# START HERE

COGNITO 3” Performance SM UCA Ball Joint Leveling Kit with Fox 2.0 IFP Shocks for GM 2020+ 2500HD/3500HD 2WD/4WD

## INSTALL SUMMARY SHEET:

**COGNITO 3” Performance SM UCA Ball Joint Leveling Kit with Fox 2.0 IFP Shocks for GM 2020+ 2500HD/3500HD 2WD/4WD**
**SKU: 110-P0883**



## COMPONENTS INCLUDED:

| QUANTITY | PART # | DESCRIPTION |
|---|---|---|
| 1 | 80000 | COGNITO 2020 GM 2500HD/3500HD SM UCA DRVR |
| 1 | 80001 | COGNITO 2020 GM 2500HD/3500HD SM UCA PASS |
| 1 | 110-90771 | COGNITO Torsion Bar Keys Kit |
| 2 | 210-90211 | Fox Performance Series IFP Front 2.0” Leveling Shock Kit |
| 2 | 210-90212 | Fox Performance Series IFP Rear 2.0” 0-1” Lift Shock Kit |
| 2 | HP9297 | 0.5” Front Shock Extender Kit |
| 1 | 110-91031 | 1” Block and 16” U-Bolt Kit |

## TECH NOTES:

- Unloading of the torsion bars is required, torsion bar loading tool is required for this installation.
- Proper vehicle lifting equipment is required. Always make sure the vehicle is properly supported and **never work under an unsupported vehicle.**
- 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
- Estimated install time: 3-4 hours.

## INTRODUCTION:

Thank you for purchasing the Cognito 3” Performance Ball Joint Leveling Lift Kit. This kit is designed to lift your vehicle 3” in the front and 1” in the rear and provide added droop travel with the Cognito Ball Joint Sheet Metal Series Upper Control Arm. This kit also includes Fox 2.0 Performance Series Shocks for the front and rear to ensuring improved ride quality and satisfaction.

## 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.**
**Modification of vehicle suspension can interfere with ride-height sensors, active suspension, lane departure features, semi-autonomous, and autonomous driving features. It is the responsibility of the installer to determine feature compatibility prior to installation. Recalibration of sensors may be required in the event of any modification.**

## 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.

This Kit Install Summary will guide you through the **necessary order of steps** to install each of the individual components that comprise this kit.

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 individual instructions packaged with each Cognito component 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 3 instruction sheets **110-90910**, **7037** and **7024** included with this kit. You will need them all to do this install. If instructions are missing or damaged, contact Cognito Motorsports for where to find replacements.

2. Start by properly lifting and supporting the rear of the vehicle by the frame so that the wheels are off the ground and the suspension is at the full droop position. **Never work under an unsupported vehicle.**

3. Start working in the rear with instruction set **7024**. Start at the beginning and follow to completion but use the rear shocks provided with this kit **210-90212**. Use the OEM hardware and torque spec for the new shocks (85 ft-lb). Use a 21mm wrench or socket.

4. Begin working in the front of the vehicle with instruction set **7037**. Start at the beginning and work through the steps until both torsion keys are unloaded and the adjuster screw nuts are removed.

5. Now reference instruction set **110-90910**. Start with the removal of the OEM upper control arms and work through until the Cognito upper control arms are fully assembled and the service perch has been cut off but stop before installing the new arms.

6. Use a jack or jack stand to support the lower control arm and remove the OEM shock using a 21mm wrench or socket. Do this on both sides of the vehicle and save the lower shock mounting hardware

7. Locate the provided front Fox Shocks **210-90211** and start by installing the lower shock mount using the OEM hardware. If there is a ¼" shock spacer included with the Fox shock, use it along with the provided ½" hardware to install the upper shock mounts. If no spacer is included, install the upper shock mounts using only the ½" hardware. Torque the ½" hardware to 50ft-lb using a ¾" socket and the lower shock mounts to the factory specification (89 ft-lb). Stacking or adding spacers that are not permitted will cause damage to the vehicle.

## INSTALLATION CONTINUED

8. Pick up where you left off from instruction set **110-90910** and continue until both Cognito upper control arms are fully installed but stop there.
9. Refer to instruction set **7037** where you left off and work through to the end setting the ride height but use **110-90910** for alignment guidelines

***This completes the installation steps, enjoy your new COGNITO 3" Performance SM UCA Ball Joint Leveling 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.

34935 Flyover Ct Bakersfield, CA 93308 Phone: (866) 426-4648 Fax: (661) 588-8295
www.cognitomotorsports.com