



2016-2017 Yamaha YXZ1000R

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

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.



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.

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.

Instruction set # 8122
365-90080

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Cognito Motorsports, Inc. hereinafter “Cognito,” warrants to the original retail purchaser, that its suspension products are free from workmanship and material defects for as long as the purchaser owns the vehicle on which the product(s) were originally installed. This warranty will be void if any modifications are made to the components, including alterations to the surface finish, i.e.; painting, powder coating, plating, and/or welding, or if they are improperly installed. Cognito truck suspension products are not designed nor intended to be installed on “competition” vehicles used in race applications, stunt or for exhibition purposes that are outside of the intended operating conditions specified by the manufacturer. Racing and competition are defined as any contests between two or more vehicles; or vehicles competing individually on off road circuits in timed events (whether or not such contests are for an award or prize).

This warranty does not include coverage for police, taxi, government or commercial vehicles, and the warranty does not cover Cognito products sold outside of the USA. Cognito’s obligations under this warranty are specified and applied at its sole discretion, and warranty coverage is limited to repair or replacement of the defective product(s). Any and all costs of removal, installation or reinstallation; freight charges, incidental or consequential damages associated with the covered products are expressly excluded from this warranty.

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 warranted 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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Product returns will not be accepted without prior written approval from an authorized Cognito representative. All products being returned must be shipped via trackable, prepaid freight. Returned products are subject to a 25% percent restocking fee. The eligible return period for products purchased directly from Cognito is 30 days from the verified date when the product(s) were originally received by the purchaser.

Product Safety Advisory

The installation of Cognito steering and suspension components will modify your vehicle’s original factory equipment and geometry, which may cause it to handle differently than a stock (unaltered) vehicle. Installation of these components is not intended to strengthen nor reinforce the vehicle’s frame, nor are they designed to increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for proper attachment, torque specifications, operation, and for any potential unusual wear or damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Modifying vehicle height combined with off road operation may increase your vehicle’s susceptibility to rollover conditions, which may cause serious injury or death. Many states regulate allowable vehicle height modifications, and it is your responsibility to know and comply with the legal requirements specified by the laws where you reside. Modifications to your vehicle’s ride height may also affect the ride quality, driver input response, trackability and handling, and wear to your vehicle’s suspension components and tires.