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Revisions			
Rev.	Description	Date	Approved
A	Initial Release Per ECO 17-018	5/25/17	R.M.



Jeep JK Rear Coil Mount Stretch Kit

Installation Instructions

Applications:

2007-2017 Jeep Wrangler (JK) 2 Door



TITLE:

**JEEP JK REAR COIL STRETCH KIT
INSTALLATION INSTRUCTIONS**

SIZE	DWG NO:	REV
A	8032-06-INST	A
SCALE: N/A		PAGE 1 OF 12



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

8032-06 JEEP JK REAR COIL MOUNT STRETCH		
QTY	Part Number	Description
2	803206-01	JK, 07-Present, Rear, Stretch Kit, Upper Coil Mount, Main Plate
2	803206-03	JK, 07-Present, Rear, Stretch Kit, Upper Coil Mount, Locating Tube
1	803206-HDW	JK, 07-Present, Rear, Coil Stretch Kit, Hardware Kit
2	803206-05	JK, 07-Present, Rear, Stretch Kit, Lower Shock Mount
2	803206-06	JK, 07-Present, Rear, Stretch Kit, Upper Shock Mount

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 kit was designed to work in congruence with Synergy MFG 8032 JK, 07-PRESENT, REAR STRETCH BRACKETS. Reference the 8032 stretch kit instructions for axle and suspension removal. Installation of the following 8032-06 Rear Coil Mount Stretch kit will take place at **STEP 13** of the 8032 Stretch kit.
- The Synergy MFG JK Rear Coil Mount Stretch Kit utilizes the factory cross-member above the rear axle. This kit involves extensive welding and should be installed by an experienced welder/fabricator.
- In order to retain the rear factory bump stop mounts, a minimum of 2" rear bump stop spacers are required to prevent interference between the rear axle and the rear upper cross member.

Tools Needed

- Basic hand tools
- Quality jack and jackstands or an automotive lift
- Metal cutting tools
 - Angle grinder / cutting torch / sawzall / plasma cutter
- Grinding / sanding attachments for frame clean up.
- Welding machine (MIG is preferred but stick or TIG are acceptable alternatives)

Estimated Installation Time:

2-4 Hours for 8032-06 Coil Mounts and Shock Mounts

*****8032 STRETCH BRACKETS AND LONG ARMS MUST BE INSTALLED FIRST*****

Instructions

1. Before fitting the 8032-06 Upper Coil Mounts and Upper Shock Mounts in place, grind smooth all areas as seen in **Figure 1**. These mounts utilize the cross member just behind the factory coil mounts.
2. Some trimming of the factory cross member is necessary for proper fitment. Using a ruler or straight edge, mark a line on the areas shown. Cut or grind material along the mark and test fit the Coil Mount to ensure it sits flush against the cross member. **See Figure 1**.

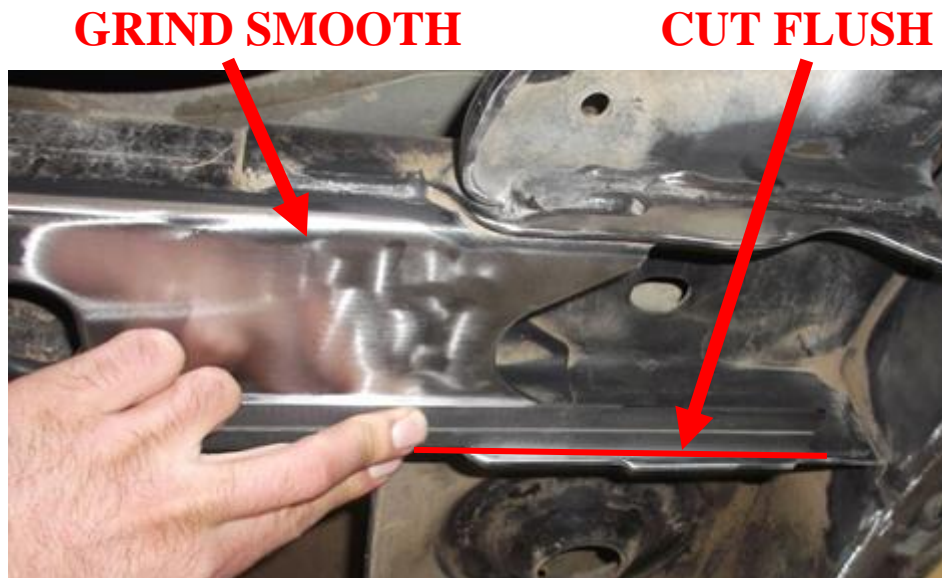


Figure 1. Marking a Line for Cutting or Grinding

3. Some model years feature a rear body mount above the cross member. **Figure 2** below shows an example of a vehicle which features the rear body mount. **Figure 3** shows a vehicle without this rear body mount above the cross member. The body mount location is circled.



Figure 2. With Body Mount



Figure 3. Without Body Mount

4. For vehicles WITH a body mount (as in **Figure 2**) remove the lower center body mount nut, slide the Locating Tube over the body mount bolt, and install the body mount nut inside the tube (a long socket extension will be needed). For vehicles WITHOUT the body mount, proceed to step 7.

5. Then using the rubber factory coil retainer to hold the Coil Mount, position the Coil Mount making sure locating tabs are oriented properly, as indicated by arrows in **Figure 4**. Tack weld in place. Proceed to step 8.

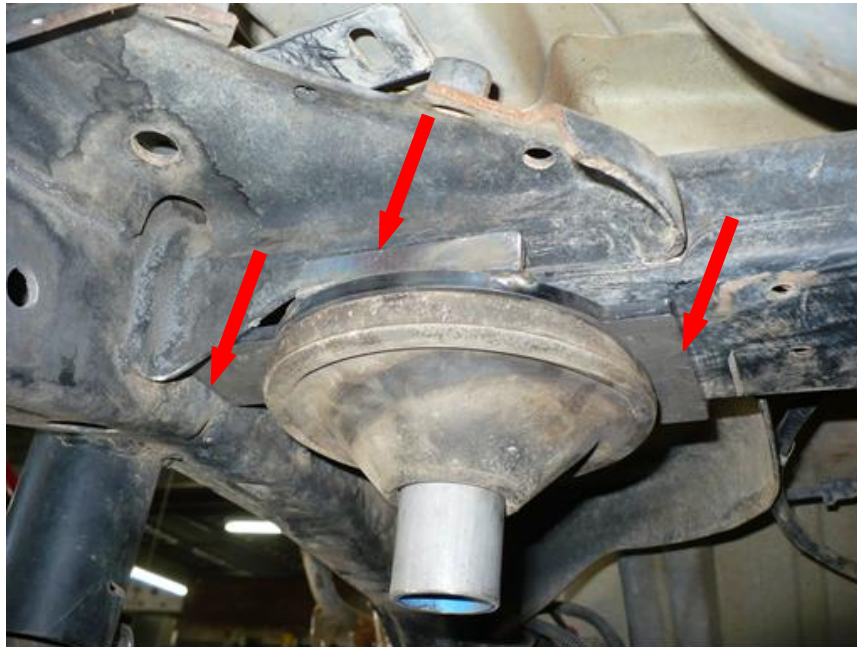


Figure 4. Coil Mount Locating Tabs Held by Coil Retainer

6. For vehicles WITHOUT body mounts(as in **Figure 3**) lay the Coil Mount on a flat surface, place Locating Tube into place and fully weld the Locating Tube to the Coil Mount. See **Figure 5**.



Figure 5. Locating Tube Positioned in Coil Mount

7. Using a clamp or by hand, position and tack weld the coil mount in place making sure the locating tabs are oriented correctly. Reference **Figure 4** for tab orientation.

8. This kit was designed to work with a 2" or taller bump stop spacer. It is **HIGHLY** recommended to cycle the suspension to full bump to ensure there are no issues with clearance and suspension travel. Each vehicle is different and various axle, driveshaft and track bar combinations may affect fitment.
9. Once the Coil Mount is in place, fully weld in all areas as shown in **Figure 6** and **Figure 7**.



Figure 6. Rear View of Fully Welded Coil Mount



Figure 7. Front View of Fully Welded Coil Mount

10. Next install the Upper Shock Mounts. To ensure correct fitment of the Upper Shock Mount, remove the inner-most shock mounting nut. This nut is tack welded in place by the factory. The nut can be removed with a punch or by simply re-installing the bolt and hitting the head of the bolt, see **Figure 8**.



Figure 8. Removing the Stock Inner Shock Mount Nut

11. Before the upper shock mount can properly fit in place, some trimming of the body is necessary. Using an angle grinder and other tools as necessary clear the 'rib' of the body directly above the stock shock mounts. See **Figures 9 and 10**.



Figure 9. Trimmed Body to Allow for Upper Shock Mount Fitment

12. Place the Upper Shock Mounts on the frame. They are self-locating brackets, when all edges of the bracket are in contact and flush with the Jeeps frame then they are in the correct position. Verify that there is enough clearance between the top of the Upper Shock mounts and the Body. See **Figure 10**.
13. Grind smooth any areas where the Upper Shock Mounts meet the frame as preparation for welding. See **Figure 10**.



Figure 10. Shock Mount in Correct Position

14. Once the weld surfaces are prepped, tack weld the upper shock mount in place. DO NOT fully weld until after the lower shock mounts are installed and the suspension has been cycled.
15. After the upper shock mount is tack welded into place move the rear axle up so that the upper coil locating tube is roughly one quarter inch away from the axle side coil spring perch, shown in **Figure 11**. NOTE: The track bar should be installed.



Figure 11. Coil Locating Tube in Relation to Axle Coil Mount at Bump

16. Next fully collapse the shocks and bolt the Lower Shock Mounts to the shocks, leaving the bolt slightly loose so the shock mount can rotate freely. *If you purchased the **8072-04 Synergy Rear Lower Control Arm Axle Bracket kit**; the 803206-05 Lower Shock Mount is designed to replace the shock tabs that are included in the 8072-04 kit.*
17. With the shock collapsed and the lower mounts attached, install the shocks on to the Upper Shock Mounts. Swing the shock over and tack weld the lower shock mount to the lower control arm mount as shown in **Figure 12**. Depending on shock travel and shock type, lower shock mount location may vary from what is shown in **Figure 12**. It is best to not fully bottom out the shocks when they are mounted; leave $\frac{1}{4}$ or more of shock shaft showing. For nitrogen charged shocks it may be necessary to release the nitrogen charge or use a tie down strap to compress the shock.



Figure 12. Lower Shock Mount tack welded to lower control arm mount.

18. After both the Upper and Lower shock mounts are tack welded securely, cycle the rear axle from full bump to full droop to ensure that there is no interference of suspension components.
19. Once the suspension has been successfully cycled with no interference, remove the shocks and fully weld all areas shown in **Figure 13, 14, 15 and 16.**



Figure 13. Lower Shock Mount Fully Welded



Figure 14. Lower Shock Mount Fully Welded



Figure 15. Upper Shock Mount Fully Welded



Figure 16. Upper Shock Mount Fully Welded

20. After you are finished welding, deburr and apply paint to all bare metal areas to prevent corrosion.
21. Install shocks, springs, wheels and tires. Torque all hardware to spec.

Post-Installation Checklist

- Verify component clearance at ride height and by flexing out the vehicle.
- Check hardware after a few hundred miles.