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Revisions			
Rev.	Description	Date	Approved
-	Initial Release Per ECO 23-051	8/2/23	RG



RAM HD Diesel 3.5" Front Springs

Installation Instructions

Applications:

- 2014+ Ram 2500 4WD, Diesel
- 2013+ Ram 3500 4WD, Diesel



TITLE:
**RAM DIESEL 3.5" FRONT SPRINGS
 INSTALLATION INSTRUCTIONS**

SIZE	DWG NO:	REV
A	8755-30-INST	-

SCALE: N/A PAGE 1 OF 5



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

8754-20 RAM 2500/3500 GAS LEVELING FRONT SPRINGS		
QTY	Part Number	Description
2	8755-30-01	RAM DIESEL 3.5" LIFT SPRING

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.
- Final truck front end height is dependent on several factors, including cab configuration and trim level.
- The Synergy 3.5" lift front springs were specifically designed to be used in conjunction with 2" bump stop drops. Failure to install bump stop spacing can result in the springs fully compressing and damaging the spring, coil bucket, or both.
- It is suggested to replace the factory shocks when these springs are installed with a longer shock. Replacement shocks should have a maximum compressed length of 17.5". This will allow for full use of the travel capabilities of the lift spring.

TOOLS REQUIRED

- Basic Hand Tools – 27mm, 21mm, 15mm wrenches and sockets
- Jack and Jackstands
- Torque Wrench

ESTIMATED INSTALLATION TIME

1.5 Hours

INSTALLATION

1. Park the vehicle on a flat, level surface. Ensure the vehicle is in park, the parking brake is set and the wheels are chocked.
2. Remove the front lower shock bolts with a 21mm wrench or socket. The nut is a tabbed nut. Save the factory hardware.
3. Spring removal requires the truck be lifted from a point other than the factory lift pads on the radius arms. This can be done with a jack on the frame right behind the frame side radius arm mount. Alternatively, if the truck has plow front frame horns under the front bumper then it is best to lift from the plow mounts. **See Figure 1.**



Figure 1. Factory Plow Mounts

4. Remove the factory springs. Pay close attention to the orientation of the upper spring isolators and the plug on the top of them that fits into a hole in the factory coil tower.

5. Install the lift springs. The springs are NOT side specific. Be sure to orient the spring so that the text printed on the spring is right side up and the upper coil wind interfaces with the upper spring isolator correctly. Once the springs and isolators are correctly aligned, slowly lower the vehicle so the springs are slightly compressed. Make sure that the plug on the top of the spring isolator is correctly oriented and fits in the corresponding hole in the coil tower. Using some soap or window cleaner as a lubricant can help. **See Figures 2 and 3:**



Figure 2. Synergy Lift Spring Installed - Spring Isolator Not Fully Seated



Figure 3. Synergy Lift Spring Installed - Upper Spring Isolator Correctly Seated



RAM DIESEL 3.5" LIFT FRONT SPRINGS INSTALLATION INSTRUCTIONS

6. Once the springs are properly seated, install your choice of front shocks or reinstall the lower shock bolt hardware if reusing your current shocks.
7. After the springs have been installed and the truck is on the ground it is necessary to loosen the radius arm and track bar bushing bolts so that the bushings re-center to prevent damage. The hardware must be re-tightened at ride height.
 - Loosen the two, frame side radius arm bolts and then re-torque them to 220 lb-ft.
 - Loosen both the track bar bolts (frame side and axle side) and re-torque to 200 lb-ft.
8. Check all hardware after 100 miles of driving and again after each offroad trip.

INSTALLATION IS COMPLETE