

Thank you for purchasing a Clayton Off Road Mfg. suspension.

2905010 – TJ 4.0" Entry Level Short Arm Lift Kit

1300103	Stainless Steel Brakelines
1505400	TJ 4.0" Front Coil Springs
1505401	TJ 4.0" Rear Coil Springs
1800101	Adjustable Short front upper (pair)
1800102	Adjustable Short rear upper (pair)
RAB05	Rear Coil Spring Retainers
JKS-2001	JKS Front Swaybar disconnects
JKS-2942	JKS Rear Adjustable Swaybar Links
OGS160	JKS Rear Trackbar Bracket
52005917	Front Spring Retainers
CE-9120TIS	Currie Adjustable Front Trackbar



2905020 – TJ 4.0" Premium Short Arm Lift Kit

1300103	Stainless Steel Brakelines
1505400	TJ 4.0" Front Coil Springs
1505401	TJ 4.0" Rear Coil Springs
1800100	Adjustable Short Front lower (pair)
1800101	Adjustable Short front upper (pair)
1800100	Adjustable Short rear lower (pair)
1800102	Adjustable Short rear upper (pair)
RAB05	Rear Coil Spring Retainers
JKS-2001	JKS Front Swaybar disconnects
JKS-2942	JKS Rear Adjustable Swaybar Links
OGS160	JKS Rear Trackbar Bracket
52005917	Front Spring Retainers
CE-9601	Currie Lower shock extensions
CE-9120TIS	Currie Adjustable Front Trackbar



2905030 – TJ 4.0" Ultimate Short Arm Lift Kit

1300103	Stainless Steel Brakelines
1505400	TJ 4.0" Front Coil Springs
1505401	TJ 4.0" Rear Coil Springs
1800100	Adjustable Short Front lower (pair)
1800101	Adjustable Short front upper (pair)
1800100	Adjustable Short rear lower (pair)
1800102	Adjustable Short rear upper (pair)
2400100	Drop Pitman Arm
4500520	Adjustable Trackbar and Drop Bracket
AB-TJLJ-LSCK	Lower Shock Conversion Kit
RAB05	Rear Coil Spring Retainers
JKS-2001	JKS Front Swaybar disconnects
JKS-2942	JKS Rear Adjustable Swaybar Links
OGS160	JKS Rear Trackbar Bracket
52005917	Front Spring Retainers



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

* This kit is intended to be used with a SYE kit and CV rear driveshaft. Vibrations are likely if a stock driveshaft is used.

** Rubicon Models require a 1 inch Body lift to use Clayton Off Road Mfg. 2 piece flat skid plate.

*** Shock can be added to any package deal for an additional charge.

If you are missing any of the above items, or are unclear about what parts you need to call and ask before you begin your installation process.

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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.

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

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

Tool requirements

1. Electric drill and drill bits
2. Spring Compressor (not necessary, but recommended)
3. Four large jack stands, ramps or a 4-post drive on lift works best.
4. Various wrenches and shop tools for removing and installing control arms.
5. 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 Installation Procedures

1. Put the vehicle up on jack stands or a lift.
2. Remove wheels.
3. Remove front shocks.
4. Remove front brakelines.
5. Remove front swaybar end links.
6. Remove front spring retainers.
7. Remove front trackbar.
8. Disconnecting the steering makes it easier to remove springs. Not necessary if you use a spring compressor.
9. Remove front springs.
10. Remove upper and lower control arms with the premium and ultimate kits. Entry level kits do not remove the lower control arms. Loosening the bolts may help installing springs as the axle will move more freely.
11. Installing brakelines and bleeding them is recommended before installing new arms because brake fluid will damage the powder coat finish. It can be done last if you are careful with the fluid.
12. Set lower control arms to 16 ½ inches, center of bolt hole to center of bolt hole. You can make final adjustments once everything else is in place if necessary. To ensure both lower arms are identical, we recommend putting the 9/16s bolts through both sets of arms while they lay next to each other.
13. You may have to drill the frame side lower bolt holes to 9/16s. The OEM rubber bushing should be installed at the axle side with the OEM bolt. The gold johnny joint adjuster should be installed at the frame side using the new supplied gold

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9/16 bolt. The bushing is welded on offset to add clearance when flexing. We recommend installing the joint with the grease fitting pointing up so it does not get damaged by rocks.

14. Install new coils and oem style lower spring clips. Self tapping bolts should line up with pre-existing holes in front axle.
15. Drill out the upper OEM frame side holes to 7/16's. With the tires off, and a long drill bit you should be able to drill this from the outside through the frame rail.
16. Install front shocks.
17. Reinstall tires.
18. With a bottle jack under the front of the axle spring perch, lower the vehicle off of the jack stands. Without the jack in the front and axle will want to rotate forward.
19. With the vehicle sitting on its own weight you will first want to set a proper track. This will ensure that your upper arms are not binding when they are installed.
20. For entry level and premium lifts refer to the Currie instructions included with the trackbar.
21. For ultimate kits refer to the trackbar and drop bracket procedure located at the end of these instructions. Install pitman arm at this time.
22. Once your trackbar is installed and set, set your caster angle. With a stock front end you should set a caster angle of 4.0-4.5 degrees. The pinion angle will be slightly on the low side, but this is normal with a stock axle.
23. Now you are ready to install both upper arms. They do NOT have to be the same length. Install them so the bolts freely go through the bracket. The silver bolts are intended to be used on the axle side, while the 7/16 gold greaseable bolts are intended to be used at the frame side with the 2 inch Johnny joint adjusters.
24. We recommend leaving everything hand tight at this time. It is best to finish the rear half, double check all measurements, then go through the entire vehicle and tighten down all bolts at that time.
25. Front swaybar disconnects can be installed using the supplied direction from JKS.

Rear Installation Procedures

26. Put the vehicle up on jack stands or lift.
27. Remove wheels.
28. Remove rear shocks.
29. Remove rear brakeline.
30. Remove rear swaybar end links.
31. Remove rear trackbar. Do not damage this item as it will be reused.
32. Remove rear springs.
33. Remove rear driveshaft. It is highly recommended that you install a slip yoke eliminator kit and CV rear driveshaft.
34. Remove upper and lower control arms. Entry level kits do not remove the lower control arms. Loosening the bolts may help installing springs as the axle will move more freely.
35. Install JKS CV style trackbar relocation bracket. *** Note this bracket is intended that the driveshaft be pointed at the back of the t-case. This will REQUIRE a CV style rear driveshaft.
36. You may have to drill the frame side lower bolt holes to 9/16s. The OEM rubber bushing should be installed at the axle side with the OEM bolt. The gold johnny joint adjuster should be install at the frame side using the new supplied gold 9/16 bolt. We recommend installing the joint with the grease fitting pointing up so it does not get damaged by rocks. The rear arms should also be set to 16 1/2 inches in the same way the fronts were.
37. Drill a 5/16 hole and use a 3/8-16 tap in the center of the rear spring bucket perch axle side. This will allow you to install the 3 inch round lower coil retainer. Check end of instructions for further details and pictures.
38. Entry level kits will need to notch the back of the spring bucket to properly clear the shock during articulation.
39. Premium level kits install the Currie shock extension brackets.
40. Ultimate kits refer to the procedure located at the end of these instructions.
41. Install the coils.
42. Install the shocks. Check for clearance between the shocks and the lower coil bucket.
43. Reinstall your trackbar.
44. Drill out both frame side and axle side upper control arm mounting brackets to 7/16s.
45. Install JKS extended swaybar links using their supplied instructions.

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46. Install your tires.
47. Remove jack stand and allow vehicle to sit under its own weight.
48. Set your pinion angle and install your upper arms. Upper arms do NOT have to be the same length. Use the supplied 7/16s gold greaseable bolts.
49. Install your rear brakeline.

Drop Track Bar Installation.

1. Remove factory trackbar.
2. Grind paint away from both sides of frame and around factory trackbar bracket where it makes contact with our new trackbar drop bracket.
3. Bolt up, using the supplied washer and nut. **This is intended for positioning ONLY, and needs to be fully welded.**
4. Located below is a picture to better illustrate how and where your trackbar drop bracket should be welded.



1. Let bracket cool, and paint.
2. Install axle side of your new adjustable trackbar reusing your factory bolt.
3. Set vehicle track.
4. Adjust Johnny Joint so that the supplied 9/16s bolt easily slides through the new trackbar drop bracket.
5. Tighten upper and lower trackbar bolts and jam nut making sure the Johnny joints stays centered in trackbar drop bracket.

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TJ/LJ Lower shock conversion kit

1. Cut off OEM lower shock brackets. They will NOT be reused.
2. There is a left and right bracket. Please make sure the shock bracket angles in towards the center of the Jeep. Grind the backside of the control arm tabs and axle area and weld. This bracket is designed to add clearance by removing the stock OEM shock bracket, strengthen the lower control arm brackets, and properly space and locate the shock.
3. Let brackets cool, paint, and install shocks.
4. Use the new supplied shock bolts.
5. Upper shock location does not change. Reuse the stock hardware.



TJ/LJ Rear spring retainers

1. Drill and tap a 3/8-16 hole in the lower spring bucket cup.
2. Install springs.
3. Clamp lower spring using the supplied 3/8-16 bolt and lock washer as seen below.



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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 4.0-4.5 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. Check tire clearance on rear body panel.

Your vehicle should now be sitting under its own weight with everything installed. **This is the time to double check measurements, check pinion angles, caster angles, and vehicle track.** All Johnny joints come pregreased. Go for a test drive and just add a small amount of grease to each grease fitting as everything should have settled in. After that its recommended you grease your joints every oil change or more frequently if you see a lot of mud, water and especially sand.

Please recheck all bolts after 50 miles and again after every offroad trip.

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



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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.

Warranty Policy: Clayton Off Road Mfg. 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 Mfg. 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 Mfg. is not responsible for any retail parts that may be sold.

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

Warranties, policies and prices subject to change without notice.