CLAYTON OFF ROAD COR-4806031 JEEP GRAND CHEROKEE REAR LONG ARM UPGRADE KIT (1999-2004 WJ)



NOTES: This product requires general welding, fabrication and automotive mechanic skills. Welding should only be done by a competent welder. Clayton Off Road implies no guarantees or warranties and is not liable for improper installation. Some grinding and fitment may be required when installing this product. Every vehicle varies slightly and some fabrication may be required. For more information please visit our web site. Refer to individual product part number instructions.

Step 1: Install part number COR-2206110 rear frame brackets.

Step 2: Install part number COR-2206210 uni-body frame rails.

Step 3: Chock front and back of both rear wheels.

Step 4: Support axle to maintain pinion angle.

Step 5: Remove upper control arm and arm ball joint.

Step 6: Install part number COR-1206010 axle truss or COR-1206100 4-link bracket.

Step 7: Remove one lower control arm.

Step 8: Remove lower control arm bracket on frame side.

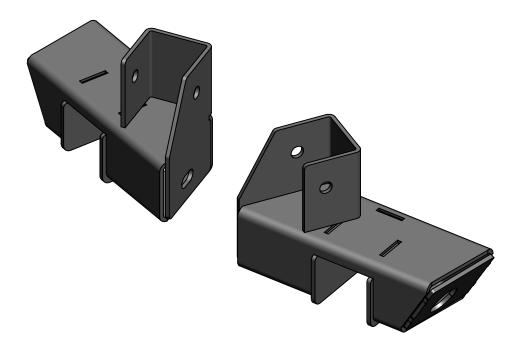
Step 9: Install one of part number COR-1906101 lower control arm.

Step 10: Repeat steps 7 to 9 on opposite side.

Step 11: Install part number COR-1900102 rear upper control arms.

Notes: All final adjustments and tightening of hardware should be done with the vehicle sitting at ride height. Care should be taken to set caster and track without binding up the suspension.

CLAYTON OFF ROAD COR-2206110 JEEP GRAND CHEROKEE REAR FRAME BRACKETS (1999-2004 WJ)



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Refer to drawing views.

Step 1: Install part number COR-2106110 3 piece cross member.

Step 2: Clean frame for welding.

Step 3: Locate brackets according to dimensions given. Wood blocks and a bottle jack work well for holding the brackets in place.

Step 4: Check fitment of WJ uni-body sub frame rails. Leaving about 1/8" gap is helpful during the install.

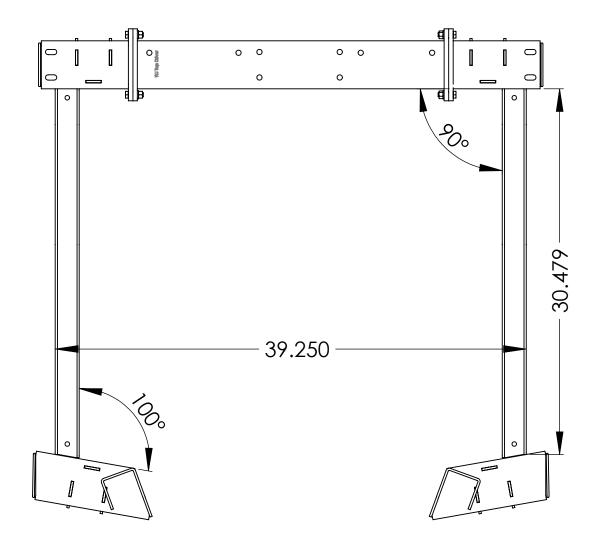
Step 5: Tack weld 4 corners of brackets.

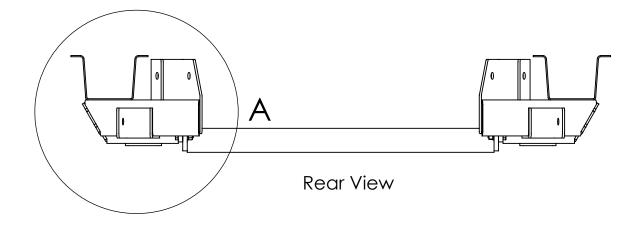
Step 6: Weld around all 4 sides of the bracket.

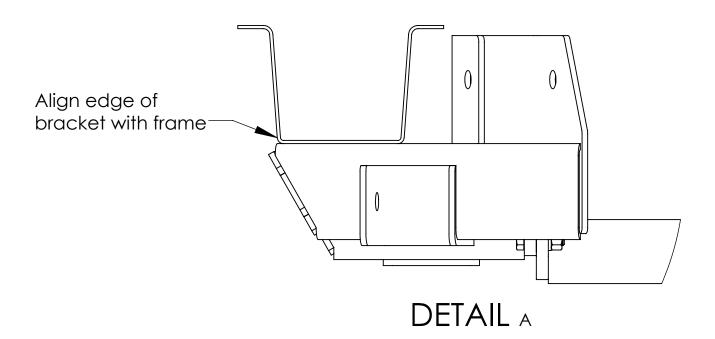
Step 7: Weld end caps on with access holes aligned.

Step 8: Paint frame brackets.

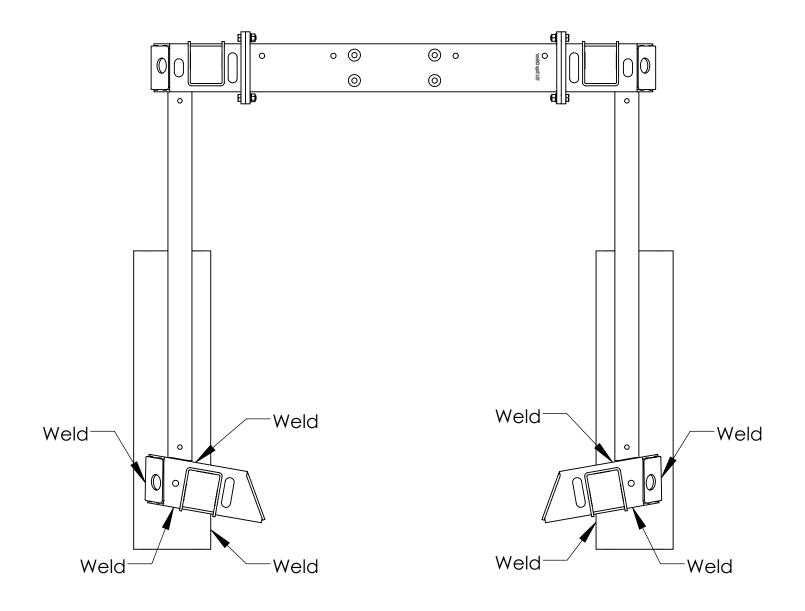
Note: It is possible to use these brackets without part number COR-2106110 and measure from the stock cross member. We recommend using part number COR-2206210 to reinforce the brackets.

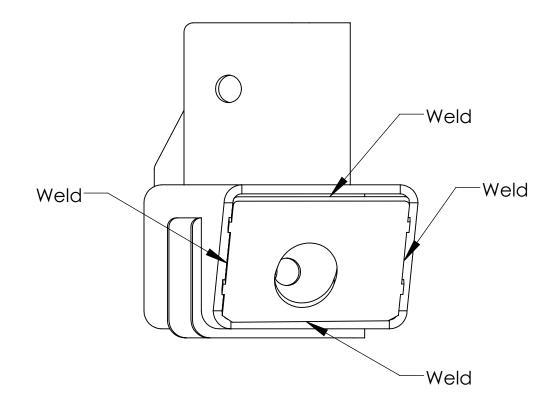






SCALE 1:3





CLAYTON OFF ROAD COR-2206210 JEEP GRAND CHEROKEE UNI-BODY FRAME RAILS (1999-2004 WJ)



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Refer to drawing views for measurements.

Step 1: Install part number COR-2106110 3 piece cross member.

Step 2: Install part number COR-2206110 rear frame brackets.

Step 1: Clean frame for welding.

Step 2: Locate rails according to dimensions given. Wood blocks and a bottle jack work well for holding the rails in place.

Step 3: Check fitment with WJ 1/4" transfer case skid plate if using.

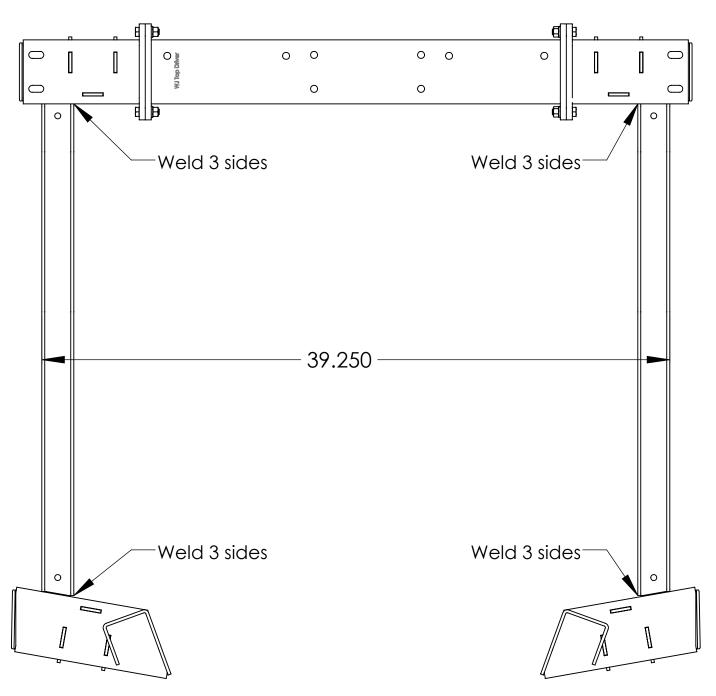
Step 4: Tack weld 4 corners of rails.

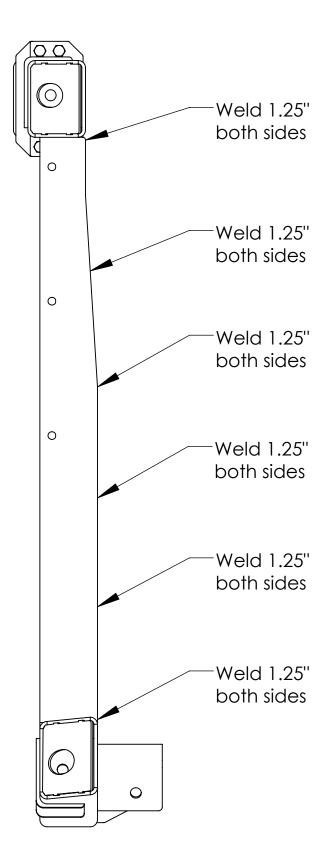
Step 5: Weld around 3 sides of the end of the rails.

Step 6: Weld along the insides and outside of the rails. Min. 6 welds spaced out.

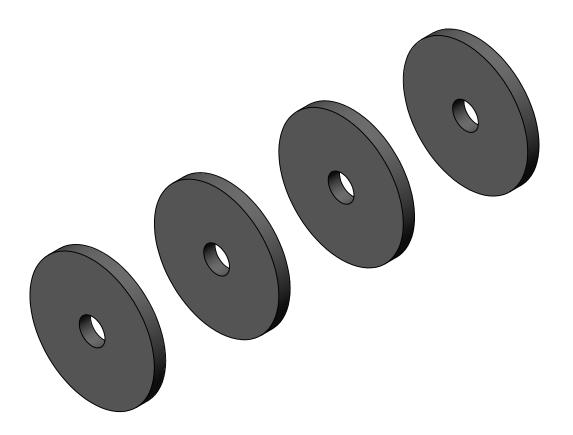
Step 6: Paint sub frame rails.

Note: These frame rails can be installed alone but will interfere with installing other parts of our system in the future.





CLAYTON OFF ROAD COR-1206104 JEEP GRAND CHEROKEE CONTROL ARM SPACER KIT (1999-2004 WJ)

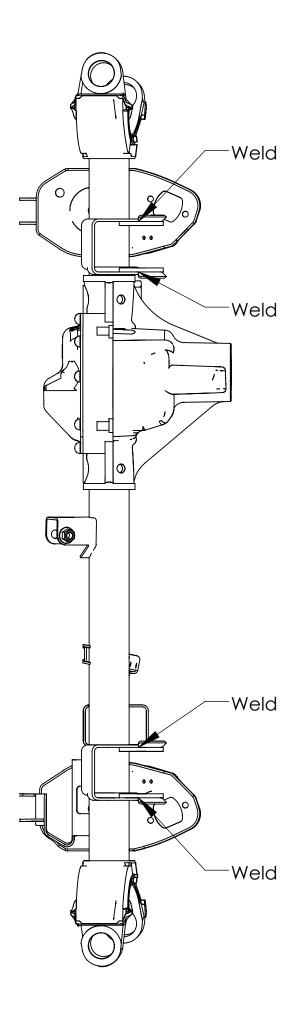


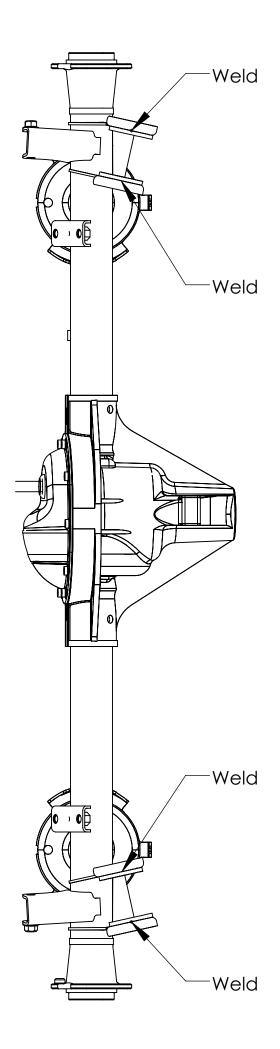
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Refer to pictures below and drawing views.

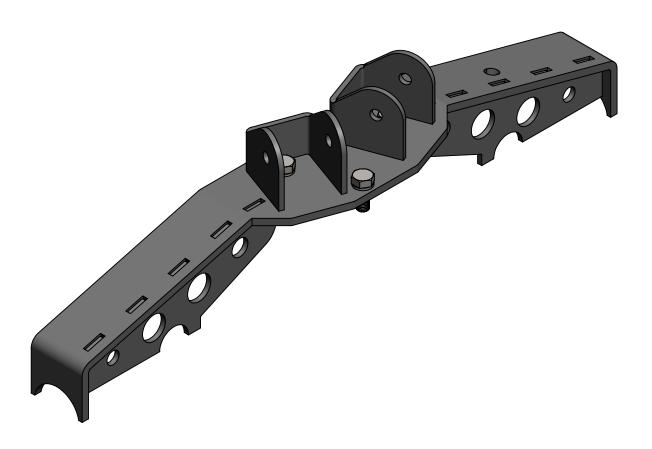
- Step 1: Remove stock control arm.
- Step 2: Bolt new control arm and spacers into control arm bracket.
- Step 3: Tack weld spacers to bracket.
- Step 4: Remove new control arm.
- Step 5: Weld spacer to bracket. Three one inch beads ar enough.
- Step 6: Paint axle bracket.
- Step 7: Install new control arm.







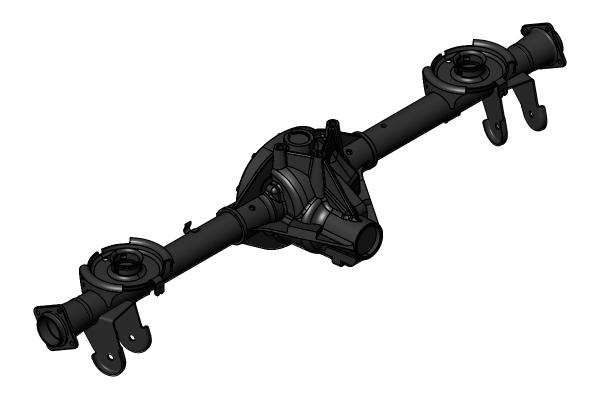
CLAYTON OFF ROAD COR-1206010 JEEP GRAND CHEROKEE REAR AXLE TRUSS (1999-2004 WJ)



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Refer to picture below.

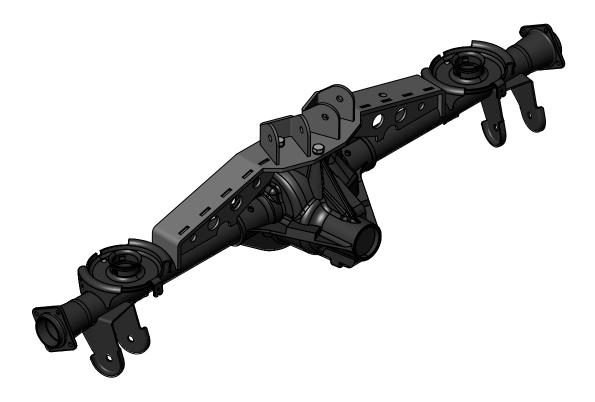
- Step 1: Remove axle from vehicle. Step 2: Remove old upper control arm mount.
- Step 3: Move brake lines out of the way.
- Step 4: Clean axle tubes for welding.

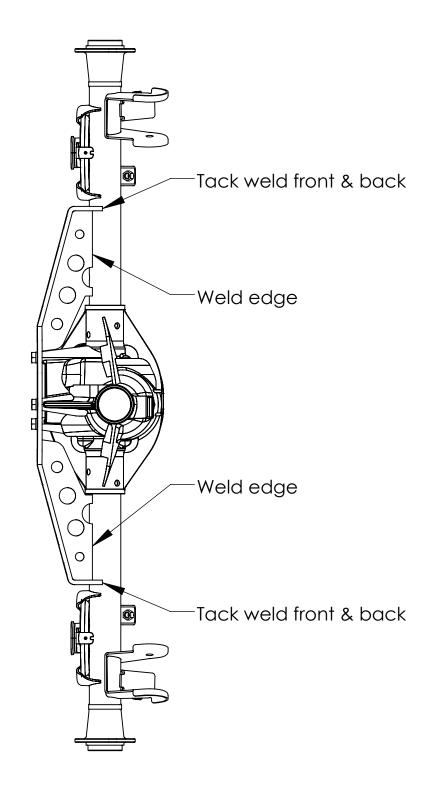


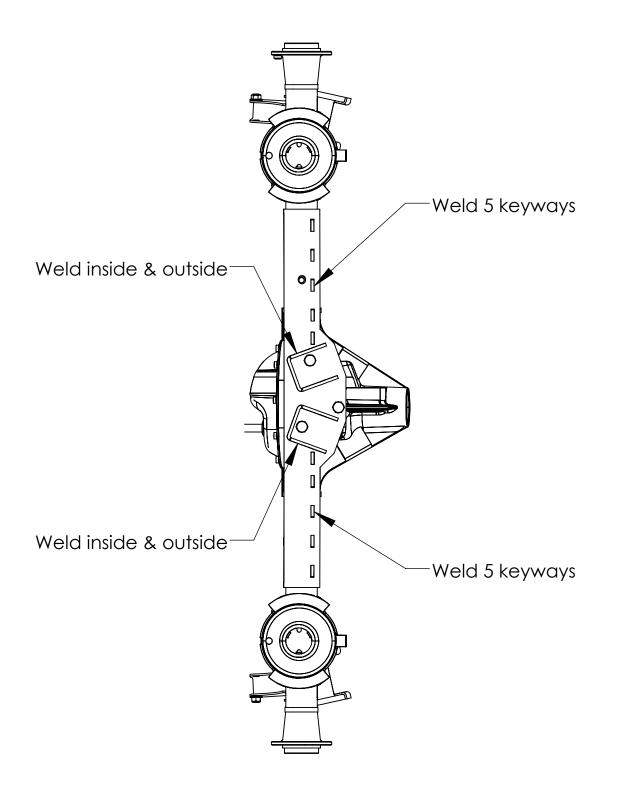
Refer to picture below and 2 drawing views.

Step 5: Slide truss gussets into place.

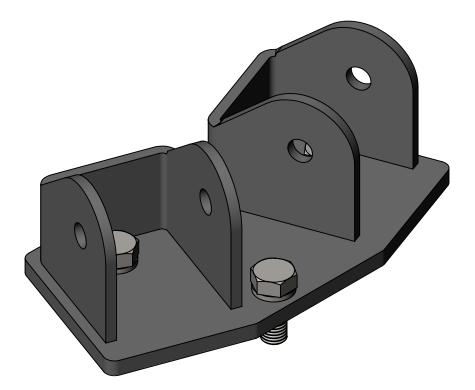
- Step 6: Bolt truss on to axle.
- Step 7: Clamp truss ends tight against axle tube.
- Step 8: Tack weld four corners of truss.
- Step 9: Make sure bottom of gusset is in contact with axle tube.
- Step 10: Weld bottom edge of gusset as indicated.
- Step 11: Weld in keyways as indicated.
- Step 12: Weld truss ends to axle tube on the inside.
- Step 13: Remove bolts from truss.
- Step 14: Align upper mounts with marks.
- Step 15: Weld as indicated.
- Step 16: Re-install bolts.
- Step 17: Paint axle.
- Step 18: Install axle in vehicle.







CLAYTON OFF ROAD COR-1206100 JEEP GRAND CHEROKEE REAR 4-LINK BRACKET (1999-2004 WJ)

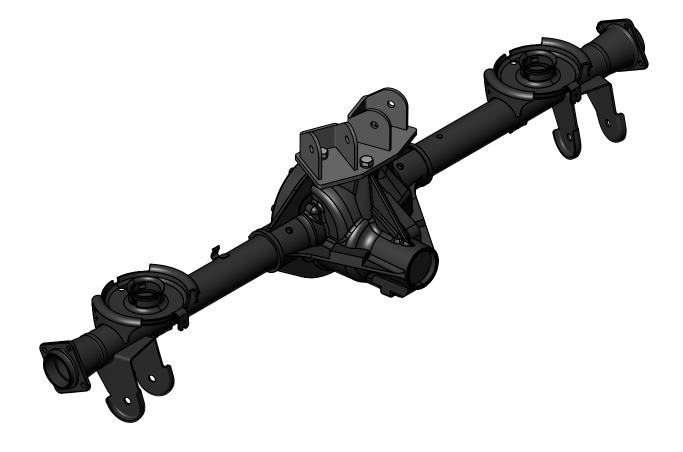


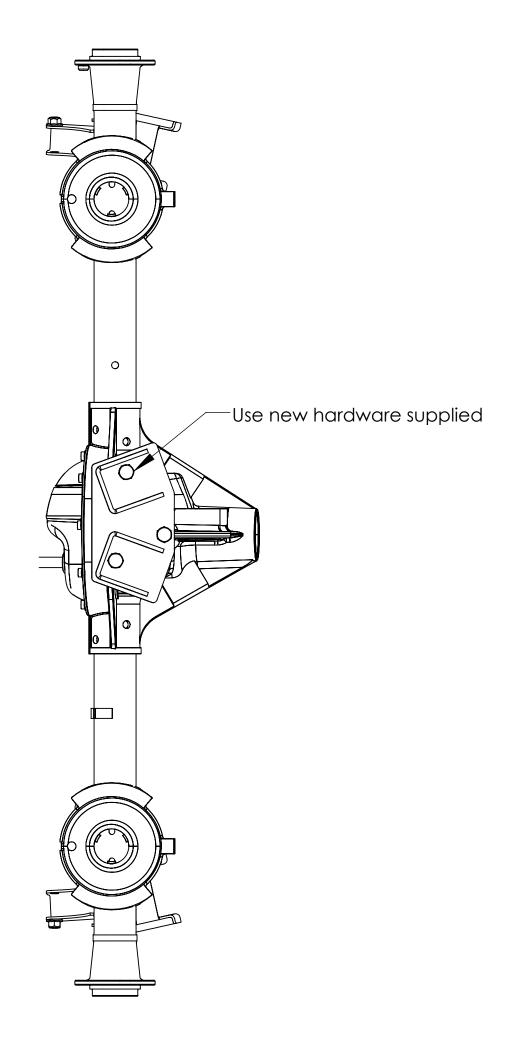
NOTES: This product may require general welding, fabrication and automotive mechanic skills. Welding should only be done by a competent welder. Clayton Off Road implies no guarantees or warranties and is not liable for improper installation. Some grinding and fitment may be required when installing this product. Every vehicle varies slightly and some fabrication may be required. For more information please visit our website.

Refer to picture below and drawing view.

Step 1: Remove upper rear control arm.

- Step 2: Remove upper rear arm ball joint. Step 3: Install rear 4 link bracket using new hardware.





CLAYTON OFF ROAD COR-1906101 JEEP GRAND CHEROKEE LONG REAR LOWER CONTROL ARMS (1999-2004 WJ)



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Refer to drawing view below and individual product part number instructions.

Step 1: Set one arm as close to recommended length as possible with grease fitting down.

Step 2: Set second arm to same length with grease fitting down. (Use two 9/16" bolts in each end of both arms.)

Step 3: Install part number COR-1206104 control arm spacer kit.

Step 4: Bolt control arm into cross member.

Step 5: Repeat steps 3 and 8 on other side.

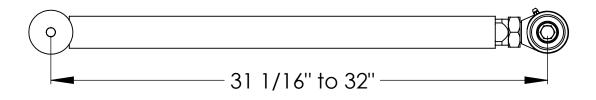
Step 6: Tighten bolts after vehicle is sitting at ride height.

Step 7: Tighten jam nuts. (We recommend a 46 mm or 1 13/16" combination wrench for this. We also recommend cutting the box end off the wrench and getting a three foot pieces pipe to put over the end of the wrench for leverage. Inserting a large screw driver between the joint body and the mount will hold the housing joint straight.)

Step 8: The joints are per greased so initial greasing is not required. (We do recommend greasing the joints every time you change your oils or grease other components on your vehicle. Use a hand grease gun not a pneumatic grease gun.

Step 13: Remove grease fittings and install set screws.

Recommended control arm length for 4.5" to 6.0" of lift is 31.5". Some adjustment of this measurement maybe performed for special applications as long as the length stays within the minimum and maximum lengths shown below.



CLAYTON OFF ROAD COR-1900102 JEEP LONG REAR UPPER CONTROL ARMS (TJ/LJ/ZJ/WJ 1993-2006)



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Refer to drawing view below.

Step 1: Set both arms as close to recommended length as possible with grease fittings lined up.

Step 2: Set desired pinion angle. (1 to 2 degrees down is recommended for CV style drive shafts, a bottle jack works well for this.)

Step 3: Center chassis over axle. (Ratchet straps work well for this.)

Step 4: Install one arm at frame end with grease fittings up.

Step 5: Adjust the length of the arms so that you can easily get the bolt in at the axle end with the grease fitting up.

Step 6: The center ball of the Johnny Joint may need to be aligned for the bolt to get the bolt to go in easily.

Step 7: Repeat steps 4 and 6 on other side.

Step 8: Tighten bolts after vehicle is sitting at ride height.

Step 9: Tighten jam nuts. (We recommend a 1 7/16" combination wrench for this. We also recommend cutting the box end off the wrench and getting a three foot pieces pipe to put over the end of the wrench for leverage. Inserting a large screw driver between the joint body and the mount will hold the housing joint straight.)

Step 10: The joints are per greased so initial greasing is not required. (We do recommend greasing the joints every time you change your oils or grease other components on your vehicle. Use a hand grease gun not a pneumatic grease gun.

Recommended control arm length for 4.5" to 6.0" of lift is 34". Some adjustment of this measurement maybe performed for special applications as long as the length stays within the minimum and maximum lengths shown below.

