



K82-0606-0 Ranger +2 A-Arms 2021-2022



INTRODUCTION

PLEASE RETAIN THIS DOCUMENT FOR FUTURE REFERENCE

If your ZBROZ® product has a damaged or missing part, please contact customer service directly and a new replacement part will be sent to you immediately.

For warranty issues, please return to the place of installation and contact ZBROZ®.

Business hours are Monday through Friday 8AM-5PM MST.

PHONE: (435) 753-7774

EMAIL: customerservice@zbrozracing.com

WEBSITE: www.zbrozracing.com

LIMITED LIFETIME WARRANTY

ZBROZ® will warranty to the original purchaser any failed ZBROZ® suspension product in the event of failure due to construction or material failure of the product. You will be required to contact ZBROZ® customer service with descriptions and photos that resulted in failure.

ZBROZ® builds suspension products to meet and exceed your expectations in quality, performance and durability. All ZBROZ® suspension products are rigorously tested during development and prototype parts are pushed to the limit by professional industry athletes, backcountry athletes and race teams. ZBROZ® Limited Lifetime Warranty excludes the following wear parts as these parts are considered defective when worn: Ball Joints, Bushings, Bump Stops, Tie Rod Ends, Heim Joints, Shock Absorbers Product purchased directly from ZBROZ® has a 90 day return policy on uninstalled products from the date of purchase (may be subject to restocking fee). Uninstalled product returns must be in the original ZBROZ® packaging. Please call (435) 753-7774 to get an RMA# for any return. Customer is responsible for shipping costs back to Zbroz Racing. Returns without RMA# will be refused. Contact ZBROZ® directly about any potentially defective parts prior to removal from vehicle.

ZBROZ® is NOT responsible for any subsequent damages to any related vehicle parts due to misuse, abuse, improper installation, or lack of maintenance. Furthermore, ZBROZ® reserves the right to change, modify or cancel this warranty without prior notice.

FOLLOW INSTRUCTIONS TO ENSURE PROPER INSTALLATION

READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION. INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED. ZBROZ® IS NOT RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

 **TOOLS:**

- [Ratchet](#) (1)
- [15mm Socket](#) (1)
- [15mm End Wrench](#) (1)
- [8mm Socket](#) (1)
- [10mm End Wrench](#) (1)

 **PARTS:**

- [Lower Right Hand A-Arm](#) (1)
 - [Lower Left Hand A-Arm](#) (1)
 - [Upper Right Hand A-Arm](#) (1)
 - [Upper Left Hand A-Arm](#) (1)
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Step 1 — Safety Warning



- **MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.** You should never operate your vehicle under the influence of alcohol or drugs. All raised vehicles have increased risk including blind spots; damage, injury and/or death can occur if these instructions are not followed.
- Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers.
- Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers. You should never operate your vehicle under the influence of alcohol or drugs.
- Driver and passengers must **ALWAYS** wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ZBROZ® does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

- Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.
- It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any ZBROZ® products.
- It is the responsibility of the driver to check their surrounding area for obstructions, people, and animals before moving the vehicle.
- All raised vehicles have increased blind spots; damage, injury and/or death can occur if these instructions are not followed.

Step 2 — Installation Warning



- All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.
- Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle components and parts included in this kit.

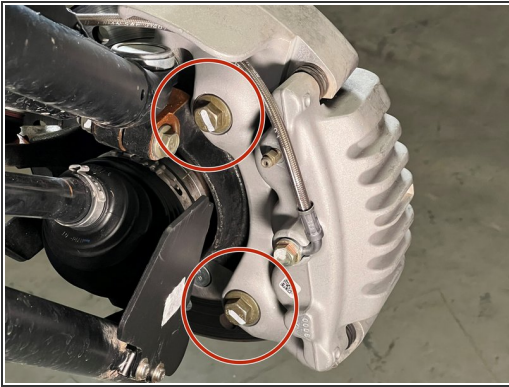
- Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.
- ZBROZ® recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components.
- Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual.
- Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.
- Larger tire and wheel combinations may increase leverage on suspension, steering, and related components.
- Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

Step 3



- Begin by making sure you are parked on a flat surface. Using a floor jack, raise the front end of your ranger and remove the front wheels and tires.
 - With an 15mm end wrench and socket, disconnect the sway bar.
 - **IMAGE 1** Using an 8mm and a 10mm, remove the mounts holding the brake line to the upper a-arm.
 - **IMAGE 2** Use a 15mm end wrench and socket to remove the lower shock mount bolt.
- ⓘ **NOTE:** It is not necessary to remove the shock completely.

Step 4



- **IMAGE 1** Remove the two 15mm bolts holding the brake caliper, This provides clearance to remove the upper and lower ball joints.
- **IMAGE 2** Using a 15mm end wrench and socket, remove the upper ball joint bolt. Gently lift on the upper a-arm and the ball joint should come out.
 - ⓘ **NOTE:** It may be necessary to remove the axle nut to slide the hub assemble from the cv shaft in order to remove the stock lower ball joint as well as installing the new ZBROZ lower arm.
- **IMAGE 3** Remove the lower ball joint bolt, then maneuver the lower ball joint out of the steering knuckle.
 - ⓘ **NOTE:** You may need to remove the bolts connecting the lower a-arm to the frame before you can remove the lower ball joint.

Step 5



- **IMAGE 1** Before you can remove the lower a-arm bolts, you must remove the two lower bolts that hold the front bumper in place in order to rotate the bumper out of the way enough to provide enough clearance to remove the lower a-arm bolts.
- **IMAGE 2** Remove the two 15mm lower a-arm bolts holding the arm to the frame.
- Once those bolts are removed the a-arm should be free. Remove the OEM end caps and sleeves/pins. These will be used in reassembly.
- **IMAGE 3** Next, use your 15mm to remove the upper control arm, Once those bolts are removed the a-arm should be free. Remove the OEM end caps and sleeves/pins. These will be used in reassembly.

Step 6



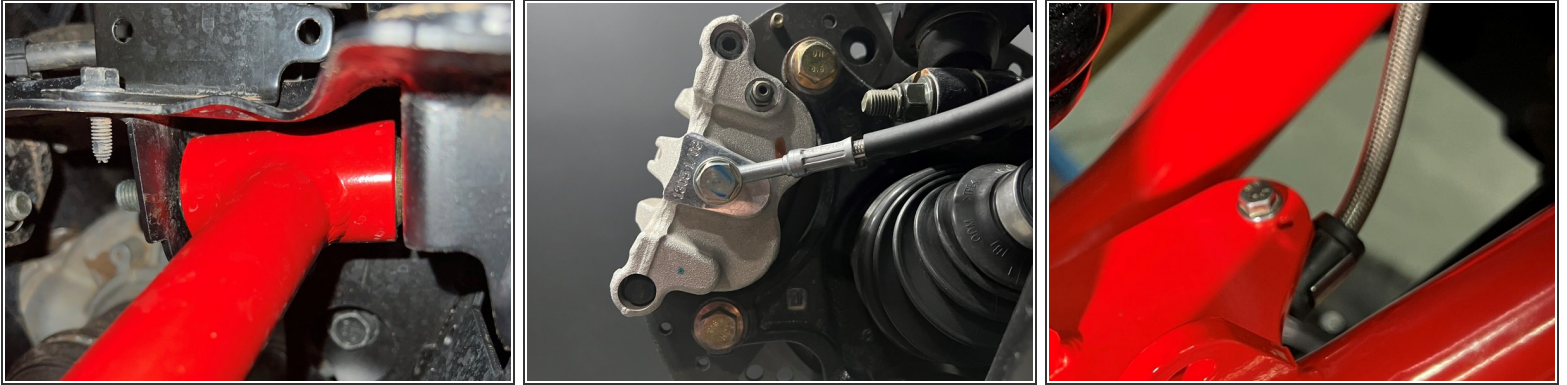
- **IMAGE 1** Place the OEM Sleeve/Pin and end caps into the new ZBROZ a-arm pivot tubes the same way they were in the stock a-arm pivot tubes. Notice the caps will go with the taper towards the outside like stock.
- ⓘ **NOTE:** The new ZBROZ a-arms will come with bushing pre installed as well as grease zerks.

Step 7



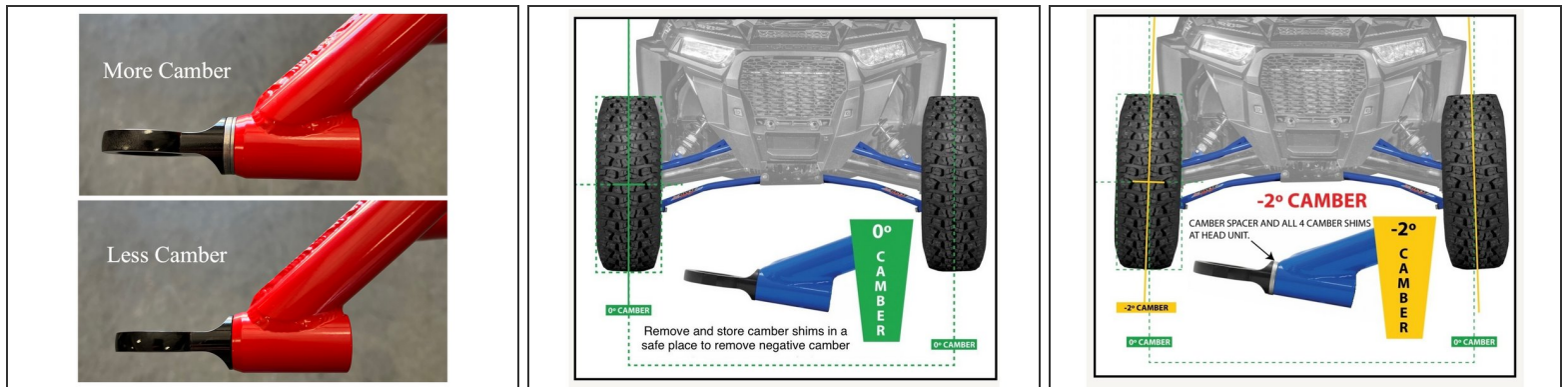
- **IMAGE 1** Begin reinstalling the new ZBROZ a-arms by first placing the lower ball joint into the steering knuckle.
- **IMAGE 2** Once you have the lower ball joint in place, maneuver the lower a-arm pivot tubes into place and replace the factory nut and bolt.
- Repeat the above steps on the opposite side.
- Replace the lower bolts that hold the bumper to the frame.
- Tighten all hardware back to factory torque specifications.

Step 8



- **IMAGE 1** With the lower a-arm in place go ahead and install the upper a-arm by first putting the pivot tubes into position and replacing the factory nut and bolt.
- With the pivot tubes in place, install the upper ball joint into the steering knuckle and replace the factory nut and bolt.
- **IMAGE 2** Now that the upper a-arm is in place, attach the break line to the upper arm using the factory nut and bolt that held it to the stock arm.
- After you have the break line in place, go ahead and replace the lower shock mount and torque to factory specifications.
- **IMAGE 3** With the upper and lower arms in place, replace the brake caliper using the two 15mm bolts and tighten to factory torque specifications.
- Repeat all the above steps on the other side, replace wheels and tires and lower the vehicle.

Step 9



- After you complete the install it is time to set your camber. Camber can differ depending on what you as a driver likes. We prefer 0 degrees to -1 degrees of camber.
- If you need less camber, remove the shim spacers until you have the desired camber.
- If you need more camber, add shim spacers to the outside of the ball joint housing as shown in the images above.

By installing this product, you acknowledge that the suspension of this vehicle has been modified. As a result, this vehicle may handle differently than that of factory-equipped vehicles. As with any vehicle, extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive this vehicle safely may result in serious injury or death. Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state. Consult your owner's manual, the instructions accompanying this product, and state laws before undertaking these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.