## Ranger XP 900 / XP 1000 Heavy Duty Tie Rod Instructions

1) Elevate front end of Ranger and support with jack stands.
2) Remove front tires/wheels.
3) Loosen jam nuts on the tie rods.
4) Detach the outer tie rod end from the steering knuckle.
5) Cut the zip tie holding the rack boot to the rack and remove the plastic clips from the outer end of the rack boots.
6) Roll the inner end of the rack boot away from the rack exposing the inner tie rod end.
7) Turn the steering wheel all the way to the right pushing the left tie rod as far to the left as possible.
8) Detach the inner tie rod end from the rack (threads are right handed).
9) Turn the steering wheel all the way to the left and detach the right inner tie rod (also right handed threads).
10)Disassemble stock tie rods retaining rack boots and discarding the rest.
11)With the copper washer installed on the threaded end of the clevises, attach the clevises to both end of the steering rack (apply red thread lock to the threads). See Image A.
12)The Steering Rack Clevis will need to be aligned so that it doesn't bind against the inner heim joint when misaligning. Call if you have questions on this.(Tighten as tight as possible)
13)Attach the right-handed heim joint (remove jam nut) to the clevis using the supplied $5 / 8^{\prime \prime}$ bolt and nut. See Image B.
14)Slide the rack boot over the heim joint and secure it in place with some zip ties. See Image C.
15)Install jam nut onto the heim and attach the inner end of the tie rod. See Image D.
16)Attach the left-handed heim joint (with jam nut installed) to the outer end of the tie rod.
17)Drill steering knuckle tie rod bolt hole to $1 / 2$ ". Install misalignment spacers (two per side) into the outer heim joints and attach the heim
joint to the steering knuckle using supplied $1 / 2$ " bolts ( 12 " wheel bottom, 14 " wheel - top). See Image E \& F.
18)Reinstall tires/wheels, set alignment, and tighten jam nuts.
19)Test ride, recheck alignment, and make adjustments if needed.


Image A


## Image B



Image C


Image D


Image E


Image $F$

