

WARRIORS OFF ROAD

Heavy duty tie rod installation instructions.



As with any service or repair, please take caution and use proper safety equipment during repair or installation of parts and or accessories.

It is recommended to use jack stands for this installation in order to remove the front wheels to gain access to the tie rods.

- Once UTV is secured, remove both front wheels.
- Remove the stock tie rods from the unit
- Before installing the new tie rods, there are a couple of things to look for: there are different colored jam nuts on them. This is because the threads are right and left threads. Make sure you use the gold colored jam nut side to mount into the steering box. The silver colored jam nut side will go into the steering knuckles. (see photos)

Gold colored jam nut end



Silver colored jam nut end



- Remember to keep the jam nuts loose at this point until you are ready to do the alignment.
- Install the gold colored jam nut side into the steering box and tighten down the castle nuts and secure with the supplied cotter pins. The tie rods should be facing down in the steering box bracket. (see pic)
- Once the tie rods are secured in the steering box side, then install the silver colored jam nut side into the steering knuckles with the tie rods facing upwards.
- Tighten the castle nuts on the silver jam nut side at the steering knuckle and install the supplied cotter pins.
- Now you are ready to do the alignment

Tech tip:

To reach the inner tie rod jam nuts it is easier to use a tool called a crows foot wrench. But it can be done with normal tools.

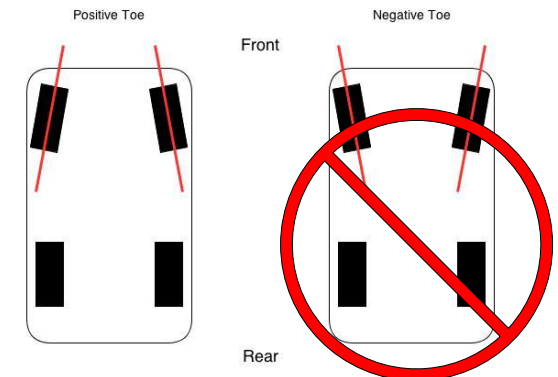


You might need the help of an assistant at this point.

- You will need to install the wheels now and lower the unit off the jack stands and onto the ground.
- Once on the ground ensure the steering wheel is centered
- Bounce the front end up and down slightly with pressure on the front bumper. This is done to settle the suspension.
- Now measure the distance at the center of the front tires front and back. (see pic 3) This will let you know how far the front end is out of alignment. You will turn each tie rod the same number of turns in or out to obtain the correct toe in.
- You should have the toe in no more than $\frac{1}{4}$ ". You need the front tire to slightly toe inwards. **If they are equal or toe out occurs, then you will have very touchy steering which might cause hard to handle issues resulting in a dangerous driving condition.**
- Once correct toe in is reached, tighten down the jam nuts on the inside and outside of the tie rods and double check to make sure the steering wheel is still centered. You should now be ready to go have some fun.
- We have a video showing how to do the alignment on our YouTube page, call for more support if needed. 562-682-7859

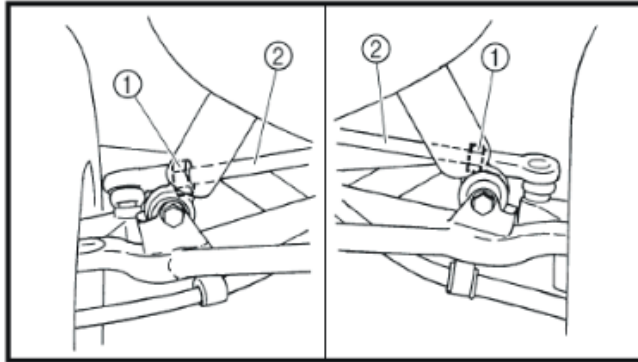
Measure the center of the front tires at the front and rear to get proper toe in

Pic 3

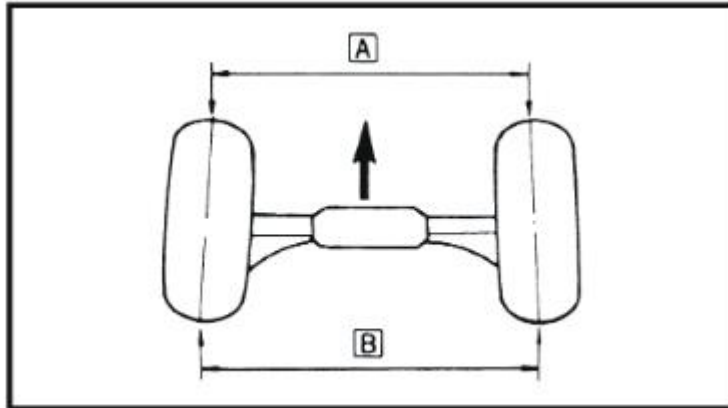


MAINTENANCE AND ADJUSTMENT OF THE UTV

Jam nuts



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



- Mark both tie-rods ends. This reference point will be needed during adjustment.
- Loosen the locknut (tie-rod end) ① on each tie-rod.
- 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.
- Tighten the rod end locknut on each tie-rod.