Last Revision No.: 1/24/12

PN - 4808100



Thank you for purchasing a Clayton Off Road suspension.

Please check to make sure you have all necessary parts before you start your install.

4808100 – JK Front Long Arm Upgrade Kit	m //	// -
1908100 JK Long Front Control Arm Kit / 4 Adjustable Arms		7 7
2108100 JK Long Arm 3 Piece Cross Member		\
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If you are missing any of the above items, or are unclear about what parts you need, please call and ask before you begin your installation process.

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Note: The new 2007+ Jeep Wrangler JKs are equipped with an Electric Stability Program (ESP). Electronic Stability Program aids the driver in maintaining vehicle directional stability, providing oversteer and understeer control to maintain vehicle behavior on various road surfaces. This function is affected when lifting this vehicle and may not function properly. It is highly important to center the steering wheel. Please drive cautiously until you know how your vehicle will react.

Note: It maybe necessary that a front CV shaft be used with this lift on either 2 and 4 door models. 2 door models may also require a CV rear driveshaft.

Note: This front long arm upgrade kit is intended to be used on the 2007-2011 Jeep Wrangler and Wrangler Unlimited JK, with 3.5 to 8 inches of lift.

<u>WARNING:</u> Suspension systems and their components are designed to enhance your vehicles off-road performance. This may cause your vehicle to handle differently, on and off-road, then it did from the factory. Always wear your seatbelts, and take extra care when driving a modified vehicle. Failure to do so can result in loss of control which may result in a rollover causing serious injury, even death to the driver and/or passengers of the vehicle. Regular maintenance and constant inspections are required to keep your modified vehicle safe and function properly.

These systems and any components should be installed by certified technicians. Attempts to install these products without proper knowledge can lead to poor performance, or possible failure, which may jeopardize the safety of the vehicle and its passengers. The installer is responsible for proper installation insuring a safe and properly functioning vehicle. Take extra care when operating a modified vehicle and thoroughly inspect your vehicle before and after every off-road use.

Please read the entire instruction manual before starting the installation. If anything is unclear, please contact us before starting your installation.

Installation Manual Long Arm Upgrade Kit Instructions

2007-2011 Jeep Wrangler & Unlimited

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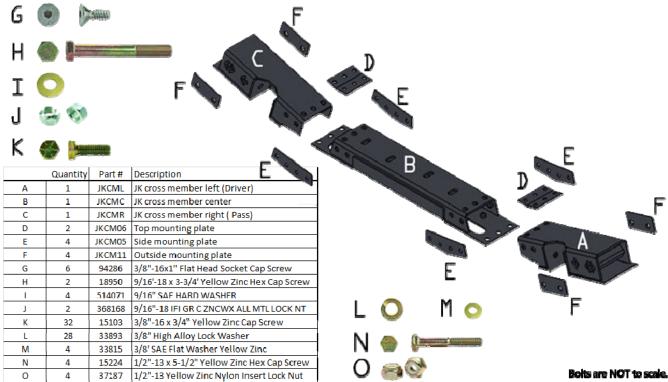
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Tool requirements

- 1. Four large jack stands, ramps or a 4-post drive on lift works best.
- 2. Various wrenches and shop tools for removing and installing control arms.
- 3. Grinder, plasma cutter or some shop tool to cut off lower oem frame brackets.
- 3. A 1 7/16 wrench is needed to tighten the upper control arm jam nuts, and a 46mm wrench is needed to tighten the lower control arm jam nuts.

Front Cross Member Installation Procedure

- Support drivetrain, and remove oem cross member and the oem skid plates if equiped. Retain all oem hardware as some maybe reused.
- 2. Assemble your new 3 piece cross member. Below is an exploded view of the cross member and where each part goes. Make sure the center section (B) is facing the correct way. Double check by making sure you can install the 9/16s bolts (H) into their mounting location. This is also a good time to install the actual johnny joint by itself into the cross member. You can do it later, but we have found its easiest to line up all the washers and bolts at this point.



- 4. All the above brackets will be used to assemble the cross member except for the outside mounting plates (F). These are used as reinforcement spacers to properly clamp the cross member back into the oem location. We have included two extra ½ 13 x 5.5" (N) bolts with nylon lock nut (O).
- 5. Once you have assembled the cross member it should look like this. Do NOT install the front (G) allen head bolts yet. They will be in the way of install the (H) 9/16s johnny joint bolts. Install these once all arms are installed. See image below.

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- 7. You are almost ready to install this cross member into your Jeep JK.
- 8. This cross member has been designed as a bolt in and can be used without welding. For our customers who are more abusive with their driving style we recommend welding in this cross member for maximum strength. The outside flanges will almost touch the bottom of the frame. If you choose to weld in the cross member, this is the time to prep the frame and the cross member. Because this is a 3 piece cross member, if you need to service the transmission in the future the center section can still be removed.
- 9. Install cross member into your Jeep JK and make sure it is centered left to right. Reinstall the oem transmission bolts.
- 10. Use the new (N) ½-13 bolts with the outside spacer plates (F) on each side to clamp the cross member into the factory bracket.
- 11. We would recommend welding it in at the end, once you have made sure everything fits, and you have made sure everything is installed correctly.





- 12. You will need to trim the stock gas tank skid to allow clearance for the new passenger side control arm mount.
- 13. We recommend removing the johnny joints from the control arms, and installing just joint at this time.





15. This pocket design allows for maximum clearance, however lining up the washers, and bolt is a little tricky. Installing just the johnny joint makes it easier to hold everything in place while you line up the washer, bolt, and nut on the other side. Once everything is installed, an open ended wrench will fit on the outside to hold the nut. On the inside a 13/16 - 3/8 drive socket

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with an extension will fit. A $\frac{1}{2}$ drive 13/16 will NOT fit. In the above picture we used a 3/8 socket, with a 3/8 to $\frac{1}{2}$ adapter so we can use a $\frac{1}{2}$ impact gun to tighten the 9/16 grade 8 bolt to 155 ft/lbs.

- 16. Now you are ready to install your new long arms. Chock the wheels and remove only the driver side arms.
- 17. Cut off the lower oem frame mounts.



- 18.
- 19. Measure and make sure both lower arms are the same length. We recommend 36.75 for our 3.5" lift, and 37" for our 4.5" kit.
- 20. If you are upgrading from our short arm kit you will install your 2 upper arms next. The straight arms will fit on stock hosuings. Our long arm upgrade kit comes with 1 straight arm, and 1 angled arm. This angled arm is designed to be used on the driver side to help with clearance on larger aftermarket axles.
- 21. If you find you do need this angled upper arm it is available for purchase, part # 1808006. Otherwise you can cut a 17 degree angled into the arm, reweld it and you will have the same effect.
- 22. Install 1 upper arm to any length at this time. This will simply hold the pinion so you can proceed to the passenger side. Final adjustments will be made once all arms are installed and vehicle is at ride height.
- 23. Remove passenger side arms, install passenger side long arm.
- 24. Set vehicle at ride height, and set your caster angle to about 4.5 degrees. On our 4.5" lifted JK our upper arms are approximately 18.75 inches long. Upper arms do NOT have to be the same length.
- 25. Reattach the oem gas tank skid plate using new 3/8" (K) bolts with the 3/8" (M) washers.
- 26. Reinstall the rear oem skid plates using new 3/8" (K) bolts with the 3/8" (M) washers.
- 27. Oem front skid plate will not work with the long arms or a lifted JK due to clearance issues with the driveshaft and arms.
- 28. Tighten all suspension bolts and any other bolts you may have removed for this installation.



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We hope your installation went smoothly and please let us know if you have any suggestions, comments or questions.

Damage or Missing Parts Policy: If you receive a product that is damaged or missing parts you must contact us within 14 days to arrange replacement. You maybe required to submit photos of damaged parts before new parts are sent. Damage parts maybe request to be returned for inspection.

Return Policy: You have 30 days to return a product in it original packaging. Parts cannot have been installed, painted and/or modified in any way. You must contact us to obtain a RGA # (Return Goods Authorization) before shipping your product back. All returns are subject to a 15% restocking fee. Your return must have the return authorization number clearly marked on the outside of the package and must be shipped prepaid. Packages shipped COD will be refused. Return's are subject to inspection and maybe refused if they are damaged or used. You are responsible for proper shipping to ensure product is not damaged or lost. We recommend insuring your product for the full amount in the case it is damaged or lost during return shipment.

Warranty Policy: Clayton Off Road Inc. comes with our abuse proof limited lifetime warranty against bending or breaking our control arms only. This covers the original purchaser of our suspension lift. This warranty cannot be transferred to a secondary purchaser and is void if the control arm is modified in any form or not used in its proper application. Original purchaser must obtain a RGA # and is responsible for shipping the product back and agrees to return shipment charges. This warranty does not cover worn bushings, missing snap rings, or any kind of rust damage to the threads or inserts or actual arm.

What is not covered:

Clayton Off Road Inc. components may have minor finish damage to powder coated or plated surfaces, which may occur during shipping and is not covered under warranty. Johnny Joint bushings, washers, snap rings, OEM rubber bushings, hardware, brake lines, shocks, springs, skid plates, trackbars, and any mounting brackets are not covered. These parts are subject to wear and are not considered defective when worn. They are warranted for 90 days from the date or purchase for defects in workmanship only. Products or components which have been subjected to abuse, accident, alteration, modification, improper installation, tampering, negligence, misuse, or products installed on a vehicle used in sanctioned racing events. A race is defined as any contest between two or more vehicles, or any contest of one or more vehicles against the clock, whether or not such contest is for a prize.

Clayton Off Road Inc. is not responsible for any retail parts that maybe sold.

Clayton Off Road Inc. shall not be liable for any loss, damage or injury, whether ordinary, direct, special, incidental or consequential damages, arising from the manufacture, sale, installation, resale, delivery, possession, handling or use of its products.

Clayton Off Road Inc. is not responsible for typographical errors either in pricing or in content.

Warranties, policies and prices subject to change without notice.

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