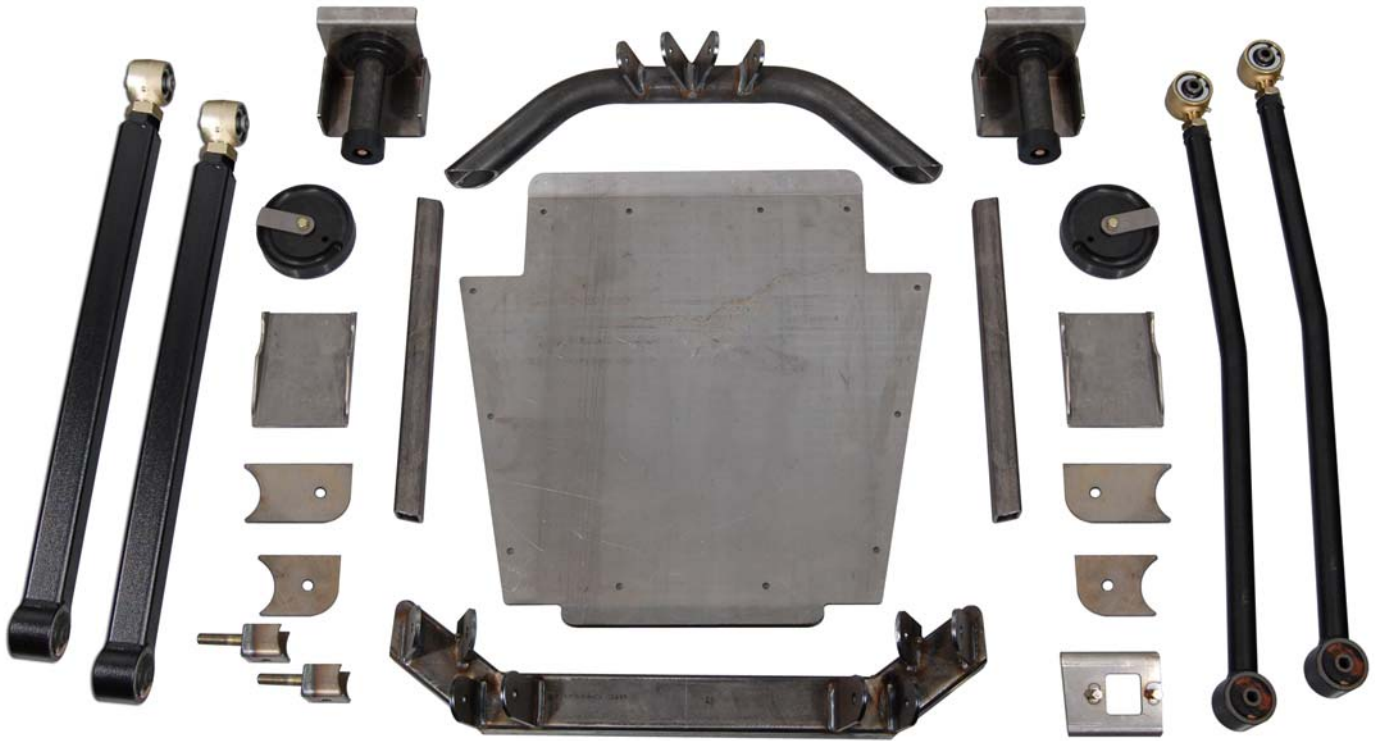


Thank you for purchasing a Clayton Off Road Mfg Long arm suspension.



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

Automatic model the $\frac{1}{4}$ cross member plates will align. No drop is needed.

Manual model the $\frac{1}{4}$ cross member plates do NOT align. A 1-inch drop is needed.

- Peugeot transmission requires a custom adapter plate.

Rear half (coil conversion)

- 2 lower long arms
- 2 upper round and bent upper arms
 - o arms are bent to allow clearance for the floor
- (8) 9/16's gold bolts
- 4 link axle truss
- double triangulated frame truss
- (2) skid plate rails
- $\frac{1}{4}$ flat skid
 - o (12) 5/16"-18 flat head screws
- (1) upper shock mount bracket
- (2) upper coil buckets

- (2) upper coil bucket poly isolators
- (2) lower coil bucket spring mounts + coil retainers
- (4) D shaped control arm axle mount brackets
 - o longer ones used on outside
- (2) U-shaped coil mounting brackets

WARNING: Suspension systems and their components are designed to enhance your vehicles offroad performance. This may cause your vehicle to handle differently then it did from the factory. 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. Take extra care when operating a modified vehicle and thoroughly inspect your vehicle before and after every offroad use.

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.

(203) 757-0339
sales@claytonoffroad.com

Tool requirements

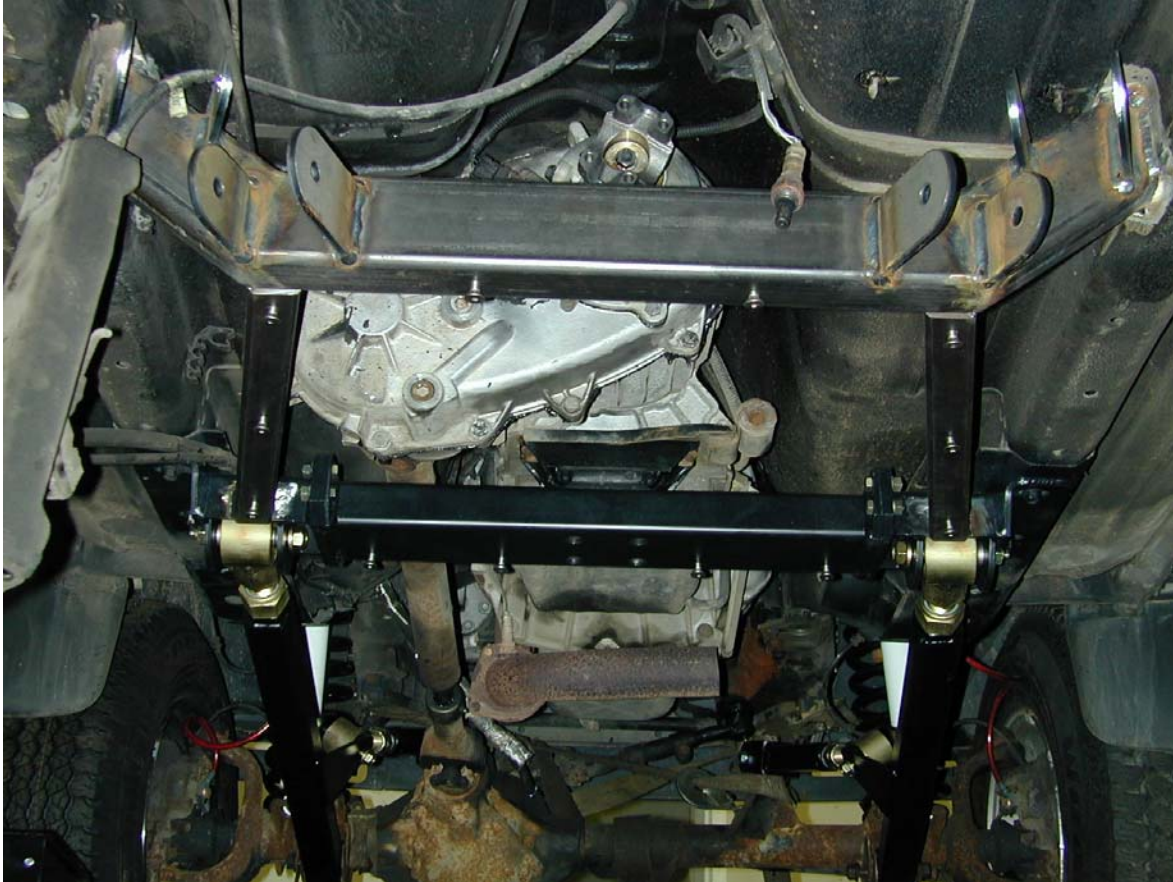
1. 175A or greater mig welder
2. Plasma cutter and or a good 4.5" grinder with cut off wheels.
3. Four large jack stands, ramps or a 4-post drive on lift works best.
4. Various wrenches and shop tools for removing and installing control arms.
5. A 1 7/16 wrench is needed to tighten the upper control arm jam nuts, and a 46mm wrench is needed to tighten the lower control arm jam nuts.

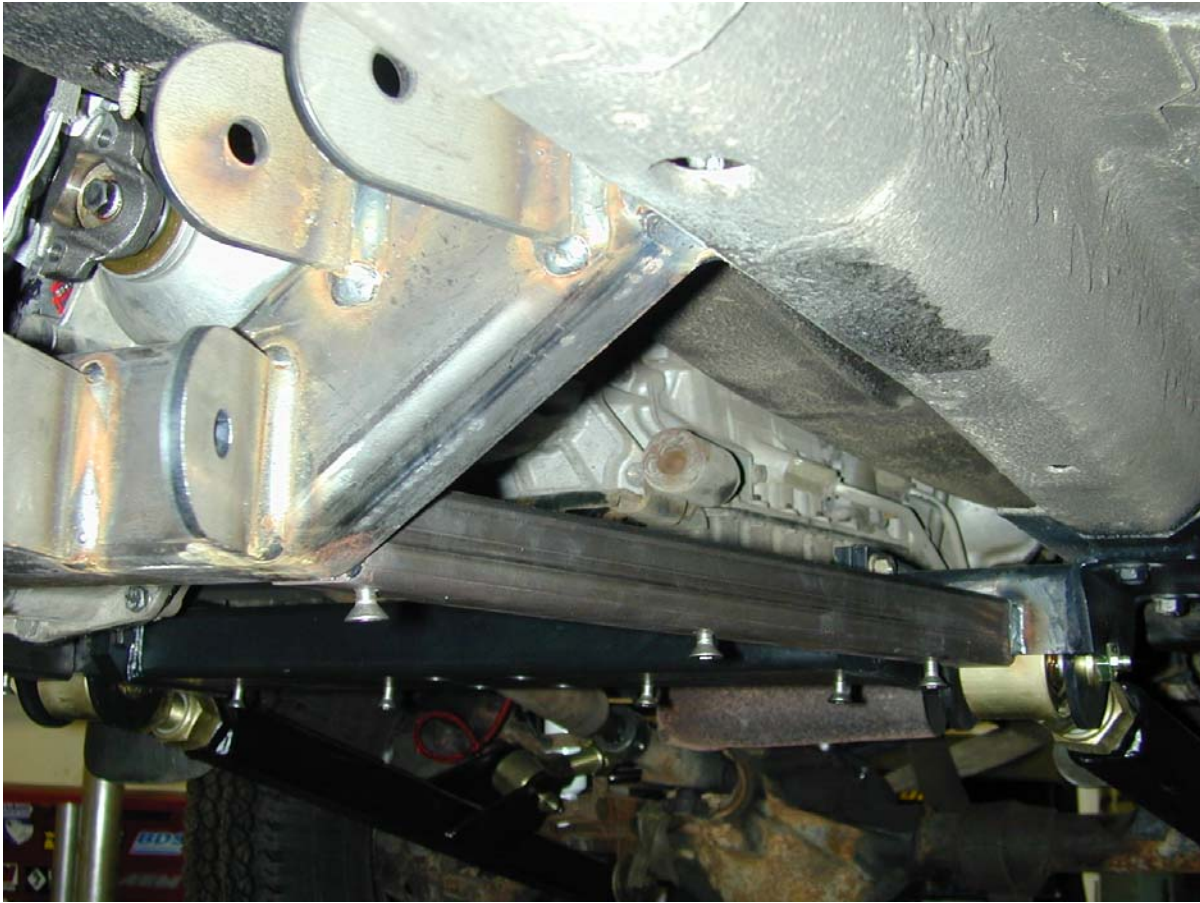
Rear Coil Conversion Truss and Skid Plate Installation Procedures

1. Once you have completed the front installation level the vehicle and support it on jack stands.
2. The following items will need to be removed at this time. Axle, shocks, leaf springs, exhaust at the cat and the drive shaft.
3. The rear control arm truss welds in 19.4375" back from the front cross member. Grind away all the paint and undercoating so you get a nice clean weld.
4. Put the rear truss into position and hold it with a floor jack or bottle jack. Make sure the truss is square to the front cross member. There is a place on the frame rail were it is double thickness. The

rear truss should be about 4.625" in front of this point. Check to make sure the skid plate stringers fit between the two. They are made of 1.5" square tube with angles cut on both ends.

5. Weld the rear truss in making four welds on each side. Top, bottom and two sides.
6. C-clamp the skid plate into position on the front cross member and rear truss. Place the skid plate stringers in position and tack weld them into place. Drill and tap for the 12 5/16"-18 flat head screws.
7. Remove the skid plate and finish welding the stringers in.
8. Paint all bare metal.
9. Re-install the skid plate.





Rear Upper Spring Perch Installation Procedures

1. Remove the bump stops from the uni-body frame rail on both sides.
2. You need to create a pocket in the frame for the new spring perches. The pocket should be centered on these bump stop bolt holes. The pocket needs to be 6.375" wide this will be about .750" from the center of each hole to the outside. The depth is .3125" from the back of the frame rail. You need to make this a nice fit for easy welding later. Remove the frame rail up to the floor board. Refer to drawing.
3. ***** WARNING – Next step requires welding to the uni-body. The carpet inside and any materials should be removed to avoid any chance of starting a fire. This metal is very thin, and the heat will go through and can and will set the carpet or any flammable items on fire. *****
4. Once the spring perch is sitting in the frame rail tack weld it into place. Welding these into place is a little tricky. Use stitch welding so you don't burn through the uni-body. These are little short welds pausing in between to allow the thin metal to cool. Weld down both sides, across under the frame rail on both sides and across the back. You can weld along the lip that turns up on the inner fender and along the floor also. Be careful this metal is very thin. What you're trying to do is just seal up the frame rail from dirt and mud getting in there it has little structural purpose.
5. Paint all bare metal.
6. Place spring puck on the post before installing springs.



Rear Axle Brackets Installation Procedures

1. Remove all old spring perches and shock mounts.
2. Grind all paint off the axle tubes.
3. Check to see if truss will clear breather vent. If it does proceed. If it is in the way, you will need to weld it shut, and drill a new breather tube which does not interfere with the axle truss. Make sure to clean out axle tubes of any metal shavings that may have drop in while drilling this new hole.
4. Set axle on jack stands and set desired pinion angle. You will probably be around 17 degrees for a low pinion or 12 degrees for a high pinion when using a SYE kit. Please also refer to the AutoCAD drawing at the end of these instructions.
5. Start by welding on the lower control arm mounts. They should be welded on level with the pinion angle set were you want it. You can use the arms as spacers for the mounts. Refer to drawing for spacing. One good weld on the outside of each mount is fine.
6. Set the spring perch plates on the lower control mounts. Weld on both side around the axle tube and make some one-inch welds in the front to the lower control arm mounts.
7. Position the spring bucket plates on the axles and weld them into place with 3 inch weld around the outside. One on each side in the front and one in the back inside corner.
8. Put the poly spring bucket on with the retainer tab.
9. Place the axle truss on the axle. Center the truss on the axle. Make your measurements from the rim or brake assembly. Don't use the differential housing as a reference point.
10. Weld shock mounts on the axle they should be level with the pinion angle set. Refer to drawing.

11. Drill and tap to mount brake distribution block on truss and run brake lines.

Passenger Side Upper Shock Mount Installation Procedures

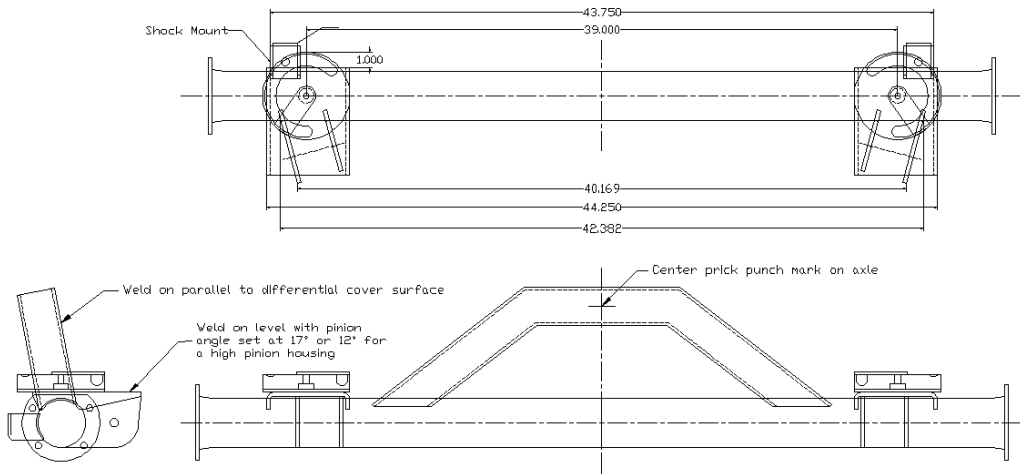
1. This mount goes in the same way as the driver's side mount. Clean away all paint to get a nice clean weld.
2. Position mount and weld in where ever it contacts the vehicle body.



Final Assembly Installation Procedures

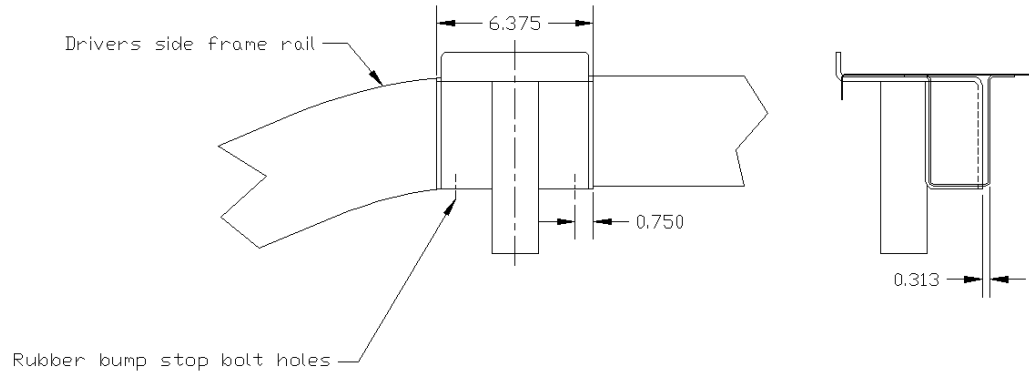
1. Position the axle back under the vehicle. Using jack stands or putting the tires on will work.
2. Install the lower control arms. Rubber bushings on the axle side. Make sure they are set to the same length. Final length may need to be adjusted later depending on lift height.
3. Lift the rear of the vehicle and install the springs. Lower vehicle on to the springs.
4. Adjust the pinion angle and use a come along or ratchet strap to center the body over the axle.
5. Install the upper arms. Align the bend in the arm with the floorboards for clearance.
6. Don't worry about making the arms the same length just make all the bolts go in easily. This will keep the track set properly.
7. Install the shocks.
8. Lock down the lower spring retainers.
9. Bleed the brakes.
10. Install the rear drive shaft.

XJ Rear Axle Coil Conversion Bracket Location Drawing



Clayton Off Road Mfg, LLC

XJ Rear Coil Conversion Upper Spring Perch Mount Drawing



Clayton Off Road Mfg. LLC

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.