



2017-Present Can-Am Maverick X3 XRS Trailing Arm Kit

PART# 370-90364

Introduction

- The Cognito Can-Am Maverick X3 XRS Trailing arms are a direct replacement for factory XRS arms.
- Constructed of chromoly to be high in strength while being lightweight.
- 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.

Parts List – 370-90364

- 8475 Driver Side Trailing Arm
- 8476 Passenger Side Trailing Arm
- (2) HP9170 Brake Line Clamp Hardware
- (2) 6134, Rear Shock Spring Retainer
- (2) 2319, Shock Guard Bracket
- HP9193 Trailing Arm Hardware

Installation Instructions

1. All hardware will be re-used except the shock bolt and the brake line retaining bolts, so retain all removed hardware for re-use.
2. Raise the rear of your Maverick 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.
3. Using an 18mm socket and wrench, remove the sway bar end link from the trailing arms and lift the sway bar out of the way.
4. Drill out the rivets holding the brake line clamps to trailing arm.
5. Remove axle nut cover with a flat head screwdriver. Take out the cotter pin and remove the axle nut with a 30mm socket.
6. Remove the two bolts holding each brake caliper to the spindle and tie the calipers up out of the way. Mark the hubs LEFT and RIGHT and remove them from the spindle.
7. With a 19mm wrench and 18mm socket, remove the inner radius rod bolt from the spindle. Retain the hardware.

8. With an 18mm wrench and socket, remove the two bolts that go through the upper and lower radius rods and the spindle. Retain hardware.
9. Remove spindles from the arm and axle.
10. Remove the rear shocks. They will need to be completely removed to install the new Cognito spring retainer and shock guard bracket. Be sure to support the trailing arm so it doesn't fall after removing the shock bolt.
11. Take out the pivot bolt for the trailing arm with an 18mm wrench and socket and remove the trailing arm.
12. Locate the Cognito trailing arms. The Uniball bearings and internal retaining rings are preinstalled at the factory. Ensure the retaining ring is properly seated inside the pivot end. If you did not buy the Cognito trailing arm rock guards use the supplied button head bolts to plug up the two mounting holes on each side of the trailing arms.
13. Locate the 4 included misalignment spacers and insert one into each side of the trailing arm pivot end from the previous step. Fasten the Cognito trailing arms to the frame pivots with the stock bolt and nut. Torque to 77 ft.lbs.
14. Using the original hardware, bolt the sway bar end link to the trailing arm and tighten to 77 ft.lbs. If replacing the end links with the Cognito end link, use the provided hardware.
15. Next, the shocks need to be retrofitted to fit. With a punch and hammer or shock adjuster tool, loosen the lock nut on the shock body and screw it up 3-4 inches. Screw the adjuster nut up to the lock nut.
16. Push the bumpstops up the shaft and remove the stock shock retainer. It is the piece that the shock guard is mounted too. Using an 8mm socket, remove the 3 screws holding the shock guard to the retainer.
17. Install the new Cognito spring retainer on the bottom of the shocks as well as the new supplied shock guard bracket.



Figure 1: The shocks should look as pictured after installing the spring retainer and shock guard bracket.

18. Screw down the adjustor and lock nut for the spring until there is some pressure on the spring. Do not tighten the lock nut at this time as the ride height will need to be set.
19. Mount the shock back to the frame and use the new M12 bolt and hardware to mount the bottom of the shock to the Cognito trailing arms. Use a washer under the head of the bolt and under the nut. Torque to 77 ft.lbs.
20. Put the spindle into the trailing arm. Swing the arm away from the car and line up the radius rods and the axle to go to their respective locations. Using the stock hardware, bolt the upper and lower radius rod through the arm and spindle. Bolt up the middle radius rod to the spindle. This bolt has two thin washers from the factory. One washer goes between the radius rod and the spindle and the other goes between the nut and the spindle. Torque these three bolts to 77 ft.lbs.
21. Place the hub back onto the axle and into the spindle, lining up the splines. Put the axle nut washer and nut onto the axle and torque to 184 ft.lbs. Back it off slightly if needed to get the cotter pin installed in the castle nut and hole in the stub of the axle. Bend the cotter pin to secure.
22. Locate the brake calipers and mount them to the spindle. Torque to 37 ft.lbs.
23. Route the brake lines as shown in Figure 2 to the Cognito trailing arm. Locate the hardware pack with the brake line clamp hardware. Remove the OEM brake line clamps from the brake line and install the new ones. Fasten the clamps to the trailing arm with the #10 hardware. A washer goes between the bolt head and the clamp, and another washer between the nut and the tab on the trailing arm.



Figure 2: Brake line routing.

24. Install the tires back onto the hub. Torque the lug nuts to 89ft.lbs in an X pattern.

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25. Set the car back onto the ground and adjust the ride height. Recommended for 30 inch tires is 15” from ground to bottom of skid plate. After adjusting, tighten the locknut.

REMINDER: It is important to bleed the brakes and check fluid levels after changing any brake lines or brake components on a vehicle to insure proper function of the brake system. Please follow proper procedure and verify brake system is functioning properly before using vehicle.

Cognito Motorsports

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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.

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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.