

Cognito 6" Lift Leaf Spring Kit for 2019+ GMC Sierra 1500 and Chevrolet Silverado 1500 Trucks**INSTALL INSTRUCTIONS:**

**Cognito 6" Lift Leaf Spring Kit for 2019+ GMC Sierra 1500 and
Chevrolet Silverado 1500 Trucks
SKU: 210-91245**

PARTS LIST FOR SKU: 210-91245

QUANTITY	PART #	DESCRIPTION
2	90977	Cognito 6" Rear Leaf Pack
1	110-90746	U-bolts W/ Hardware 10.5"X2.6"X5/8", Set of 4

**WARNING**

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.



INTRODUCTION

The Cognito leaf spring is a complete replacement of the OEM spring and is arched for 6 inch over stock rear lift height while maintaining excellent ride quality via being made from high-quality spring steel, a higher leaf count with thinner leaf material for a more compliant ride. This kit comes with U-Bolts (set of 4) with hardware.

A military wrap is used on the front eyelet for safety, the ends of each leaf are diamond-shaped cut and have anti-friction inserts for smooth movement, and the pack is secured with included center pin and retaining clips. Using leaf springs instead of lift blocks helps reduce wheel hop or axle wrap. Made in the USA.

TECH NOTES

- Read instructions carefully and study the pictures (if included) before attempting installation.
- If this product was purchased as part of a bundle/package, familiarize yourself with each set of instructions included with the bundle/package before beginning.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.
- These leaf springs are not compatible with trucks originally equipped with the OEM composite mono-leaf spring, unless the required OEM conversion hardware is purchased.

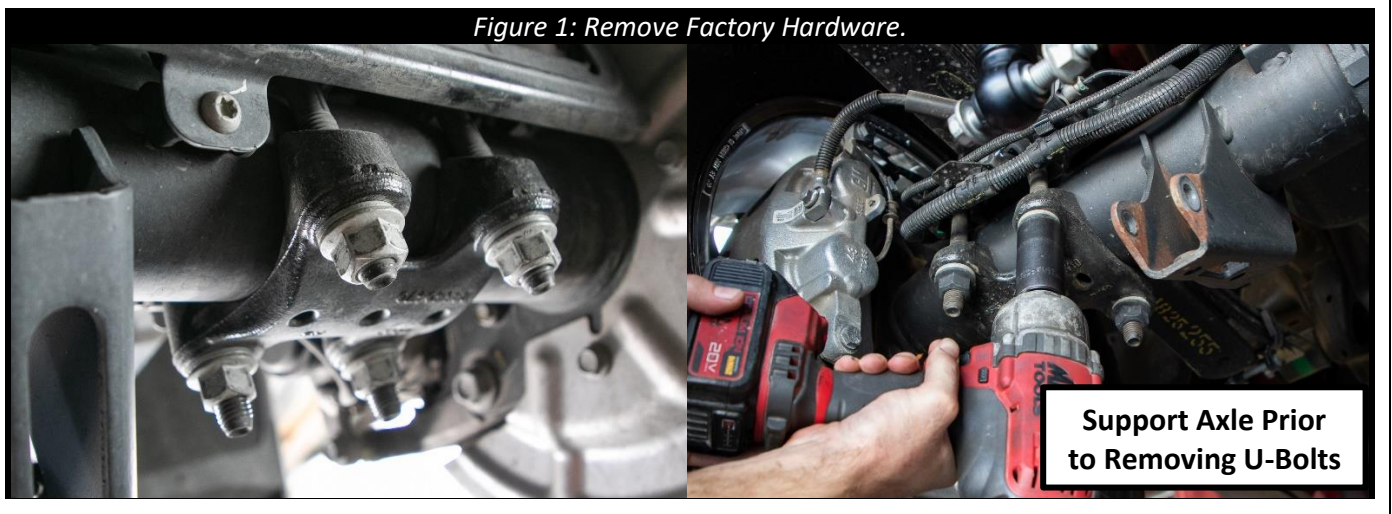
REQUIREMENTS

- Installation requires a qualified mechanic.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM service manual.
- Always wear safety glasses when using power tools.
- When a lift is required to perform the installation of these products ensure the vehicle is properly supported before attempting installation or serious injury may occur.

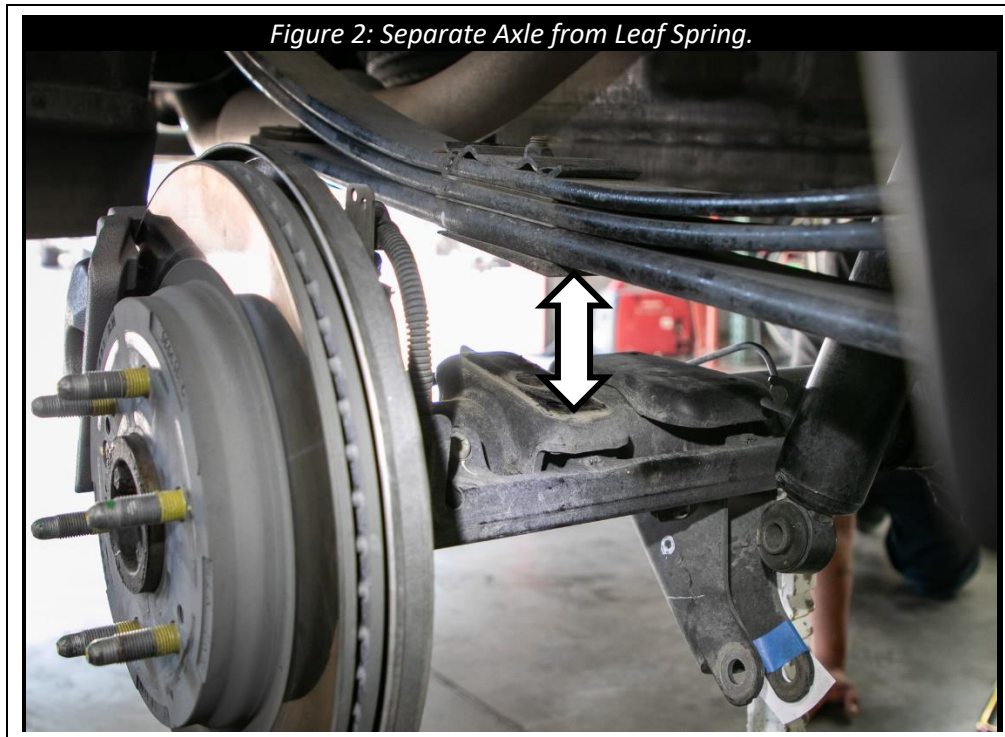
INSTALLATION

1. Rack the vehicle and lift it off the ground, or if no hoist is available then jack the rear of truck off the ground and support properly with jack stands. Support the rear axle. Remove the rear tires and set them as side.
 - **NEVER WORK ON AN UNSUPPORTED VEHICLE.**
2. If using OEM brake lines, check to make sure they will not be overextended when the suspension reaches full droop. Modifications to the OEM brake line brackets might be necessary.
 - If aftermarket extended brake lines were purchased, install them now. Make sure to bleed the brakes, purge any air from the system and check for leaks.
3. Remove the rear shocks.
4. Remove the U-bolt nuts and washers from one side of the vehicle. Remove the factory U-bolts and anchor plate (Figure 1). The OEM U-bolts, nuts, and washers may be discarded.

Figure 1: Remove Factory Hardware.



5. Lower the support under the axle until there is no tension on the spring pack (Figure 2).



6. Loosen the exhaust hanger bracket bolt enough to gain access to the rear spring shackle bolt mounting the shackle to the frame.
7. Remove the front leaf spring bolt and the rear shackle bolt. Retain the OEM hardware.
8. With the spring and shackle removed from the vehicle, remove the OEM leaf spring from the shackle and install the shackle onto the Cognito leaf spring. Note the orientation of the leaf spring, the larger bolt is installed towards the front of the vehicle.
 - Torque the leaf spring shackle nut to **85 ft-lbs.**
9. Use an 11/16" drill bit to drill out the OEM anchor plates holes to accommodate the larger 5/8" U-bolts.
10. Install the Cognito leaf spring, U-bolts, anchor plate, and hardware onto that side of the vehicle.
 - Torque the leaf spring front bolt to **118 ft-lbs.**
 - Torque the leaf spring shackle nut to **85 ft-lbs.**
 - Tighten the U-bolt nuts in a crosswise fashion, leaving about the same amount of thread showing under each nut. Then torque the nuts to **120 ft-lbs.** in a cross pattern making two passes on each nut.
11. Retighten the exhaust hanger bracket bolt.

12. Perform the above steps on the opposite side of the vehicle.
13. Install rear shocks, torque OEM hardware to OEM specs.
 - Torque the rear shock upper bracket bolt to **70 ft-lbs.**
 - Torque the rear shock lower bracket bolt to **118 ft-lbs.**
14. Ensure that all bolts are properly torqued. Ensure there are no rubbing or loose cables anywhere after the Cognito lift block installation. Use cable ties to restrain any cables from interfering with any other parts. Check that all lines are free of stress or interference while the vehicle is in full droop and full bump.
15. Re-install rear wheels and set the vehicle back on the ground.
16. Some applications may require you to remove the center pin nut, and center pin to access the shims to adjust rear lift height. If no adjustment is required, then skip this step. This leaf pack has two 3/8" shims which can be removed and one tapered shim which should be retained. Refer to this step if a rear ride height adjustment is needed later.
 - Use a c-clamp to hold the leaf pack together when removing the center pin.
 - Use vice grips to hold the round head of the leaf spring center pin.
 - When reinstalling the pin nut and center pin torque the hardware to **30 ft-lbs.**
 - Make sure that the tapered shim is not reinstalled backwards.





WARRANTY / RETURN POLICY / SAFETY

Cognito Limited Lifetime Warranty

Cognito Motorsports, Inc. hereinafter “Cognito,” warrants to the original retail purchaser, that its suspension products are free from workmanship and material defects for as long as the purchaser owns the vehicle on which the product(s) were originally installed. This warranty will be void if any modifications are made to the components, including alterations to the surface finish, i.e.; painting, powder coating, plating, and/or welding, or if they are improperly installed. Cognito truck suspension products are not designed nor intended to be installed on “competition” vehicles used in race applications, stunt or for exhibition purposes that are outside of the intended operating conditions specified by the manufacturer. Racing and competition are defined as any contests between two or more vehicles; or vehicles competing individually on off road circuits in timed events (whether or not such contests are for an award or prize).

This warranty does not include coverage for police, taxi, government or commercial vehicles, and the warranty does not cover Cognito products sold outside of the USA. Cognito’s obligations under this warranty are specified and applied at its sole discretion, and warranty coverage is limited to repair or replacement of the defective product(s). Any and all costs of removal, installation or reinstallation; freight charges, incidental or consequential damages associated with the covered products are expressly excluded from this warranty.

The following items are exempt from Cognito limited warranty coverage: bushings, bump stops, tie-rod ends (Heim joints) and limiting straps. These parts are “consumables” and designed to wear as a normal part of their duty cycle, therefore they are not considered defective when worn. The aforementioned products are warrantied separately against defects in workmanship, for 60 days from the date of purchase. As a condition of warranty validation, respective Cognito suspension components must be installed as a complete system (not combined with non-Cognito hardware or ancillary parts). Any substitutions or omission of required components will void the warranty. Some minor cosmetic wear and imperfections may occur to parts during shipping, which is not covered under this warranty. This limited warranty does not apply to any components that have been subjected to collision damage, negligence, alteration, abuse, or misuse, and coverage does not extend to products manufactured by third-party companies. Cognito reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of its parts when deemed necessary, without notice.

Return Policy

Product returns will not be accepted without prior written approval from an authorized Cognito representative. All products being returned must be shipped via trackable, prepaid freight. Returned products are subject to a 25% percent restocking fee. The eligible return period for products purchased directly from Cognito is 30 days from the verified date when the product(s) were originally received by the purchaser.

Product Safety Advisory

The installation of Cognito steering and suspension components will modify your vehicle’s original factory equipment and geometry, which may cause it to handle differently than a stock (unaltered) vehicle. Installation of these components is not intended to strengthen nor reinforce the vehicle’s frame, nor are they designed to increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for proper attachment, torque specifications, operation, and for any potential unusual wear or damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Modifying vehicle height combined with off road operation may increase your vehicle’s susceptibility to rollover conditions, which may cause serious injury or death. Many states regulate allowable vehicle height modifications, and it is your responsibility to know and comply with the legal requirements specified by the laws where you reside. Modifications to your vehicle’s ride height may also affect the ride quality, driver input response, trackability and handling, and wear to your vehicle’s suspension components and tires.