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Revisions					
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### Jeep JK Front Axle Side Upper Control Arm Mount

Installation Instructions Applications: 2007-2018 Jeep Wrangler (JK)



 

 TITLE:

 JEEP JK FRONT AXLE SIDE UCA MOUNT INSTALLATION INSTRUCTIONS

 SIZE

 DWG NO:

 REV

 A

 SCALE: N/A

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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!

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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**

8012-18 JEEP JK FRONT UCA AXLE SIDE MOUNT				
QTY	Part Number	Description		
1	801218-MA	JEEP JK FRONT UCA AXLE SIDE MOUNT		
2	4326-02	FRONT AXLE UCA BUSHING FOR 12MM HARDWARE		
1	3240-300-03	THREE HOLE THREE INCH CORNER GUSSET		

# **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 for your reference.
- This installation requires welding, cutting, grinding and pressing in bushings. If you are not confident or able to perform these procedures, take the vehicle to an experienced installation shop.
- This part is intended to either reinforce the factory control arm mount or to replace it completely. These instructions show the part being used with the factory mount in order to reinforce it.

## **TOOLS REQUIRED**

- Basic hand tools 18mm wrenches or sockets
- Angle grinder with cutoff wheel or Sawzall or other cutting tool
- Angle grinder with flapper wheel or similar grinding/sanding tool
- Drill (Optional)
- Welder (MIG recommended)
- Ball joint press or other bushing press tool

## **ESTIMATED INSTALLATION TIME**

### 2 Hours



# INSTALLATION

1. Installation should be performed with the vehicle on a lift or on jackstands. The front axle should be allowed to freely droop in order to allow room for the installation. Remove the right side front upper control arm from the mount on the axle with a 18mm socket and wrench. The arm may then be pivoted up out of the way. See **Figure 1**.



Figure 1. Right Side Front Upper Control Arm Rotated Up

2. Make a mark on the factory axle side mount just below the bushing, approximately 2 <sup>3</sup>/<sub>4</sub>" above the top of the axle tube. Use the included corner gusset as a guide. See **Figures 2 and 3**. If the factory mount is bent or otherwise damaged, it may be necessary to remove it completely. If it must be removed, the Synergy machined upper control arm mount is profiled to fit on the axle tube at the correct angle and it may be welded directly to the axle tube.



Figures 2 and 3. Marking the Axle Side Front Upper Control Arm Mount (View from Rear of Vehicle Looking Forward)



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**3.** Cut the mount at the line from the previous step. Using a grinder or sander, grind the cut line smooth. Remove any paint from the axle tube and bracket around the location where the gusset will be welded. If so desired, drill holes in the factory mount to allow for rosette welds. Remove paint from area around hole in factory mount. See **Figure 4**.



#### Figure 4. Paint Removed from Areas to be Welded (From Rear of Vehicle)

4. Place the machined Synergy upper control arm mount in the factory control arm mount with the angled side facing the front of the vehicle. Make sure the mount sits all the way down against the axle. See **Figure 5**.



Figure 5. Synergy Control Arm Mount Installed



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5. If all surfaces are clean and free of paint and grease, weld the mount to the factory bracket all along the top seam. Rosette weld any holes in the bracket. Weld the corner gusset as shown in **Figure 6**.



Figure 6. Mount and Gusset Fully Welded

- **6.** After the welding is complete, paint all bare metal surfaces.
- 7. After painting, install new bushing from the right-hand side. See **Figure 7** for a typical ball joint press being used to install bushing. The bushing has a step in it that will sit against the mount, the bushing does not press all the way into the mount. Do not over-tighten the press as this can crush the bushing shell. See **Figure 8** for a correctly installed bushing.



Figure 7. Ball Joint Press Used to Install Bushing



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Figure 8. Bushing Correctly Installed

- **8.** Re-install front upper control arm.
- **9.** Remove left side front upper control arm. Remove factory bushing from mount cast into differential housing. It may be easiest to use an air hammer to remove. Press new Synergy bushing into housing using the same setup as for the right-hand side. Re-install upper control arm.