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Revisions			
Rev.	Description	Date	Approved
A	Initial Release Per Eco 21-040	4/29/2021	KB



# JEEP GLADIATOR ADJUSTABLE REAR LOWER CONTROL ARMS

## Installation Instructions

Applications:  
2019+ JEEP JT GLADIATOR



TITLE:  
**JEEP JT ADJ REAR LOWER CONTROL ARM INSTALLATION INSTRUCTIONS**

SIZE	DWG NO:	REV
<b>A</b>	<b>8871-01-INST</b>	<b>A</b>
SCALE: N/A		PAGE 1 OF 5



## JEEP JT ADJ REAR LOWER CONTROL ARM INSTALLATION INSTRUCTIONS

Thank you for purchasing the best aftermarket products available for your vehicle. We strongly feel that the parts you are about to install should meet or exceed your expectations for performance. Proper assembly is critical to the performance of these components and the vehicle as a whole. Please take the time to carefully read these instructions and familiarize yourself with the installation procedure before working on your vehicle. If you have any questions PLEASE contact Synergy Manufacturing BEFORE beginning installation. Thanks again for supporting Synergy – enjoy the performance benefits of the best aftermarket products available for your vehicle!

**Synergy Manufacturing**

**Phone: (805) 242-0397**

**Email: support@synergymfg.com**

Modifying or otherwise altering vehicle components may cause the vehicle to handle differently than originally designed. It is the driver’s responsibility to familiarize themselves with the performance and handling characteristics of the modified vehicle. Vehicles with larger diameter than stock tires must be driven carefully and cannot be expected to perform as stock or meet OEM performance with regard to handling, braking or crash performance. Ensure all replacement components are compatible with vehicle capacities so as not to overload components, especially tires. It is up to the individual to ensure that the vehicle and all components are compatible with the intended vehicle use, including load ratings, road conditions, and driver abilities. Thorough and frequent vehicle inspections are recommended to ensure a safe and reliable state of readiness, especially after off-highway use.

### PARTS LIST

<b>8871-01 JEEP JT ADJ REAR LOWER CONTROL ARM</b>		
<b>QTY</b>	<b>Part Number</b>	<b>Description</b>
1	887101-L-PC	JT ADJ REAR LOWER CONTROL ARM, LEFT, POWDERCOATED
1	887101-R-PC	JT ADJ REAR LOWER CONTROL ARM, RIGHT, POWDERCOATED
2	432002	LOWER CONTROL ARM BUSHING, MULTI COMPOUND, 16MM
2	480002	LOWER CONTROL ARM DDB JOINT, 2.625W X 16MM BOLT, 1.25-12L
2	3622-12-12-PL	ROD END ADJUSTER SLEEVE 1.25ID X 12TPI
2	NA	HEX HEAD BOLT, UNF 1/2-20 X 1.75
2	NA	TOP LOCK NUT, UNF 1/2-20

### GENERAL NOTES

- These instructions are also available on our website; [www.synergymfg.com](http://www.synergymfg.com). Check the website before you begin for any updated instructions and additional photos for your reference.
- These control arms are a direct replacement for the stock control arms. They are compatible with stock and lifted Jeeps.
- The installation of these control arms will allow the rear axle position and pinion angle to be adjusted in order to accommodate lift springs, aftermarket driveshafts, or larger tires.
- These control arms feature Synergy Dual Durometer Bushings which are free-floating Teflon lined bushings that require no grease or other maintenance. Replacement bushings are available at [www.synergymfg.com](http://www.synergymfg.com).
- These control arms are 23 5/8” collapsed and 24 7/8” extended.

## TOOLS REQUIRED

- 19mm (or 3/4"), 21mm, and 24mm Sockets and Wrenches
- 1 1/2" Open End Wrench (Or Large Crescent Type Wrench)
- Tape Measure
- Torque Wrench
- Jack and Jack Stands

## ESTIMATED INSTALLATION TIME

1 Hour

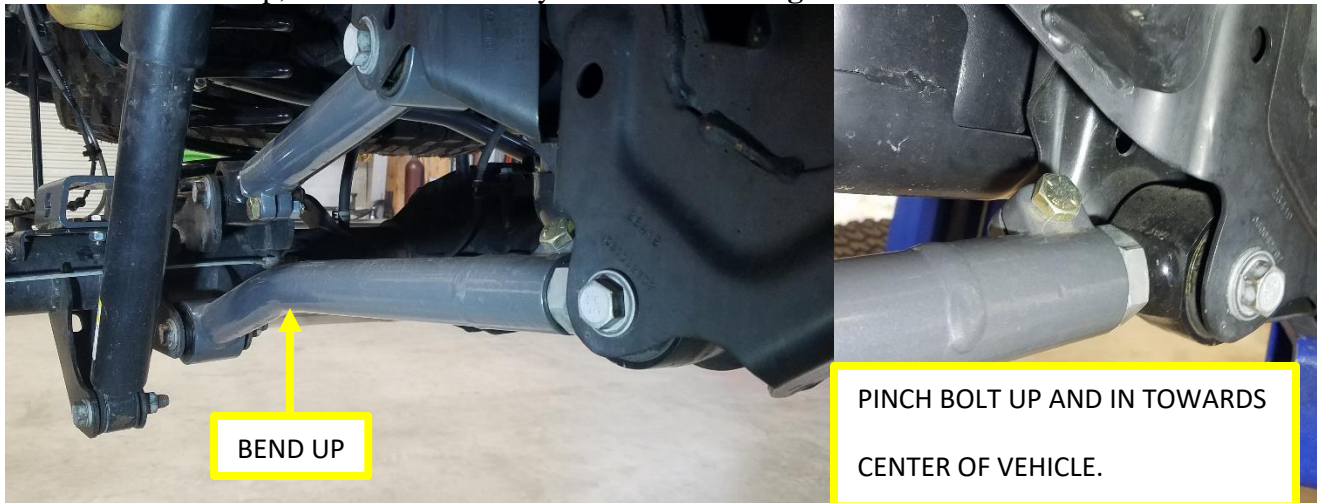
## INSTALLATION

1. Park the vehicle on a flat, level surface. Put the vehicle in gear or in park and set the parking brake. Raise the vehicle up and support the frame with jack stands or on a lift. We recommend removing the rear wheels (22mm socket) in order to ease installation.
2. Remove one of the rear lower control arms. Use a 24mm wrench and 21mm socket to loosen and remove the frame and axle side control arm bolts. Retain the factory hardware. See **Figures 1 and 2**.



**Figures 1. and 2. Removing the Drivers Side Factory Lower Control Arm.**

3. Install a new Synergy Adjustable control arm. The arms install with the pinch bolts up and in toward the center of the vehicle, and the fixed end of the arm on the axle side. The bend in the arm goes up towards the frame for increased clearance. Adjust the length as necessary by rotating the silver double adjuster sleeve with a 1 1/2" open end wrench or Crescent style adjustable wrench. Once the bolt holes line up, re-install the factory hardware. See **Figures 3. and 4.**



**Figures 3. and 4. Installing the Passenger Side Synergy Rear Lower Control Arm**

4. Repeat steps 2 and 3 for the other side of the vehicle.
5. Torque frame side hardware to 120 lb-ft. Torque axle side hardware to 120 lb-ft. Leave pinch bolts loose at this point.
6. Re-install wheels and torque lug nuts to 130 lb-ft. Place vehicle back on ground at ride height.
7. With the vehicle back on the ground, adjust the control arm lengths to set the axle in the correct position, and set the correct pinion angle for the driveshaft being used. See **Figure 5.** We recommend keeping the lower control arms as short as possible, and using the upper control arms to set pinion angle.



**Figure 5. Adjusting the Arm to Set Axle Position.**

8. Double check control arm lengths to make sure they are identical side to side. After checking, torque pinch bolts to 90 lb-ft. See **Figure 6**.



**Figure 6. Tightening the Pinch Bolt**

9. If the pinion angle has changed significantly from stock (pinion is higher than stock) then we recommend over-filling the rear differential by a quart or so in order to ensure the pinion is getting sufficient oiling. Aftermarket diff covers often have raised fill plugs to accomplish this, otherwise you can add the extra fluid through the vent tube.

### **Installation is Complete**

**Table 1. Jeep JK/JL Bolt Torques**

<b>Bolted Joint Location</b>	<b>Wrench Size</b>	<b>Torque</b>
JT Lug Nuts	22mm	130 lb-ft
Rear Lower Control Arm to Frame	21mm and 24mm	120 lb-ft
Rear Lower Control Arm to Axle	21mm and 24mm	120 lb-ft
Synergy MFG Control Arm Pinch Bolts	19mm or 3/4in	90 lb-ft