



# K38-0623660-01 Polaris Ranger Tie Rod Kit



## 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](mailto:customerservice@zbrozracing.com)

WEBSITE: [www.zbrozracing.com](http://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:**

- 18mm End Wrench (1)
- Side Snips (1)
- Pipe Wrench (1)

**PARTS:**

- Right Hand Tie Rod Assembly (1)
- Left Hand Tie Rod Assembly (1)

## 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



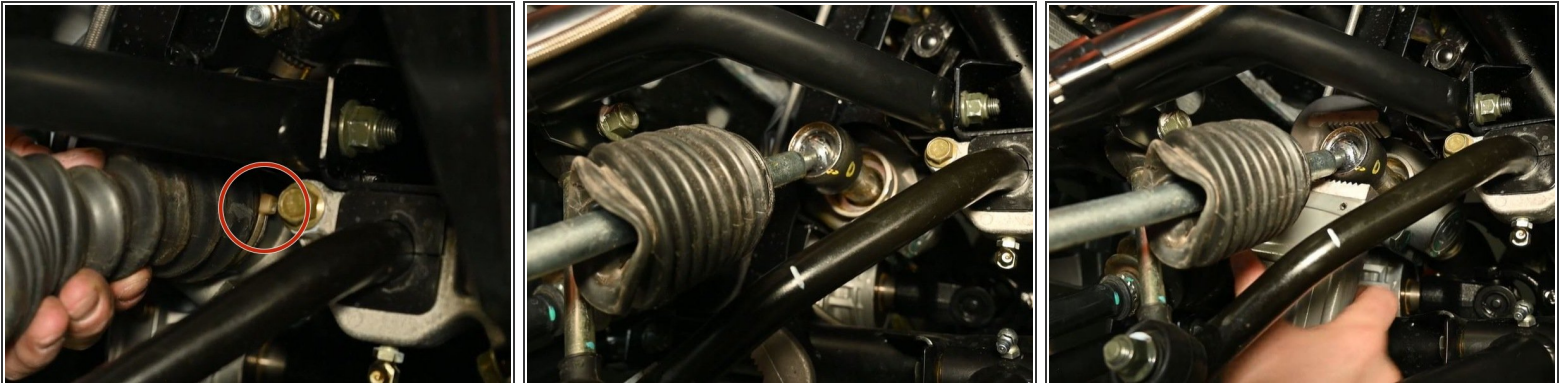
- All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.
- Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle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

### Step 3



- Begin by making sure you are parked on a flat surface. Using a floor jack, raise the front end of your vehicle and remove the front wheels and tires.
  - **(IMAGE 1)** Use a pair of snips and remove the zip tie holding the tie rod boot to the steering rack.
  - **(IMAGE 1 & 2)** Slide the boot down out of the way and use a pipe wrench to remove the axial tie rod end from the steering rack.
- ⓘ **NOTE:** Be sure not to damage the boot as it will be re-used in reassembly



## Step 4



- **(IMAGE 1)** Remove the outer rod end from the steering knuckle. Gently tap on the steering knuckle with a hammer and the tie rod end should lift out see **(IMAGE 2)**
  - **(IMAGE 3)** In order to remove the tie rod boot, remove the outer tie rod end and slide boot down and off.
- ⓘ **NOTE:** Remember that the tie rod has left handed threads.

## Step 5



- **(IMAGE 1)** Remove the axial joint from the new ZBROZ tie rod and install the boot.
- **(IMAGE 2)** Before placing the new axial joint back into the tie rod itself, use your pipe wrench to tighten the axial joint into to the steering rack.
- **(IMAGE 3)** Once the axial joint is tight, replace the boot and secure it using a new zip tie.

## Step 6



- **(IMAGE 1)** Now that you have the axial joint and the boot in place, go ahead and reattach the tie rod to the axial joint.
  - **(IMAGE 2)** With the tie rod in place, locate the supplied reducers and place them in the heim joint. One of the reducers is longer and tapered, that one goes into the knuckle. Place the new reducers back into the steering knuckle. See the image for proper reducer placement.
    - ⓘ 2014-2018 uses NON tapered reducer.
    - ⓘ 2019- uses tapered reducer
  - **(IMAGE 3)** Once the reducers are in place, locate the new nut and bolt. Place the bolt through the reducers and tighten the bolt to factory torque specifications.
    - ⓘ **NOTE:** It is a good idea to re-check the torque settings after the first ride.
- ⚠ Before driving the vehicle after the tie rod install, it is crucial to obtain a proper wheel alignment.
- See video for basic alignment tips.

## Step 7



- See video for a basic alignment. As always we recommend you take your side by side to a certified shop to obtain a proper front wheel alignment. This video is helpful in getting a close alignment so you don't wear out your tires.
- [https://www.youtube.com/watch?v=CNRFNw9\\_...](https://www.youtube.com/watch?v=CNRFNw9_...)

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.