

## 50110-JL • INSTALLATION INSTRUCTIONS

2018+ Jeep Wrangler JL 2.5" Lift Kit

Thank you for purchasing this BODY ARMOR 4X4 product. Please read through this entire document before proceeding with installation. If you are not confident in your mechanical skills, please seek the help of a professional to perform the installation. Check your packages immediately upon arrival to ensure that everything listed is included, and to check for damage during shipping. If anything is missing or damaged, call Body Armor 4X4 at (951) 808-0750 as soon as possible.



### PARTS LIST

- 2 Front Coil Spacer
- 2 Front Shock Bracket
- 2 Front Sway Links
- 2 Front Bump Stop Spacers
- 2 Rear Sway Links
- 2 Rear Coil Spacer
- 2 Rear Shock Bracket
- 2 Rear Bump Stop Spacers

### HARDWARE PACK A

- 4 Shock Bracket Crush Sleeve
- 2 3/8" x 1" Bolt
- 2 3/8" Flat Washer
- 2 3/8" Flange Locknut
- 4 12mm x 65mm Bolt
- 4 12mm Flange Locknut
- 2 JK Spacer Washer
- 2 1/2" x 2.5" Bolt
- 2 1/2" 1.25" Bolt
- 6 1/2" Flat Washer
- 2 1/2" Nylock Nut

### HARDWARE PACK B

- 6 1/2" Flat Washer
- 4 12mm x 65mm Bolt
- 4 12mm Flange Lock Nut

### HARDWARE PACK C - REAR BUMP STOPS

- 4 3/8" Flat Washer
- 4 3/8" x .75" Bolt
- 4 3/8" Flange Lock Nut

### HARDWARE PACK D - FRONT BUMP STOPS

- 2 3/8" Flat Washer
- 2 3/8" x 3" Bolt
- 2 3/8" Flange Lock Nut

### TOOLS NEEDED

- 6mm Allen
- 10mm Socket & Wrench
- 15mm Socket & Wrench
- 18mm Socket & Wrench
- 21mm Socket & Wrench
- 22mm Deep Well Socket
- Pliers
- 9/16" Socket & Wrench
- 3/4" Socket & Wrench
- Floor Jack & Jack Stands

### IMPORTANT INFORMATION

- Factory service manual is recommended to have on hand.
- Secure and properly block vehicle prior to beginning installation
- Always wear safety glasses when using power tools or working under the vehicle

- *Modifications to any part will void the warranty associated with that product.*
- *IT IS RECOMMENDED THAT YOU HAVE YOUR VEHICLE'S ALIGNMENT CHECKED WHENEVER INSTALLING NEW SUSPENSION. IT IS ALSO RECOMMENDED THAT YOU ADJUST YOUR HEADLIGHTS WHENEVER YOUR VEHICLE'S RIDE HEIGHT IS ALTERED.*

## INSTALLATION PROCEDURE

- 1. Park the vehicle on a flat, level surface, make sure the transmission is in park (or first gear if manual transmission), the engine is turned off, and the parking brake is set. Wear safety glasses and follow basic shop safety practices for the duration of this installation.**
- 2. Measure the "Before" heights of your vehicle.** This measurement can be recorded from the center of the wheel straight up to the top of the inner fender lip. Record the measurements below:

### FRONT

DRIVER: \_\_\_\_\_ PASSENGER: \_\_\_\_\_

### REAR

DRIVER: \_\_\_\_\_ PASSENGER: \_\_\_\_\_

- 3. Position the floor jack under the front differential and lift the front of the vehicle until the tires are off the ground.. Carefully release the floor jack to slowly lower the Jeep on to the jack stands. Continue to lower the jack so that the weight of the Jeep is fully resting on the jack stands, but stop the axle from lowering with the front coil springs still in slight compression.**
- 4. Use a 22mm deep socket and wrench to remove the front lug nuts. Remove the wheels/tires and set them aside.**
- 5. Use a felt-tip pen to mark the front driveshaft where it connects to the flange on the front differential. Make adjacent marks on both components so that it may be aligned correctly later when it is re-connected. Use a 15mm socket and ratchet to disconnect the driveshaft from the axle. Use a length of wire or rope, or a ratchet strap to tie the**

disconnected end of the driveshaft up and out of the way. Do not just let the driveshaft hang loosely as it may damage the boot.

- 6. Use a 21mm socket to remove the bolt securing the front track bar track bar to the frame. Retain the hardware for re-use.**



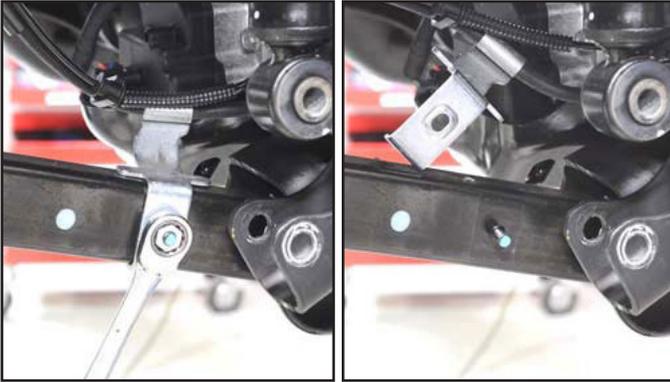
- 7. Use an 18mm socket and ratchet to remove the bottom sway bar link bolts. Retain the hardware for re-use.**



- 8. Use the 18mm socket and ratchet to remove the lower shock bolt. It may be necessary to raise the axle slightly, with the floor jack, and pull down on the shock to remove the bolt. Retain the stock hardware.**



9. Use a 15mm wrench to remove the brake line bracket from the lower control arm. Retain the OE hardware for re-use.



10. Use pliers to remove the wiring harness from the upper control arm, and to pull the axle vent tube from the differential housing.



11. Loosen the upper control arms using an 18mm wrench.

12. Use a 21mm and 24mm wrench to loosen the lower control arm bolts, but do not remove the control arms.

13. Disconnect the locking differential wiring harness from the differential by depressing the retaining tabs and separating the connector.



14. Carefully lower the floor jack so that the coil springs are at rest, neither in compression or extension. Remove the coil springs and spring isolators from both sides of the Jeep.



15. Use a 10mm wrench to disconnect the brake line bracket from the lower coil spring mount. Retain hardware for reuse.



16. Install the supplied spring spacer with coil spring isolator under the spacer.



17. Re-install the coil spring.



- 18. Install the bump stop spacer into the lower coil mount, using the supplied 3/8" x 3" bolt, washers, and nut through the spacer and coil mount. Tighten using 9/16" wrenches.**



- 19. Re-install the brake line bracket on the coil mount using the factory hardware and a 10mm wrench.**

- 20. Install the supplied shock extension bracket on to the stock lower shock mount using the supplied 3/8" x 1" bolt, 3/8" washer, and 3/8" flange locknut, through the bottom hole of the bracket. Do not tighten the hardware yet.**



- 21. Place the supplied crush sleeve into the factory shock bracket. Install the factory shock hardware into the brackets and through the sleeve.**



- 22. Tighten the lower bolt using a 9/16" socket and wrench. Torque to 30ft/lbs.**



- 23. Use the floor jack to lift the axle housing and compress the suspension, then install the lower end of the shock into the extension bracket using the supplied 12mm x 65mm bolt, 1/2" washers, and 12mm nut.**



- 24. Tighten the factory bolt using an 18mm socket and wrench. Torque to 55ft/lbs.**



**25. Tighten the lower shock bolt using an 18mm socket and wrench. Torque to 55ft/lbs.**



**26. Install the brake line bracket on the lower control arm using the factory hardware. Tighten using a 15mm wrench. Torque to 18ft/lbs.**



**27. Remove the sway bar link from the sway bar using a 6mm hex key and an 18mm wrench.**



**28. Install the new supplied bent sway link using the supplied 12mm x 65mm bolt, 1/2" washers, and lock nut. Torque to 55ft/lbs.**



**29. Clip the wiring harness into the upper control arm.**

**30. Re-connect the axle vent tube to the differential using a pair of pliers.**

**31. Re-connect the front differential wiring harness.**



**32. Attach the sway bar links, to the axle, using the factory hardware and an 18mm socket and wrench. Torque to 55t/lbs.**

**33. Reinstall the front tires/wheels, using a 22mm deep well socket.**

**34. Lower the vehicle to the floor.**

**35. Attach the track bar using the factory hardware** and a 21mm socket and wrench. Torque to 120ft/lbs. Turning the steering wheel will help align the track bar and the mounting hole.

**36. Re-tighten the lower control arms using a 21mm & 24mm wrench.**

**37. Re-tighten the upper control arms using a 18mm wrench.**

## REAR INSTALLATION

**1. Chock the front wheels then use the floor jack to lift the rear of the vehicle** so that the rear wheels are off the ground. Position the jack stands under the frame rails and carefully lower the vehicle on to them. Adjust the floor jack to slightly lift the rear axle housing.

**2. Remove the rear tires/wheels, using a 22mm deep well socket.**

**3. Use a 21mm socket to remove the track bar bolt at the axle.** Retain the stock hardware for reuse.



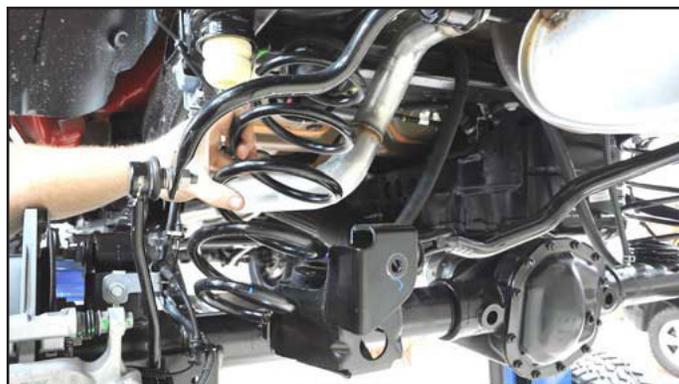
**4. Use an 18mm socket and wrench to remove the lower shock mounting hardware.** Save for reuse.



**5. Use an 18mm socket and wrench to remove the lower sway bar link hardware.**



**6. Lower the axle and remove the coil spring and coil spring isolator.**



**7. Install the supplied bump stop spacer on the axle** using the supplied 3/8" x .75" bolts, washers, and flange lock nuts. (You will use 2 bolts, 2 washers, and 2 nuts per side)



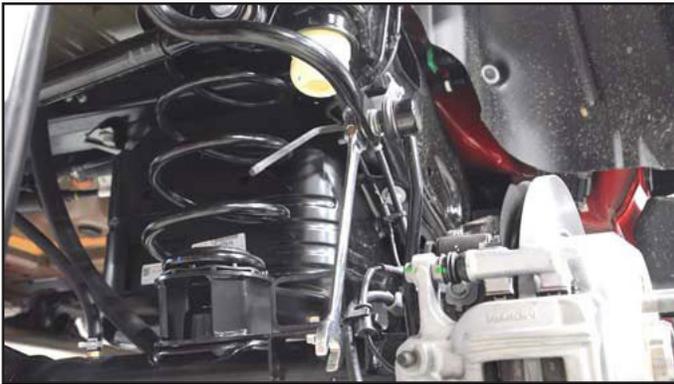
**8. Use a 9/16" wrench and socket to torque the hardware to 30ft/lbs.**



9. Use a 6mm hex key and an 18mm wrench to remove the sway bar link from the sway bar.



12. Install the supplied coil spring spacer washer on top of the coil spring pocket.



10. Attach the supplied straight sway bar link using the supplied 12mm x 65mm bolt, 1/2" washers (bolt head side only), and 12mm flange nut.



13. Install the supplied rear coil spacer, using the supplied 1/2" x 2.5" bolt. Tighten using a 3/4" socket. Torque to 65ft/lbs.



11. Use 18mm wrenches to tighten the upper sway link bolt. Torque to 75ft/lbs.



14. Install the coil spring isolator and coil spring.



- 15. Install the supplied rear shock extension bracket** using the factory shock bolt and supplied crush sleeve. Do Not Tighten.



- 16. Install the supplied 1/2" x 1.25" bolt, washer and 1/2" nylock nut** in the bottom shock mounting hole. The washer will go under the nut. Do Not Tighten.

- 17. Install the shock in the shock extension bracket** using the supplied 12mm x 65mm bolt, 1/2" washers, and 12mm nut.



- 18. Tighten the factory shock bolt** using an 18mm socket and wrench. Torque to 55ft/lbs.



- 19. Tighten the lower shock bolt** using an 18mm socket and wrench. Torque to 55ft/lbs.



- 20. Tighten the lower shock bracket bolt** using a 3/4" socket and wrench. Torque to 65ft/lbs.



- 21. Install the sway bar links, in the lower mount** using the factory bolts and an 18mm socket and wrench. Torque to 55ft/lbs.

- 22. Reinstall the rear tires/wheels, using a 22mm deep well socket**

- 23. Lower the vehicle to the ground.**

- 24. Reinstall the track bar in the factory location** using the factory hardware and tighten using a 21mm wrench.

## AFTER INSTALLATION

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- 1. Confirm that the drag link was adjusted to the center steering wheel BEFORE the vehicle is driven.** Failure to do so will cause a computer error, odd handling, and poor performance.
- 2. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members.** Check steering for interference and proper working order. Test brake system.
- 3. Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely.** Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
- 4. Re-torque all fasteners after 500 miles and re-check after 1000 miles.** Alignment must be checked by a qualified mechanic. Visually inspect components and re-torque fasteners during routine vehicle service.
- 5. Readjust headlights to proper settings.**
- 6. Have a qualified alignment center realign the front end, to the factory specifications immediately.**

## MAINTENANCE

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It is the ultimate buyers responsibility to have all bolts/nuts checked for tightness after the first 500 miles and then every 1000 miles. Wheel alignment, steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles.

*Congratulations, you have completed the installation!*

**WARRANTY POLICY & PROCEDURE**

Contact your Body Armor 4x4 Distributor or Body Armor 4x4 directly regarding any issue prior to removing product from vehicle. If it appears said product is warrantable, you will be given a Return Authorization Number (RA #) and asked to return said product freight pre- paid. The RA # must appear on the outside of the carton/box of any returned product. Unauthorized returns will be refused. RA # must be given by Body Armor 4x4 in advance of return.

**BODY ARMOR LIMITED LIFETIME WARRANTY**

Body Armor 4x4 (BA) warrants to the original purchaser that these products will be free from defects in material and workmanship prior to shipping and/or installation for the life of the product. This non-transferable limited lifetime warranty does not cover damage or impairment in any part due to misuse, improper installation, accident or contact with on-road or off-road hazards, product modification, improper or inadequate cleaning and/or maintenance. All other warranties and representations express or implied are hereby disclaimed, including fitness for merchantability and buyer's intended use or purpose.

BA products are built and sold for highway and off-road use. The original purchaser assumes all risks as to the selection, suitability and performance of all goods and products purchased.

BA's sole and exclusive obligation under this warranty shall be to repair or replace the item(s) and their discretion and BA will not issue any credit or refund to the consumer. Proof of purchase is required on all warranty claims. BA may require pictures to diagnose the warranty claim and may require the product(s) be returned if determined by BA to be necessary. If a return is required then a RGA number will be issued by BA. Any item arriving to BA without a valid

RGA number will be refused and sent back. Upon evaluating the RGA and no valid warranty claim is made, the RGA will be returned to the consumer at their expense or disposed by BA after 60 days. BA will not be responsible for incidental charges such as removal, installation, shipping costs or lost during transit. Any items that are ordered in error, refused or canceled are not considered a valid warranty claim and cannot be returned to BA.

**WARRANTY PROCESS**

Contact an authorized BA dealer to initiate warranty process. Authorized dealers must contact BA to assist in evaluating the warranty claims. Valid warranties will have a RGA issued. Once issued the dealer will request the product be returned to BA facilities. Products purchased through an authorized BA dealer will be refunded and/or credited by that BA dealer.

Warranty contact: [orders@bodyarmor4x4.com](mailto:orders@bodyarmor4x4.com)

Return address: Body Armor 4x4, 1050 N. Vineyard Ave. Ontario CA, 91764, P: 951-808-0750

**FINISH WARRANTY**

The finish is warranted to be free of defects for a period of 3 years from date of purchase. Product(s) that have been abused, altered, incorrectly installed or used in competition are void of said warranty. Surface rust, pitting or discoloration is a direct result of improper maintenance is not covered by this warranty. It is the responsibility of the owner to preserve and maintain the finish of their product(s). In areas where high concentrations of road salts and other corrosive agents are used, rust or damage to the finish may occur if BA product(s) are not properly maintained. Lack of proper maintenance in these areas may void the finish warranty. See below for routine maintenance tips and recommendations.

**PRODUCT CARE AND MAINTENANCE**

Textured coat finished should be cleaned ONLY with a mild soap on a damp sponge.

BA recommends wiping down the product with a light coat of lubricate (i.e. WD40) periodically to maintain its luster.

DO NOT apply polish or wax that requires buffing for removal as this may damage the finish.

DO NOT coat the product with any type of shine such as Tire Shine or glossy aerosol or gel. This can cause discoloration, staining or bubbling.