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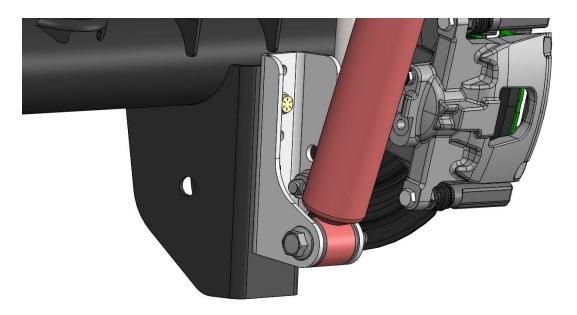
Revisions						
Rev.	Description	Date	Approved			
A	Initial Release Per ECO 18-082	5/3/18	KB			



# Jeep JL Rear Lower Shock Brackets

**Installation Instructions** 

Applications: 2018+ Jeep Wrangler JL



		TITLE:		
		JEEP JL REAR LOWER SHOCK BRACKETS		
	SIZE	DWG NO:		REV
	A	8874-01-INST		A
		SCALE: N/A	PAGE 1 OF 7	



#### JEEP JL REAR LOWER SHOCK BRACKETS 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.

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### **PARTS LIST**

8874-01 JEEP JL REAR LOWER SHOCK BRACKET					
QTY	Part Number	Description			
1	887401-R	RIGHT SIDE BRACKET			
1	887401-L	LEFT SIDE BRACKET			
4	-	5/16-18 X 1.0 GRADE 8 BOLT			
4	-	5/16 FLAT WASHER			
4	-	5/16-18 SERRATED FLANGE NUT			

### **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.
- These shock relocation brackets will allow you to raise the lower shock mount to match your shock length to your bump stop length. They can also provide increased ground clearance if you trim the bottom of the lower control arm brackets.
- These shock relocation brackets are bolt on but require cutting and grinding of the factory shock bracket and lower control arm bracket. A 4.5" grinder with a cut off wheel and grinding disk are required, a Sawzall or plasma cutter can help too.

## **TOOLS REQUIRED**

- Metric and SAE sockets and wrenches
- Floor jack and jack stands
- Angle grinder
- 3/8" or larger hand drill
- 11/32" drill bit
- Center punch
- Hammer
- Sharpie or Permanent Marker

#### ESTIMATED INSTALLATION TIME

#### 1.5 Hours

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### **INSTALLATION**

- 1. It is a good idea to pull the rear coil springs and rubber bump stops first. Compress the rear suspension all the way up so that whatever bump stop spacer you are using is against the frame metal bump stop mount. Measure for shock length to determine which position to install the rear shock mounts. For reference, the lowest position the shock mounts can be installed is also the same position as the stock shock mounts on the axle.
- 2. Remove the lower end of the shocks and anti-sway bar links from the axle brackets. See Figures 1 and 2.



Figures 1 and 2. Unbolting the Shock and Sway Bar

3. With a grinder and cut off wheel, cut the welds on the factory lower shock brackets. Remove the shock brackets and grind the welds clean. DO NOT CUT OFF THE SWAY BAR LINK TABS. See Figures 3 and 4.

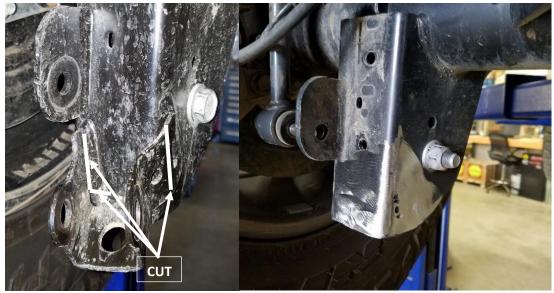


Figure 3. Where to Cut Figure 4. After Cutting and Cleaning Up

**4.** Once you have determined which position you want to install the brackets in, use the original sway bar mounting bolt and nut to hold the bracket on. Install a 5/16" nut, bolt, and washer in the upper bracket hole as shown in Figure 5. The washer goes on the outside under the bolt head. It's easiest to hold the nuts with a box end wrench on the back side and turn the bolts as they go through the

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brackets and catch the nut. You can use a small piece of paper in between the nut and wrench to keep the nut from falling off the wrench, **Figure 6**. Hand tighten the upper 5/16" bolt at this time.

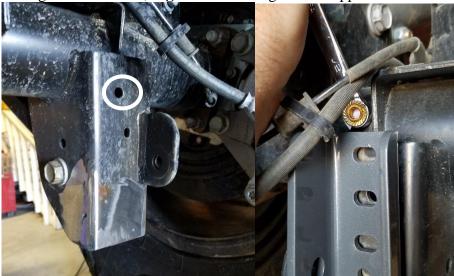


Figure 5. Factory Hole Location Figure 6. Wrench Holding Nut

5. With the bracket loosely installed, mark the lower non-slotted hole location. Mark and center punch the third bolt hole down on the bracket from your top bolt. See **Figures 7 and 8**.



Figure 7. Marking the Corresponding Lower Hole Location

Figure 8. The Bracket Moves Up and Down, the Bolts Stay in the Same Location

**6.** Remove the bracket and pilot drill the previously marked hole with an 1/8" drill, then use an 11/32" drill bit to finish the hole. See **Figure 9**.

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Figure 9. Drilling the Control Arm Bracket

- **7.** At this time, you can trim the bottoms of the control arm brackets for improved ground clearance if desired.
- **8.** Paint any bare metal surfaces to help prevent rust.
- 9. After allowing the paint to dry, bolt the brackets back onto the control arm mounts using two 5/16" x 1" bolts, two flat washers, and two 5/16" serrated flange nuts. Bolts should be installed from the back forward with a washer under the bolt head and the serrated flange nut on the inside of the control arm brackets. Install the sway bar end links and sway bar bolts and nuts. It's best to leave everything a bit loose and once all the bolts are installed torque them down. See figure 10. Torque the 5/16" bolts to 20lb-ft, and the sway bar bolts to 59lb-ft.



Figure 10. Final Install and Tightening of Fasteners

10. Install the shock, original shock bolt and nut and torque to 74lb-ft. See Figure 11.

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Figure 11. Installing the Shocks

**Installation is Complete** 

### POST-INSTALLATION CHECKLIST

- ☐ Did you remember to torque all the hardware?
  - All four 5/16" bolts to 20lb-ft.
  - Lower sway bar end link bolts to 59lb-ft.
  - Lower shock bolt to 74lb-ft.
- □ Did you check to make sure the suspension won't bottom out on the shocks instead of the bump stops!
- ☐ After driving the vehicle for approximately 100 miles, recheck all bolt torques.
- □ Did you find any missing or worn out components? Such as shocks, shock bushings, or sway bar bushings? If so, replace all worn components immediately!

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