

3" Standard Leveling Lift Kit, For 2022+ Toyota Tundra With Load Leveling Rear Height Control Air Suspension.

## **INSTALL INSTRUCTIONS:**

3" Standard Leveling Lift Kit, For 2022+ Toyota Tundra With Load Leveling Rear Height Control Air Suspension. SKU: 135-91225

PARTS LIST FOR SKU: 135-91225				
QUANTITY	PART#	DESCRIPTION		
2	80054	Front Strut Spacer Assembly		
2	6967	Front Bump Stop Extension		
1	HP9329	Rear Ride Height Sensor Bracket Hardware Pack		
1	HP9330	Rear Brake Line Bracket Hardware Pack		
1	HP9331	Rear Shock Extender Hardware Pack		

PARTS LIST FOR SKU: 80054			
QTY	PART#	DESCRIPTION	
1	6962	Billet Strut Spacer	
4	HARDWARE-M10- 1.25x30STUD	M10-1.25X30 Rib Neck Stud	
4	HARDWARE-M10-1.25- FN	M10-1.25 NYLON INSERT FLANGE NUT	

PAR	PARTS LIST FOR SKU: HP9329				
QTY	PART#	DESCRIPTION			
2	3061	Rear Ride Height Sensor Bracket			
2	HARDWARE-M6- 1.0X16-FB	M6-1.0X16 Flange Bolt			
2	HARDWARE-M6-FLNUT	M6-1.0 Nylon Insert Flange Lock Nut			

PARTS LIST FOR SKU: HP9330			
QTY	PART#	DESCRIPTION	
1	3062	Rear Brake Line Bracket	
1	HARDWARE-M8-	M8-1.25X20 Bolt	
	1.25X20		
1	HARDWARE-M8X1.25-	M8-1.25 Nylon Insert Flange	
	FN	Lock Nut	



### 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.

PARTS LIST FOR SKU: HP9331			
QTY	PART #	DESCRIPTION	
2	6958	Rear Shock Spacer	
2	6959	Rear Shock Sleeve	
4	6960	Stem Bushing	
4	6961	Conical Washer	
2	HARDWARE- M16-2.0-FN	M166-2.0 Nylon Insert	
	IVI10-2.U-FIN	Flanged Lock Nut	





## INTRODUCTION

Thank you for purchasing the Cognito 3" Standard Leveling Lift Kit. This kit is designed to level your vehicle front to rear while retaining majority of OEM components ensuring the OEM ride quality is not compromised. The Cognito 3" Standard Leveling Lift Kit includes the Front Strut Spacer Kit, Rear Ride Height Sensor Bracket Kit, and Rear Shock Extender Kit with all with hardware included.

# **REQUIREMENTS**

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

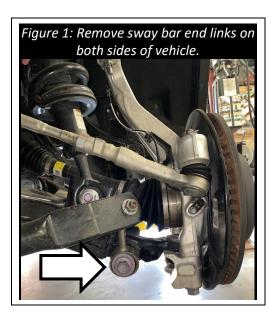
### **TECH NOTES**

- Read instructions carefully and study the pictures (if included) before attempting installation.
- If this product was purchased as part of a kit each kit, and options to kits, are packaged separately. Therefore installation procedures are covered in separate instructions. Familiarize yourself with each specific set of instructions before beginning.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.

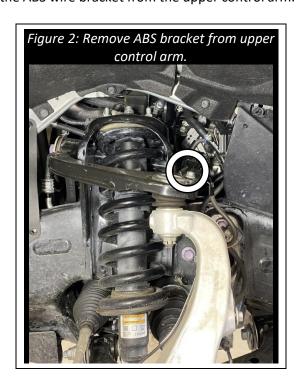


## **INSTALLATION**

1. Before lifting vehicle, use a 19mm socket to remove sway bar end links from lower control arm on both sides of vehicle.

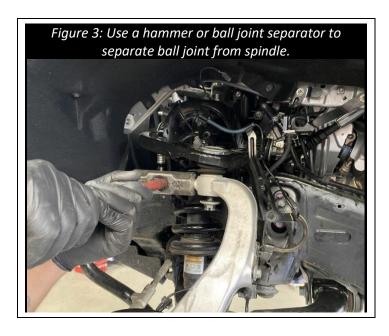


- 2. Lift the vehicle using a suitable hoist and remove front wheels. <u>Never work under an unsupported vehicle. Serious injury or death can occur!</u>
- **3.** Use a 12mm socket to remove the ABS wire bracket from the upper control arm.

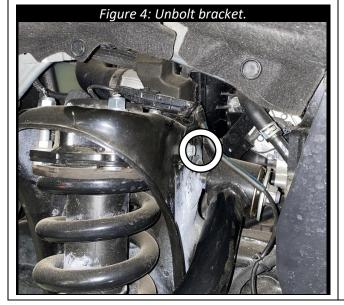


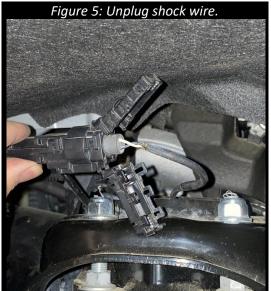


- **4.** Use a strap or jack stand to support steering spindle before removing upper control arm. Failure to support spindle may cause CV axle to fall out of inner CV joint.
- 5. Remove the cotter pin from the ball joint stud and save for reuse. Use a 19mm socket to loosen the ball joint nut. Leave the nut partially threaded on the ball joint stud. Use a hammer or ball joint separator to separate the ball joint stud from the steering spindle.

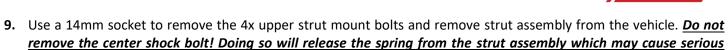


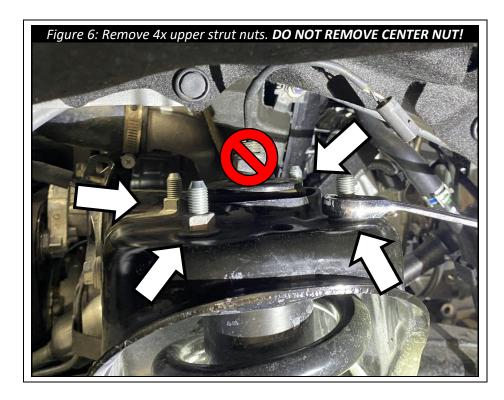
- 6. Remove ball joint stud from steering spindle and rotate upper control arm up and out of the way.
- 7. Use a 19mm socket to remove the lower strut mount bolt.
- 8. Use a 12mm socket to remove shock wire bracket. Unclip plastic housing and unplug wire from shock.





injury!





**10.** Use the OEM nuts to fasten the **80054 Strut Spacer Assembly** onto the OEM strut top hat. Torque to **33 ft-lbs.** The spacer will only fit onto the top hat in one orientation. The COGNITO logo will be clocked 45 degrees clockwise from the "OUT" arrow on the OEM top hat.



11. Place the strut assembly in a spring compressor. Compress the spring and rotate the top hat and strut spacer until the COGNITO logo is aligned parallel with the axis of the lower strut mount bushing sleeve. Then release the strut assembly from the spring compressor.



- **12.** Reinstall strut assembly into vehicle. Be careful not to pinch shock wire when placing strut into strut tower. Torque 4x strut top bolts to **33 ft-lbs.**
- 13. Reinstall lower strut bolt. Torque to 122 ft-lbs.
- 14. Reinstall the ball joint stud into the steering spindle and fasten with the OEM castle nut. Torque to 92 ft-lbs. Insert the OEM cotter pin through the hole in the ball joint stud. If the castellations on the nut do not line up with the hole in the ball joint stud, continue to tighten the nut until they do. Never loosen the castle nut to align the cotter pin hole!
- **15.** Reattach shock wire to plastic connector.
- **16.** Reattach the ABS wire bracket to the upper control arm.



17. Use a large crescent wrench or channel locks to remove the OEM bum stop.

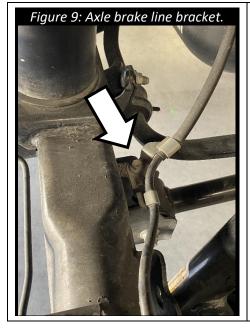


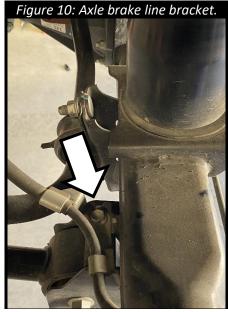
- 18. Apply medium strength thread locker to the threads of the 6967 bump stop spacer and install in OEM location.
- 19. Apply medium strength thread locker to the threads of the OEM bump stop and install into 6967 bump stop spacer.
- **20.** Repeat steps 3 through 19 on opposite side of vehicle.
- 21. Move to installation of rear components. Sway bar end links will be reinstalled when vehicle is placed on ground.

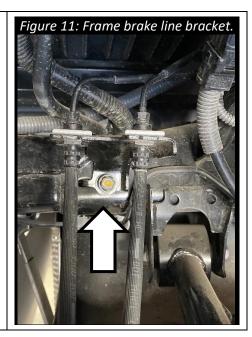


#### **Rear Installation**

- **22.** Remove rear wheels and support rear axle.
- 23. Use a 12mm socket to remove 2x brake line brackets from the axle and 1x from the frame.



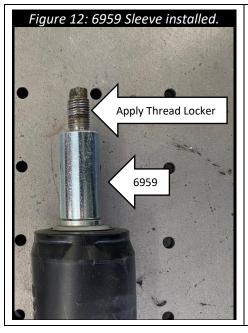




- **24.** Unplug the wire connector from the bottom of the shock.
- **25.** Use a 19mm wrench to loosen but not remove the upper shock mount nut. An 8mm open end wrench or vice grips may be used to prevent the shock from spinning.
- **26.** Use a 17mm socket to remove the lower shock mount bolt.
- 27. Remove the upper shock mount bolt and remove the shock from the vehicle.
- **28.** Remove the OEM stem bushing from the top of the rear shock.



- 29. Slide the 6959 sleeve over the OEM shock.
- **30.** Apply high strength thread locker onto the thread of the OEM shock and then thread **6958** spacer the onto end of OEM shock and tighten.
- **31.** Slide 1x **6961** conical washer and 1x **6960** stem bushing over spacer. The raised center section of the stem bushing should face towards the shock mount on the frame of the vehicle.







- **32.** Reinstall the lower shock mount to the axle but do not torque at this time.
- **33.** Slide the upper end of the shock through the upper shock mount. Ensure the raised center section of the stem bushing seats into the hole in the frame mount. Slightly collapsing the shock or lowering the axle may be necessary to fit the shock into the mount.
- **34.** Install 1x **6960** stem busing and 1x **6961** conical washer onto upper portion of shock extender. Ensure raised center section of upper stem bushing seats into the hole in the frame shock mount.
- 35. Thread the included M16-2.0 Nylon Insert Lock Nut onto the 6958 spacer until the nut bottoms out.
- 36. Torque lower shock mount bolt to 72 ft-lbs.
- **37.** Reattach shock wire at bottom of shock.
- **38.** Remove the nut attaching the ride height sensor linkage to the upper control arm.
- **39.** Attach 1x **3061** Ride Height Sensor Bracket to the inboard side of the upper control arm using the included **M6** hardware from **HP9329**. The side of the bracket with the line of holes will point towards the rear of the vehicle.



40. Reattach the ride height sensor linkage to the 3061 ride height sensor bracket using the OEM nut.

Note: Each hole on the ride height sensor bracket equates to roughly 0.5" of rear lift. It is recommended to start with the ride height sensor linkage positioned in the middle hole and then adjust as desired.. Fine tuning of rear ride height can be done using the slot at the top of the ride height sensor linkage.





- **41.** Repeat steps 22 through 40 for the opposite side of the vehicle.
- **42.** Attach the **3062** brake line bracket to the frame of the truck using the OEM bolt.



43. Attach the OEM brake line bracket to the 3062 brake line bracket using the included M8 hardware from HP9330.



- 44. Reattach 2x brake line brackets to the axle.
- **45.** Reattach wheels and torque lugs to manufacturer specifications.
- **46.** Place vehicle on ground. Reattach front sway bar endlinks to lower control arms on both sides of vehicle and torque to **111 ft-lbs.**
- **47.** Adjust headlights per owner's manual.
- 48. Have the vehicle professionally aligned.





# 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.

Install Sheet 7423

INGENUITY · QUALITY · PERFORMANCE

SKU: 135-91225

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