

High Clearance Radius Rods for CanAm Maverick X3

INSTALL INSTRUCTIONS:

High Clearance Radius Rods for CanAm Maverick X3
SKU: 370-91187

PARTS LIST FOR SKU: 370-91187

QUANTITY	PART #	DESCRIPTION
2	80046	Assembled Lower Radius Rod
2	80048	Assembled Middle Radius Rod
1	HP9326	Badge Hardware Pack



PARTS LIST FOR SKU: 80046

QUANTITY	PART #	DESCRIPTION
1	6924	Radius Rod, Lower
2	UNI-BALL-WSSX12T-F1	Uniball WSSX12T 0.75" w/ F-1Fit & Teflon Liner
2	HARDWARE-IRR-1-3/8"	1.375" Internal Retaining Ring
4	6926	Misalignment Spacer
1	6679	Radius Rod Bushing

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.

PARTS LIST FOR SKU: 80048

QUANTITY	PART #	DESCRIPTION
1	8818	Radius Rod, Middle
1	UNI-BALL-WSSX12T-F1	Uniball WSSX12T 0.75" w/ F-1 Fit & Teflon Liner
1	HARDWARE-IRR-1-3/8"	1.375" Internal Retaining Ring
1	6928	Turnbuckle
1	JAM-NUT-SJNL12	3/4"-16 Left Hand Zinc Jam Nut
1	RODEND-JMX12T	Rodend JMX12T w/ F-1 Fit & Teflon Liner
1	HARDWARE-36266	3/4"-16 Zinc Jam Nut
4	6926	Misalignment Spacer

PARTS LIST FOR SKU: HP9326

QUANTITY	PART #	DESCRIPTION
2	2100	Cognito Badge
4	HARDWARE-4-40X3/8-BH	#4-40 x 3/8" Button Head Hex Drive Screw
4	HARDWARE-4-40-LN	#4-40 Nylon Insert Lock Nut
4	HARDWARE-FW-NO4	#4 Flat Washer



INTRODUCTION

- The OEM CanAm 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.
- Please note, it is highly recommended to use the Cognito Radius Rod Cage in place of the stock radius rod plate.
- This kit features an adjustable middle radius rod for controlling toe and a fixed-length lower rod. Pair this kit with the Cognito adjustable upper radius rod to control camber. The middle rod comes set to OEM length.

TECH NOTES

- Read instructions carefully and study the pictures (if included) before attempting installation.
- If this product was purchased as part of a kit each kit, and options to kits, are packaged separately. Therefore installation procedures are covered in separate instructions. Familiarize yourself with each specific set of instructions before beginning.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.
- Tools: 19mm socket, 1-1/8" open wrench, crescent wrench

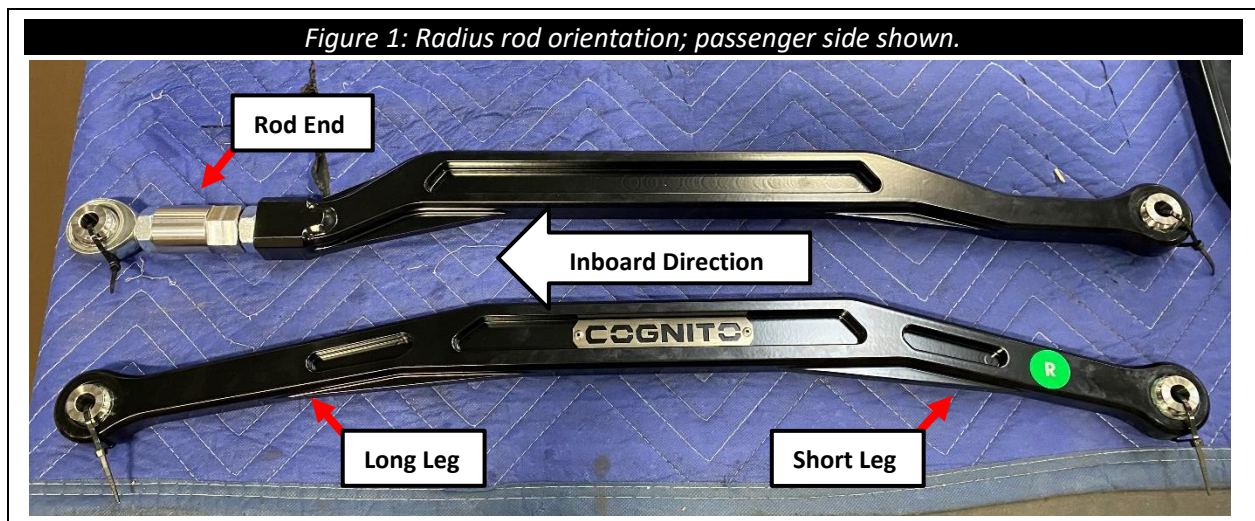
REQUIREMENTS

- 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. 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. Install outboard end of the radius rod assemblies to the spindle bearing carriers. Tighten to 77 ft-lbs.

Note: The rod end of the middle radius rod and the long leg of the lower radius rod both point towards the inboard of the vehicle, see Figure 1. 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.



Note: Older versions of the Cognito trailing arm will require trimming for clearance for the lower radius rod. Use a die grinder to trim as shown in Figures 2 and 3 . Trimming is not required with the OEM CanAm arm.

Figure 2: Trimming Location

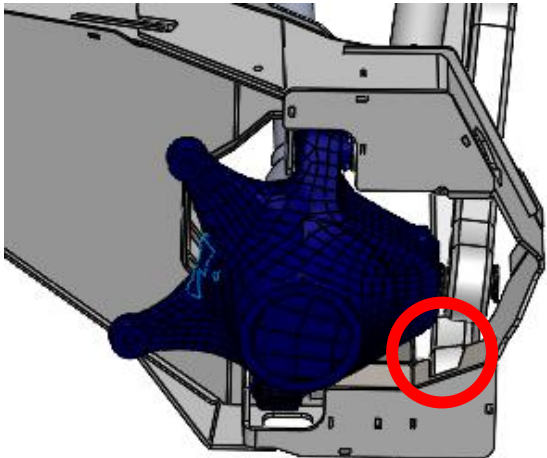
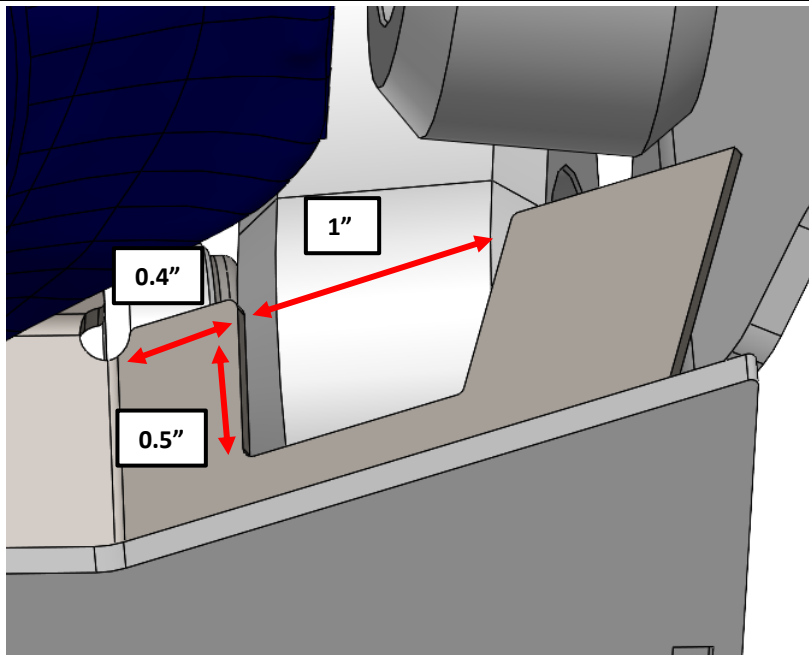


Figure 3: Trimming dimensions.



5. Install the inner ends of the radius rods onto the studs sticking out of the frame. Place radius rod bushing between lower radius rod and frame of vehicle.
6. Install the radius rod plate back and then the nuts. Torque each nut to 77 ft.lbs.
7. Install rear wheels and torque to 89 ft.lbs.
8. Use the hardware from **HP9326** to install Cognito badge on each lower radius rod.

To Adjust Toe: Use a 1-1/8" open wrench or a large crescent wrench to loosen both jam nuts on the middle rod. Turn the turnbuckle to achieve desired toe angle. Tighten jam nuts. Regularly re-tighten jam nuts.



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 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.

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.