

MAXIMUS-3

JL WRANGLER

3.5"/4.5" GEO SUSPENSION LIFT (Left Hand Drive Only)

INSTALLATION GUIDES

Vehicle & Model Year Applications: 2018 – Current Jeep JL and JLU Wrangler



PLEASE MAKE SURE YOU READ AND UNDERSTAND THE ENTIRE INSTALLATION GUIDE BEFORE YOU START. WE EXPECT YOU TO HAVE BASIC MECHANICAL ABILITIES TO PERFORM THIS INSTALLATION.

WE RECOMMEND THAT YOU SEPARATE AND IDENTIFY ALL THE PARTS AND HARDWARE KITS YOU RECEIVED WITH YOUR SHIPMENT BEFORE YOU PROCEED TO DISASSEMBLE YOUR JEEP.

Parts List:

Coil Springs (Front & Rear)	4
Shocks (Front & Rear)	4
Bump Stop Kit (Front & Rear)	1
Rear Sway Bar End Links	2
Flip Draglink Kit	1
Rear Track Bar Correction Bracket Kit	1
Front Track Bar & High Steer Correction Kit	1
Steering Stabilizer/Damper Relocation Kit	1
Front Control Arms Geo Correction Kit	1
Brake Line Bracket Kit	1

Qty

Tools Required:

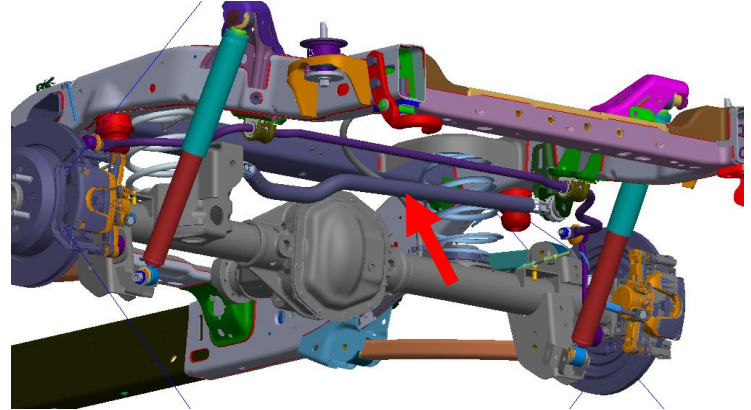
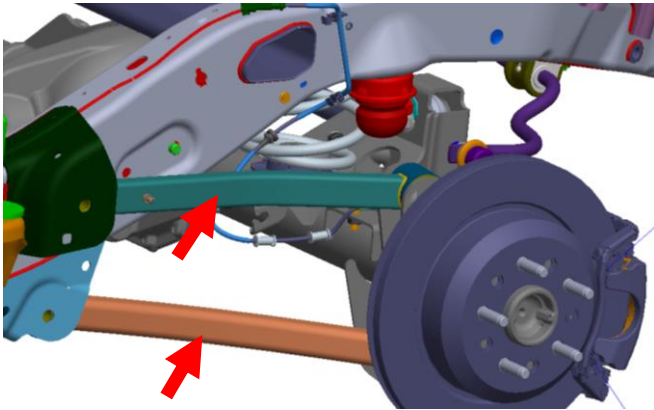
- Basic Hand Tools
- Metric & Standard wrenches/spanners
- Driller
- 3/8" or 10mm Drill Bit

INSTALLATION STEPS

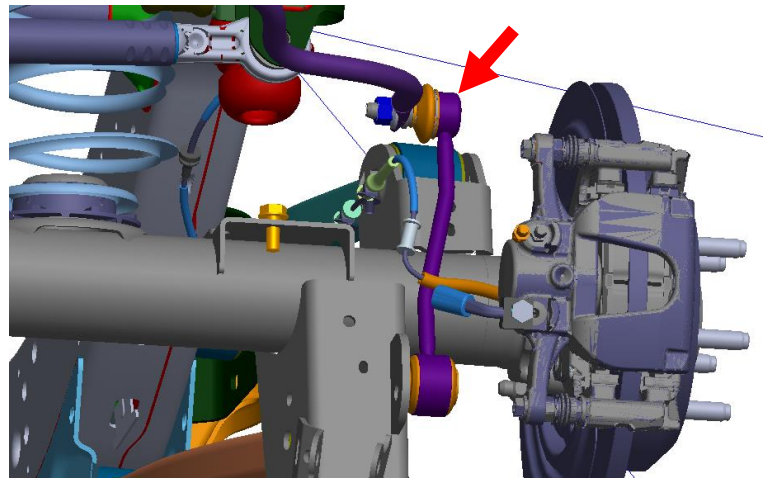
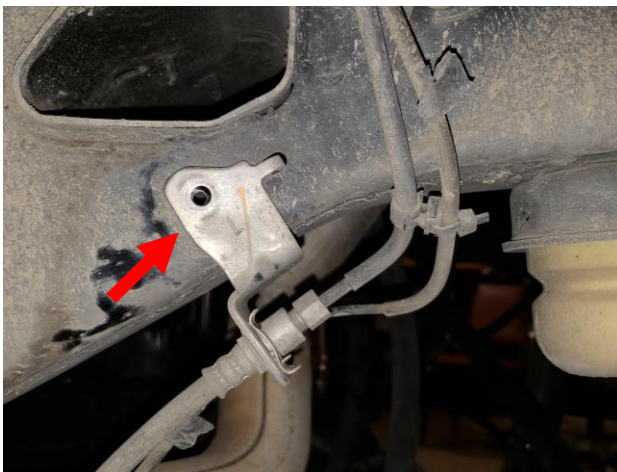
Estimated Install Time: 6 – 8 man/hrs

REAR

1. Hoist the Jeep or jack it up and support from under the frame in four corners using jack stands (about 22 inches off the ground) such that you can drop the axle enough to remove the Coil Springs. Support the axle from the center with a floor jack.
2. Remove the rear wheels. Do not remove the front wheels at this point.
3. Using a socket/wrench, loosen all 8 upper and lower rear control arms bolts.
4. Using a socket/wrench, Loosen the rear track bar bolt at the chassis end and remove the bolt from the axle end. Leave chassis end connected.
5. Remove Axle Vent Hose from axle (Rubber hose attached to the axle) to avoid over stretching or breakage.

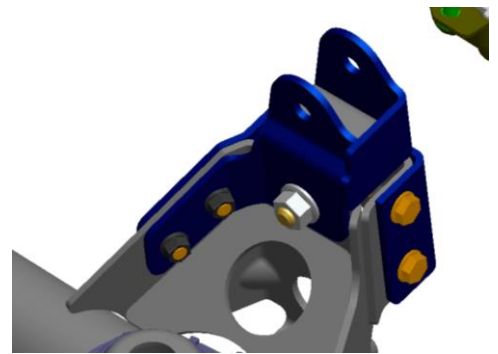
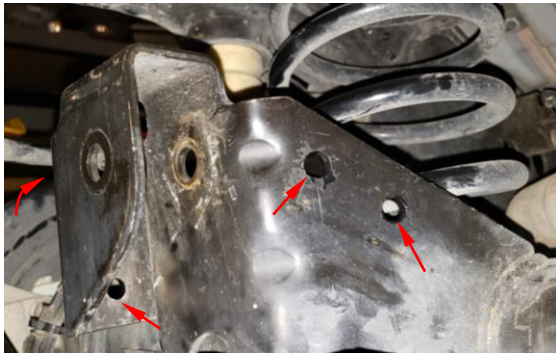
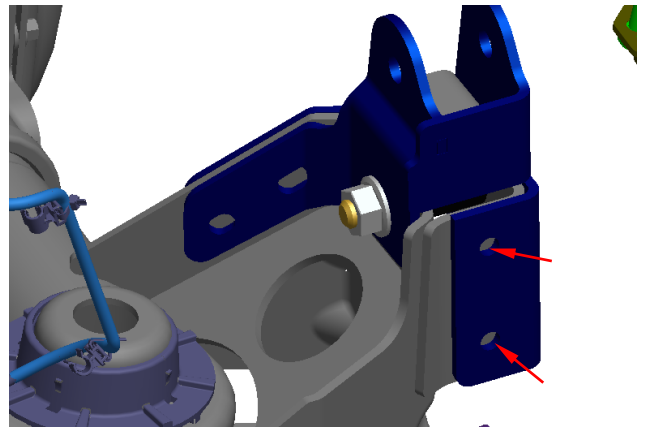
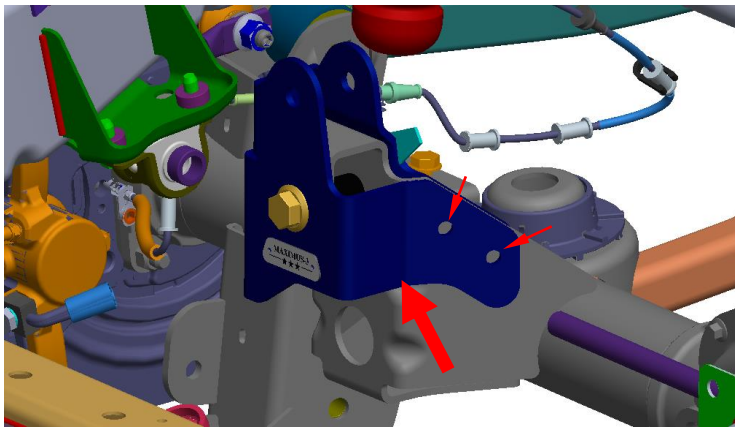


6. Using a 10mm socket/wrench, unbolt the Brake Lines brackets from the frame – both sides (see picture below).
7. Using sockets/wrenches, remove the factory shocks.
8. Detach all wires from axle and chassis to allow enough movement and avoid wire over stretching or breakage when you lower the rear axle later. Detach speed/locker wiring plastic cable ties from the axle and frame using a pry tool. Detach locker sensor for JL Rubicon.
9. Using sockets/wrenches, remove rear sway bar end links and save along with hardware for front install later. Upper nuts have different thread pitch from lower nuts, DO NOT interchange them. Reattach them to their respective studs so you don't misplace them or mix them up with the others.

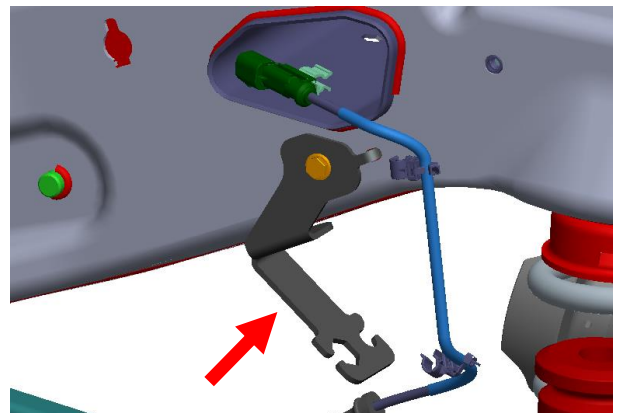
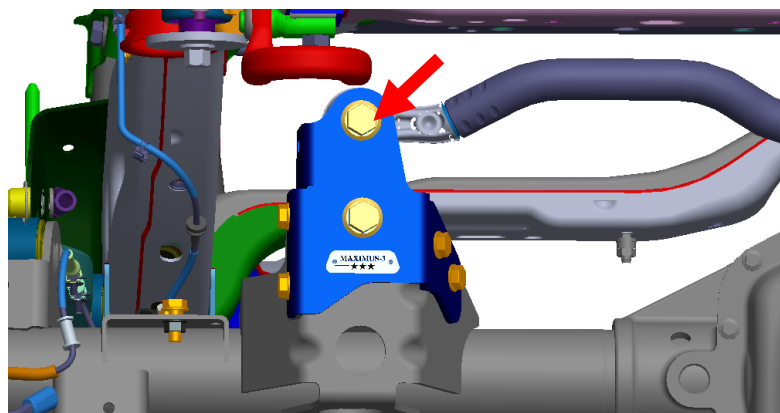


10. Carefully lower the axle using the floor jack to enable enough droop to remove the coil springs. Be careful not to over stretch the speed/locker sensor wiring and Brake Lines.
11. Remove the factory springs.
12. Place your Maximus-3 Rear Track Bar Bracket on the axle as shown below. Temporally insert the M14 bolt supplied to align the bracket in position and mark 4 drill holes locations with a marker/sharpie.
13. Now remove the bracket and drill 4 pilot holes then final mounting holes using 3/8" or 10mm drill bit. Touch up the holes with paint to prevent rust.

14. Loosely, install Maximus-3 Track Bar Bracket as shown using the hardware supplied - make sure to insert crash bushing between. Now tighten all bolts (torque the long M14 bolt to 110 ft/lbs).



15. Install the new Coil Springs. Make sure to properly index the coil ends on the axle spring seat.
16. Bolt the axle end of the rear Track Bar to the Maximus-3 Track Bar Bracket as shown using factory hardware (place jack on the left side of the axle near the bracket and jack up the axle. Track Bar should align with minimal effort) Do not tighten for now. Note orientation of the bolts.
17. Install the new shocks. Bolt the top mount of the shocks for now. NOTE: If you are installing Remote Reservoir Shocks, make sure the Reservoir hose does not make contact with any other parts.
18. Raise axle slowly using the jack and guide springs into seating position.
19. Install the new Rear Sway Bar End Links using factory hardware and tighten (torque to 60 ft/lb top and 60 ft/lb bottom). Note, ball joint stud points inward.
20. Now bolt Shocks bottom ends using factory shocks hardware and tighten (75 ft/lb bottom, 80 ft/lb top).
21. Install Maximus-3 Brake Line Brackets as shown below and tighten.

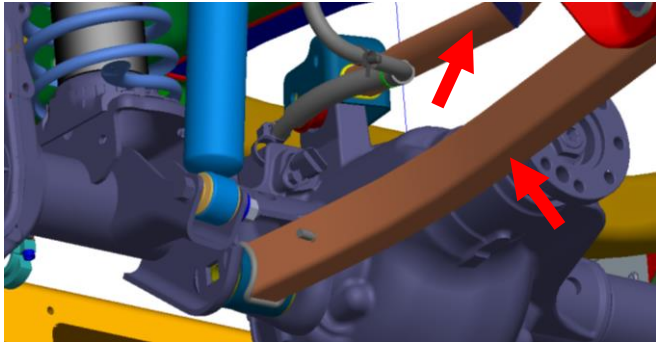


22. Reconnect the Rubber Axle Vent Hose.
23. Remove E-Brake cable bracket from the body and discard.
24. Disconnect E-Brake cables from the axle on both sides. Use a pair of vise pliers to hold the rod end.
25. Re-route the E-Brake cables from under the cross member to allow more length.
26. Re-connect your E-Brake cables.
27. Reinstall wheels and tighten lug nuts (torque to 105 ft-lbs).

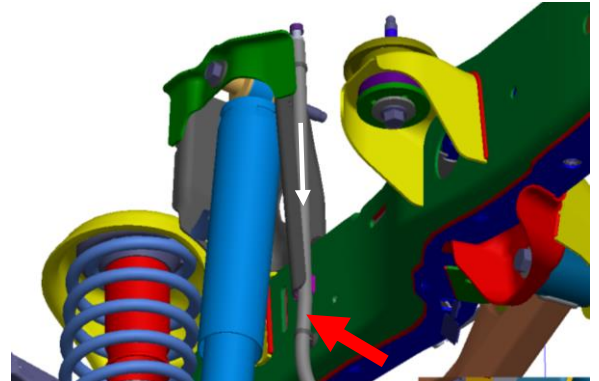
**** DO NOT install the Rear Bump Stop for now. They will be installed later.
***** DO NOT tighten Track Bar or Control Arms for now. They will be tightened later.

FRONT

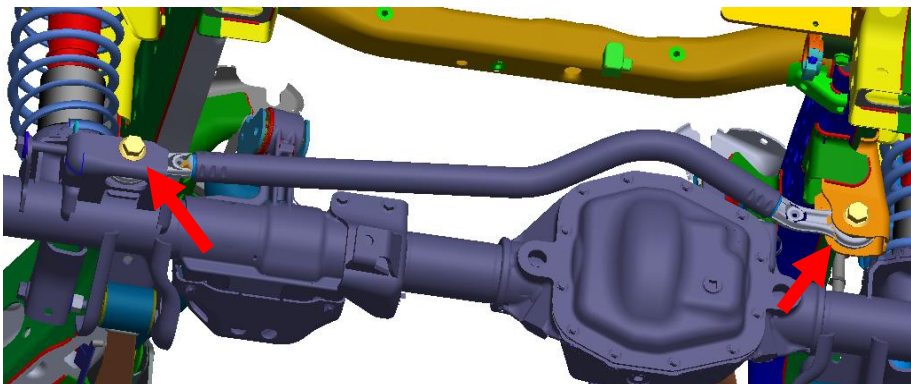
1. With the Jeep still raised on jack stands, remove the front wheels. Support the front axle from the center with a floor jack.
2. Loosen all 8 upper and lower control arm bolts, but DO NOT remove.
3. Remove the factory Steering Drag Link and save the axle end bolt and nut for reuse later. Put aside for partial reuse with SteerSmarts HD half flip link (not needed for XD full flip link).



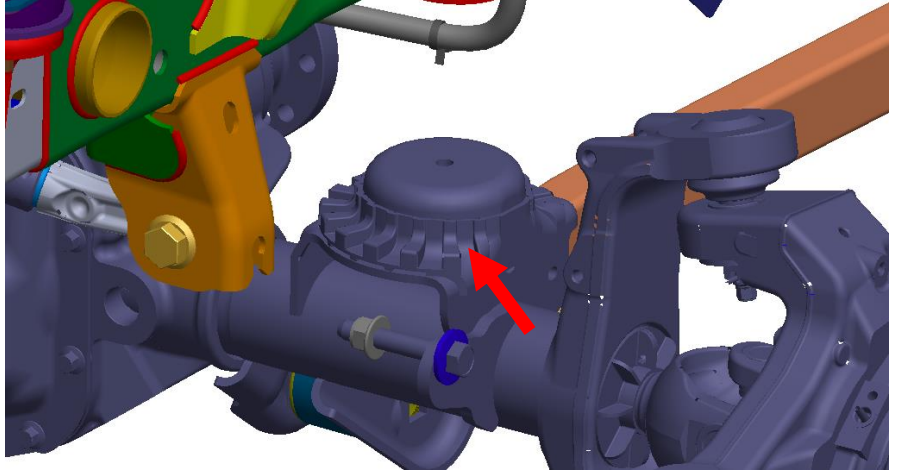
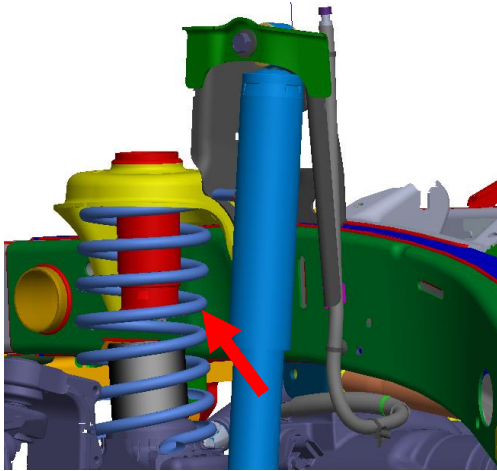
4. Remove factory Steering Stabilizer/Damper Shock (if you are installing Maximus-3 relocation kit).
5. Detach all wires from axle, control arms and chassis to allow enough movement and avoid wire over stretching or breakage when you lower the axle later. On Rubicon models, remove the "fir tree" zip ties holding the speed sensor wiring to the upper control arm. Disconnect/Unplug the locker connectors from the axle using a pry tool.
6. Remove the Axle Vent (rubber hose) from the frame and reattach lower down as shown (see picture below).



7. Loosen the frame-side Track Bar bolt, but do not remove. Remove and save the axle-side track bar bolt and flag nut (see picture below).
8. Remove all front sway bar end links and discard. Save the bottom hardware for reuse later. Note orientation of bolts, new links will be installed in the same way.
9. Remove shocks and save all shock mounting hardware (see picture below).
10. Remove the brake line brackets bolts to the frame.



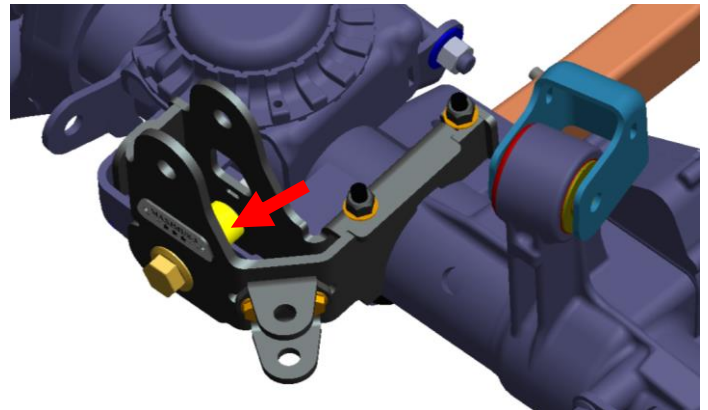
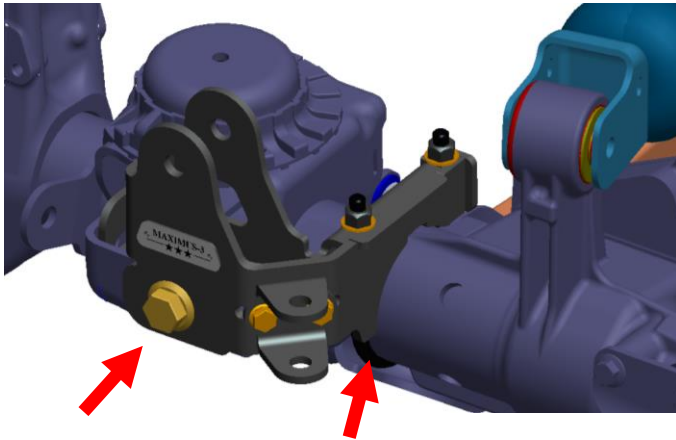
11. Lower the axle and remove factory coil springs. Do not remove factory isolator if your spring did not come with new ones.



12. If you are installing Remote Reservoir Shocks install the reservoir brackets now.

13. Install Maximus-3 Front Track Bar & High Steer Bracket as shown below:

- Insert the supplied U-bolt in location on the axle tube and hold up while you place Maximus-3 Track bar Bracket into alignment and loosely connect the U-bolt using washers and lock nuts supplied.
- Insert the supplied spacer/crash bushing between factory bracket and Maximus-3 bracket as shown (you may need to pry the brackets apart or tap in the spacer/crash bushing with a hammer) - line up with factory track bar bolt hole. Insert M14 bolt supplied as shown, add flange nut and tighten (torque to 110 ft/lbs).
- Now tighten U-bolt nuts (torque to 18 ft/lbs).

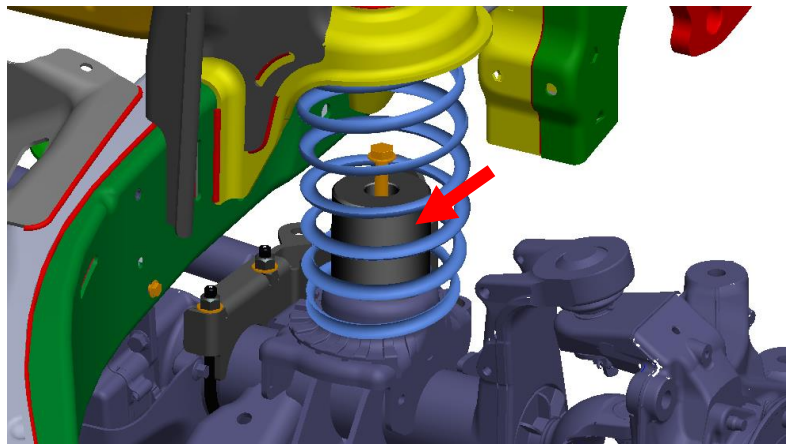


14. Reconnect factory track bar to new Maximus-3 bracket.

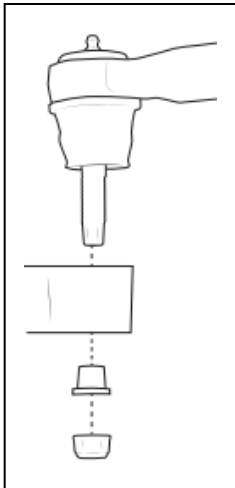
- Slowly raise the axle and line up track bar bolt hole with the hole in the new bracket – you may need to pry the brackets apart to allow the track bar to drop in easily. Use the floor jack to maneuver the axle over to line up the holes. You can also use a ratchet strap to move the axle over.
- Connect the track bar using M14 track bar bolt and flanged nut supplied, but do not tighten for now.

15. Install the new Front Coil Springs.

- Place new Front Bump Stop spacer inside springs as shown below and insert the spring in top mounting location, keeping factory isolator in place, and index the bottom in mounting location on the axle. Make sure to properly index the springs on the bottom spring plastic seat.
- Bolt and tighten supplied Bump Stop spacer using supplied thread cutting bolt and flanged lock nut.



16. Install front sway bar end links
 - A. Use the factory Rear Sway Bar End Links you removed earlier or equivalent replacement end links.
 - B. Using factory hardware, attach the ball-joint upper end stud to the sway bar in the same orientation as the original factory front links with the stud pointing to the frame and tighten (torque to 60 ft/lb top and 60 ft/lb bottom). Note: Flag nut goes on passenger side.
17. Install the front Shocks.
 - A. Install shocks in the upper mount in the same way as the factory shocks using factory hardware (75 ft/lb).
 - B. Install shocks lower mount in the same way as the original factory shocks using factory hardware (80 ft/lb).
 - C. If you are installing Remote Reservoir Shocks, make sure the Reservoir hose does not make contact with any other parts.
18. Install High-Steer Flip Draglink
 - A. For SteerSmarts XD Draglink (full link), skip to step B. For SteerSmarts HD Draglink (half link), reuse the factory axle side link and adjuster sleeve. Apply anti-seize to the threads of your new HD half Draglink and thread it into the factory adjuster sleeve until the amount of thread showing are about the same on both sides.
 - B. Remove the plastic protective cover from the Draglink end and insert the stud and washer of Flip Draglink (top mount draglink) into the knuckle hole from the top side.
 - C. Insert the tapered sleeve into the bottom of the knuckle mounting hole, thread on the lock nut and tighten. Use an Allen key in the stud tip to prevent the stud from turning in the socket while you tighten the lock nut using socket/wrench (torque to 120 ft-lbs).
 - D. Make sure you grease the draglink socket through the zerk fitting until grease purges around the boot seal.

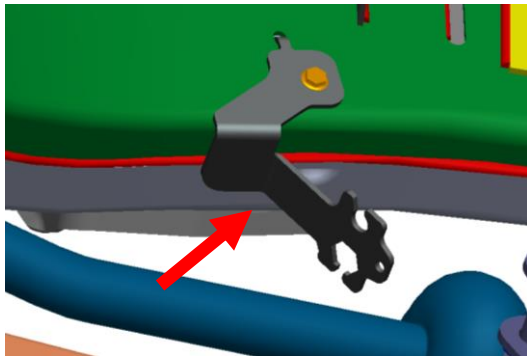


19. Optional: Install your Steering Stabilizer/Damper and Relocation Kit
 - A. Disconnect your factory Steering Stabilizer/Damper from the axle bracket and from the tie rod bracket.
 - B. Using factory hardware, connect your Steering Stabilizer rod end to the relocation tab on your Maximus-3 Track Bar Bracket. Note orientation of Stabilizer and make sure the bolt points up as shown below.
 - C. Loosely bolt Maximus-3 Steering Stabilizer Stud to the tie rod using U-bolts supplied. Adjust the position of the stud on the tie rod to 23.5" from the edge of the tie rod tube to the center of the stud.

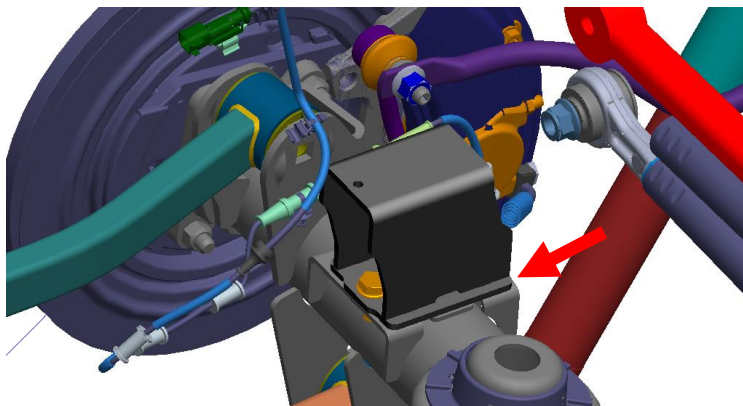
- D. Rotate the tie rod bracket until the stud is pointing about 90 degrees straight up and tighten U-bolts.
- E. Attach the tube end of your Steering Stabilizer/Damper to the tie rod stud using supplied spacer washer and flanged lock nut (torque to 37 ft-lbs).



- 20. Install Front Brake Line Relocation Brackets (torque to 8 ft-lbs).
 - A. Using M10 open wrench, disconnect the brake line hose from the pipe end.
 - B. Pull out the retainer spring clip holding the factory bracket. Remove the bracket and discard, but save the retainer spring clip for reuse.
 - C. Connect the brake line to Maximus-3 Brake Line Bracket using factory retainer clip.
 - D. Reconnect the brake line hose using M10 open wrenches.



- 21. Reinstall wheels and tighten lug nuts (torque to 130 ft-lbs). Lower the Jeep on level ground.
- 22. Now tighten all fasteners to factory specifications.
- 23. Install new Maximus-3 Bump Stop Spacers on the rear axle as shown using supplied hardware. Make sure you install them in the orientation shown (see picture below).

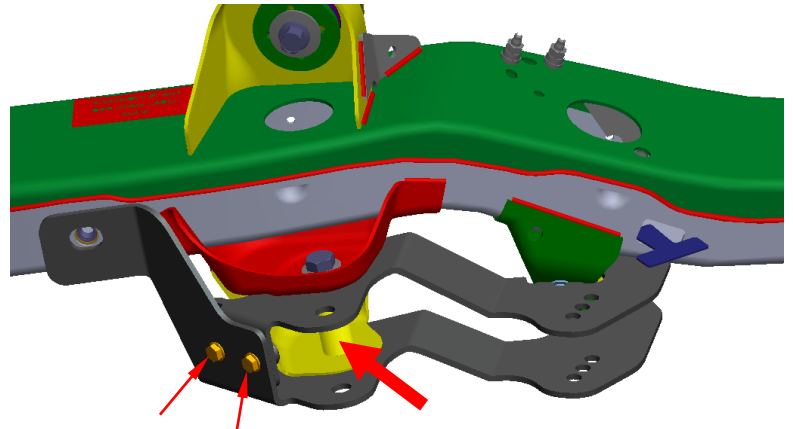
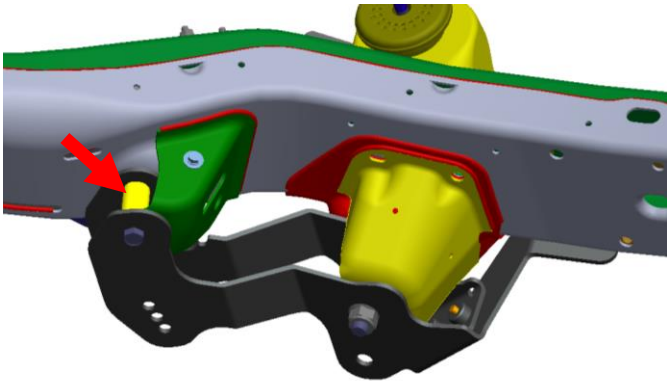


FRONT CONTROL ARMS GEOMETRY CORRECTION BRACKETS

(3.5" - 4.5" SUSPENSIONS LIFT)

Make sure your Jeep is at ride height with all 4 wheels on the ground.

1. Remove the automatic transmission skid bar/plate and set aside.
2. Starting on one side, remove the bolts holding upper and lower control arms at the frame end and save the hardware. Remove the upper control arm heatshield cover and discard.
3. Using the factory hardware and crash bushing spacers provided, install the brackets in the factory control arms mounting locations as shown (M15 in lower, M12 in upper). Place the bushing spacers between the new bracket and original tabs on the frame to prevent the tabs from collapsing when you tighten the bolts later. Do not tighten bolts for now.
4. Bolt the lower control arm in the new lowered location using the supplied M15 bolt and lock nuts. Do not tighten for now.
5. Using M12 bolt and lock nut supplied, bolt the upper control arms in the upper mounting hole for 2.5" lift, middle hole for 3.5" or in the bottom hole location 4.5" lift. Do not tighten for now.
6. Bolt the two brackets together using the two M8 bolts supplied as shown. Make sure to line up the back slotted hole with the mounting location of the automatic transmission skid bar you removed in step 1. Do not tighten bolts for now.
7. Now tighten all bolts starting with the bolts you installed in step (3), then of step (4) and finally step (5) in this order. Torque M16 bolts to 130 ft/lbs, M12 bolts to 75 ft/lbs, M8 bolts to 25 ft/lbs.
8. Repeat the same on the other side.



9. Now reassemble the automatic transmission skid bar using original factory hardware (torque to 60 ft/lbs).
10. Torque all hardware to specified specs.

Your installation is complete. If you have questions regarding this installation, please contact us at info@maximus-3.com or call 248 821 6654.