

Jeep JK and JKU Long Arm Kit Installation Instructions

Torque Specs:

- 9/16": 120 ft-lbs
- 12mm: 80 ft-lbs
- Lower control arm jam nuts: 250 ft-lbs
- Upper control arm jam nuts: 200 ft-lbs
- Body mounts: follow the OEM torque specifications.

Required Tools

- Basic hand tools
- Torque Wrench
- Tools to torque down jam nuts can be an adjustable wrench or appropriate-sized crow foot adapters.
- Sawsall or a grinder with a cut-off wheel
- Safety Glasses
- Welder
- Paint of your choice

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Installation Notes:

- This kit is very labor-intensive and requires cutting and welding on the frame of your Jeep. It is recommended to watch our installation videos on this long arm kit before attempting the installation to make sure that you are prepared for and ready to tackle this installation. If you feel this installation is above your skill level, it is recommended to find an installation shop to do the work for you.
- When cutting the control arm brackets off of the frame of the vehicle, be careful to not cut into, gouge the frame, or cause any damage to the frame of the vehicle.
- It is recommended to paint over any cut marks or sections of the frame that had a flap disk used on to help seal and protect it against rust.
- You need to drop the fuel tank for this installation. We recommend starting this installation with a low fuel level or to remove the gas from the tank before installation. The gas tank is removed to create room to weld on the new rear control arm bracket, the area around the fuel tank needs to be cleaned of any fuel spills or residue to reduce the risk of fire.
- The factory down pipes on the 3.6L V6 may need to be modified to fit the long arm brackets. The drivers side downpipe has a loop section in it that comes close to the bracket and may block the bolt from going into the bracket when installing the arm. There are kits available to delete that loop section of the exhaust or you can take it to your local exhaust shop to have it removed and replaced with a straight section of pipe.
- It is easier to remove the exhaust to make the installation easier. Removing the downpipes and the rear exhaust can help with making extra clearance for cleaning and prepping the frame for welding and for welding the brackets to the frame.
- When torquing down jam nuts, it is recommended to use a crows foot adapter on your torque wrench or breaker bar. If you do not have a torque wrench that goes up to 200-250 ft-lbs, you need to get the jam nuts as tight as you physically can. If you do not have crows feet adapters, a large adjustable wrench can also work.
- When torquing double-threaded control arms, you want to get the jam nuts to their final torque spec in stages. Starting at 50 ft-lbs and alternating between the right-hand and left-hand jam nuts while increasing your torque to the proper spec is a great way to get the jam nuts torqued down without spinning the control arm body in the process.
- There are wrench flats machined into the aluminum body control arms to help with holding the control arm when torquing the jam nuts. You can also put a screw driver or pry bar between the Johnny Joint housing and the control arm mount to hold the Johnny Joint straight. This prevents the joint from hitting the mount when off-roading or under extreme articulation.

Control Arm Identification

1. Front Upper Control Arms.

2. Front Lower Control Arms.

3. Rear Upper Control Arms.

4. Rear Lower Control Arms.

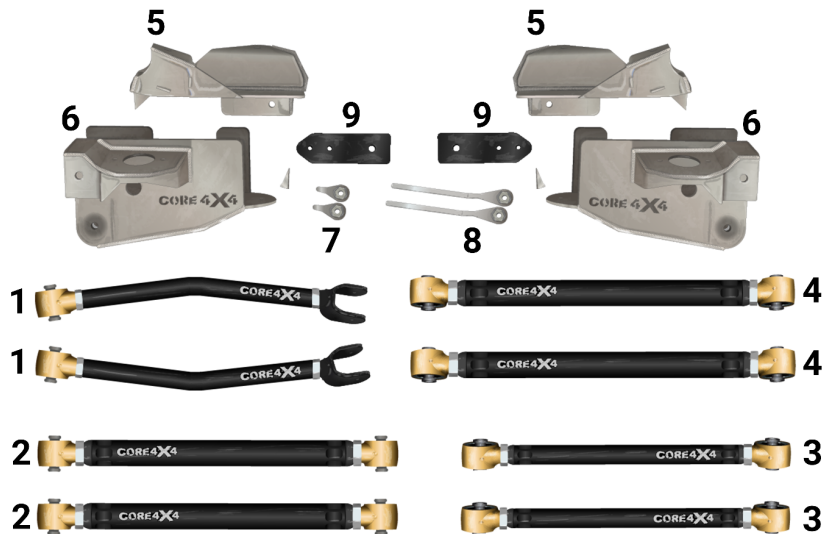
5. Front Plate Steel Brackets.

6. Rear Plate Steel Brackets.

7. Front Nut Tabs.

8. Rear Nut Tabs.

9. Rear Relocation Plate.



Installation Videos:

- Tear down and prep:



- Bracket and control arm installation:



Frame Brackets Installation Guide

- 1) Raise and support the vehicle from the frame away from where you are going to be working. You cannot support the vehicle from the axles if you are doing the installation on the vehicle because you are removing the control arms allowing the axle to move independently from the vehicle.
- 2) Remove the connections to the fuel tank. This includes the fuel fill hose and several quick connect fuel lines that run from the front of the vehicle to the top of the fuel tank. This all can be done without the need of dropping the tank for clearance.
- 3) Support the fuel tank skid plate and remove the fuel tank skid plate bolts. The fuel tank skid plate holds the fuel tank in the vehicle, so both the tank and the skid plate will drop down as one unit from the vehicle.
- 4) With the fuel tank removed, start removing all eight control arms from the vehicle.
- 5) Starting at the front of the vehicle, start cutting the control arm bracket off of the frame of the vehicle. The front lower and front upper control arm brackets are separate, so there are four total brackets that need to be cut off from the front of the vehicle, or two front control arm brackets that need to be removed from each frame rail.
 - a) Be careful to not damage any fuel lines or wiring harnesses while removing the factory brackets.
- 6) Once the brackets are removed, use a flap disk or other tool to smooth out the cuts and any remaining part of the bracket on the frame. It needs to be a smooth surface to slide the new control arm bracket over the frame rails so no remnants of the factory brackets can be left on the frame.
- 7) While this is not a necessary step, it is a good idea to paint over the areas that you have cut and smoothed out to help prevent the frame rails from rusting. The brackets require welding to attach them to the frame, so use weldable paint or avoid painting the areas that the bracket will weld to.
- 8) On the rear of the vehicle, you are going to be removing the rear lower control arm mount, rear upper control arm mount, and the rear body mount. The new rear brackets replace the factory rear body mount. Remove the rear body mount bolt so that the bracket can be removed.
- 9) Remove the three rear brackets and clean the area. It may be easier to remove the body mount first as that can give more clearance and room to remove the other two control arm brackets.
- 10) Before installing the new frame brackets, it is recommended to paint the brackets. They come uncoated and may be prone to rust depending on your location and driving conditions.
- 11) Starting in the front, mock up the brackets to make sure that they fit properly and that the areas that need to be welded are clean and that you have good surfaces to weld on. The front control arm brackets have a hole on the bottom and towards the rear of the bracket that lines up to a threaded hole on the frame. This is used to help locate the bracket and to hold it in place while welding it in.

- 12) When welding the new bracket onto the frame, it is best if you weld in short sections to avoid heat soaking the frame and potentially weakening that section of the frame. A way to avoid heat build up in the frame is to weld a one inch section on the front of the bracket, then weld a one inch section on the back of the bracket, and make your way around the bracket until it is fully welded onto the frame.
- 13) The hardware kit contains small triangle pieces of metal. Those are used on the front control arm brackets under the front upper control arm bracket to close up a small opening where the bracket does not follow the contour of the frame. Refer to our JK Long Arm Kit Part 2 video at 7:25 for where this piece goes.
- 14) The rear brackets slip over the frame and use the rear frame crossmember to locate the bracket. The front of the bracket will also line up with with a point on the frame where two sections connect and a hole in the bracket will center over a hole in the side of the frame. Refer to 7:58 in our JK Long Arm Kit Part 2 video to show where the bracket goes.
- 15) With the bracket in the correct position on the frame, ensure that the bracket is fully seated against the frame and that there are no gaps between the frame and the bracket on wherever the bracket makes contact with the frame. You can also use a c-clamp to pinch the bracket against the frame to ensure to gaps open around the bracket and frame.
- 16) Use the same welding method used to weld the front brackets to weld the rear brackets to the frame. Be careful when welding around the fuel lines and fuel tank area to avoid any fires caused by the weld sparks and heat.
- 17) It is recommended to clean the welds and paint over the brackets to fully seal the brackets and frame from any rust.

Front and Rear Control arm Installation

1. Depending on the front axle you have in your Jeep will determine what front control arms you will need. If you have an axle with less than a 70" width as measured from the hub faces, you will need to use the front control arms made from 1.75" DOM with bends for tire clearance. If you have a full width axle, your front lower control arms do not need a bend for tire clearance and they will be made from 2" 7075 aluminum.
2. The front lowers tube cut length is 23.5", the front upper tube cut length is 19", the rear lower tube cut length is 21.5", and the rear upper cut length is 19".
3. Install your front upper control arms in the frame bracket using the supplied 9/16" bolt and nut tab. The nut tab will slide into the bottom of the bracket through a hole between the bracket and the frame.
4. Then install the u-bracket onto the front axle using the supplied hardware. The upper front control arm will have a bend in it, and that bend needs to be positioned towards the center of the vehicle once you are finished adjusting the control arm and are tightening the jam nuts.
5. Install the front lower control arms into the frame bracket with the supplied hardware, then install it in the axle control arm mount with the supplied hardware.
6. Using the supplied hardware, install the flat plate that comes with the kit into the factory body mount location on the body of the Jeep. Orient the plate towards the new body mount location on the frame bracket. Install the factory body mount into the frame bracket and bolt the factory body mount to the flat plate. That flat plate locates the factory body mount position to the new location on the frame bracket.
7. Using a 9/16" drill bit, drill through the upper rear control arm mount so you can insert a bolt through the bracket and into the frame.
8. Insert the upper rear control arm into the frame bracket and use the supplied 9/16" long nut tab and 9/16" bolt to hold the control arm in the bracket. The nut tab is inserted through a hole in the bottom of the frame rail almost parallel with the upper rear control arm mount and you need the serrated edge to go against the outside of the frame, or to the side of the frame where the control arm will mount. Then install the upper rear control arm into the axle control arm mount.
9. Install the lower rear control arm in the frame mount with the supplied hardware, then in the axle control arm mount with the supplied hardware.
10. With all the control arms installed. Torque all the bolts down to the torque specifications listed above. The new control arm bolts have a grease zerk in them for maintenance, be careful to not overtorque the bolts.
11. Lower the vehicle on the ground, or under it's own weight, and ensure that your tires are centered in the wheel wells or positioned where you would like if you are stretching the wheelbase, and that you have a proper pinion angle.
12. Torque all jam nuts to the torque specifications listed above.

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13. Johnny Joints come pre-greased. We recommend greasing Johnny Joints every 3,000 to 10,000 miles depending on driving conditions and habits. Driving through high water or lots of mud can wash away some of the grease on these joints, causing them to rust or to allow debris entering the Johnny Joint internals.
14. Take the vehicle for a shakedown run, usually 50-100 miles, and retorque all the bolts and jam nuts. Jam nuts and bolts should be checked for the proper torque every 3,000, or every oil change, to ensure that nothing is coming loose. Stripped threads or damaged components due to loose hardware is not directly covered under our lifetime warranty.