

## Introduction

The RD-M1 Cross Bar Kits provide the brackets and hardware to mount the RD-M1 assembly to your vehicle's truck bed and supports the RD-M1 assembly.



*Note that instructions and graphics may vary depending on if you are using the North American or European kits.*

## Installation

### Post Extension Clamps

Install the post extension front clamp (1007510-01) and post extension back clamp (1007511-01) with M10 bolts (1006412-01 2 ea) and M10 washers (1006415-01 2 ea).

### Rod End

1. Fasten the 1/2-20 Rod Ends (1013484-01 2 ea) into the 1/2-20 threaded cross bars (1013256-01 2 ea) using the supplied jam nuts.
2. Fasten the 3/8-24 Rod Ends (1013485-01 2 ea) into the 3/8-24 threaded cross bars (1013257-01 2 ea) using the supplied jam nuts.

### Cross Bar

1. Insert the unthreaded ends of each cross bar into the clamp (1013255-01 2 ea).
2. Tighten the 5/16-18 Socket head screws (2070-0114 2 ea) to clamp the 7/8" OD cross bars in place.
3. Fasten the 1/2" Rod Ends (1013484-01 2 ea) to the Post Extension Clamp (1007510-01) using the supplied M12 Bolts (1009229-01 2 ea) and washers (1009342-01 2 ea).



*There are two options for attaching the cross bars to your vehicle. If using a truck, the clamps can fasten the cross bars to the lip of the truck bed. If using a vehicle without a truck bed or suitable lip around the bed walls, use the vacuum cups to fasten the cross bars to the roof of the vehicle.*

### Option A - Truck Bed Clamp

1. Fasten the 3/8" Rod Ends (1013485-01 2 ea) to the clamp tops (1013261-01 2 ea) using the supplied 3/8-16 bolts (2080-0137 2 ea), washers (2060-0182 2 ea), and spacers (1013487-01 2 ea) as shown in Figure 1.
2. Place the top and bottom clamps around the lip of the truck bed and tighten down with the 1/4-20x2" bolts (1013482-01 2 ea) and washers (2060-0182 2 ea) to securely fasten the assembly to the truck bed.



*Position the cross bars at a 45 degree angle with the truck bed walls for the best results.*

3. Tighten the 5/16-18 Socket head screws (2070-0114 2 ea) to clamp the 3/4" OD cross bars in place.

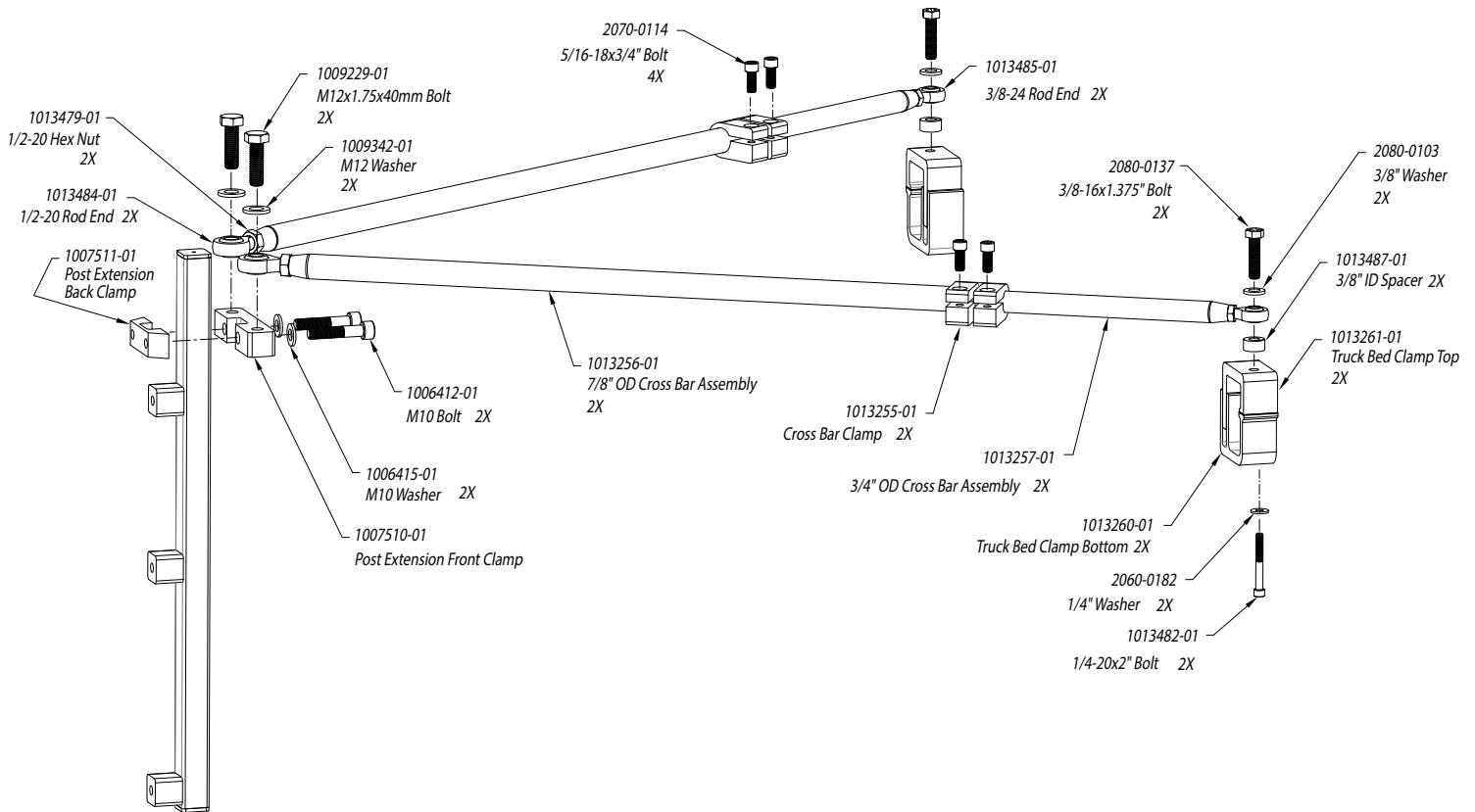


Figure 1: Cross Bar Clamp Mount

## Option B- Vacuum Cup



When using the vacuum cups to attach the cross bars to your vehicle, ensure the surface of the vehicle is clean and free of any debris. Periodically check that the vacuum cups are adhered properly and have a strong vacuum seal. Always check that the vacuum cups have a strong seal before each trip in the vehicle. Note that the vacuum cups may lose their seal when undergoing a significant change in temperature, and may need to be resealed.

1. Fasten the threaded mount to the RAM vacuum cup using the supplied screws. See Figure 2.
2. Fasten the 3/8" Rod Ends (1013485-01 2 ea) to the top of the vacuum cup mount using the 3/8-16x1" Bolts (2080-0108 2 ea) and washers (2080-0103 2 ea)



Position the cross bars at a 45 degree angle with the truck bed walls for the best results.

3. Attach the vacuum cups to the roof of the vehicle by pressing the cups against the clean surface and twisting the tabs on each RAM vacuum cup.

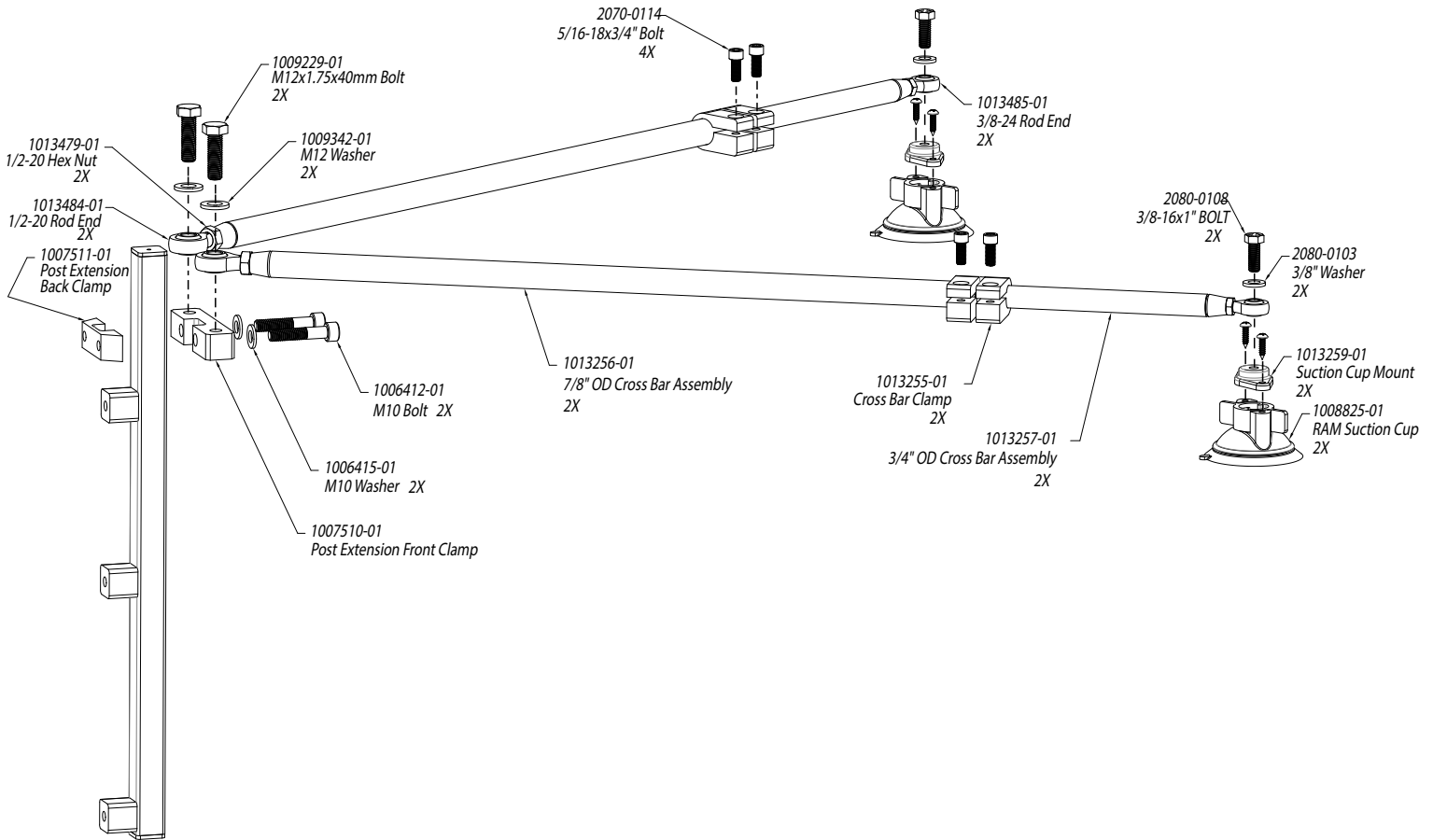


Figure 2: Cross Bar Suction Mount

4. Before tightening the crossbar bolts onto the post extension clamp, loosen the ball hitch bracket and plumb the hitch post as shown in Figure 3.
5. Tighten the hitch mount bolts (4 ea), and the M12 crossbar bolts (2 ea).

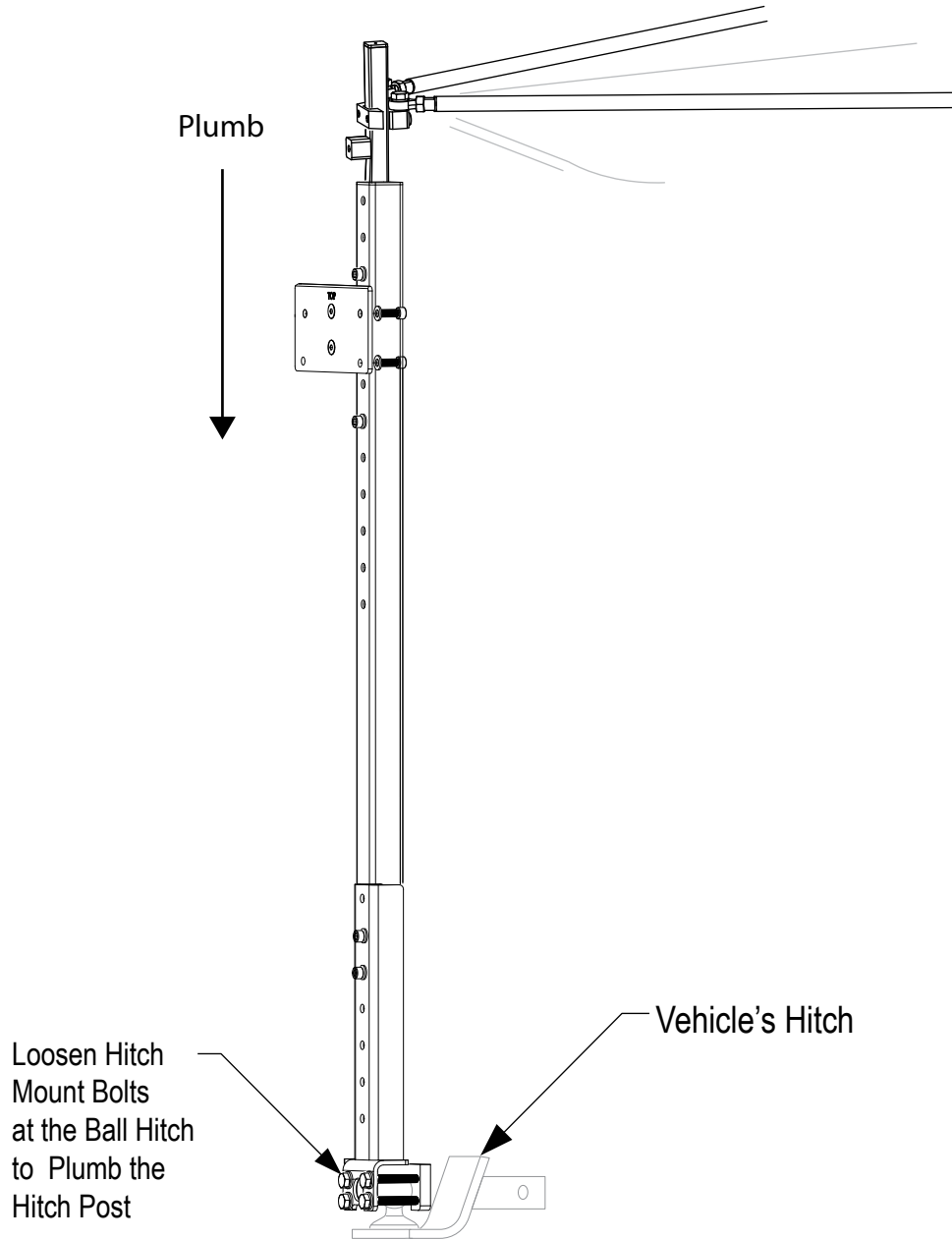


Figure 3: Plumb Hitch Mount Post



For more information contact Synergy Positioning Systems or visit the Synergy Positioning Systems website at [www.synergypositioning.co.nz](http://www.synergypositioning.co.nz)  
All branches: Phone 0800 867 266 Email: [info@synergypositioning.co.nz](mailto:info@synergypositioning.co.nz)