JL/JT Ultimate Front 3-Link Long Arm Kit Instructions

Thank you for purchasing the RPM Steering 3-link long arm upgrade kit. Please take your time during the installation and be sure to do it correctly. Completely read the directions before starting your installation so you know what to expect. Remember, your safety and the safety of others depends on it. Feel free to call with any questions you may have. 480-476-2073.

Kit Includes:

(1) Transmission crossmember with link mounts

(1) Bolt in driver side 3-link frame mount

(1) Bolt in driver side 3rd link reinforcement bracket

(1) Bolt in driver side crossmember outer bolt plate

(2) 2" Aluminum control arms w/ Rock Jock narrow joints (2.25'' Links available with upgrade)

(1) 1.75" Upper control arm w/Rock Jock narrow joint and offset clasp

(1) Axle side Rock Jock uniball upper joint and install tool

(1) Hardware Pack

*****JT/ Gladiator Specific Parts**

(2) Crossmember shim plates (may not be used depending on model and year).

(3) Passenger side aluminum spacer sleeves (Some JT frames come with the 3 crossmember sleeves welded in from the factory and some do not. These are to be used when the factory welded sleeves are not present).

(1) Passenger side crossmember bolt plate (to be used with aluminum spacers if factory welded in sleeves are not present).

Warranty:

Center aluminum section is lifetime warrantied for failure, including bending, cracking, or breaking. Should any of these failures occur please send the center section to RPMSTEERING for replacement. (Shipping and handling additional).

Disclaimer:

Customer assumes full responsibility for use, installation and routine maintenance. RPM Steering is not responsible for damage as a result of improper installation, use or maintenance.

JL Front Long Arm Hardware Kit

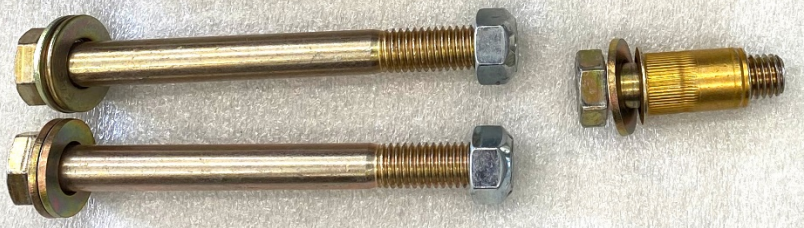
Qty 6 - 5/8-11 x 5" Bolts

Use 3 on each side through frame to secure crossmember

5/8-11 x 4" Bolts

Use on all control arms. Note the Upper control arm mount on the frame requires use of a washer and a welded nut plate.

1/2-13 Rivnut Install under flange on passenger side crossmember bracket



1/2-13 x 5"

Use on the rear two holes of the upper control arm mount through the frame and into the reinforcement bracket

M12 1.5 x 40

2 bolts and welded nut plate to be used on the upper control arm frame bracket front two holes.

1 bolt will secure the bottom flange of the upper control arm frame bracket

1 bolt will secure the bottom flange on the passenger side crossmember bracket

Front Crossmember and 3rd link install:

1) With the vehicle on a level surface and parking brake engaged, jack one side of the axle up at a time and remove your tire and place a large jack stand under the frame to allow axle to full droop without touching the ground. Repeat on other side.

2) If you are upgrading your current lift and do not need to change in spring, shocks, track bar etc, simply support the axle with small jack stands or a floor jack so the control arms can be disconnected safely.

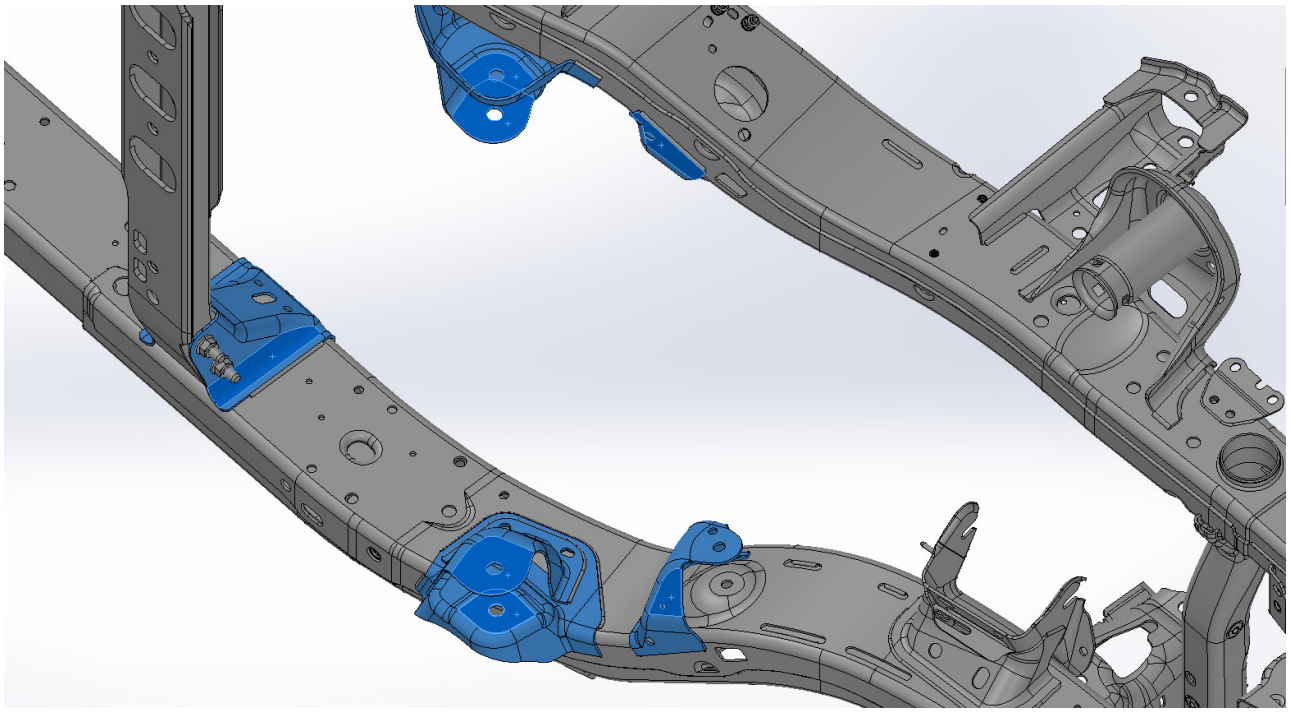
3) If you are installing lift comenents like springs, shocks, track bar you may do that now.

4) With the axle supported, unbolt and remove the factory control arms.

5) With the vehicle on a level surface, place a floor jack under the transmission/transfer case tail end to support the driveline while removing the factory transmission crossmember.

6) Unbolt and remove the factory transmission crossmember (keep all transmission hardware it will be reused).

7) With suspension and crossmember out of the way you can now remove all the factory control arm brackets as well as the bracket holding the crossmember up. The goal is to have all welds removed down to a flat smooth frame where the new crossmember will sit and on the section where the new 3rd link mount will sit. Complete removal of all the welds on other areas are optional and cosmetic only. This can be done with a cut off disc and flap disc or torch depending on your skill level. Watch for any wiring or lines running along the frame. See image below for reference.



8) Once all the areas are cut, clean and smooth finish with a coat of paint to protect from rust.

9) Next take the driver side bolt plate (ensure you have the driver side by holding the plate up to the driver side crossmemeber L bracket as the bolt pattern is different for each side). (Only JT kits will have 2 bolt plates).

10) Use the bolt plate as a template on the inside of the frame aligning the slot in the plate and the slot in the frame to mark the 3 holes that will be drilled for the crossmember bolts.

11) Use the same method to now mark the holes on the outside of the frame where the bolts will come through.

12) Next hold up the 3rd link mount aligning the holes in the frame with the holes in the bracket and mark the holes for drilling that are not present in the frame.

13) With all the holes marked, start by drilling the 3- 5/8'' holes for the crossmember.

14) Use a 1/2 bit to drill the holes for the 3rd link bracket.

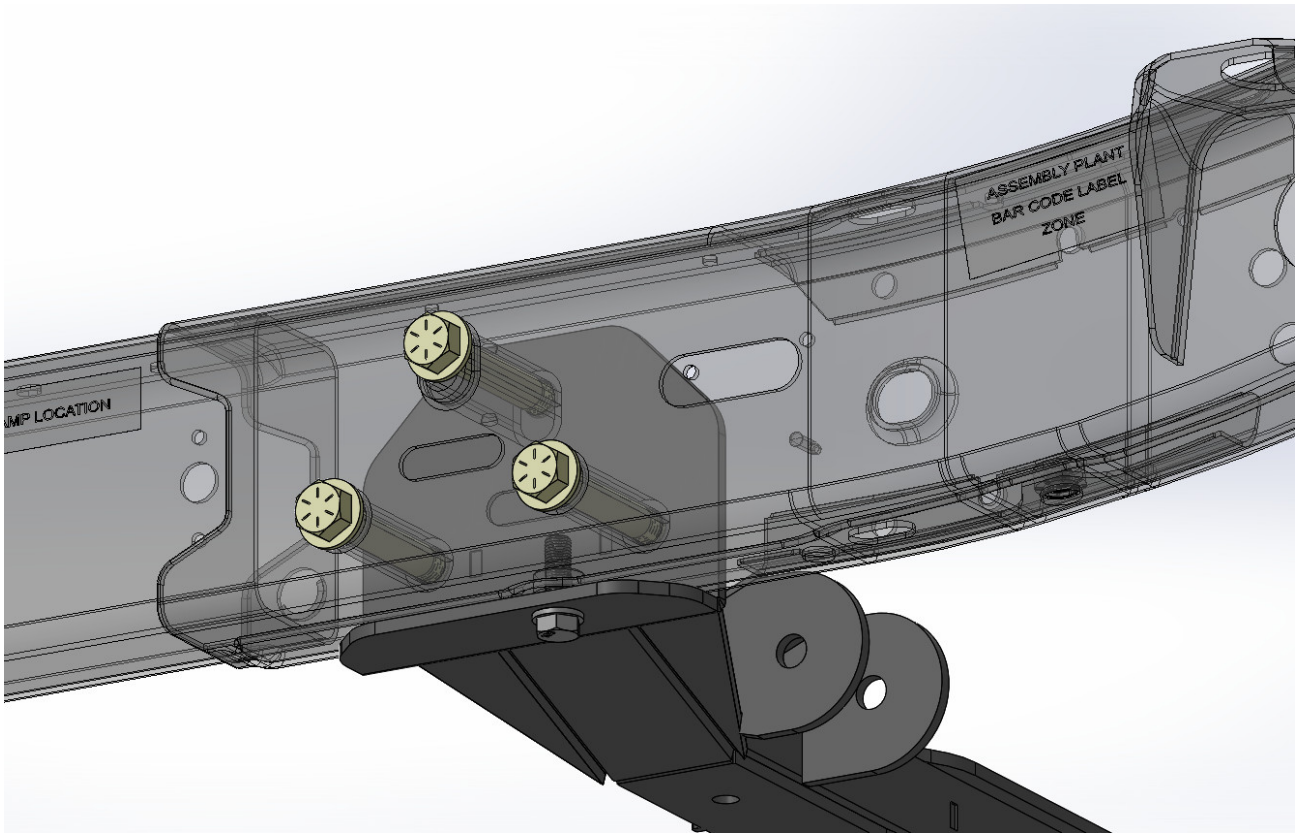
15) Hold the crossmember in place. You can slide a bolt through temporarily for this step. Mark the hole on the botton of the frame on the driver side for the install of the rivnut.

16) Move crossmember out of the way and install the rivnut. Use an 11/16 drill bit and a rivnut tool or you can find other methods online using a bolt, extra nut, and a few washers to create your own tool.

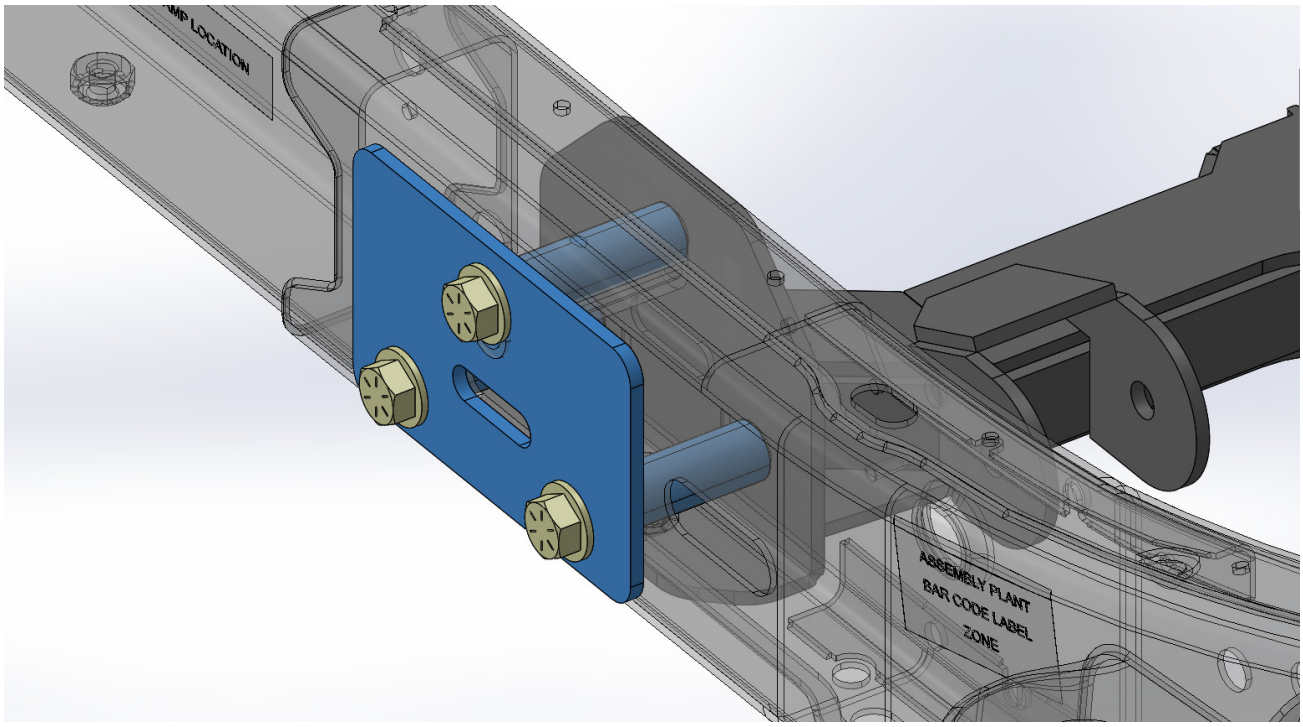
17) Once the rivnut is in place the crossmember can now be bolted in. With the crossmember held in place loosely thread one of the m12 bolts into the bottom on the passenger side and a ½-13x2'' in the rivnut on the driver side. On the driver side insert the 5/8 x 5'' bolt with washer through the bolt plate previsously used as the template and then through the frame from the outside. The bolts will pass through the frame and the bracket end of the crossmember. Use a washer and a stover top lock nut to secure the crossmember from the inside of the frame. Do not over torque the bolts on the driver side as you can crush in the frame. We utilize the large bolt plate to spread the load across a large area of the frame to help prevent this. (JT Trucks: We have provided 2 shim spacers to use if needed. We have found in development that there are two frame widths among the JT lines that are exactly .25'' different. You may or may not need them based on the gap between the crossmember frame side L bracket and the frame. Reference image at the end for JT specifc install).

18) JL and JT owners with the welded in sleeves on the passenger side simply insert the 3 5/8 x5 bolts with a washer through the sleeves and through the crossmember bracket and secure with washer stover top lock nut. (JT's without welded in sleeves will need to use the provided JT bolt plate and slide 3 bolts through the plate with the aluminum spacer sleeves over the 3 bolts. Carefully insert the spacers into the side of the frame opening not allowing the spacers to fall off the ends of the bolts, pass through to the crossmember side and bolt them down with a washer and stover top lock nut. Reference picture provided at end for JT specific install).

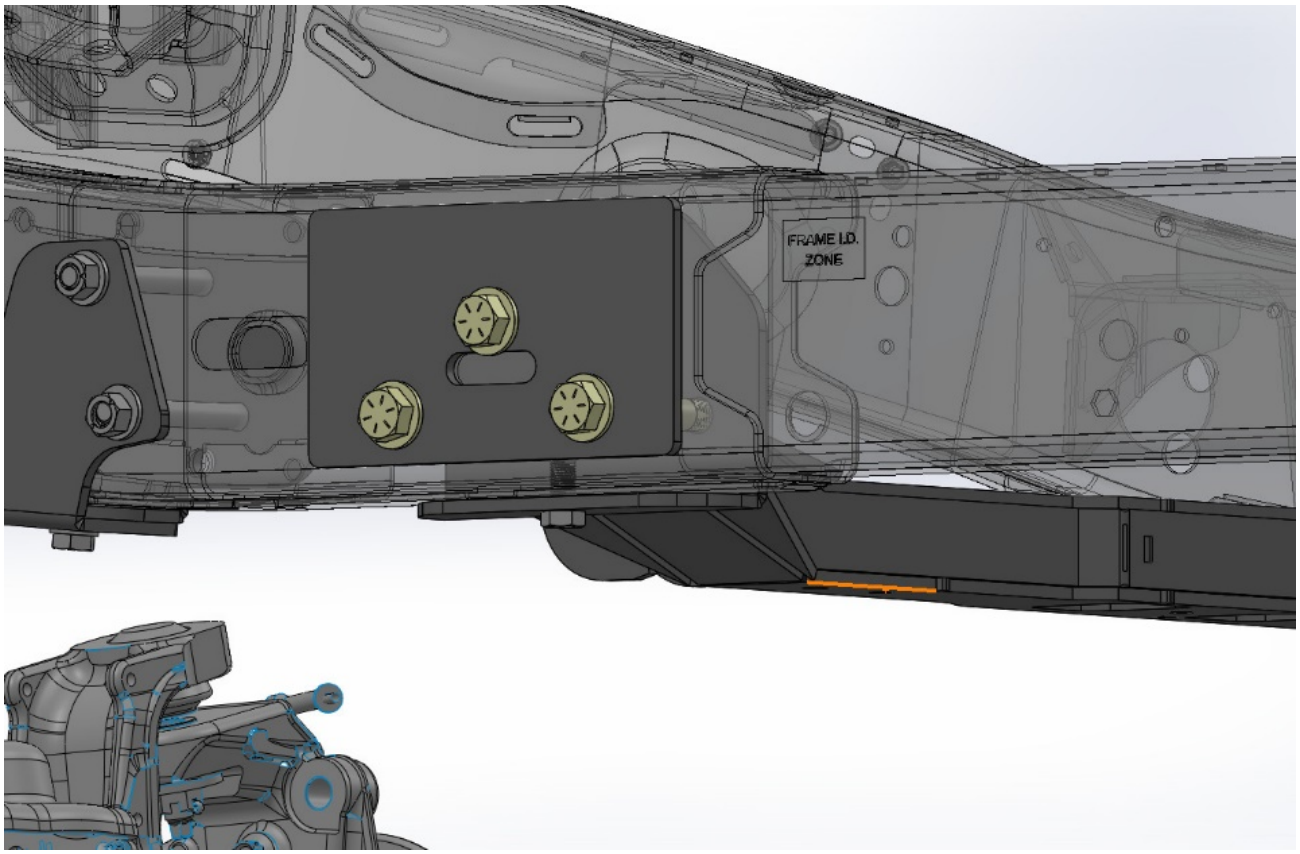
Passenger side JL and JT with Welded in sleeves:



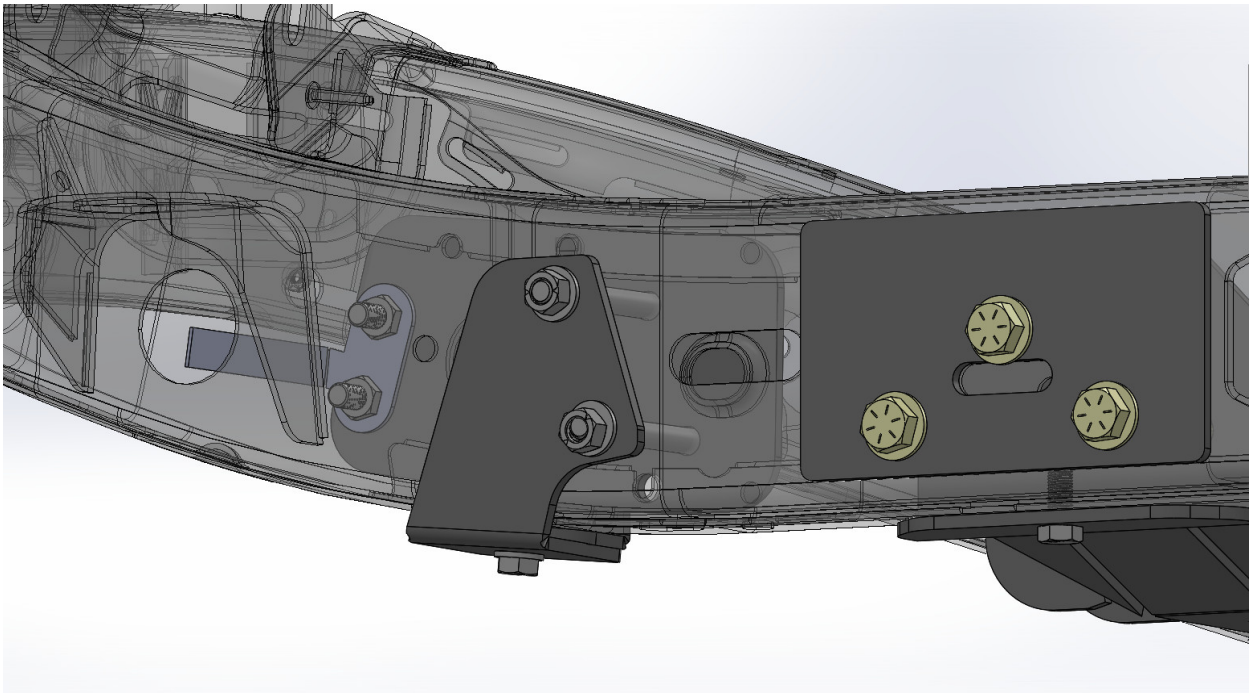
JT with no welded in sleeves. Use provided aluminum spacers as shown below.

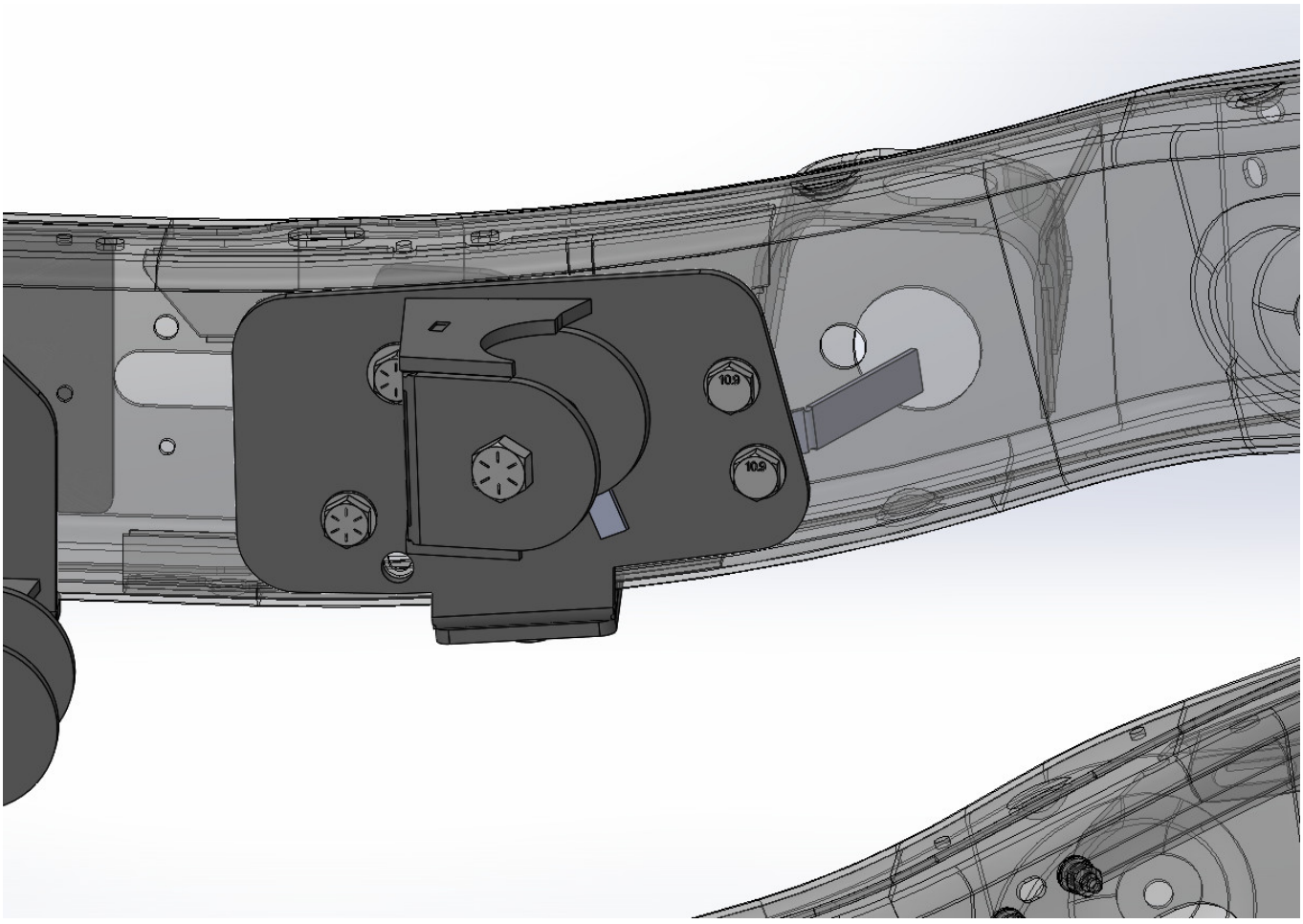


Driver Side with Bolt plate



19) Next install the upper 3rd link bracket using the m12 bolt through the bottom of the reinfocement bracket and through the bottom of the 3rd link bracket. With the provided double nut plate and two m12 bolts use the opening in the outside of the frame to insert the nut plate and bolt in the front two bolts. Lastly install the 2 - ½ x 6'' bolts through the rear of the bracket and frame into the reinforcement backet. See image below.





20) With crossmember and 3rd link in place, tighten bolts and finish by removing the jack out from under the transmission/transfer case and reinstall the factory transmission bolts and factory skid plate.

21) Next using the Rock Jock Tool as a punch knock out the factory bushing in the forged differential housing.

22) Install the provided Rock Jock Uniball into the housing using the provided tool.

23) We are now ready to install the control arms. Set to start length provided in the chart below. The control arms are threaded LH and RH at the joints to allow you to simply roll the aluminum to lengthen or shorten. For safety keep the joints from spinning and turn the bar itself so they have equal thread length showing on each side. You can perform this step while the control arm is installed on the vehicle.

24) Install the upper control arm using the 5/8 x 4'' bolt and nut plate on the frame side. Use a 5/8 x 4'' bolt and stover top lock nut on the clasp/uniball axle side.

25) Install the two lower control arms using the 5/8 x 4'' bolts and stover top lock nuts.

26) Double check eye to eye length on vehicle. Turn aluminum bar to make any final adjustments.

27) Tighten all 6 control arm jam nuts.

28) At this time ensure everything has completely been tightened and in place.

29) If you have completed the install of any other suspension/lift components, jack up the front axle enough to reinstall your wheels.

30) Remove jack stands and set the jeep back on the ground.

31) The start lengths are rough measurements to get you started. If you want to fine tune your caster we recommend taking it to a shop that knows how to deal with aftermaket setup alignments. You can also simply drive your Jeep and adjust the lower arms out if you feel you need more castor. Please work at your comfort level and take the Jeep to a professional if you are not sure how to set castor.

32) ENJOY! If you love it let us know! Send us pictures! Tag us! Thank you for your support!

Control Arms Start Lengths:

2.5" - Upper Control Arms – 33 15/16'' Lower Control Arms – 39 7/8''

3.5'' - Upper Control Arms – 34 '' Lower Control Arms – 40''

4.5'' - Upper Control Arms – 34 1/16'' Lower Control Arms – 40 1/8''