



Cognito Heavy Duty OE Replacement Tie Rod Kit For 17-23 Can-Am Maverick X3

INSTALL INSTRUCTIONS:

Cognito Heavy Duty OE Replacement Tie Rod Kit For 17-23 Can-Am
Maverick X3
SKU: 370-90422

PARTS LIST FOR SKU: 370-90422

QTY	PART #	DESCRIPTION
2	8543	Control Arm Assembly, Driver
1	HP9210	Control Arm Assembly, Passenger

PARTS LIST FOR SKU: HP9210

QTY	PART #	DESCRIPTION
2	RODEND-JMXL10T	Jmxl10T With F-1 Fit
2	JAM-NUT-SJNL10	5/8 Jam Nut
2	6214	LONG STEERING MISALIGNMENT SPACER
2	6215	SHORT STEERING MISALIGNMENT SPACER

**WARNING**

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.

Modification of vehicle suspension can interfere with ride-height sensors, active suspension, lane departure features, semi-autonomous, and autonomous driving features. It is the responsibility of the mechanic to determine feature compatibility prior to installation. Recalibration of sensors may be required in the event of any modification.



INTRODUCTION

The Cognito Heavy Duty OE Replacement Tie Rod Kit is designed to be a direct replacement for the OE X3 tie rods. The OE tie rods are weak and prone to bending.

The X3 is known to have issues with bump-steer. The Cognito Tie Rods resolve the bump-steer problem by correcting the outer tie rod geometry.

This kit has been engineered to withstand the abuse of racing and hard recreational use.

Note: OE inner tie rod joints are reused with this kit.

TECH NOTES

- Read instructions carefully and study the pictures (if included) before attempting installation.
- If this product was purchased as part of a bundle/package. Familiarize yourself with each set of instructions included with the bundle/package before beginning.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.

REQUIREMENTS

- Installation requires a qualified mechanic.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM manual.
- Always wear safety glasses when using power tools.
- When a lift is required to perform the installation of these products and always ensure the vehicle is properly supported before attempting installation or serious injury may occur.



INSTALLATION

1. Raise the front of your X3 up and support by the frame so that the suspension droops out and tires are off the ground by at least an inch. Remove front tires.
2. Break the interior jam nut on the tie rod loose.
3. Remove the bolt holding the tie rod to the spindle. Turn the tie rod and remove the OEM tie rod from the vehicle.
4. Replace the OEM tie rod with the Cognito tie rod. The tall misalignment spacer goes on top on the spindle side.
5. Torque the **12 mm** bolts on the spindle to **75 ft. lbs. (101 Nm)**.
6. Repeat for the opposite side.
7. Now you can turn the adjuster tube and the tie rod length will change. Once the toe is set, then tighten the jam nuts against the adjuster tube to lock it in place, make sure the outer rod ends are clocked appropriately for articulation, this takes a little patience since while tightening the jam nuts, the rod ends want to turn, just get a small crescent wrench to hold the rod end while tightening the jam nut but also need to keep the adjuster tube from turning while tightening the jam nut. Get some help if needed. This is important so that there is no binding.



WARRANTY / RETURN POLICY / SAFETY

Cognito Limited Lifetime Warranty

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 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.

Return Policy

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.