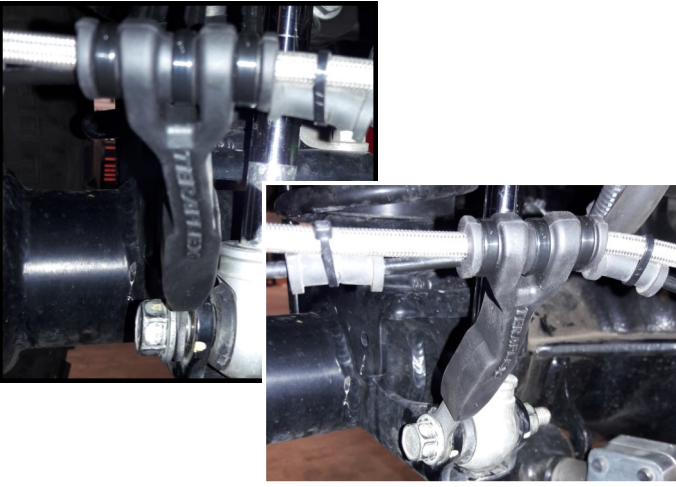
Once the anchor is installed then install the ABS line into the anchor followed by the brake line.
 (see picture)
 Next, loosely install a cable tie. Inspect the lines and adjust the line positions as needed.



30

We installed the lines so that the anchor was pulled slightly toward the tire when it was turned out. This was to help the lines stay clear of the tire when it is turned the opposite way.
 Loosely install the rest of the cable ties.
Snug down the shock bolt.

31

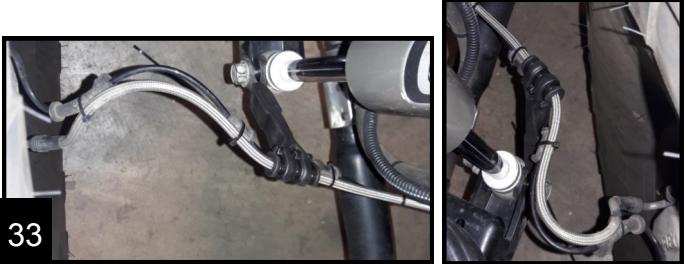


32

Repeat steps 34 to 39 for the other side.

Test the position of the lines and anchor by turning the wheel from lock to lock and articulating the axle. With the shock bolt only snug the anchor can be rotated to help find the best angle.

33



IMPORTANT NOTE! **Watch the anchor for clearance from the shock body.**

Once the best position is found, that keeps the brake lines safe from snags or damage, tighten and trim the cable ties and torque the shock bolts.
 56 ft. lbs. (76Nm)

34

Reinstall the front drive line. Apply thread locker to the bolts and torque to 15 ft-lbs. (20Nm)

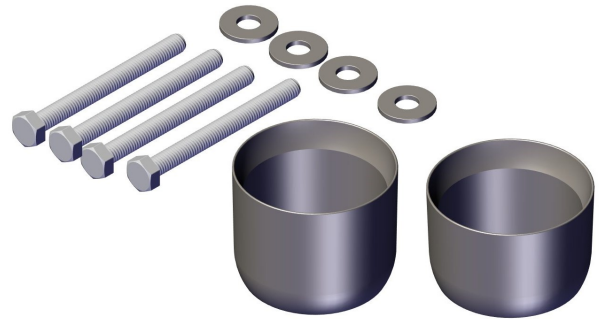
Refer to instruction set 999044 found in the trackbar kit 1753418 and install the front trackbar before proceeding to the next step. Do not torque the trackbar bolts until the vehicle is lowered to the ground.

Final torquing of all suspension and trackbar bolts will take place once the Jeep is on the ground at ride height.

The *front* installation is now complete.

35

Exhaust Spacer Installation



36

If you are installing this lift on a 2012 or newer Wrangler, you must install the exhaust spacer kit.

If you are installing this kit on a 2007-2011 Wrangler, please proceed to Step 43.

37

Using a 13mm, remove the four exhaust flange bolts at the left and right crossover pipe collectors.



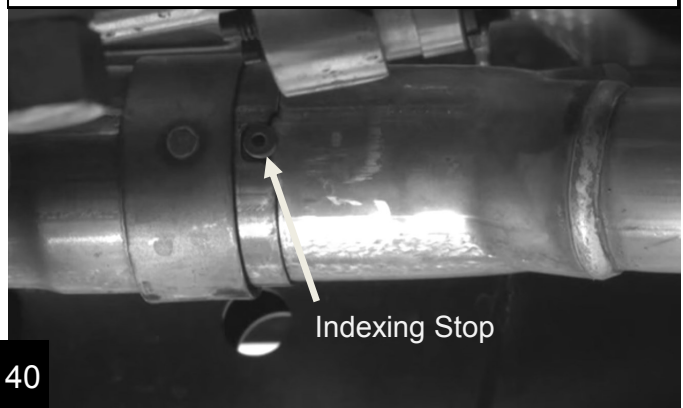
38

Loosen the Y-pipe clamp that joins the front and rear sections of pipe. This will allow the exhaust to slide together to maintain correct positioning of the exhaust.



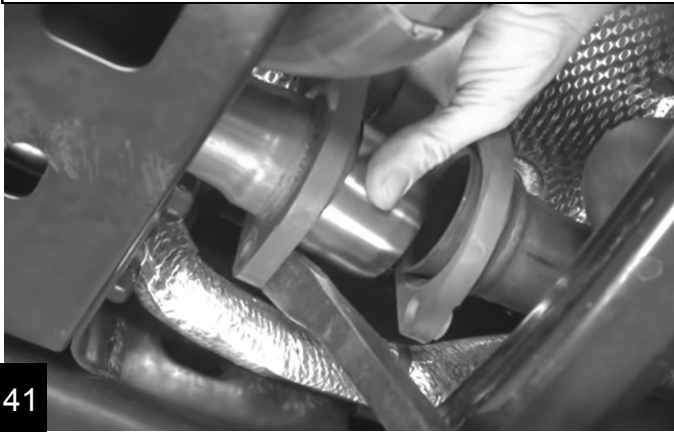
39

Using a chisel, remove the spot welded indexing stop on the intermediate pipe. This will allow the intermediate pipe to slide into the y-pipe to provide added clearance.



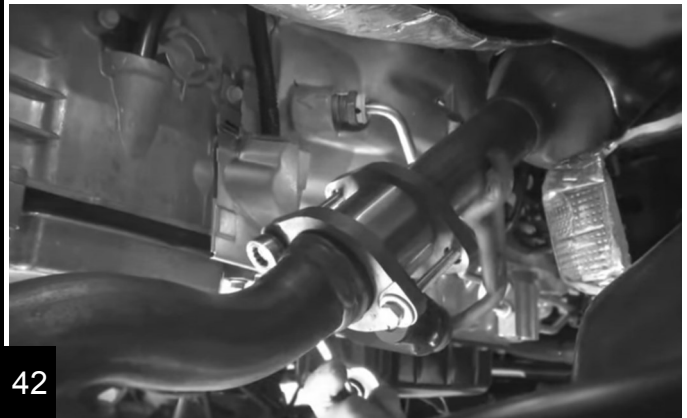
40

Place a pry bar between the front skid bar and the driver side rear pipe flange; separate the exhaust and insert the spacers between the flanges. The longer spacer is used on the passenger side.



41

Install the supplied bolts into the exhaust flanges and tighten evenly. Make sure the exhaust pipes are still properly aligned and the spacers are straight. Check the exhaust system for clearance and retighten the Y-pipe clamp .



42

Rear Installation

“Great works are performed, not by strength, but by perseverance”

-Samuel Johnson

Support the rear axle. Completely remove the rear shocks and axle side trackbar bolt.

Remove the lower control arms. Replace them with the new Sport Flexarms with the sticker facing out. Install the frame side bolts only.

Release the axle breather tube from the upper retaining clip on the underside of the Jeep body.

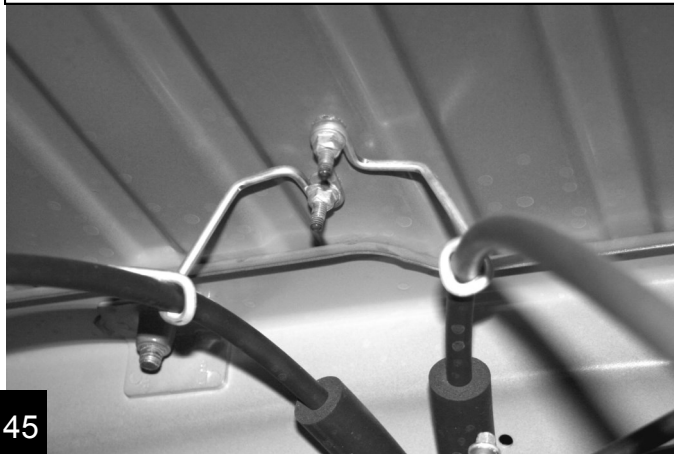
Release the ABS line from the two retaining clips on the axle (on each side).

Remove rear swaybar links.

43

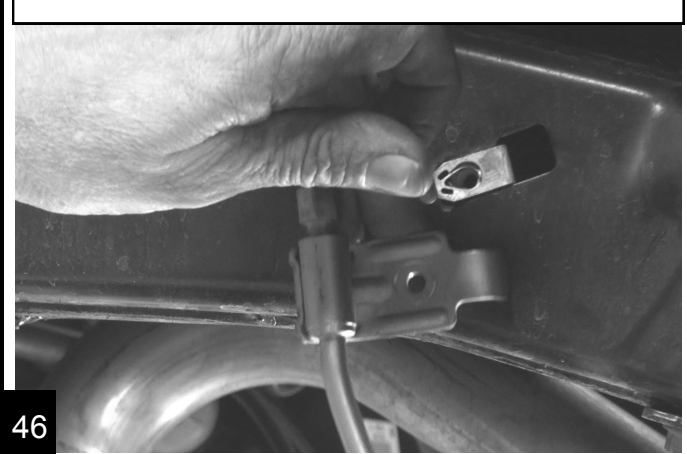
44

Fully remove the part brake cables from the hanger bracket and discard the bracket.



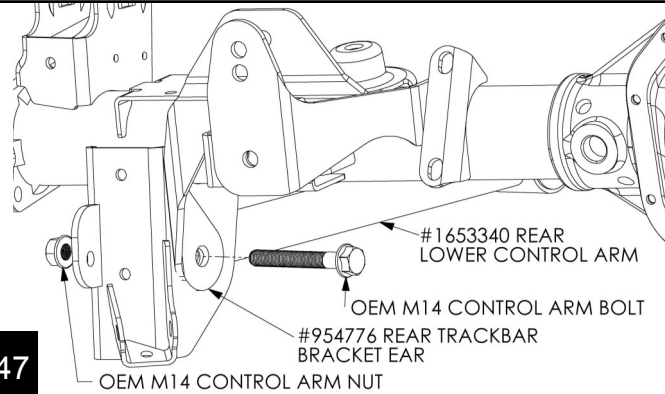
45

Loosen the brake line support brackets and lower the axle enough to remove the coil springs.



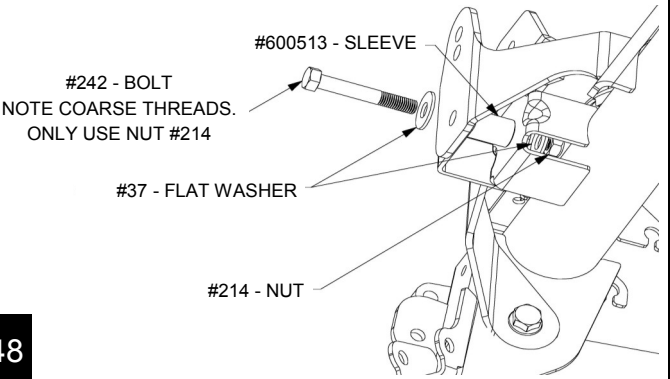
46

Locate the trackbar bracket and hardware kit (600080). The lower ear of the trackbar bracket, and the driver lower control arm share the same bolt. They will need to be installed together.



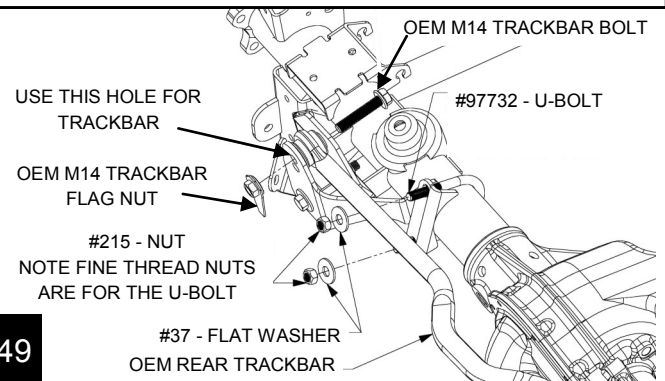
47

Position the trackbar bracket for install and swing the lower control arms up into place and insert the lower control arm bolts. Do not tighten. Install the trackbar bracket spacer and relevant hardware.



48

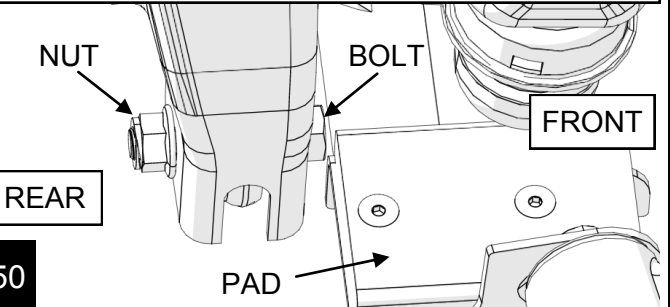
Install the U-bolt nuts and washers. Torque the U-bolt Stover Locknut to 45 ft-lbs (101 Nm) Install the trackbar into the upper hole of the bracket using the factory trackbar bolt. Install the bolt from the front and the nut to the rear.



49

IMPORTANT NOTE! Due to clearance issues with the bumpstop pad on the axle it is important to have the frame side factory trackbar bolt installed from the front, and the nut to the rear.

For those that have our weld in Rear Speedbumps this will not work. Instead, grind the end of the bolt flush with the nut.



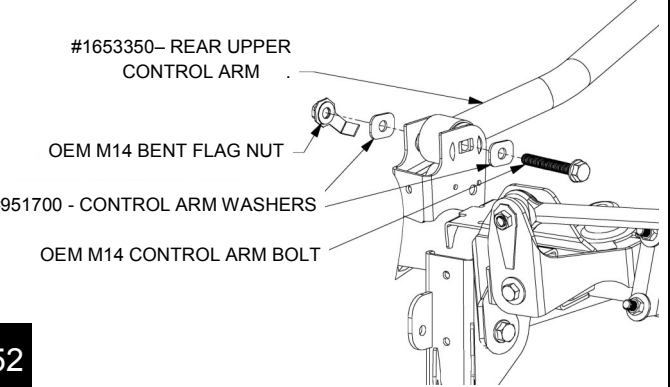
50

Remove the driver upper control arm. Place the new arm into position with the long end facing forward, and the bend going against the frame. Install the frame side bolt.



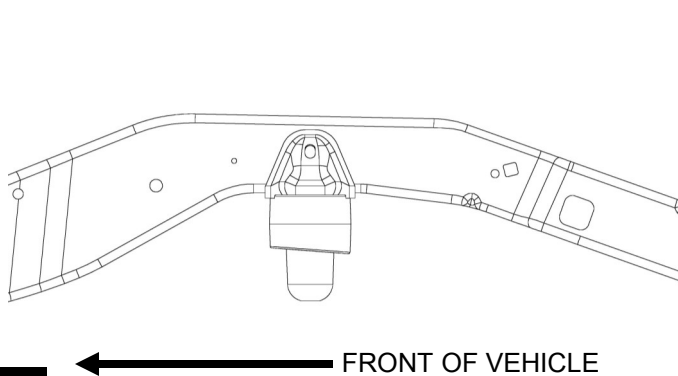
51

Install the axle side bolt. Note the orientation of the cam washers. Tighten just enough to hold washers in place. Do not tighten. Repeat Steps 51 and 52 for the passenger side.



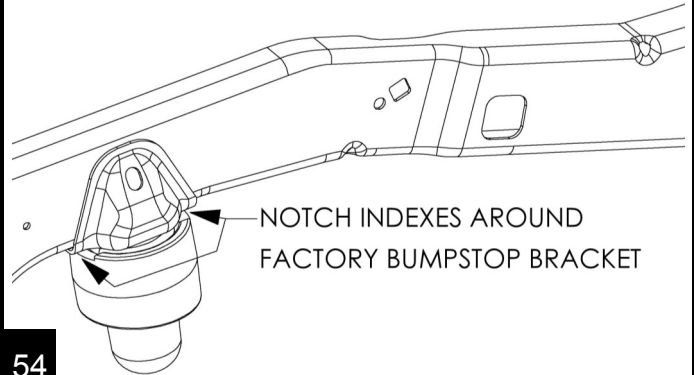
52

Install the upper SpeedBump cups. The cup snaps onto the frame bump stop bells. (It will take some pressure)



53

Position the Speed Bump cup with the longer side of the slope (the large end of the taper) facing the rear. The notched cuts index around the factory bump stop bracket.



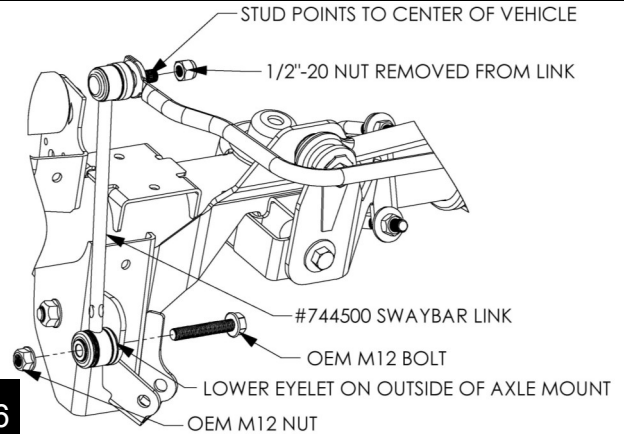
54

Twist and push the new Speedbump bump stops into position. Some silicone spray lubricant will help them pop into place.



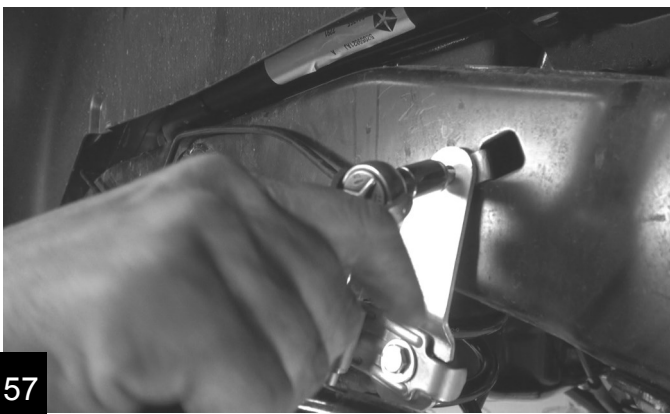
55

Install the swaybar link with the ball joint stud end at the top and the mounting stud pointing towards the frame. Torque upper and lower to 59 ft-lbs.



56

Locate the brake line extension hardware bag (5018). Use the supplied 1/4" bolt to attach the factory bracket to the new extension.



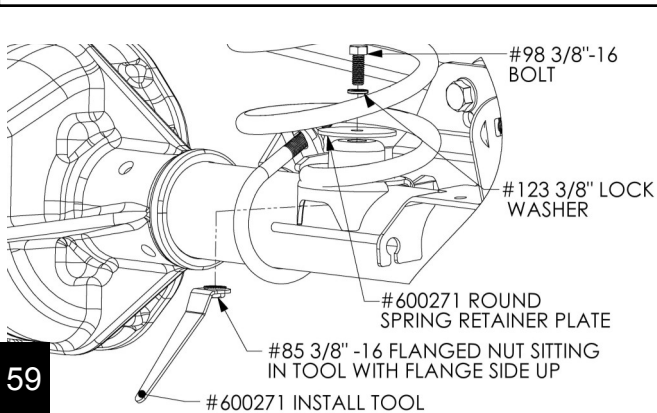
57

IMPORTANT NOTE! It is imperative at this time to cycle the swaybar and check for proper clearance between the swaybar and the brake line. Make the necessary bends in the brake line and bracket to clear the swaybar link as it goes through its range of travel.



58

Install the factory rear upper spring isolators and the new rear coil springs. Locate the rear lower coil spring retainer kit (4954300) and install. Use the provided wrench to help with the nut installation. Torque to 25 ft-lbs (35 Nm).



59

Install the rear shocks. If using Fox shocks, inspect for clearance of the 90° reservoir fitting. Due to variances in the upper shock mounting bracket it may be necessary to clearance the opening with a die grinder.



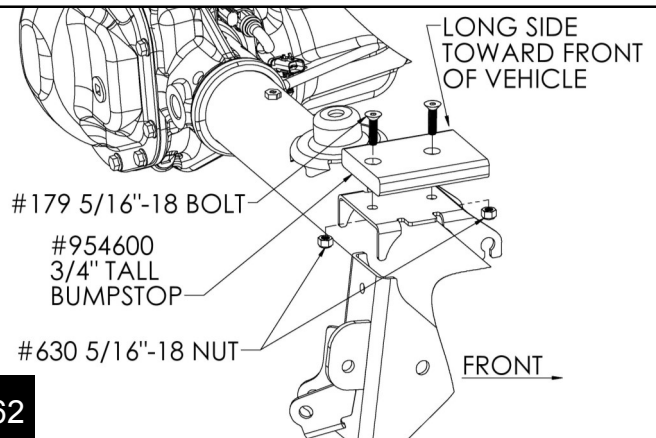
60

Check the shock reservoir and line clearance. The reservoir can be repositioned so that there is no contact by adjusting the clamps. Final torque the upper shock bolts to 37 ft-lbs (50 Nm) and the lower bolts to 56 ft-lbs (76 Nm).



61

Locate the rear lower bump stop kit (19454605) and install the lower bump stop pad with the extended end facing forward. Torque to 200 in-lbs (22 Nm).



62

Secure the axle breather tube to the cross member.



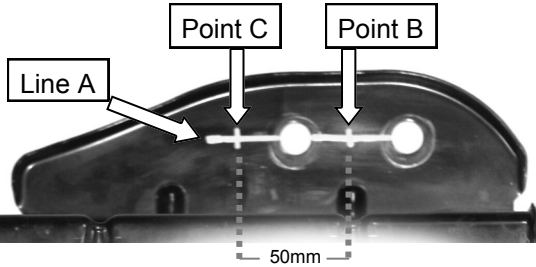
63

Note: 2012+ 4-Door Wrangler must relocate the EVAP canister for proper driveline clearance at full suspension articulation. 2007-2011 4-Door and all 2-Door JK's skip to step 74.

Locate the EVAP canister and skid plate located under the vehicle next to the rear driveline. Use a 16mm to remove the two front bolts of the EVAP canister. Loosen, but do not remove the rear bolt.

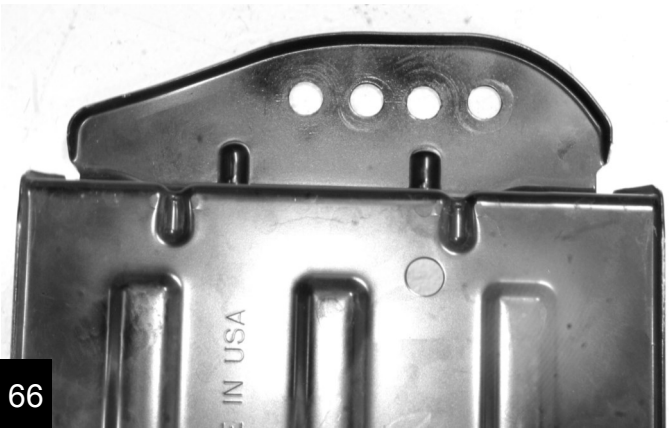
64

Mark a centerline of the existing holes (labeled Line A). Mark a spot about half way between the two existing holes (labeled Point B) and one 50mm to the left of Point B. (labeled Point C). Center punch and drill a 1/2" hole at Points B and C. Use a small block of wood as a spacer behind the bracket for drilling.



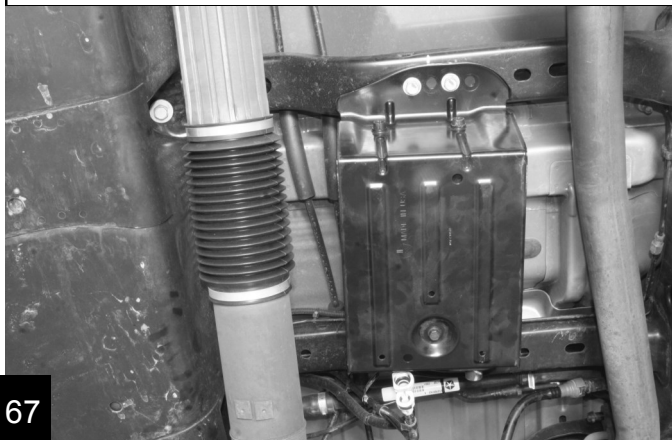
65

Results after drilling.



66

Remove the wood, rotate the canister and skid plate. Reinstall using the two new mounting holes. Torque all three bolts to 10 ft-lbs (14 Nm)



67

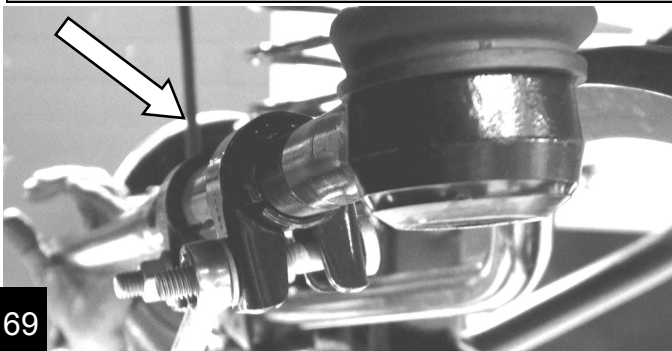
Reinstall the wheels and tires. Torque lug nuts to 85-125 ft-lbs (115-170 Nm) Lower the Jeep to the ground.

With the Jeep on the ground, torque control arm, trackbars, trackbar brackets and all other bolts that have not been tightened. This will ensure that the bushing load is in a neutral position throughout the Jeep.

Front Upper Control Arms	75 ft-lbs	102 Nm
Rear Upper Control Arms	125 ft-lbs	169 Nm
Front and Rear Lower	125 ft-lbs	169 Nm
Front and Rear Trackbars	125 ft-lbs	169 Nm

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Before test driving the Jeep, do a quick visual check and make sure the tires are straight. Adjust the drag link as needed to center the steering wheel. Drive a short distance down a straight road and, if necessary, readjust the steering wheel to center. Torque the drag-link adjusting sleeve to 26 ft-lbs (35 Nm).



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Perform a final check of the suspension components and bolts.

To avoid excessive tire wear an alignment is necessary.

Maintenance Note: After the first 100 miles and every 3,000 miles after that, re-torque all the suspension components and bolts.

Install is now Complete!

Congratulations! Your hard work, unprecedented dedication, and extreme attention to detail have earned you a very sweet ride. Go enjoy a day or two in the back country. After all, you earned it.

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PRODUCT INFORMATION

MAINTENANCE INFORMATION:

It is the buyer's responsibility to have all suspension, drivetrain, steering, and other components checked for proper tightness and torque after the first 100 miles and every 3000 miles after that.

NOTICE TO INSTALLER:

The enclosed "Warning to Driver" sticker must be installed in the vehicle in driver's view. This sticker is to act as a constant safety reminder when operating the vehicle. It is your responsibility as the equipment installer to install the provided sticker and to forward the product instructions to the vehicle's owner for review. If a "Warning to Driver" sticker or product installation guide were not included in the kit, FREE replacement stickers and instructions are available by request. It is the installer's duty to ensure a safe and controllable vehicle after the modifications have been performed.

WARNING:

Neither the seller nor the manufacturer will be liable for any loss, damage, or injury directly or indirectly arising from the use of or inability to determine the use of these products. Before using, the user shall determine the suitability of the products for its intended use, and the user shall assume all responsibility and risk in connection therewith.

WARNING TO DRIVER:

This vehicle has been modified to enhance off road performance and has unique handling characteristics. Use in harsh environments can cause extreme stress on the components. Vehicle should be inspected after being off road to make sure that all the components are in working order and safe to travel on the highway. All fasteners should be checked so that they are at the correct torque specifications as the vibration and stresses from off roading may cause critical fasteners to work loose. Extra care should be taken to inspect the critical components, steering, and brake systems. During each oil change components such as arms, tie rod ends, etc should be greased and checked for excessive wear. Any worn components should be replaced. When returning to the pavement always set or restore tire air pressure to the factory recommendation and connect or engage any disabled swaybar mechanisms. Because of the higher center of gravity and larger tires, this vehicle handles and reacts differently than many passenger cars, both on and off road. You must drive it safely! Extreme care should be taken to prevent vehicle rollover or loss of control, which can result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers. Generally, braking performance and capabilities are decreased when significantly larger/heavier tires are used, especially when used in combination with transfer case low-range reduction kits. Take this into consideration while driving. Do not add, alter or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the TeraFlex product purchased. Mixing component brand is not recommended. TeraFlex Inc. will not be responsible for any altered product or any improper installation or use of our products. We will be happy to answer any questions concerning the design, function, and correct use of our products. It is ultimately the buyer's responsibility to have all bolts/nuts checked for tightness after the first 100 miles and then every 3000 miles. Wheel alignment, steering system, suspension and drive line systems must be inspected by a qualified professional mechanic at least every 3000 miles.

TERAFLEX PRODUCT WARRANTY:

TeraFlex Inc. warrants TeraFlex Suspension products to the original retail purchaser to be free of defects in material and workmanship for as long as the original purchaser owns the vehicle on which products were originally installed.

Failure to complete regular maintenance (grease every 3000 miles) on TeraFlex FlexArms will void this warranty. All other conditions of the standard TeraFlex product warranty apply.

All TeraLow products are covered by the TeraFlex two (2) year warranty to be free of defects in material and workmanship for two years from date purchased.

TeraFlex axles are covered by a 12-month warranty to be free of defects in materials and workmanship.

This warranty does not cover or include product finish, improperly installed or applied products, improperly maintained products, products or components used for racing or competition or damage due to abuse or neglect, products that fail due to the use of larger tire and wheel combinations.

All returns must be accompanied by an original invoice. It is the customer's responsibility to remove the product from the vehicle. Shipping charges are the responsibility of the customer. TeraFlex Inc. will pay the return freight if the product meets the terms of warranty.

This warranty is for the replacement or repair of defective TeraFlex products only and does not include freight charges, labor charges for removal of or installation of TeraFlex or related products or components, costs incurred due to down time of the vehicle, or lost profits due to vehicle down time.

A returned goods authorization number (RGA#) must accompany any returned products. For more information please contact a TeraFlex customer service representative.

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