



EVO Manufacturing

Jeep Gladiator JT 2018+

High Clearance Long Arm Kit Instruction Manual

EVO-3185



Before starting installation procedure please read <http://evomfg.com>Returns-Warranties-Shipping>



CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL AND KEEP FOR FUTURE REFERENCE. IF YOU HAVE ANY QUESTIONS ABOUT THE PRODUCT CALL EVO MANUFACTURING. FAILURE TO FOLLOW GUIDELINES COULD RESULT IN MALFUNCTION OF PARTS OR INJURY. PLEASE HAVE A TRAINED PROFESSIONAL ASSIST WITH OR INSTALL ALL PRODUCTS. INSTALLING EVO MFG PRODUCTS OR KITS DEMANDS SPECIFIC KNOWLEDGE, TOOLS AND EXPERIENCE. GENERAL KNOWLEDGE OF HOW TO USE LATER SPECIFIED TOOLS AND/OR LIMITED EXPERIENCE WITH EVO MFG PRODUCTS MAY NOT BE ENOUGH TO PROPERLY COMPLETE THESE TASKS. SOME OF EVO MFG PRODUCTS MAY REQUIRE TWO OR MORE PEOPLE TO INSTALL SAFELY AND CORRECTLY. DO NOT ATTEMPT ALONE, ALWAYS ENLIST THE HELP OF TRAINED PROFESSIONAL WHEN NEEDED.

Notes: Set Up Before installation

It requires cutting and grinding of frame mounts and welding of new bracketry.

Gas tank removal is required. This is easiest done when tank is low on fluid.

Wheel spacers or aftermarket wheels with a smaller backspacing than factory are required for a complete installation.

All Vehicles that spend time on salted roads. It is recommended that removal of control arm joint/collar (threaded end) on all control arms before installation of vehicle, apply a small amount of Anti Seize on threads and reassemble.

All factory bolts should be tightened to factory specifications. All supplied bolts torqued according to chart at end of instruction.

This instruction will give procedure of installing the long arm portion of the system first then return to install all other components after the vehicle has been long armed.

DISCONNECT ALL BATTERY TERMINALS BEFORE STARTING. REINSTALL AT FINAL END OF INSTALLATION

Rough Starting lengths for all arms: Professional Alignment after installation recommend.

ARMS:	FRONT TRACKBAR:	REAR TRACKBAR:
Front Uppers: 26 3/8"	2.5" Lift: 34 1/4"	2.5" Lift: 33 9/16"
Front Loweres: 34 1/2"	4.5" Lift: 34 9/16"	4.5" Lift: 33 9/16"
Rear Uppers: 27 3/4"	6.5" Lift: 34 3/4"	6.5" Lift: 33 5/8"
Rear Loweres: 34 1/2"		



READ BEFORE INSTALL

It is generally a good idea to apply Loctite to all threaded bolts.

ALWAYS wear safety glasses and other approved safety gear when working on a vehicle.

All supplied bolts torqued according to chart at end of instruction.

It is recommended all installation be performed by a trained professional. Some modification may have to be done.

Test brakes and verify no leakage in lines before driving. Recheck often. Removal or trimming of factory plastic inner fender liner may be required to clear combinations of larger tire sizes and wheel back spacings.

Professional alignment is recommended after install.

After alignment is complete and no additional adjustments are to be made to control arms. Torque all 1" Jam Nuts to 250 ft/lbs and all 1-1/4" Jam Nuts torque to 300 ft/lbs. Regularly check all jam nuts and punch bolts on all control arms for proper torque/tightness. Failure to do so may cause premature wear of threads on arms and is not covered under warranties.

SOME PART ASSEMBLY MAY BE REQUIRED. FOLLOW THESE ASSEMBLY INSTRUCTIONS AT END OF THIS DOCUMENT.

Parts included: Table below shows black (painted) EVO MFG JLU Long Arm Pro.

Recommended Tools:

- Welder and materials
- Drill/Bits
- Wrench/Impact with sockets
- Grinder/Metal Cutting tools
- Paint



Safety Steps for installation

- For installing EVO MFG products always use wheel chokes to block rear tires from rolling.
 - Always make sure you have everything necessary ready before install.
 - If you have to, carefully lift front of vehicle by front frame rails extending suspension until tires leave the ground, place frame on approved jack stands for vehicle. Verify all lines/wires are not over extended.
 - Remove tires if needed for easier install.
 - Make sure to wear safety equipment (eye protection, hand protection, foot protection etc.) at all times during installation.
 - Make sure all safety precautions have been taken.
 - Always check and replace any part of vehicle that is worn or broken before starting install.
 - Do not mix anything EVO with weaker alternatives.
 - It is generally a good idea to apply liquid threadlock to all bolts.
 - Tighten included hardware to torque specifications in bottom table unless it is otherwise specified, factory bolts should be torqued to factory Jeep specifications.
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FRONT INSTALL

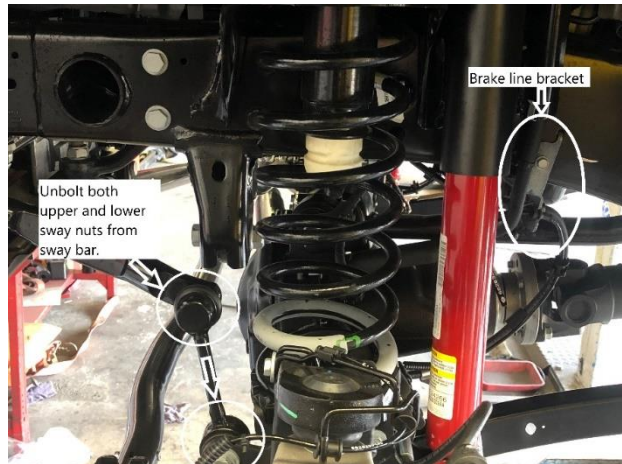
1. Carefully lift vehicle by frame rails/crossmember extending the suspension until the tires leave the ground.
2. Securely place weight approved jack stands for vehicle under frame

With vehicle tires now suspended and frame securely supported on stands, remove tires from vehicle.

1. Remove both driver and passenger side swaybar links bolts at axle and swaybar removing swaybar links and rotate sway up and out of the way. Factory front links will not be reused.

There is a 6mm allen key inside both driver and passenger side upper sway bar studs. Use allen head to allow nut to unscrew.

3. Remove bolt on brake line bracket.



4. Disconnect push-in clip from front upper control arm mounts at axle holding wire. Un clip all other wires/hoses that are connected to axle.

Vehicle wiring and hoses vary, make sure all wires, hoses, lines etc. from frame to axle are freed up giving ample length to move axle downward as needed before proceeding, verify wiring/hoses etc. do not get stretched while lowering axle in next steps.



Support BOTH axles with jack stands

5. **IF** you are **replacing shocks** and not using shock extensions remove upper bolt. Otherwise leave shock mounted at upper.
6. Lightly jack the front driver side axle tube slightly. With axle slightly supported remove front lower shock bolt from axle.
7. Repeat on passenger side.

Varying axle jack tension to the right amount will alleviate load on the bolt and allow it to freely slide out.



8. Remove trackbar bolt at both axles.

This will allow the axle to move side to side so be cautious about this from here on.



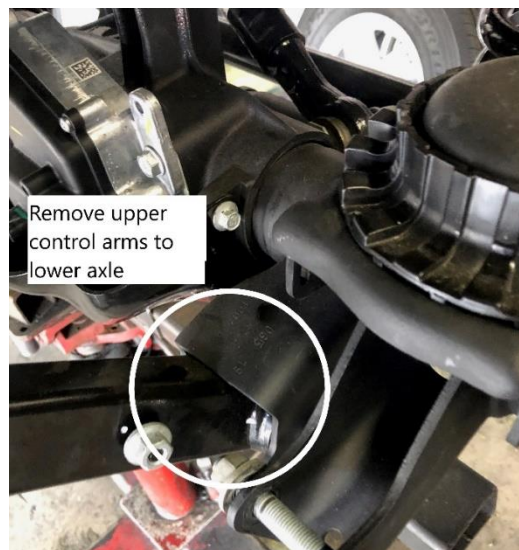
9. Unbolt driveshaft from axle. Tie up and out of the way.



10. To lower the axle without any binding, we will remove the factory lower front control arms. Remove the driver side first, then remove the passenger side.

Repeat on rear arms.

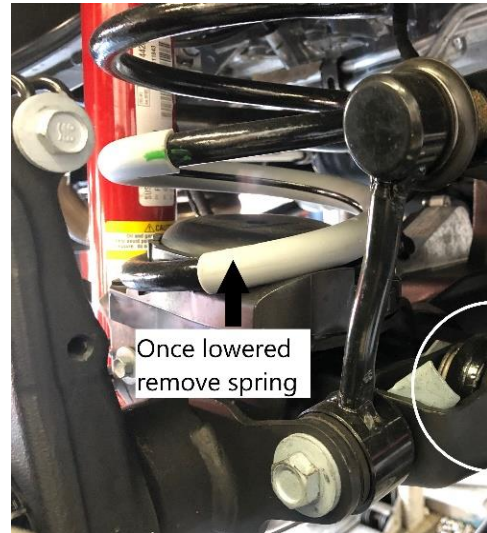
Be careful when removing control arms. Axle may rotate downward due to off centered weight, support pinion if necessary.



11. Lower both front and rear axles (one at a time) while checking wire and hose lengths until springs can be removed.

Adjust wire and hose connections as needed.

12. Remove springs



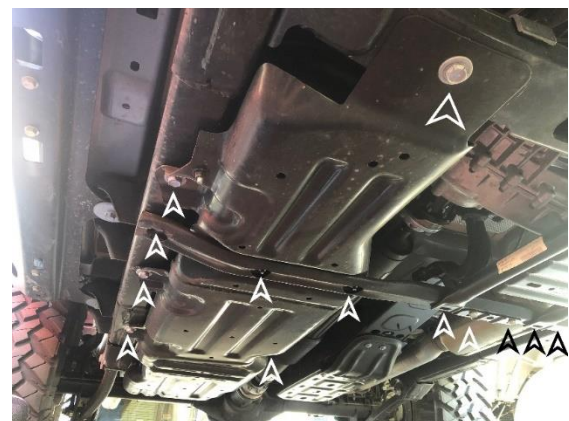
13. Remove upper control arms from frame and axle and set aside. Axle will be loose at this time use caution and appropriate support.

Repeat on rear arms.

Be careful when removing control arms. Axle may rotate downward due to off centered weight, support pinion if necessary.



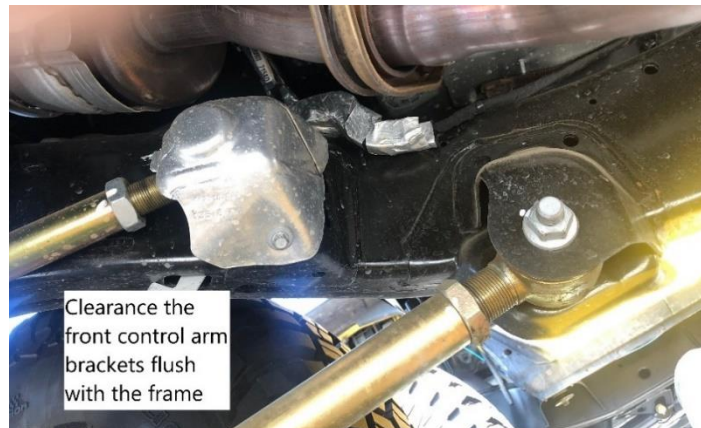
14. Carefully Support underside of gas tank. Remove all bolts holding it to chassis. Carefully lower tank (remember there is fuel BE CAREFUL) until you can reach connections on top of tank and disconnect. Set tank aside in a safe well vented space away from any flames/heat. It will be reinstalled later.



15. Remove exhaust crossover bar from chassis (small crossmember bar in front of exhaust crossover), Bar will not be reused. Keep hardware.
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16. Using tools at your disposal, grinders, cut off wheels, torch, plasma cutter etc. Clearance all control arm mounts, front upper, lower and rear upper and lower clean to frame rails.
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17. Once all control arm mounts are clearance clean to frame.

Starting in the front install front driver long arm bracket to frame using the single bolt hole on the underside of the frame, where exhaust bar was once bolted, using original factory bolt. This will locate this bracket in the proper location. Slight clearance of edge/lip on exhaust collector may be required. Do so as needed.



Repeat previous step on passenger side (less exhaust note)

Weld front Brackets as shown. (not all areas are shown, **weld all points of connection between frame and brackets, top and bottom, front and back**). Be sure to weld top of bracket. Moving exhaust may be needed to access for some welders. Do so if needed. Do not omit welding top of brackets

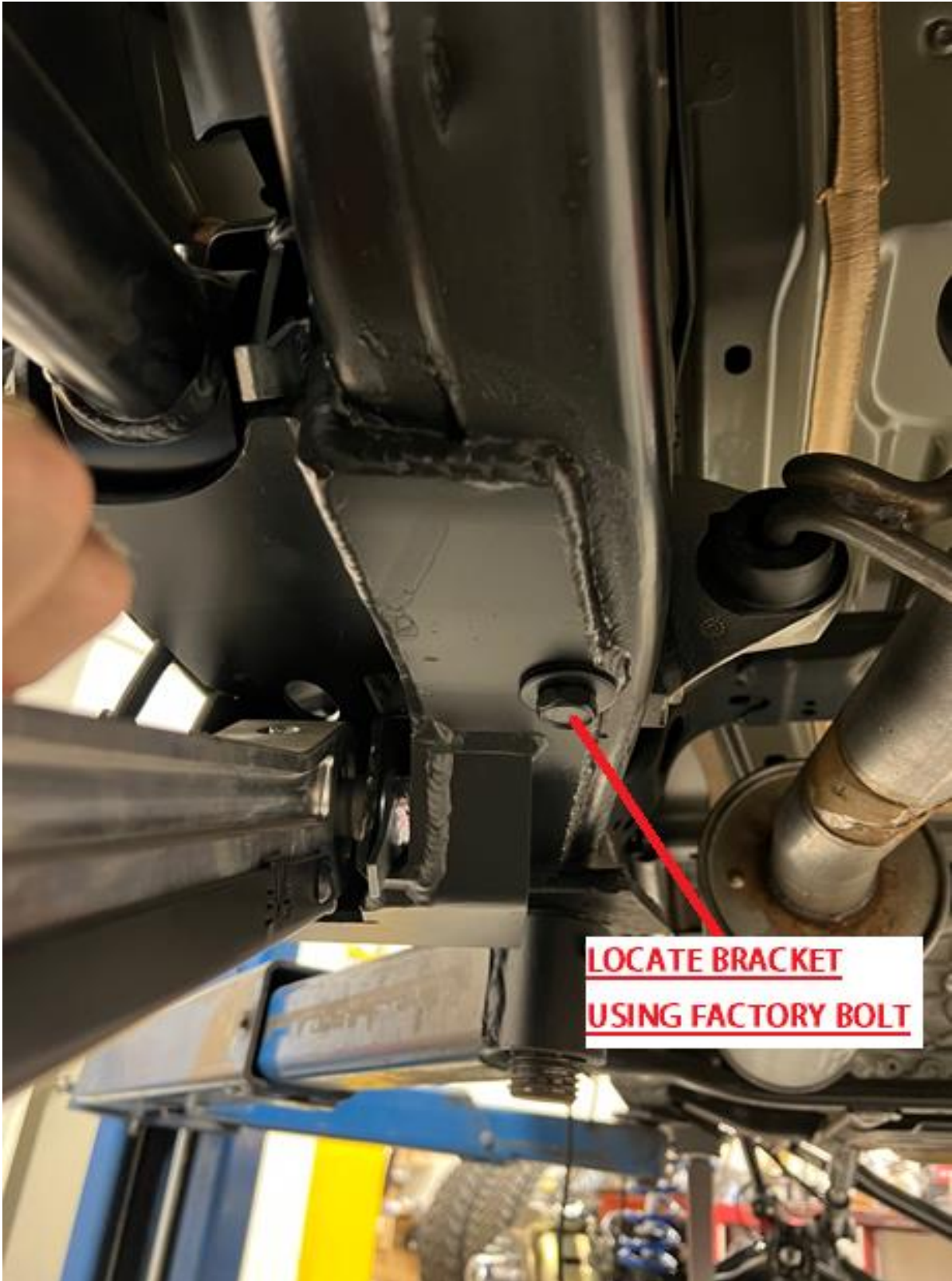




REAR

18. Carefully support gas tank from underside
19. Disconnect all hose and wire connecting gas tanks and carefully cover opening with clean rags.
20. Remove bolts holding gas tank in place while tank is supported
21. Lower tank and move out of way of any ignition or heat source/welding.
22. Using metal cutting tools (Grinders, Plasma Cutters, Torch, Sawzall etc) move all frame mounts for the upper and lower control arms on the frame. Same frame smooth.
23. Fit bracket to frame on left and right of vehicle using the single factory bolt on lower side frame





LOCATE BRACKET
USING FACTORY BOLT

24. Weld as shown at all bracket seams to frame.







ENVY Links (option) may require trimming to brackets to fit their shape. Do so as needed



25. Paint all Exposed Metal, let dry



26. Install upper and lower control into new locations. Factory hardware at axle, Supplied EVO hardware with Nut tabs at new frame locations. Starting length are available at beginning of instructions. STARTING LENGTHs are reference. You will need to dial in to vehicle/alignment.







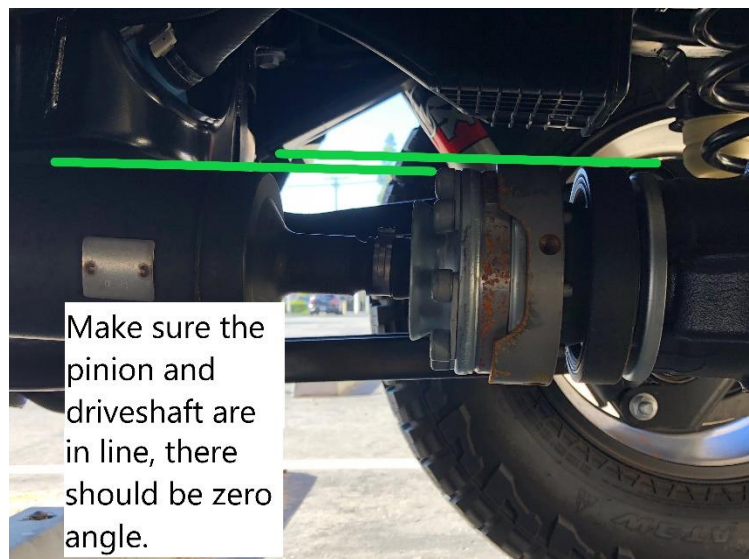
Cycle Suspension: Verify all wiring and hoses are connected and have enough freedom for suspension motion.

27. Reinstall gas tank and associated hose/wiring. (Carefully)

Make sure all hoses and wires are properly connected, make sure there are no leaking fluids. Check and make sure all gauges read properly.

Reinstall wheels and tires, lower to ground.

Once vehicle is on the ground, set pinion angle on vehicle so that the driveshaft and the pinion are inline with the axle at an approximate ride height and centered to vehicle.



RECENTER STEERINGWHEEL/FUNCTION CHECKS:

Adjusting Turn buckle on Draglink. Make sure to turn the correct way to center (do not do a full rotation of steering wheel, closest direction to straight, watch wheel while turning) and pinch nuts once straight. You may need to do this more than once after a drive to get it straight to your liking. Test brakes and verify no leakage in lines before driving. Recheck often. Removal or trimming of factory plastic inner fender liner may be required to clear combinations of larger tire sizes and wheel back spacings. Check for acceptable clearance. Retorque all bolts after 500 miles.



After Install:

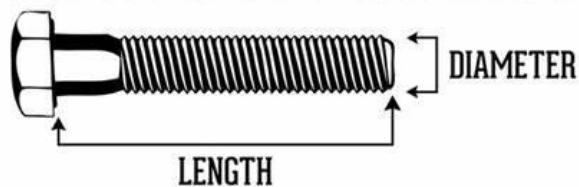
- Tighten all bolts securing purchased parts to specified locations.
- After completing installation using provided instructions, go through all steps again to make sure nothing was missed, not tightened or improperly assembled.
- Some components may need to be purchased separately.
- Check turn signals, headlights, fog lights (if applicable), taillights, blinkers and windshield wipers.
- Adjust mirrors, speedometer and headlights if needed.
- Make sure all gauges are fully operational.
- Drive the vehicle slowly for a couple minutes, looking and listening for abnormal noises while driving. After modification of a vehicle there will be differences in driving experiences and capabilities, be mindful of that.
- Inspect and Retorque all Bolts after 500 miles of completed installation and regularly thereafter.
- Some modification may be required.
- Test brakes and verify no leakage in lines before driving.





PAINT MARK ALL TORQUED BOLTS. REGULARLY CHECK ALL BOLTS INCLUDING JAM NUT/PINCH BOLTS

Recommended Torque: FACTORY BOLTS, TORQUE TO FACTORY TORQUE. EVO BOLTS BELOW

Size	Grade 2		Grade 5		Grade 8		18-8 S/S	
	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
#4*	-	-	-	-	-	-	5.2	-
#6*	-	-	-	-	-	-	9.6	-
#8*	-	-	-	-	-	-	19.8	-
#10*	-	-	-	-	-	-	22.8	31.7
1/4	4	4.7	6.3	7.3	9	10	6.3	7.8
5/16	8	9	13	14	18	20	11	11.8
3/8	15	17	23	26	33	37	20	22
7/16	24	27	37	41	52	58	31	33
1/2	37	41	57	64	80	90	43	45
9/16	53	59	82	91	115	129	57	63
5/8	73	83	112	128	159	180	93	104
3/4	125	138	200	223	282	315	128	124
7/8	129	144	322	355	454	501	194	193
1†	188	210	483	541	682	764	287	289

HOW TO PROPERLY MEASURE A BOLT:



GRADE	SAE BOLT LINES	BOLT MARKINGS	
		Metric	SAE
Grade 2 Metric 5.8	No Radial Lines		
Grade 5 Metric 8.8	3 Radial lines		
Grade 8 Metric 10.9	6 Radial Lines	