



## **INSTALLATION MANUAL**

**FOR**

**ROCK KRAWLER SUSPENSION, INC.**

**2021- Present Ford Bronco**

**1.0" Adventure System**

**2022 1st EDITION  
September 2022**



# ROCK KRAWLER S U S P E N S I O N

**Dear customer:** Thank you for purchasing the best system on the market for your Ford Bronco. We are sure you will be happy with this system after your installation is complete. Please take your time during the installation and be sure to do it correctly. Completely read the directions before starting your installation so you know what to expect. Remember, your personal safety depends on it. Should you have any questions during this installation feel free to give our tech line a call (518-270-9822) and we will be happy to help you.

## Welcome to TEAM RK

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**Note: BE SURE TO CHECK ALL FASTENERS FOR PROPER TORQUE BEFORE TEST DRIVE. RECHECK AFTER 500 MILES AND BE SURE TO CHECK PERIODICALLY.**

### WARNING

- Properly block and secure vehicle prior to installation.
- Always wear safety glasses when using power tools.
- Rock Krawler Suspension recommends the use of Loctite on all hardware, unless noted otherwise.
- The use of limiting straps is recommended to avoid possible damage from overextending the suspension of your vehicle.
- Read and understand all instructions, warnings and safety precautions in these instructions and your owner's manual before attempting to install these components.
- Proper installation of Rock Krawler Suspension products requires knowledge of recommended procedures for disassembly/assembly of OE vehicles and components. Access to OE shop manuals and special tools are required. Attempting to install this kit without knowledge of these procedures may affect the safety of your vehicle and or the performance of these components. Rock Krawler Suspension, Inc. strongly recommends that this system be installed by a certified mechanic with off road experience.
- Rock Krawler Suspension does not recommend combined use of suspension lifts, body lifts or other lift devices. Combined use of lifts may result in unsafe and unexpected handling characteristics. Also, many states now have laws restricting Vehicle lift, bumper heights, and other alterations. Consult local laws to determine if your proposed alterations (including installation of this system) comply with your state laws.
- Rock Krawler Suspension does not condone or authorize the use of any other suspension components with its products. Should Rock Krawler Systems or components be installed in junction with other products or not per the provided instructions Rock Krawler Suspension warranty is void and is not to be held accountable for any resulting actions.



## **Driving and Handling Tips**

- For Highway driving it is best to have the front sway bar connected. This will give you the on-highway ride and handling characteristics you expect. **If you choose otherwise, you do so at your own risk.**
- The ride quality and handling that Rock Krawler is known for is based on using OEM sway bars front and rear with approved shocks. Using any components other than directed can result in adverse handling characteristics and poor ride quality.
- For Off-Road use it is best to have the front sway bar disconnected and the rear sway bar connected. This will allow your suspension to do its intended function. Our suspension will give your vehicle unmatched articulation which will provide traction and feedback to keep your vehicle moving in almost all conditions. Let the suspension do the work!

## **IMPORTANCE OF JAM NUTS**

**This is a note about jam nuts and the consumer's responsibility. The installer is the person or persons initially responsible for the proper setup of the suspension system and/or components and the initial tightening of the jam nuts. The jam nuts not only hold the orientation of the joint it is on, but it is the single component that puts the necessary pre-load on the joint's threads. The consumer or vehicle owner is the person or persons responsible for maintaining the jam nuts tightness. Failure to do so will result in the rapid deterioration of the threads in the control arm and will impose a "cause for concern" for the occupants of the vehicle. Failure to comply with the warnings heeded in the directions regarding the number of threads showing past the jam nut will also result in the same "cause for concern" for the occupants of the vehicle. All the above items are the responsibility of the vehicle owner and or installer. If a threaded section of a component is bad it will show itself defective immediately. Threads that fail over time are due to improper maintenance of jam nuts and can be proven very easily. Thread sections and jam nuts not properly maintained or setup, are not covered under warranty. This is the end user and installer's responsibility.**

### **HEIM JOINTS (Non- rebuildable spherical joints)**

**All Rock Krawler Heim Joints use Teflon Liners and thus are self-lubricating. They too can also benefit from spraying down the outside of them liberally with WD-40 or Liquid Fluid Film. Grease should never be applied to them! Take caution when using cleaners and detergents on your vehicle as it can ruin the adhesives used on the Teflon liners yielding a bad heim joint.**

## **TORQUE VALUES FOR HARDWARE AND JAM NUTS**

- All 12mm and 1/2" are torqued to 75 to 80 ft-lbs.

## **FRONT SUSPENSION INSTRUCTIONS**

- 1) Make sure vehicle is on a level, hard, working surface if you are using a floor jack and jack stands.
- 2) Block the rear wheels so the vehicle cannot move and make sure the emergency brake is applied.
- 3) Raise and support the front of vehicle with safety jack stands. Locate jack stands on the frame in front of the axle.
  - a. If you are using a vehicle lift, place the lift arms according to the specific vehicles lifting procedures. Ensure that the lift arms will not interfere with the components that are being replaced.

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- 4) Remove the front wheels and tires while the axle is supported by a floor jack.
- 5) If running 35" tall tires and large offset wheels, you will want to use your discretion to remove crash bars or not. (Shown below)



- 6) Remove the skid plated with a 15mm socket and unplug the rack and pinion.
- 7) Remove the tie rod end with a 21mm. (Shown on right)



- 8) Remove the ABS wire and brake line from the knuckle with a 10mm.
- 9) Remove upper ball joint with an 18mm.



- 10) Remove the upper sway bar link.
- 11) Remove the lower strut bolt with an 18mm. Discard hardware. Shown to right.
- 12) Remove the upper strut nuts with a 15mm. Save the OEM nuts for reuse.



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- 13) Be careful when lowering the strut as to not pull the C.V. apart or out of the diff.
- 14) Remove the strut from the vehicle.



**Shown with strut removed**

- 15) Remove the press in studs from the OEM bar pin.



- 16) Reinstall the strut with the spacer into vehicle using the supplied washer and lock nut for the bottom mounting. Reuse factory upper hardware. (Shown on right)
- 17) Reinstall stock hardware in reverse order and connect points in reverse order.
- 18) Reinstall wheels and place vehicle on the ground. Tighten all hardware to spec.





## **Typical alignment specs for the Rock Krawler 1.0” Adventure Kit**

Caster 3.0 to 3.5 degrees with .2 degrees caster on the passenger side than the driver’s side to account for road crown. Please note: some tire treads and steering stabilizers may cause a pull or push that needs to be accounting for. Camber 0 to ½ degree in. Set tow to zero

Suspension tuning, ride quality and handling were developed on 35 and 37-inch-tall tires on 17- or 18-inch diameter wheels. Tuning tire pressure to achieve what is optimum to you is up to you and your discretion.

Remember to retorque all hardware after 500 miles and check for proper alignments to ensure everything has settled in properly and is functioning correctly!

**\*Please Note:** If you do not have adjustable components, you will not be able to dial in the alignment or pinion angle settings so what you get is what you get.

### **A note about tires, wheels, tire pressure and how it effects ride quality:**

Tire and Wheel combinations at a given tire pressure have their own spring and dampening rates associated with them. This plays a major part in ride quality and off-road performance. The stock tire pressure settings on your Wrangler are based on stock C rated light duty tires on 17” wheels. Larger aftermarket tires typically have a much firmer side wall than the stock ones, thus increasing the spring rate and decreasing the dampening rate associated with the tires themselves. Going from a C to a D or E rated tire also amplifies this effect. Increasing wheel diameters cuts down on the sidewall size of the tire; for example, going from a 17” wheel to a 20” to 22” wheels will increase the spring rate and decrease the dampening rate of the tire and wheel combination. As you increase tire strength and wheel size it is common to have to reduce the tire pressures in order to make your aftermarket tire and wheel combination feel like stock wheel combination. **Choose pressures wisely and safely! This is one part of your suspension tuning you can do on your own.**

**Congratulations, you have just finished installing your Rock Krawler Suspension System! Your Bronco is now free to roam about the country.**