



Tie Rod Installation Instructions

We have tried to cover every detail of this installation as thoroughly as possible, but in the event that we missed something, please let us know. We really appreciate your business, and we hold customer satisfaction with high regard. Do not hesitate to give me a call if you need clarification or assistance with anything at all throughout your installation process.

-Jared Doster
936-581-2948

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TTC Tie Rod Installation:

Step 1. (Assemble and Install TTC HD Tie Rods) Your new heavy-duty tie rods come in 3 pieces. The inner tie rod end (SATV Part # T4571, or T2522 for the 14mm version), outer tie rod end (5/8"-18 Heim Joint), and the heavy-duty tie rod itself. **Make sure to use Red Loctite on the threads that go into the steering rack.** Screw the inner tie rod into the rack and pinion and make sure it is very tight (60ftlbs)

(2022+ models may need to drill out the hub assembly with a 1/2" bit in order to install the 1/2" bolt and Heim into the hub assembly)



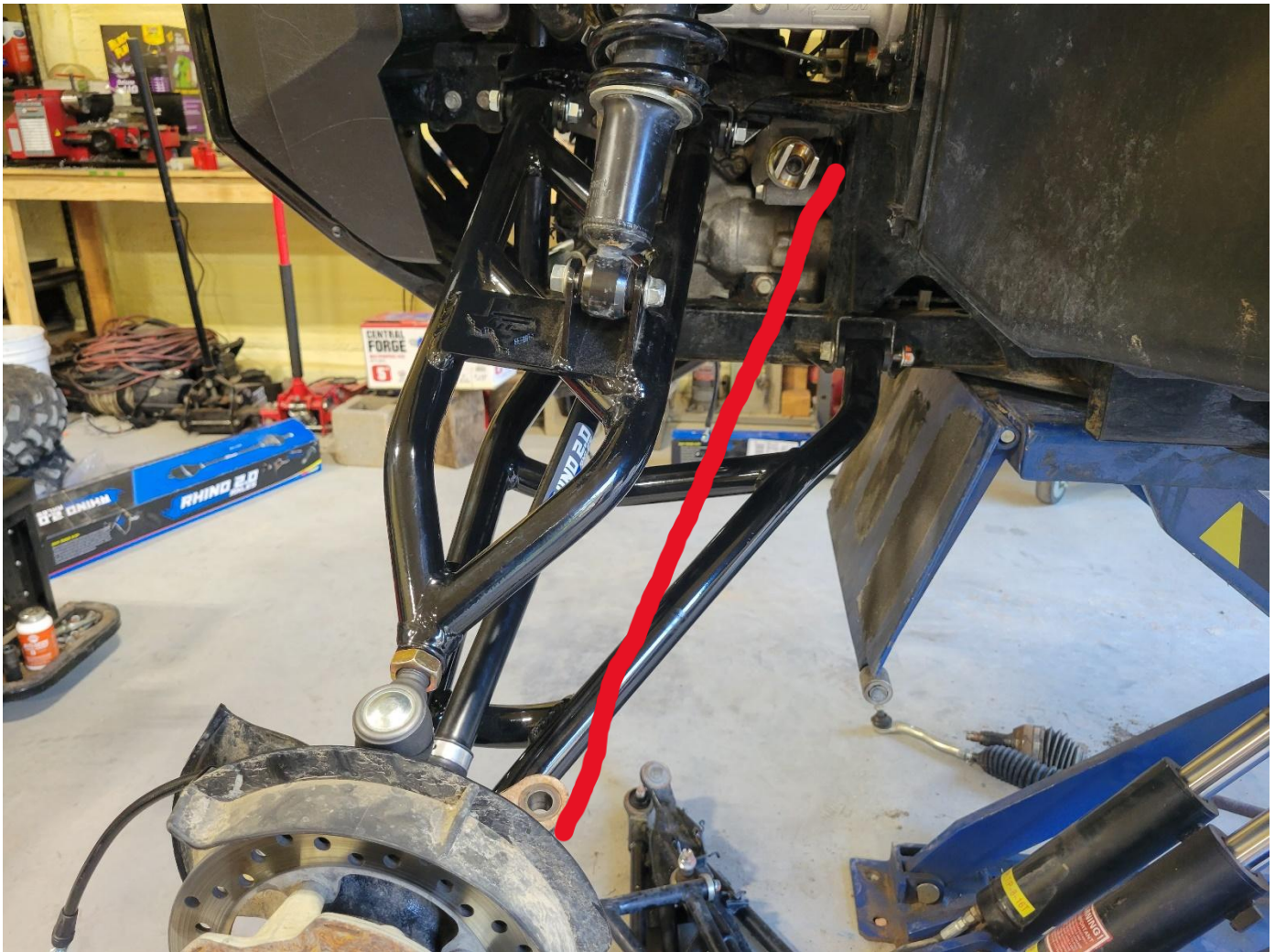
(Heim Style Tie Rods):

When installing our "Stage 2" heim style tie rods, make sure to "clock" the inner heim clevis slightly towards the rear of the machine (@ 1 o'clock on the driver's side, and @ 11 o'clock on the passenger's side). We do this so that the heim maintains full range of movement throughout the full stroke of the rack and doesn't bind up in the clevis. See the picture below or watch the video link below. **Make sure to use Red Loctite on the threads that go into the steering rack. (Torque steering rack bolt to 60ftlb)**

https://youtu.be/_fl-srRFd_M

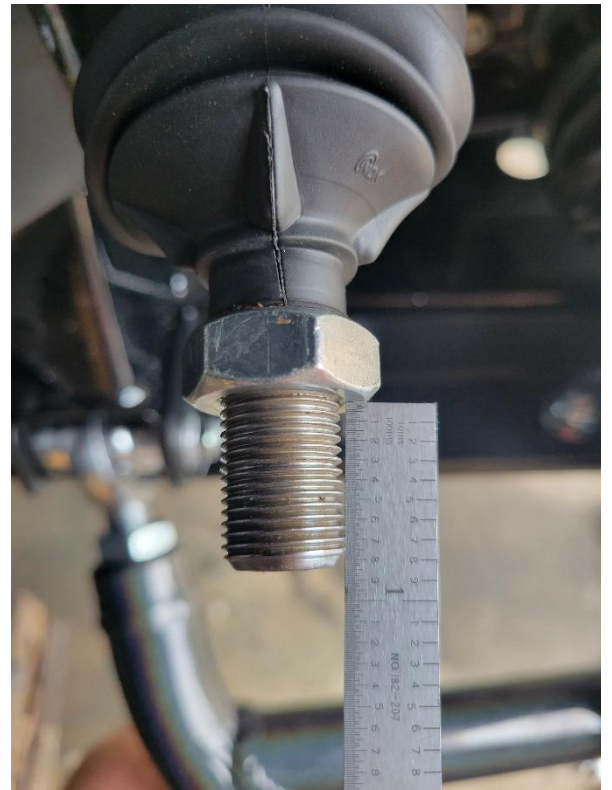


Ideally you want to line the clevis up with the hole in the hub assembly where the outer tie rod will attach. See pic below.



Next, make sure the jam nut is not installed on the inner tie rod (or heim joint), and push your stock tie rod boot on to the shaft of the inner tie rod end (or heim joint). Make sure the boot is properly installed and seated in the groove on the rack and pinion, then secure it tightly with a zip tie.

Now, screw the jam nut on to the inner tie rod (or heim). If you are running our HD tie rods, screw the jam nut all the way on to the inner tie rod end. If you are running our Stage 2 tie rods, screw the jam nut onto the inner heim joint so that there is 3/4" of threads left on the end of the heim, then screw the HD tie rod all the way up to the jam nut.



Next, screw the tie rod bar onto the inner tie rod end (or heim joint) all the way up to the jam nut. Then screw the outer heim joint all the way into the tie rod bar. Now install the 2 misalignment spacers into each side of the outer heim joint and install into the hub using the 1/2" Flange bolt, flange nut, and nylon locking nut.

Toe Adjustment:

Always adjust toe last, because when you make camber adjustments it changes your toe.

If your wheels are pointing **outward**, you need to **loosen** the outer tie rods to bring the wheels straight.

If your wheel are pointing **inward**, you need to **tighten** the outer tie rods to bring the wheels straight.

Step 1. (Adjust Toe) Make sure all tie rods are screwed all the way in and the jam nuts are loose. Since both ends of the tie rod are right hand thread, you must remove the outer tie rod end from the hub assembly, make your adjustment in or out equally on both sides, then reinstall back into hub assembly and check tow again. Do not install the nylon lock nut until desired toe is reached and you are finished making adjustments. Check toe by measuring the distance between the wheels in front of the ball joint and comparing it to the distance between the wheels behind the ball joint.

Step 2. (Tighten) Once desired toe is reached, tighten the jam nuts and make sure to check them frequently. (Desired toe is about 1/8" toe in)

Note: Steering wheel not centered? It is not uncommon for everything to be set perfectly, but your steering wheel is not straight. For some reason Honda does not always perfectly center the steering wheel to the steering rack. Now that you have your new TTC Kit installed and set up, everything from the wheels to the rack is centered.

To center your steering wheel, first make sure your wheels are straight by driving the buggy to make sure it is tracking straight.

Next, remove the center cover on the steering wheel to gain access to the steering wheel nut. Using a 19mm socket, remove the nut and center your steering wheel accordingly. Once centered, reinstall the nut and cover.

