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INSTALL INSTRUCTIONS:
Cognito 2" Elite Leveling
Kit for 2017-2019 Ford
F250/F350 4WD Trucks

PARTS LIST FOR SKU: 220-P0950

QTY.	PART #	DESCRIPTION
2	3002	3" Coil Spring
1	90599	1" Bump Stop Spacer Kit
1	120-90947	HD Fixed Track Bar
1	220-90726	Fox 2.5 DSC Front Shock Kit
1	220-90730	Fox 2.5 DSC Rear Shock Kit
1	120-90588	Bracket kit, relocate front brake lines
1	120-91022	Block and U-bolt kit



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

Thank you for purchasing the Cognito 2" Elite Leveling Kit. This kit is designed to level your vehicle and provide added droop travel. This kit also includes Fox Factory Series 2.5 Shocks front and rear for added adjustability and to ensure improved ride quality and satisfaction.

TECHNICAL INFORMATION

- **This kit does NOT fit 2WD models**
- Always wear safety glasses when using power tools.
- This leveling kit may only be installed on a truck that has not already been lifted or leveled. You cannot stack leveling kits or shock spacers.
- This kit requires advanced mechanical procedures that should only be performed by a qualified mechanic.
- Read each set of instructions carefully and study the pictures before attempting installation.
- Check the parts and hardware packages against the parts list in each instruction set to assure that your kit is complete.

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

This document will guide you through the sequence of operations, which includes work to prepare for the installation 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 INDIVIDUAL INSTALLATION INSTRUCTION SHEETS INCLUDED WITH THIS KIT BEFORE BEGINNING.

INSTALLATION

1. Before starting, secure the rear tires to prevent vehicle from rolling or moving, but do not lift at this time. With the vehicle remaining on the ground, remove the brake line bracket mounting bolt from both driver and passenger brake line brackets (Figure 1 A/B).

Figure 1A: OE Brake Line Bracket



Figure 1B: OE Brake Line Bracket, Bolt Removed



2. Remove the ABS line from both driver and passenger side OE brake line brackets by pulling the rubber boot out of the containment slot (Figure 2 A/B).

Figure 2A: Passenger ABS Line Removal



Figure 2B: Driver ABS Line Removal



3. Install the Cognito brake line brackets (Part # 8546 & 8545) to the frame by inserting the alignment tab into alignment hole and rotating the bracket mounting hole into position. Attach to the frame using the OE bolt removed in step 1, and torque to OE torque specifications (Figures 3 & 4).

Figure 3: Passenger Brake Line Bracket



Figure 4: Driver Brake Line Bracket



4. Once the brake line brackets are in place, carefully bend the OE hard lines to align the OE mounting tab with the Cognito brake line mounting holes. Do not twist the OE mounting tab when bending the lines, this will loosen the brake line fitting. Assemble using (1) 5/16"-18 x 3/4" Lg. cap screw with (1) 5/16" SAE flat washer between the bolt head and mounting bracket. Torque to 24 ft.-lbs. using (1) 5/16"-18

locknut with (1) 5/16" SAE flat washer between the locknut and mounting bracket. Repeat for opposing side brake line mounting.

- Once the brake lines are securely mounted, insert the driver side ABS line rubber boot into the Cognito bracket containment slot (Figure 5). Use the supplied 6" black cable ties to secure the driver and passenger ABS lines in an orientation to prevent chaffing or wear (Figure 6).

Figure 5: Diver Side ABS Line Installed



Figure 6: Passenger Side ABS Line Routing

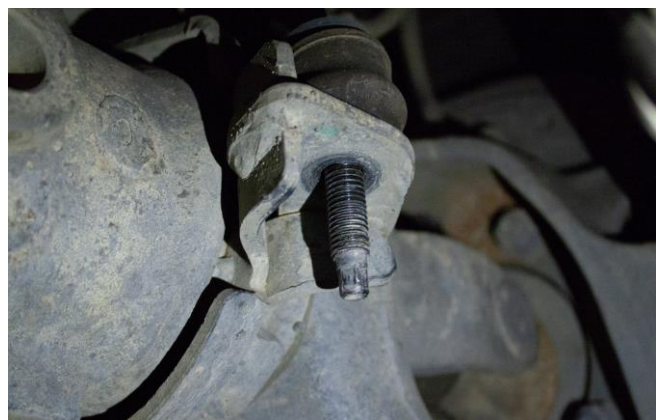


- Once the brake lines are in place, turn the steering wheel all the way to passenger side of vehicle and check to make sure the brake lines are not interfering with springs, brackets, or tires. Repeat with the wheels turned all the way to the driver side of the vehicle.
- Remove the sway-bar end link nut from both driver and passenger sway-bar end links (Figure 7 A/B).

Figure 7A: OE Sway-Bar End Link



Figure 7B: OE Sway-Bar End Link, Nut Removed



- Now refer to installation sheet # 7272 in the track bar box and install the Cognito extended length track bar kit at this time. Once complete, return here to proceed to next step.
- Remove the front shocks from both driver and passenger side of the vehicle (Figure 8 A/B)

Figure 8A: Front Shock, Top Mount



Figure 8B: Front Shock, Lower Mount



- Properly position and check to ensure that all brake lines, vacuum lines, hoses, and wiring are free to lift vehicle. Raise the vehicle slowly until the front spring preload is removed (Figure 9A). DO NOT raise the vehicle any higher than necessary to remove springs. This could result in driveline, wiring, brake line, and suspension component damage. Remove front springs and rubber isolator from the driver and passenger side spring perch (Figure 9B).

Figure 9A: Vehicle Lift Height



Figure 9B: Spring Removal



11. Locate the OE bump stop underneath both driver and passenger side frame rails. Remove the bump stop using a screwdriver to pry out of the bump stop mount (Figure 10A). Once the bump stop is removed, loosen the bolt and remove OE bump stop mount from the frame rail (Figure 10B).

Figure 10A: OE Bump Stop Spacer



Figure 10B: FSD Bump Stop Spacer Hardware



12. Now locate the 1" bump stop spacer kit, as seen in Figure 11 (different size spacer shown in picture).

Figure 11: FSD Bump Stop Spacer Hardware



13. Insert the locking tab on the OE bump stop mount into the alignment hole on the bump stop spacer (Figure 12- image shows a different size spacer). Using (1) M8x1.25x80mm Lg. cap screw, assemble with (1) lock washer between the bolt head and (1) flat washer. Orientate the spacer so that the flat side of the OEM bump stop mount is facing the spring (Figure 13 – image shows a different size spacer) and torque to 25 ft.-lbs.

Figure 12: Bump Stop Spacer Alignment



Figure 13: Bump Stop Spacer Orientation



14. Before starting this step, if using remote reservoir front shocks, refer to those instructions, since the reservoir mount will need to be installed before proceeding further with these instructions. Locate the Cognito coil spring (COIL-SPRING-3002), and align the OE rubber isolator, removed in step 9, with the top spring pig-tail (Figure 14A). Install the spring with isolator onto the lower spring perch and rotate until the bottom spring pig-tail makes contact with OE spring perch tab (Figure 14B). Repeat for the opposing side of vehicle front spring.

Figure 14B: Bottom Spring Pig-tail Orientation



Figure 14A: Coil Spring and Isolator Orientation



15. Once the springs are installed, locate the Cognito/FOX extended length shocks. Remove the top washer (Figure 15A) and bushing, then insert the top shock mounting stud through the frame, making sure the polyurethane pancake bushings are in place on both sides of frame. Install the top mounting washer with the concave side against bushing (Figure 15B). Repeat for the opposing side front shock, but do not tighten at this time.

Figure 15A: Concave Shock Mounting Washer



Figure 15B: Top Shock Mount Installed



16. Before starting this step, it is recommended to get another person to assist you. Align both front shock bottom eyelets into lower shock mount shackle. Slowly lower the vehicle until the lower shock eyelets are aligned with the shackle mounting hole (Figure 16A). Re-install the OE bolt and locking nut plate, then torque to 90 ft-lbs. (Figure 16B).

Figure 16A: Front Lower Shock Mount



Figure 16B: Front Lower Shock Mount Installed



17. Install the rear block kit, the OEM blocks are 2" tall and will be replaced by the Cognito 3" tall blocks and extended length u-bolts. Be sure and use a torque wrench on the u-bolts, an impact usually will not get them tight enough. Pay attention to the blocks, there is a right side and left side block.
18. Install the supplied rear shocks making sure the shock reservoirs are facing away from the axle tube. Reuse OEM mounting hardware and torque to OEM specifications.
19. Make sure the vehicle is in park with the emergency brake activated, but leave the engine running. Adjust the drag link length so the front tires are straight while the steering wheel is also straight. No details are given here as this is an alignment shop job although a qualified mechanic can adjust the drag link to get the steering wheel straight.
20. Test drive to make sure steering wheel is straight while driving straight. Once the steering wheel is straight, you don't need a front end alignment as the toe setting did not change. If you add larger tires and the truck pulls slightly, consult an alignment shop and they will know how to adjust caster split in order to accommodate road crown with the larger tires.

This completes the installation steps, enjoy your new Cognito Elite 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 warranted 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.