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Cognito 3-Inch Elite Leveling Lift Kit with Elka 2.5 remote reservoir coilover shocks for 2019+ GM 1500 2WD/4WD Trucks

INSTALL SUMMARY SHEET:

Cognito 3-Inch Elite Leveling Lift Kit with Elka 2.5 remote reservoir coilover shocks for 2019+ GM 1500 2WD/4WD Trucks SKU: 210-P1138

PARTS LIST FOR SKU: 210-P1138		
QTY.	PART #	DESCRIPTION
1	90881	2019+ GM 6-Lug 1.5" Rear Bump Stop Spacer Kit
1	HP9324	GM Adaptive Ride Control Bypass Kit
1	110-90784	2019+ GM 6-Lug Press In Ball Joint SM Series Upper Control Arm Kit
1	110-90880	2" Block & 10.5" U-bolt Kit (cast/straight)
1/1	510-91091 / 510-91092	Elka Front 2.5" Remote Reservoir Coilover Shock, Driver/Passenger
1/1	510-91108 / 510-91109	Elka Rear 2.5" Piggyback Remote Reservoir Shock, Driver/Passenger

WARNING VEHICLES WITH SUPER CRUISE SYSTEM

If your vehicle came equipped with the Super Cruise, hands free driving system, the vehicle **should not be modified**.

The Super Cruise system relies on many sensors that must be calibrated by the manufacturer to ensure proper function and safety. If the vehicle is modified by changing the height or rake of the vehicle these sensors are no longer calibrated. At that point the system will no longer work properly and safety or function of the system cannot be guaranteed.



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.

CAUTION VEHICLES WITH ADAPTIVE RIDE CONTOL

On this generation of trucks GM moved to a new type of active suspension that is only present in the Denali, High Country and Custom trim trucks. This new system is called Adaptive Ride Control or ARC for short.

This kit will require the ARC system to be bypassed as outlined in the instruction included with HP9324.

Vehicle without the ARC system, HP9324 can be discarded.

If unsure that the vehicle in question is equipped with the ARC system, the instructions in HP9324 can help with that.

INTRODUCTION

Thank you for purchasing the Cognito 3-Inch Elite Leveling Lift Kit. This kit is designed to lift and level your vehicle as well as provide added droop travel with the Cognito Sheet Metal Series Upper Control Arm Kit utilizing a press in ball joint. This kit also includes Elka 2.5 remote reservoir coilover front shocks and Elka 2.5 piggyback remote reservoir rear shocks for added adjustability and to ensure improved ride quality and satisfaction.

TECHNICAL INFORMATION

- Not Compatible with 2019+ AT4, AT4X, ZR2 or Trail Boss trims, nor the 2019 LD/Limited trims (2014-2018 body style).
- Not Compatible with Rear Composite Mono-leaf Springs.
 - o To identify, Composite Mono-leaf springs make use of U-bolts with a rounded top.
 - Steel Multi-leaf springs make use of a U-bolts with a square top.
- · Vehicles equipped with adaptive ride control will require bypassing the system for proper operation.
- Proper vehicle lifting equipment is required. Always make sure the vehicle is properly supported and never work under an unsupported vehicle.
- Check the parts and hardware packages against the parts list in each instruction set to assure that your kit is complete.
- Be sure to read though all install instructs include with this kit prior to attempting instillation and heed all warnings, failure to comply with all warnings and requirements can lead to an accident and serious injury.
- This kit is equipped with ride-height adjustable coilover front shocks. If after the installation a ride height adjustment is required, to either raise/level the vehicle to the proper front lift height or to lower the vehicle to achieve the minimum 3" of droop travel, then refer to the included shock instructions to safely adjust pre-load.
 - o To reach the recommended lift height of 3" the droop travel should be set to 3".
 - o Each 1/8" of spring preload is approximately equal to 1/4" of ride-height adjustment.



This Kit Install Summary will guide you through the <u>necessary order of steps</u> to install each of the individual components that comprise this kit in the required sequence to safely complete full and proper installation.

The proper installation of this combination of products is dictated by the necessary sequence in which each component must be installed to avoid access, interference or clearance issues that will result in unnecessary disassembly and reassembly and potential safety hazards.

This document will guide you through the sequence of operations, which includes preparatory work and the prescribed order for installing components – by referring you to the <u>individual instructions packaged with each Cognito component</u> for detail on how each kit component is properly installed.

YOU MUST FOLLOW THESE STEPS IN SEQUENTIAL ORDER FOR PROPER INSTALLATION OF THIS KIT.

REVIEW TECHNICAL NOTES AND REQUIREMENTS OF THE INDIVDUAL INSTALLATION INSTRUCTION SHEETS INCLUDED WITH THIS KIT BEFORE BEGINNING.

INSTALLATION

- 1. Begin by locating the 4 instruction sheets <u>7024</u>, <u>7249</u>, <u>7415</u> and <u>8148</u> included with this kit. You will need them to do this install. If instructions are missing or damaged, contact Cognito Motorsports for where to find replacements.
- 2. Start with instruction set <u>7024</u>. Check to make sure all parts on the parts list are accounted for. Work through until instructed to install the block on to the axle, stop at this point.
- Remove the tapered shim on the bottom of the leaf spring pack:
 Use a c-clamp to hold the leaf pack together.
 Use vice grips to hold the round head of the leaf spring center pin.
 Remove the center pin nut, remove the center pin and tapered shim.
 Reinstall the center pin and nut.

Torque the hardware to 30 ft-lbs.

NOTE:

All trims except AT4 and Trail Boss have a tapered shim between the axle and leaf spring that must be removed.

- 4. Refer back to instruction set <u>7024</u>, pick up where the install left off and Work through until instructed to install the rear shocks.
- 5. Locate 1x <u>510-91108</u>, driver rear Elka shock and 1x <u>510-91109</u>, passenger rear Elka shock.

 The Elka shocks are side dependent, ensure the correct shock is installed on the correct side of the vehicle.

 Install shocks in the upper mounts using the OEM hardware, compress the shock to install into the lower mount.

 Torque hardware to **85 ft-lbs**.



Prior to removing the OEM shocks unplug the wiring harness connectors from the shocks. Retain the OEM shock until install is complete, parts are required to be removed from them.

- 6. Refer back install sheet 7024, pick up were the install left off and work through until completion.
- 7. Reference install sheet <u>7249</u> to install the rear bump stop spacers. Check to make sure all parts on the parts list are accounted for. Work through the instructions until completion.
- 8. Moving to the front of the vehicle, reference install sheet <u>8148</u>. Check to make sure all parts on the parts list are accounted for. Work through the instructions until the OEM upper control arms have been removed and the service perch has been removed.



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INSTALLATION – CON'T

9. Support the lower control arm and remove the OEM front strut. Retain the lower mounting hardware for reuse but the upper mounting hardware may be discarded.

ARC VEHICLE NOTE:

Prior to removing the OEM shocks unplug the wiring harness connectors from the shocks. Retain the OEM shock until install is complete, parts are required to be removed from them.

- 10. Locate 1x 510-91091, driver front Elka coilover and 1x 510-91092, passenger front Elka coilover. The Elka shocks are side dependent, ensure the correct shock is installed on the correct side of the vehicle. Install the struts using the provided upper mounting hardware and OEM lower mounting hardware. Torque hardware to 37 ft-lbs.
- 11. Refer back install sheet 8148, pick up were the install left off and work through until completion.
- 12. ARC VEHICLES: Reference install sheet 7415 for ARC bypass instructions and work through until completion.

This completes the installation steps, enjoy your new Cognito 3-Inch Elite Leveling Lift Kit!

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.

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