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Revisions			
Rev.	Description	Date	Approved
A	Initial Release Per ECO 19-010	1/31/19	A.S.
B	Revised Per ECO 19-065	5/7/19	A.S.
C	Revised Per ECO 19-134	11/21/19	A.S.



## Jeep JL Rear Coil Springs

### Installation Instructions

Applications:  
2018+ Jeep Wrangler JL/JLU



TITLE:  
**JEEP JL REAR COIL SPRINGS  
INSTRUCTIONS**

SIZE	DWG NO:	REV
<b>A</b>	<b>8864-XX-INST</b>	<b>C</b>
	SCALE: N/A	PAGE 1 OF 4



## PARTS LIST

8864-XX REAR COIL SPRINGS		
QTY	Part Number	Description
1	8864XX-01	Rear Coil Spring (Left) (XX denotes 4 door Rubicon lift height)
1	8864XX-02	Rear Coil Spring (Right) (XX denotes 4 door Rubicon lift height)

## 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 or videos for your reference.
- If these coil springs are being installed as part of a Synergy MFG Suspension System, please refer to the suspension system product page on [www.synergymfg.com](http://www.synergymfg.com) for complete installation instructions.
- These Rear Coil Springs are designed to be used in conjunction with rear bump stop spacers. The required minimum bump stop spacer required is shown below:

Synergy Part Number	Required Minimum Bump Stop Spacer
8864-10	2"
8864-20	2"
8864-30	2"
8864-40	3"

- Rear coil springs are not designed to be used with any spring spacers other than the stock isolators. If spring spacers are to be used, the appropriate additional bump stop spacer must be installed.
- Approximate lift heights will vary depending on vehicle configuration, drivetrain and aftermarket components. See our web site for most current lift height information.

## TOOLS REQUIRED

- 10, 15, 18 and 21mm wrenches and sockets
- Torque wrench
- Jack and jack stands (or vehicle lift)
- Spring compressor (recommended) with interchangeable yokes such as the Fairmount 31655 or similar



## INSTALLATION

1. Make sure vehicle is parked on a flat level surface with transmission in park or in gear and parking brake set. Chock front wheels.
2. Raise the rear of the vehicle as high as reasonable and support with jack stands under either the control arm mounts or the frame.
3. Remove wheels and tires.
4. Loosen track bar bolts with a 21mm socket and wrench (do not remove).
5. Loosen all rear control arm bolts with a 21mm socket and wrench (do not remove)
6. Remove brake line brackets from the upper control arm mounts with a 10mm socket.
7. Disconnect the electrical plug from the electric locker (for Rubicon models only). Loosen wiring by removing zip ties and clips.
8. Release parking brake and remove parking brake cable from mounts on brake assembly by pulling on cable forward, towards the front of the vehicle. Remove parking brake cable assemblies from mounts on front of axle.
9. Remove rear sway bar end links from axle with an 18mm socket and wrench.
10. Place a jack under one side of the axle and remove the lower shock bolt from that side.
11. Allow axle to droop down making sure not to stress any brake lines or electrical lines. Slowly lower axle until stock spring and upper isolator are loose enough to come out.
12. Remove stock spring, and continue to lower axle. Be very careful not to damage any brake lines or electrical lines.
13. When axle is as low as it will go, place a jack stand under axle. Move jack to other side of the vehicle and repeat.
14. Install the stock upper isolators on the Synergy springs.
15. The new Synergy springs are stamped with a part number. The last two digits of the part number indicate which side of the vehicle they go on. The -01 is the driver side (left) spring. The -02 is the passenger side (right) spring.
16. Install the Synergy rear springs, making sure the upper isolators are properly seated. There is a 'nub' on the top of the upper spring isolator that must fit into a hole in the spring perch on the frame.
17. With the springs in place, raise the axle back up to prevent them from falling out. Replace jack stands under axle.
18. Install appropriate bump stop spacers.
19. Re-install the brake line brackets, locker wiring and parking brake cables.
20. Re-install sway bar end links and torque axle side hardware to 60 lb-ft.
21. Re-install lower shock bolts and torque to 75 lb-ft.
22. Re-install wheels and tires (if removed) and put vehicle back on the ground. Make sure the suspension is settled by rocking it back and forth carefully.
23. Torque the track bar hardware to 90 lb-ft with the vehicle on the ground at ride height.
24. Torque the lower control arm hardware to 90 lb-ft with the vehicle on the ground at ride height.
25. Torque the upper control arm frame side bolts to 120 lb-ft and axle side hardware to 95 lb-ft with the vehicle on the ground at ride height.



**Figure 1. Correctly Installed Rear Spring**

## **INSTALLATION IS COMPLETE**

**CHECK ALL BOLT TORQUES AFTER APPROXIMATELY 100 MILES OF DRIVING, AND  
AFTER EACH OFF-ROAD TRIP.**

**Table 1. Jeep Wrangler JL Bolt Torques**

<b>Bolted Joint Location</b>	<b>Wrench Size</b>	<b>Torque</b>
Front Upper Control Arm	18mm	80 lb-ft
Front Lower Control Arm	21/24mm	190 lb-ft
Front Brake Mount to Control Arm	15mm	15 lb-ft
Front Track Bar	21mm	110 lb-ft
Front Sway Bar End Links	18mm	60 lb-ft
Front Upper Control Arm Heat Shields	10mm	40 lb-in
Lower Shock (Front and Rear)	18mm	75 lb-ft
Rear Upper Control Arm to Frame	21mm	120 lb-ft
Rear Upper Control Arm to Axle	21mm	95 lb-ft
Rear Lower Control Arm	21mm	90 lb-ft
Rear Sway Bar Link to Axle	18mm	60 lb-ft