# **INSTALLATION OF TIE ROD KIT**

Please ensure all safety recommendations are used while installing this kit.

To install the hew heavy duty tie rod kit, you will need to remove the OEM tie rods from the UTV. To do this, you will need to remove the bracket that holds the tie rod ends onto the steering box.

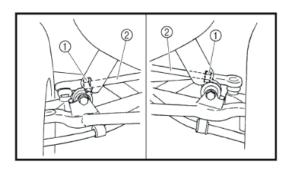
### Follow these steps:

- Mark with either paint or scratch, the position of the tie rod bracket to the stem from the steering box. This will ensure you reinstall it in its proper position later.
- Remove the bolt holding the tie rod bracket to the steering post in the steering box
- Slide the entire tie rod bracket assembly up freely
- Remove the tie rods from both the right and left side of the UTV from the steering spindles.
- Slide the entire assembly out of the UTV.
- Remove the old tie rods from the steering bracket
- Install the new tie rod ball joints to the steering bracket in the same position making sure to install the inner cotter pins now, as you won't be able to get to them later.
- Keep the lock nuts loose on the tie rod to adjust and align later
- Reinstall the steering bracket back onto the steering stem and align with the mark you
  previously made earlier.
- Install the outer tie rod ends to the right and left spindles, the same position
- Once installed, you will now need to re align the front end
- Make sure the steering wheel is centered and straight
- Using the tires center, you can measure the front of the tire and the rear of the tire center to center. The front should be approx. 1/8" to ¼" toe in. You can turn the tie rods to correct the toe in.
- Once the front wheels are correctly adjusted to proper toe in, you can secure the lock nuts to the tie rods.
- Make sure the cotter pins are in place on the outer ball joints

Enjoy and have fun!

See photos on the next page for assistance

### MAINTENCE AND ADJUSTMENT OF THE UTV

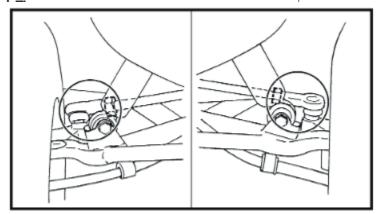


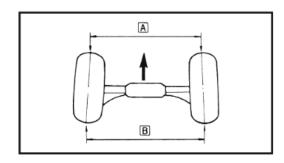
make, sure if the Steering bar is pormal, if not, adjust the tension rod left or right within the specification.

- a. Mark both tie-rods ends. This reference point will be needed during adjustment.
- b. Loosen the locknut (tie-rod end) ① on each tie-rod.
- c. The same number of turns should be given to both the right and left tie-rods ② until the specified toe-in is obtained. This is to keep the length of the rods the same.
- d. Tighten the rod end locknut on each tie-rod.

Locknut (rod end) 40 Nm (4.0 m · kg, 29 ft · lb)

Chassis	
Frame type	Steel tube frame
Trail	41mm (1.61 in)
Toe-in	5 mm (0.20 in)





- a. Mark both front tire tread centers.
- b.Lift the front end of UTV  $\,\,$  to keep the front wheel from force .
- c. Faster the steering forward . Meagcre the widthe beetween two marks.
- d. Rotate the front tires 180° until the marks are exactly opposite one another.
- e. Measure distance B between the marks.
- f. Calculate the toe-in using the formula given below.

Toe-in=B-A

- g. If the toe-in is incorrect, adjust it.
- 3. Adjust toe-in

MARK HERE BETWEEN THE STEERING POST AND THE TIE ROD BRACKET. THIS WILL HELP WHEN YOU RE-INSTALL IT BACK TO ENSURE PROPER ALIGHMENT.

#### WARNING:

Make sure that left / right tension rods have turned the same turns . Otherwise the UTV will still go UTV left and right even though . Operate the UTV to go forward straightly with steering bar , easily causing to getting out of contor and accident . After adjusting the toe-in correctly drive the UTV to move forward a span of distance by fastering the steering bar so as to



If you have any questions during installation, please call for assistance

## **WARRIORS OFF ROAD**

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