



Thank you for purchasing a Clayton Off Road suspension.

2908010 – JK – 2007+ Entry Level 3.5” Lift Kit		
1308101	JK Front Stainless Steel Brakelines (pair)	
1308102	JK Rear Stainless Steel Brakelines (pair)	
1508350	JK 3.5” Front coil springs (pair)	
1508351	JK 3.5” Rear coil springs (pair)	
1808101	JK Front Upper Adjustable Control Arms	
1808103	JK Rear Upper Adjustable Control Arms	
2308101	JK Rear Adjustable Swaybar Links	
4508100	JK Front Adjustable Trackbar	
4508110	JK Rear Adjustable Trackbar	
4508200	JK Rear Adjustable Trackbar Bracket	



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.

Clayton Off Road Inc. – 1261 Meriden Road – Waterbury – CT – 06705 – (203) 757-0339 sales@claytonoffroad.com

Note: Shocks can be added to any package deal for an additional charge.

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 : A new rear driveshaft is not necessary, but it is recommended. A front driveshaft is necessary on any 2012 model. A front driveshaft is necessary due to clearance issues on any 07-11 automatic. A front driveshaft is recommended on 07-11 auto and manual models due to long term wear and tear or the CV boot.

Note: The 3.5 inch kit is intended to fit 35x12.5 tires. We recommend a backspacing of 4.5 or using a 1.5 inch wheel spacer.

**WARNING: 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.**

**Contact at: (203) 757-0339 or email sales@claytonoffroad.com**

**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. 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.

# Installation Manual

## Short Arm Lift Kit Instructions

### 2007-2012 Jeep Wrangler

Last Revision No.: 8/31/11

PN – 2908010

#### Front Installation Procedure

1. Put the truck up on jack stands or lift.
2. Remove the OEM front transmission skid plate. The OEM skid plate will come in contact with the driveshaft and can NOT be reused. If you want to keep this skid plate, you will need to modify it accordingly so it does not come in contact with the front driveshaft during articulation.
3. Unclip the ABS lines in order to allow for additional length.
4. With a Rubicon model, unclip the locker lines to allow for additional length.
5. Remove the shocks, swaybar disconnects, and front trackbar. These items will NOT be reused, however some of their hardware may, so do not discard them.
6. Remove the OEM brakelines and install the new provided brakelines. There is a front and rear set so please pay attention to the label on the bag. Make sure the caliper end is facing away from the caliper. This routes the brakeline away from the tire. Front is labeled 1308101, and the rear is labeled 1308102. Use the provided frame brackets with the OEM screws in the OEM locations. **See Photo # 1.**
7. Also shown in Photo # 1 is the front axle breather. Lower the clip approximately 4 inches to allow for the added lift.
8. Set both upper arms to approximately 18.75" center to center. These arms will have to be readjusted at a later time so your measurement is not critical at this time.
9. Install the driver side upper arm reusing the OEM bolts. Installing the grease fitting facing down will make greasing easier. Installing the passenger side arm may require cutting the OEM bolt in half, removing it entirely, and then you will install a new provided bolt from the frame side. **See Photo # 2.**
10. With your extended brakelines installed, ABS lines unclipped, skid plate removed, shocks removed, stock lower arms loosened and our arms installed, you should be able to lower the front axle with minimal effort.
11. Once you remove the OEM coils, if you purchased the bumpstops, you will need to drill and tap a hole in the center of the lower perch in order to install them. Drill a 5/16 hole and use a 3/8-16 tap. Once the lower hole is drilled and tapped, hold the bumpstop in the coil and place it over the perch and tighten the center bolt.
12. Set the trackbar at an initial setting of 32 7/8" center to center reusing the OEM bolts. Install the bushing at the axle end. The johnny joint goes at the frame end, and should be readjusted and tightened to factory specs once the vehicle is sitting under its own weight with the new springs front and rear.
13. Install shocks. Make sure you install the bolts from the inside out. The nut has to be on the outside, closer to the tire, in order to allow clearance for the lower control arm during articulation.
14. If you purchased the optional JKS swaybar disconnects following their instructions. If you have a Rubicon and/or did not purchase the disconnects, use the rear swaybar links in the front. They are the same except 4" longer which will compensate for the lift height.

#### Rear Installation Procedure

1. We are assuming the vehicle is still on a lift or jack stands, and that the rear brakelines have already been swapped out.
  2. Remove the OEM shocks, swaybar disconnects and rear trackbar. Once again some of these items and hardware will be reused so do NOT discard them at this time.
  3. Loosen all control arms, and unclip any wires or cables and lower the axle and install the new rear coils.
  4. Depending on your axle, year and model there maybe a 3-4 inch weld on the back side of the axle. You may need to grind away a small portion of this weld to allow the new trackbar bracket to sit smoothly against the axle.
  5. Install the upper arms with gold Johnny joint at the axle end. The measurement on these upper arms will depend on if you are using the standard driveshaft or a CV driveshaft. **See Photo # 3** for proper driveshaft angle alignment.
  6. Install the new rear trackbar bracket. It reuses the OEM hole for alignment, then clamps around the axle tube as a brace. Use the supplied bolts to bolt the clamp around the axle. Use the OEM bolt through the OEM bracket, and use the supplied bolt through the new trackbar bracket. Set the track and use the hole which closest aligns your vehicle track. **See Photo # 4.**
- a. **Optional Rear Trackbar**
- i. Trackbar is required for 2 dr models and optional on 4 dr models.
  - ii. Once the vehicle is sitting under its own weight, set your proper driveshaft angle.
  - iii. Now set the vehicle track using a ratchet strap.
  - iv. With pinion angle set, and track set, install new adjustable trackbar with bushing in the new bolt on bracket, and the johnny joint in the OEM frame bracket.
7. Install the new rear swaybar adjustable links. For a 3.5 inch kit 12.5 inch center to center should work. You can make final adjustments as needed. Max length is 13.75 center to center. Please make sure the jam nuts

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are tight once you have set your desired length.

**Final Adjustments**

1. Make sure all springs are properly seated and lower vehicle onto its own weight.
2. Front trackbar alignment and caster angle procedure.
  - a. Make sure steering wheel is unlocked.
  - b. Remove trackbar at frame end.
  - c. Use bottle jack to hold axle from twisting forward or backwards and remove both upper arms at the axle end.
  - d. Use bottle jack to set 4.5-5 degrees of caster. (DO NOT install arms yet)
  - e. Set vehicle track.
  - f. Once track is set, double check caster angle and install both upper arms at the same time. Meaning do NOT install one upper arm, remove the jack and then install the other. This will cause unequal load on one arm, and cause the bushings to wear out faster. Upper arms do NOT have to be the same length.
3. Rear pinion angle procedure.
  - a. Put jack under rear pinion.
  - b. Remove both upper arms at axle end.
  - c. Set pinion angle.
  - d. Install both upper arms at the same time for the same reason as the front uppers. Upper arms do NOT have to be the same length.
4. Go through the entire Jeep and tighten all suspension bolts and any other items you may have unbolted or loosened.
5. Tighten all suspension jam nuts. Lowers use a 46 mm wrench. Uppers use a 1 7/16 wrench.
6. Properly bleed brakelines and check for any leaks and a firm pedal.
7. We recommend doing a test drive with the ESP manually disengaged. We highly recommend this system be updated to properly function with you new lift height and larger tires. A proper alignment is a critical part to having the ESP function properly.

We hope your installation went smoothly. Please let us know if you have any questions, suggestions or comments. Here are some finished vehicle photos below.



Photo # 1



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Photo # 2  
 Photo # 3

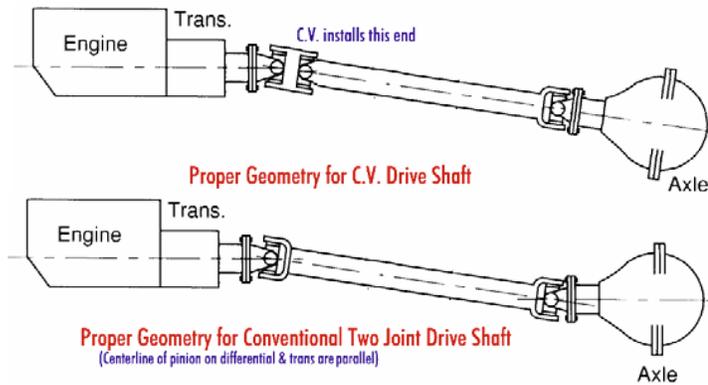


Photo # 4

We hope your installation went smoothly. Let us know if you have any questions, comments or suggestions. Thank you.

**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 may be required to submit photos of damaged parts before new parts are sent. Damage parts may be requested to be returned for inspection.

**Return Policy:** You have 30 days to return a product in its 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. Returns are subject to inspection and may be 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.

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**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 of 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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