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Revisions			
Rev.	Description	Date	Approved
A	Initial Release Per ECO 19-033	3/7/19	A.S.



Jeep JL Adjustable Front Upper Control Arms

Installation Instructions

Applications:
2018+ Jeep Wrangler (JL/JLU)



TITLE:
JEEP JL ADJUSTABLE FRONT UPPER CONTROL ARMS INSTALLATION INSTRUCTIONS

SIZE	DWG NO:	REV
A	8853-01-INST	A
	SCALE: N/A	PAGE 1 OF 5



PARTS LIST

8851-01 ADJUSTABLE FRONT UPPER CONTROL ARMS		
QTY	Part Number	Description
1	885301-L-PC	Left Upper Control Arm Powder Coated
1	885301-R-PC	Right Upper Control Arm Powder Coated
2	3622-07-14L-PL	Adjuster Sleeve
2	4321-01	Dual Durometer Bushing
2	805305-01	Forged Yoke
2	N/A	1/2-20 Top Lock Nut
2	N/A	1/2-20 x 1.75 Grade 8 Bolt

GENERAL NOTES

- These instructions are also available on our website; www.synergymfg.com. Check the website before you begin for any updated instructions and additional photos or videos for your reference.
- These control arms are a direct replacement for the stock control arms. They are compatible with stock and lifted Jeeps as a heavy-duty upgrade and allow you to correctly align the front axle after the Jeep has been lifted.
- These control arms feature a double adjuster sleeve which allows you to adjust the length of the arms without removing them from the vehicle.
- Anti-seize has been applied to both sides of the double adjuster sleeve. You can apply more anti-seize if you would prefer. More anti-seize may be beneficial in wetter climates.
- These control arms feature Synergy Dual Durometer Bushings which are free-floating Teflon lined bushings that require no grease for the duration of their use.
- These control arms are 20.0" collapsed and 21.25" extended.
- It is recommended to have the vehicle suspension aligned after any suspension change or modification.
- We recommend pairing adjustable upper control arms with adjustable lower control arms.

TOOLS REQUIRED

- 10mm, 18mm and 19mm (or 3/4") Sockets and Wrenches
- 1 1/4" Wrench (or large Crescent wrench)
- Torque Wrench

INSTALLATION

1. The control arms come assembled to the shortest length. Make any length adjustments by only turning the adjuster sleeve so there is equal thread on the forged yoke and adjuster sleeve.
2. If you are just replacing the upper control arms, they can be replaced one at a time with the vehicle sitting on level ground, without removing the tires & wheels or any other suspension part. If the vehicle is raised up and the suspension is allowed to droop, it may be more difficult to align the bolts in the arms due to the track bar 'pulling' the axle over.

3. Remove the heat shields covering the frame side upper control arm bolts (10mm head). Depending on engine configuration it may not be possible to access both upper and lower bolts holding the heat shields to the mount. In this case it is possible to only remove the lower bolt and bend the heat shield out of the way. **Figure 1** shows heat shield bent out of the way.



Figure 1. Front Upper Control Arm Heat Shield Bent Out

4. Remove the factory right-side upper control arm (18mm head). The frame side uses a flag nut that goes through the frame. Certain engine configurations may not allow the bolt to come fully out without removing or moving other nearby components.
5. The Synergy MFG control arms are right and left specific. Be sure they are installed correctly with the pinch bolt facing up and the bend facing in and down, towards the center of the Jeep. The bends are to clear the frame and the motor mounts. Reuse the factory mounting bolts. Install the right-side Synergy MFG control arm and snug hardware. **Figure 2** shows correctly installed control arm.



Figure 2. Correctly Installed Synergy MFG Right Front Upper Control Arm

- Remove the factory left-side upper control arm. Install the Synergy MFG left-side control arm and snug hardware. **Figure 3** shows correctly installed control arm.

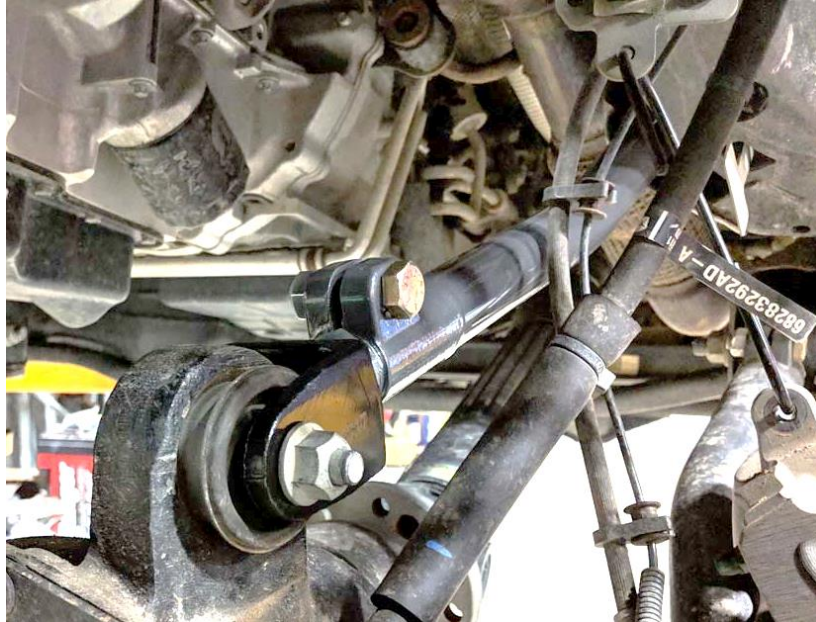


Figure 3. Correctly Installed Synergy MFG Left Front Upper Control Arm

- Make sure the vehicle is on its own weight, then tighten the frame side and axle side control arm bolts to 80 lb-ft.
- Re-install the factory heat shields and torque hardware to 40 lb-in (Inch, not feet!). It is critical that the heat shields be reinstalled, otherwise hot exhaust components will cause control arm bushings to fail prematurely. **Figure 4** shows installed control arm with heat shield.



Figure 4. Synergy MFG Right-Side Control Arm Installed With Heat Shield



JEEP JL ADJUSTABLE FRONT UPPER CONTROL ARMS INSTALLATION INSTRUCTIONS

9. Adjust control arm length as needed with a 1 1/4" wrench or Crescent wrench. If being used with adjustable lower control arms, use the lower control arms to position the axle in the wheel well, then use the upper control arms to adjust caster. We recommend adjusting the control arm length so the vehicle aligns to approximately 6 degrees. Arms should be adjusted to the same length. We recommend aligning the slots in the double adjuster with the slot in the pinch bolt forging if possible. See **Table 2** for initial control arm length recommendations.
10. Tighten the adjuster pinch bolts (19mm or 3/4") to 90 lb-ft.
11. Retorque bolts after the first 100 miles of driving.
12. Installation complete.

Table 1. Jeep JL Bolt Torques

Bolted Joint Location	Wrench Size	Torque
JL Lug Nuts	22mm	125lb-ft
Front Upper Control Arm to Frame	18mm	80lb-ft
Front Upper Control Arm to Axle	18mm	80lb-ft
Factory Heat Shield Bolts	10mm	40lb-in
Synergy MFG Control Arm Pinch Bolts	3/4 in	90lb-ft

Table 2. Recommended Front Control Arm Lengths

Lift	UCA Length	LCA Length
2-3"	20.25"	24.25"
4-5"	20.25"	24.5"