



2017-Present Can-Am Maverick X3 XRS Radius Rod Kit

PART#: 370-90370 (Lower Radius Rod Kit)

370-90371 (Middle Radius Rod Kit)

370-90378 (Fixed Middle Radius Rod Kit)

370-90372 (Upper Radius Rod Kit)

370-90379 (Fixed Upper Radius Rod Kit)

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 Can-Am radius rods under heavy duty use are prone to bending and wearing out the bearings in the ends which become very sloppy. A bent or broken radius rod can cause much more damage sometimes breaking or bending rear axles, rear CV joints, trailing arms, rear shock shafts, and sway bar end links.
- The Cognito upper and middle radius rods use rod ends that are right hand thread, so that if the jam nuts come loose, the length does not change and cause damage. The lower radius rods are a fixed length. Any adjustment can be made with the upper and middle radius rods.

Parts List: 370-90370 (Lower Radius Rod Kit)

- (2) 8479 Lower Radius Rod Assembly
- (8) 6141 Misalignment Spacer

Parts List: 370-90371 (Middle Radius Rod Kit)

- (2) 8478 Middle Radius Rod
- (4) Rod end JMX10T
- (4) 5/8-18 jam nut
- (8) 6141 Misalignment Spacer

Parts List: 370-90378 (Fixed Middle Radius Rod Kit)

- (2) 8508 Fixed Middle Radius Rod
- (8) 6141 Misalignment Spacer

Parts List: 370-90372 (Upper Radius Rod Kit)

- (2) 8477 Upper Radius Rod
- (4) Rod end JMX10T
- (4) 5/8-18 jam nut
- (8) 6141 Misalignment Spacer

Parts List: 370-90378 (Fixed Upper Radius Rod Kit)

- (2) 8507 Fixed Upper Radius Rod
- (8) 6141 Misalignment Spacer

Installation Instructions

1. All hardware will be re-used, so retain all removed hardware for re-use.
2. Raise the rear 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 rear tires using 19mm socket.
3. Remove the fasteners holding the outer ends of the stock radius rods to the spindle bearing carriers, and the inner ends from the chassis and radius rod plate. Remove stock radius rods from the car.
4. If installing uppers and/or middles, locate the included rod ends and jam nuts. Thread the jam nuts all the way onto the rod ends, finger tight. Now lubricate the threads of the radius rod bars, then thread in the rod ends into all the ends of the radius rod bars, thread them all the way in.
 - a. If installing the fixed upper or middle radius rods no adjustments will be required. Put misalignment spacers inside each end, then go to step 9.
5. The 2 longest bars are the middle rods and the 2 shortest are the upper rods. The lower radius rod is a fixed length. Tighten the jam nut on one end of the upper and/or middle radius rods.
6. Put a misalignment spacer in each side of the rod end. If installing upper and/or middle, grab the corresponding stock radius rod and put a bolt through one end of the Cognito radius rod and one end of the stock radius rod so they are parallel.
7. Put another bolt through the other end of the stock radius rod and through the other rod end of the Cognito radius rod to match the stock length. Tighten the jam nut. It is difficult to tighten these jam nuts when installed on the car, and we don't want the length to change; therefore we are tightening the jam nuts on the bench/visé prior to installing on the car.
8. Do Step 6 and 7 for each upper and/or middle radius rod.
9. Since the lower Cognito radius rod is fixed, there is no length matching needed. Put a misalignment spacer in each end of the Uniball bearing and install on the car.
10. Now install one end of the radius rod assemblies to the spindle bearing carriers. The middle radius rod had two thin washers on the outer mounting point when it was removed. One goes between the misalignment spacer and the spindle, and the other goes between the spindle and locknut. Tighten to 77 ft-lbs.
11. Install the inner ends of the radius rods onto the studs sticking out of the frame and put the radius rod plate back on and then the nuts. Torque each nut to 77 ft.lbs.
12. Install rear wheels and torque to 89 ft.lbs.
13. If the alignment is slightly off and you are still using the OEM radius rod plate, it is caused due to the large holes in the stock radius rod plate. For minuet adjustments, simply loosen the nut on the radius rod plate and pull/push the tire in the direction you desire to change, and then tighten the nut back to 77 ft.lbs. The middle radius rod adjusts the toe and the upper radius rod adjusts the camber.

Cognito Motorsports

Limited Lifetime Warranty

Cognito Motorsports warrants, to the original retail purchaser, that its suspension products are free from defects in workmanship and material for as long as the purchaser owns the vehicle on which the product was originally installed. Cognito Motorsports does not warrant the product for finish, alterations, modifications, and/or original installation contrary to specifications of Cognito Motorsports. Cognito Motorsports suspension products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities involving abnormal abuse other than the vehicle was originally designed to handle or endure. (A "RACE" is defined as any contest between two or more vehicles, and/or contest of one or more vehicle against the clock, whether or not such contest is for a prize.)

This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warrant are sales outside of the United States of America. Alterations to the finish of the parts including but not limited to painting, powder coating, plating, and/or welding will void all warranties. Cognito Motorsports obligation under this warranty is limited to the repair or replacement, at Cognito Motorsports option of the defective product. Any and all costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty.

This warranty excludes the following items: bushings, bump stops, tie-rod ends, limiting straps, and heim joints. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days of purchase for defects in workmanship. Cognito Motorsports suspension components must be installed as a complete system. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty. This warranty shall not apply to any product that had been subject to accident, negligence, alteration, abuse, or misuse. Cognito Motorsports does not warrant products not manufactured by Cognito Motorsports. Cognito Motorsports reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of parts when deemed necessary by Cognito Motorsports without written notice.

Return Policy

Cognito Motorsports has a no refund return policy. Under special circumstances, returns might be accepted with prior written approval. All returned product will be shipped freight prepaid. Product returned is subject to a 25% restocking fee. No returns will be accepted after 30 days upon receipt of product.

Product Consumer Safety and Warning

The installation of this kit will modify the suspension of your vehicle and may cause it to handle significantly different than a factory equipped vehicle. Installing larger tires with modified suspension and increased ground clearance will significantly alter the handling characteristics of the vehicle, and may result in increased braking distances as well as changes in vehicle maneuverability and handling compared to the factory equipped vehicle. As with any vehicle, extreme caution and care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts and drive safely, recognizing the reduced speeds and specialized driving techniques is required.

This suspension system will not strengthen nor reinforce the stock frame of the vehicle, nor will it increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for tightness of fit or any damage. Installation of these parts will modify the height of the vehicle and will raise the center of gravity. Altered height modifications and off-road operation may increase your vehicle's susceptibility to roll over conditions and may cause serious injury or death. Many states regulate the height modification to each vehicle. Check the laws in your state for exact specifications. Height modifications may affect the reaction, ride, handling, and wear factor of your vehicle's components.

Failure to drive this vehicle safely may result in injury or death! Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications and combinations of modifications are not recommended, unsafe, and may not be permitted in your state. Consult your vehicle owner's manual, the instructions accompanying this product, and your state laws before undertaking these modifications. The owner of the modified vehicle and the qualified mechanic required to install this product are responsible for the legality and safety of the vehicle being modified.