

## Defender HD Tie Rod Installation Instructions

- 1) Elevate front of Defender 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.
- 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.
- 11) With the shim kit installed on the threaded end of the clevises, attach the clevises to both end of the steering rack (apply red loctite). **See Image A.**
- 12) The threads on the steering clevis may need to be polished with a wire brush to remove zinc coating if they don't thread in easily.
- 13) The Steering Rack Clevis will need to be aligned, using a combination of shims provided, so that the clevis doesn't bind against the inner heim joint during the suspension cycle. Call if you have questions on this. (Tighten as tight as possible)
- 14) Attach the right-handed heim joint (remove jam nut) to the clevis using the supplied 5/8" bolt and nut. **See Image B.**
- 15) Install jam nut onto the heim and attach the inner end of the tie rod.
- 16) Attach the left-handed heim joint (with jam nut installed) to the outer end of the tie rod.
- 17) Install misalignment spacers (two per side) into the outer heim joints and attach the heim joint to the steering knuckle.
- 18) Reinstall tires/wheels, set alignment, and tighten jam nuts.
- 19) Test ride, recheck alignment, and make adjustments if needed.

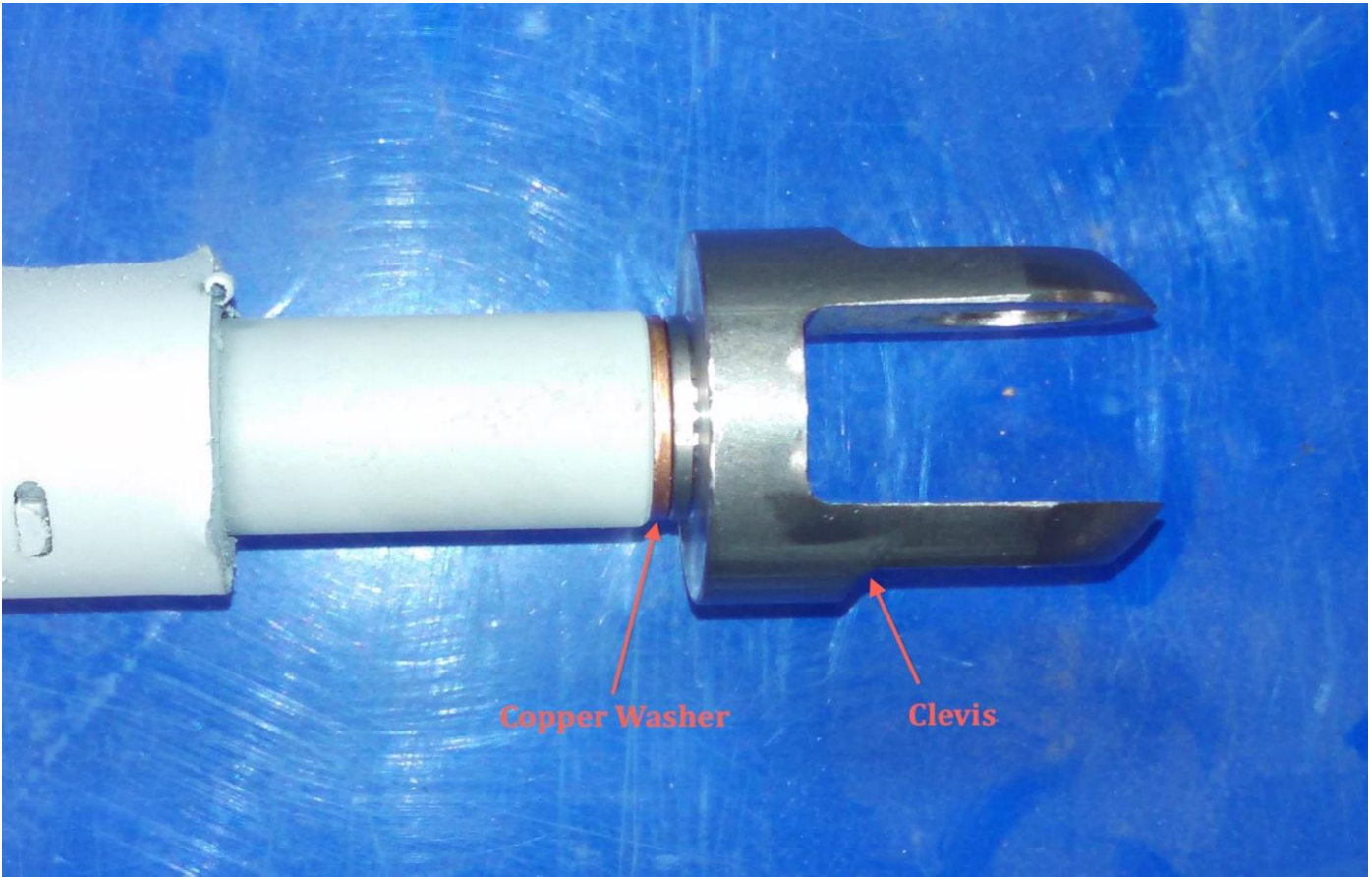


Image A

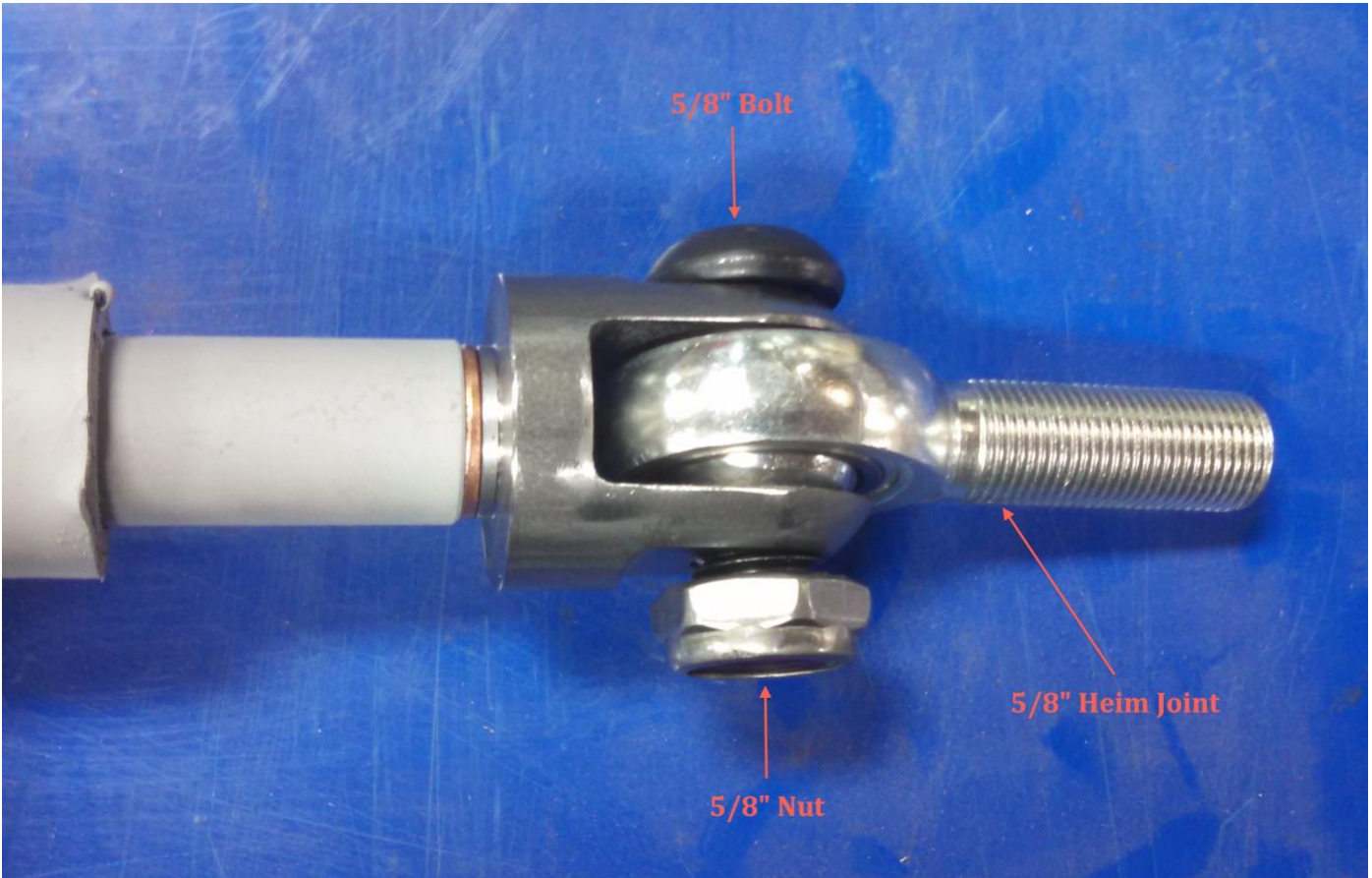


Image B