



**10023 / 10024**

**WR EDITION BILLET STEERING RACK**

**FACTORY REPLACEMENT OR 2:1 QUICKNED**

**RACK VEHICLE: YAMAHA YXZ1000R**

**PARTS INCLUDED:**

- **BILLET STEERING RACK**
- **SPARE U-JOINT BOLT (IF NEEDED)**



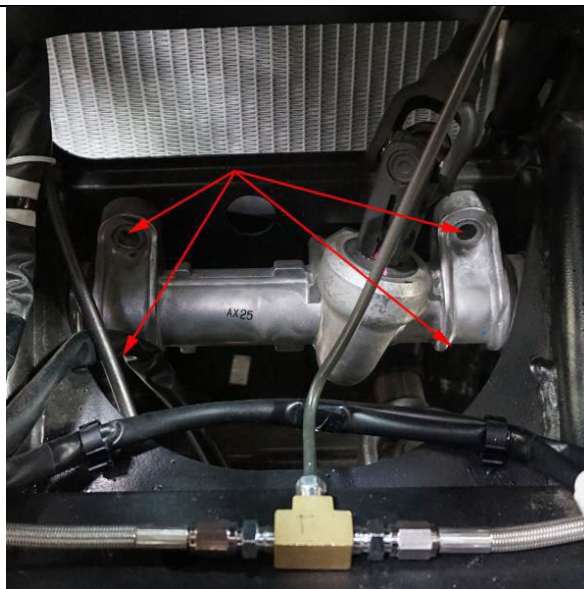
**Installation Instructions:**

- 1. JACK UP FRONT OF VEHICLE**
- 2. REMOVE FRONT TIRES**
- 3. REMOVE COTTER PINS FROM OUTER TIE ROD ENDS**
- 4. REMOVE CASTLE NUTS FROM OUTER TIE ROD ENDS**
- 5. WHILE PULLING UP ON TIE ROD, SMACK THE SPINDLE WITH A GOOD HEAVY STEEL HAMMER. (SEE IMAGE)**

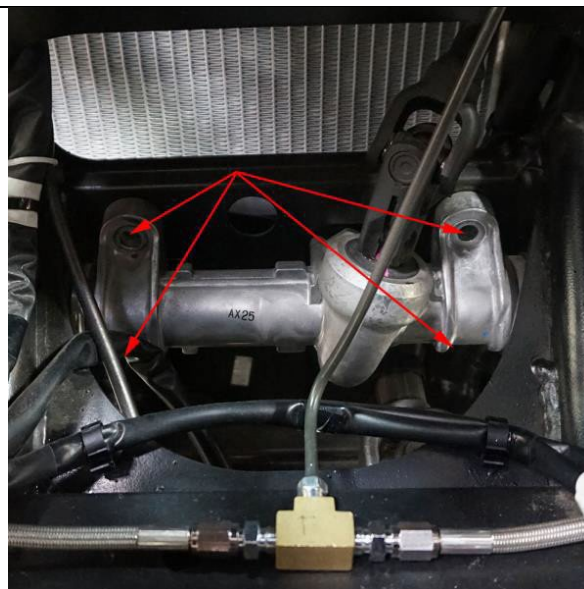


**6. REMOVE BOLT FROM STEERING SHAFT U-JOINT (6MM ALLEN). BOLTS STRIP EASILY\* THE KEY TO REMOVING IS TO KEEP THE BOLT ALIGNED WITH THE NOTCH ON THE STEERING SHAFT SPLINES. YOU CAN USE A PRY BAR TO HELP KEEP THE SHAFT PUSHED UP. IF BOLTS GET TIGHT, STOP AND REVERSE BOLT TO GET ALIGNED WITH SLOT AGAIN. NOTE: WD-40 OR OTHER LUBE WILL HELP.**

**\*\*NOTE: IF BOLT DOES STRIP, JUST KEEP GOING, BOLT IS SOMETIMES DESTROYED BUT STEERING SHAFT IS NORMALLY OK. IF THREADS ON U-JOINT ARE DAMAGED, RE-TAP WITH 8MM X 1.25 TAP. USE PROVIDED REPLACEMENT BOLT FOR RE-ASSEMBLY)**

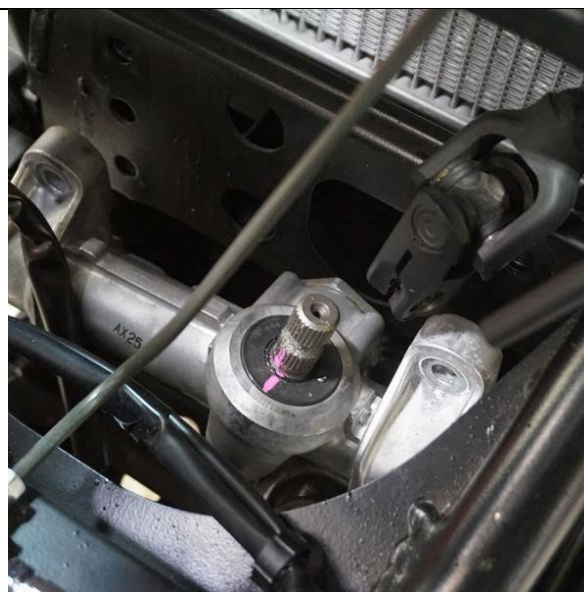


**7. REMOVE 4x RACK MOUNTING BOLTS USING A 12mm SOCKET (SAVE FOR RE-USE)**

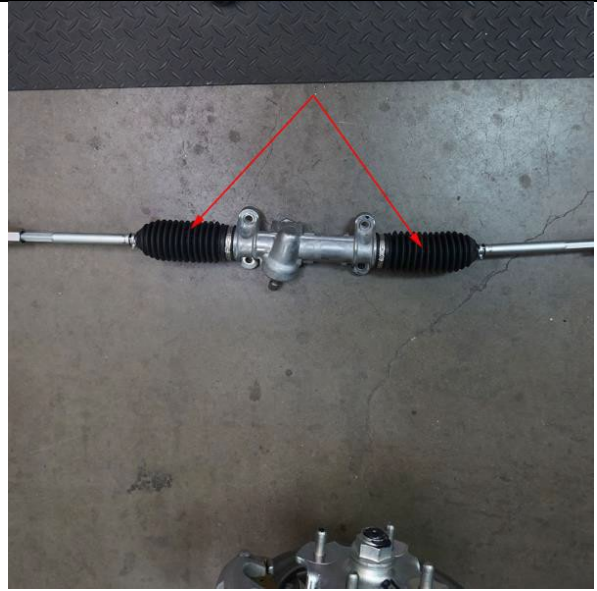


**8. REMOVE THE STEERING SHAFT U-JOINT FROM THE RACK (THIS MAY TAKE A SMALL PRYBAR AND SOME WIGGLING) (RACK WILL MOVE DOWN AND OUT OF THE SHAFT).**

**9. REMOVE COMPLETE RACK ASSEMBLY FROM THE PASSENGER SIDE OF THE VEHICLE**



**10.** IF YOU DID NOT PURCHASE BOOTS SEPERATELY WITH YOUR NEW WR EDITION STEERING RACK, THEN YOU WILL NEED TO REMOVE THESE AND RE-USE THEM FROM THE STOCK RACK.



**11.** WE HIGHLY RECOMEND THE USE OF OUR HD TIE ROD KIT TO REPLACE THE FACTORY TIE RODS. (SOLD SEPERATELY).

ASSEMBLE WR EDITION TIE ROD CLEVISES, BOOTS, AND TIE RODS ON THE NEW WR EDITION BILLET RACK

\*\*\*IF YOU ARE RE-USING STOCK TIE RODS, RE-INSTALL PER FACTORY SERVICE PROCEDURE. (USE RED LOCTITE ON THREADS INTO RACK BAR. SKIP TO STEP 17.



**12.** BE SURE TO LOOK ON THE BACK OF THE CLEVIS FOR THE "L" FOR LEFT (DRIVERS SIDE) AND THE "R" FOR RIGHT (PASSENGER SIDE)

**13.** USE RED LOCTITE ON THE THROUGH BOLT AND INSTALL THE CLEVISES ON THE RACK

**14.** USING A 10mm ALLEN SOCKET, TORQUE THE BOLTS TO 72 FT/LBS. WE USE A VISE WITH SOFT JAWS TO HOLD THE CLEVIS WHILE TIGHTENING.



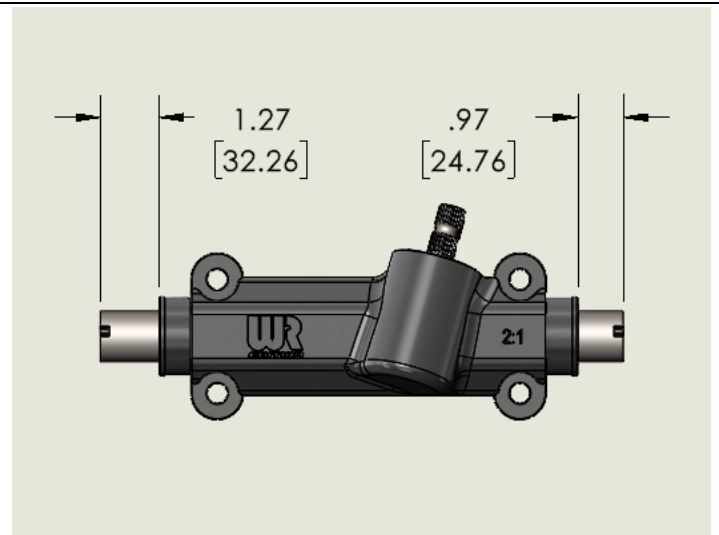
**15.** NOTING WHICH ARE THE DRIVER/PASSENGER SIDE TIE RODS (LOGO ON TIE ROD SHOULD READ CORRECT FROM FRONT OF CAR). UNSCREW THE HEIM JOINT AND JAM NUT FROM THE TIE ROD. INSTALL THE HEIM JOINTS USING THE PINS AND CLIPS. (SNAP RING PLIERS).

(WE INSTALL THE CLIPS ON THE FRONT SIDE FOR EASY ACCESS LATER).

**16.** NOTE: THE DRIVER SIDE CLEVIS BOTTOMS OUT/STOPS INSIDE THE RACK NOT ON THE END OF THE HOUSING, ENSURE THAT THE FACTORY OR REPLACEMENT TIE RODS BOTTOM INSIDE THE RACK HOUSING.



**17.** CENTER THE STEERING RACK BAR. USING CALIPERS OR TAPE MEASURE, MEASURE HOW FAR THE RACK BAR IS STICKING OUT OF THE HOUSING. **CENTER IS 0.97"(1") OUT THE DRIVER SIDE AND 1.27"(1-1/4") ON THE PASSENGER SIDE.** MARK THE TOP OF THE RACK HOUSINGS TO SPLINES WITH PAINT MARKER TO KEEP CENTERED AFTER BOOTS ARE INSTALLED.





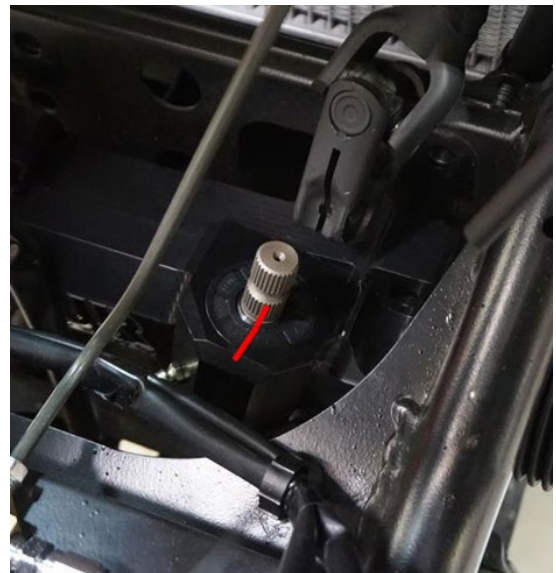
**18. INSTALL NEW BOOTS WITH THEIR NEW CLAMPS, OR YOUR OLD BOOTS WITH A ZIP TIE ON INNER SIDE AND THE FACTORY CLAMP ON OUTER END.**

**19. INSTALL NUTS ON HEIMS, MAKING SURE THAT THEY ARE SCREWED ALL THE WAY ON AND THE BOOT IS PUSHED UP AGAINST THE HEIM AS FAR AS IT WILL GO.**



**20. MAKE SURE THAT YOUR STEERING WHEEL IS STRAIGHT AND RACK IS STILL CENTERED FROM STEP 17.**

**21. INSTALL THE NEW RACK ASSEMBLY INTO THE CAR, ALIGNING SPLINES ON RACK AND STEERING SHAFT. THIS MAY TAKE A COUPLE TRIES TO GET THE SPLINES STRAIGHT WITH THE STEERING WHEEL. WHEN YOU ARE DONE, THE RACK SHOULD BE FLAT ON THE BASE PLATE WITH THE RACK/CLEAVISES CENTERED AS WELL AS THE STEERING WHEEL CENTERED.**

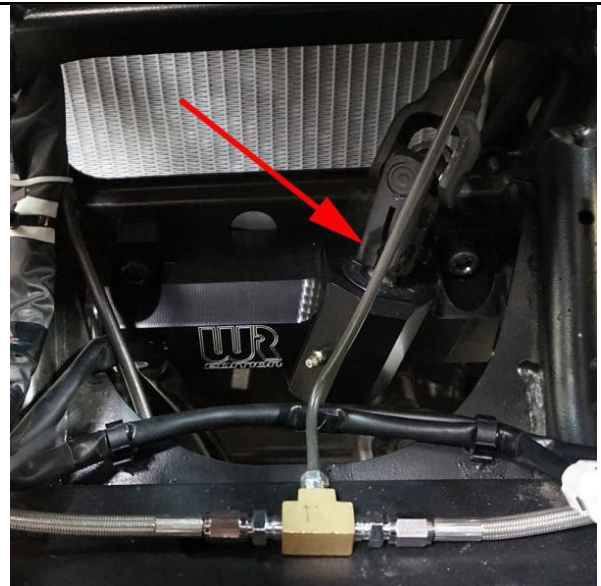


**22. START ALL 4 RE-USED MOUNTING BOLTS, FINGER TIGHT. BE SURE TO USE RED LOCTITE ON THEM.**

**23. USING RED LOCTITE, INSTALL THE U-JOINT ALLEN BOLT FINGER TIGHT.**

**24. ONCE THE STEERING SHAFT IS ATTACHED, TIGHTEN AND TORQUE THE 4 MOUNTING BOLTS TO 35 FT/LBS.**

**25. TIGHTEN AND TORQUE THE U-JOINT ALLEN BOLT TO 24FT/LBS.**



**26.** TURN STEERING WHEEL BACK AND FORTH TO VERIFY THAT EVERYTHING FEELS SMOOTH AND FREE. MAKE SURE THERE IS NO BINDING OR ROUGH SPOTS. IF THERE IS, THEN LOOSEN AND RE TRY STEP 24/25.

**27.** INSTALL TIE RODS. WE USUALLY BOTTOM THE TIE RODS ALL THE WAY IN ON THE INSIDE HEIMS AND LEAVE THE OUTSIDE HEIMS ABOUT 1/8" FROM BOTTOMING THREADS TO START.

**28.** INSTALL THE FRONT TIRES

**29.** LOWER VEHICLE TO THE GROUND AND SETTLE (MOVE THE VEHICLE FORWARD AND BACKWARDS A COUPLE TIMES TO SETTLE)



**30.** ADJUST THE TOE SETTING BY COMPARING THE FRONT AND THE REAR OF THE TIRE AT THE SAME HEIGHT. THE FRONT SHOULD BE 1/8" TO 1/4" WIDER THAN THE REAR FOR A TOE OUT SETTING LIKE WE RUN. WHEN YOU ARE DONE, BOTH SIDES SHOULD BE SIMILAR IF EVERYTHING IS CENTERED PROPERLY. IF NOT, THEN YOU WILL NEED TO REMOVE YOUR STEERING WHEEL AND ADJUST IT TO ONE SIDE OR THE OTHER TO CENTER IT TO THE RACK.

