

2016-2020 Yamaha YXZ1000 HD +4.5" Tie Rod Kit PART# 365-90080

Introduction

- Installation requires a qualified mechanic.
- Read instructions carefully and study the pictures (if included) before attempting installation.
- Check the parts and hardware packages against the parts list to assure that your kit is complete.
- Always wear safety glasses when using power tools.

The OEM Yamaha tie rods are weak and known to bend easily or snap at the stock clevis. Cognito Motorsports's new HD Yamaha YXZ Tie Rod kit replaces the stock tie rod assembly integrating a newly designed stainless steel clevis and steel tie rod. The 4.5" longer kit is intended for the Cognito Motorsports 4.5" long travel kit.

Parts List - 365-90080 YXZ Tie Rod Kit

- 5949 (2) Steering Rack Clevis
- 5958 (2) Tie Rod Tubes
- 5955 (2) Tie Rod Studs
- 5702 (2) Spherical Washers
- 5976 (2) Steering Rack Boots
- (2) Tie Rod End Righthand Thread
- (2) Tie Rod End Lefthand Thread
- (2) Jam Nut Lefthand Thread
- (2) Jam Nut Righthand Thread
- (2) 3/8-16 Nylon Lock Nuts
- (2) M12 Flatwashers
- (2) Shoulder Bolts
- (2) M12 Lock Nuts
- (4) Thick Black Washers
- (2) 12 Point Bolts
- (2) Lock Washers
- (2) M12 Socket Head Cap Screws
- (2) 12" Black Cable Ties

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Installation Instructions

- 1. Raise the front of the YXZ by the frame until the tires are off the ground and secure.
- 2. Remove wheels.
- 3. Remove the tie rod ends from the spindles.
- 4. Take off the stock steering rack boot clamps and pull the boots out so you can access the OEM clevis.
- 5. Unscrew the clevis CCW from the steering rack. The stock clevis uses a lock washer with tabs on it. These tabs will shear off.
- 6. Remove complete OEM tie rod and discard.
- 7. Put Loc-Tite on the M12x1.25x25 socket head cap screw and install the new clevis onto the steering box rack. The tabs on the clevis will align with the slots in the steering box rack. Torque bolt to 40 ft.lbs while holding an adjustable wrench on the rack to prevent damage to steering box. See Figure 1.



Figure 1: Install clevis onto steering box rack.

8. Install the left-hand threaded heim joint (gold colored) onto the clevis with the shoulder bolt, 2 black washers on both sides, and lock washer. Put anti-seize on the heim threads. See Figure 2.

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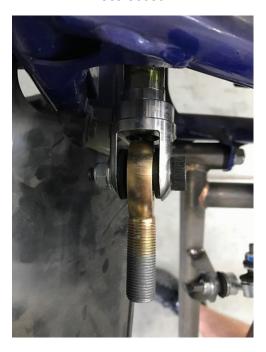


Figure 2: Install heim onto clevis.

9. Install the Cognito supplied steering rack boot over the heim and onto the steering box. The clevis will be inside the boot and the heim joint will snugly fit through the small end of the boot. Fasten the boots with zip ties. See Figure 3.



Figure 3: Steering boot installed over heim.

10. Screw left-hand jam nut onto heim.

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- 11. On the spindle side, put together the right-hand (silver colored) heim joint. Place the Cognito stud into the heim. On the other side, put the spherical washer onto the stud and secure with lock washer and 12-point bolt.
- 12. Install tie rod end assembly into the spindle with a washer and locknut on the other side. Torque to 35 ft.lbs. Use a drop of red threadlocker on the threads at the end of the bolt (farthest from the bolt head) to ensure the threadlocker covers the threads which engage with the spindle pin. Put anti-seize on threads and thread jam nut on tie rod end heim. See Figure 4 for assembly.



Figure 4: Tie rod end assembly.

- 13. Locate the left-hand threaded end of the tie rod shaft. Screw tie rod shaft onto each end of the heim joints evenly and until the wheels are relatively straight.
- 14. Install tires and place YXZ back on the ground.
- 15. At proper ride height, check front wheel toe measurement and adjust as necessary. It should be at 0-1/8" toe in for optimal handling. Tighten jam nuts once desired toe is achieved.
- 16. Double check that everything is tight before riding.

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The following items are exempt from Cognito limited warranty coverage: bushings, bump stops, tie-rod ends (Heim joints) and limiting straps. These parts are "consumables" and designed to wear as a normal part of their duty cycle, therefore they are not considered defective when worn. The aforementioned products are warrantied separately against defects in workmanship, for 60 days from the date of purchase. As a condition of warranty validation, respective Cognito suspension components must be installed as a complete system (not combined with non-Cognito hardware or ancillary parts). Any substitutions or omission of required components will void the warranty. Some minor cosmetic wear and imperfections may occur to parts during shipping, which is not covered under this warranty. This limited warranty does not apply to any components that have been subjected to collision damage, negligence, alteration, abuse, or misuse, and coverage does not extend to products manufactured by third-party companies. Cognito reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of its parts when deemed necessary, without notice.

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