

RADGNARACY



RGP-100 Allbike Attachment USER MANUAL

Important! Read all instructions before using or servicing this product. Keep this manual in a location that is readily available to users and service technicians.



Modular Racks Redefined



INTRODUCTION

Thank you for purchasing the RadGnaRack Modular Rack. The RadGnaRack is a modular hitch mounted equipment transportation device. This module is designed for convenience in the loading of heavy eBikes, mountain or road bikes. Future modules will allow for transportation of other large outdoor adventure equipment or storage resources.

Anyone who uses this product must understand how to assemble, install, and use the product before loading bicycles and traveling. This product is intended for the transportation of bicycles only. Any other purposes will nullify the warranty. Rad Gnar Products holds no responsibility or liability for the improper use of this product. Failure to adhere to safety warnings, use instructions, and maintenance may result in accidents, equipment malfunction, and severe injury or death.

For other questions or inquiries, contact us at:

E-mail: info@radgnarack.com

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1.0 SAFETY

Use of this product must comply with all applicable national, state, and local laws, regulations, and safety standards. Failure to heed these safety actions and warnings may result in serious injury or death.

WARNING!

Important! The following safety warnings could result in serious injury or death.

The rack has moving parts that may pinch body parts during assembly and use resulting in serious injury. When the rack locks into place a user could injure themselves on the top while locking. Always keep body parts (i.e., fingers, hair) away from the moving parts pinch points.

CAUTION!

Important! The following safety warnings could result in minor or moderate injury.

Mishandling during use and assembly of the rack may cause the rack to tip over, drop, or fall resulting in impact with body parts and minor or moderate injury. Always take caution when handling the rack to ensure it does not make unexpected impact with your body.

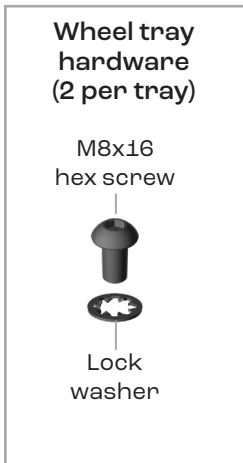
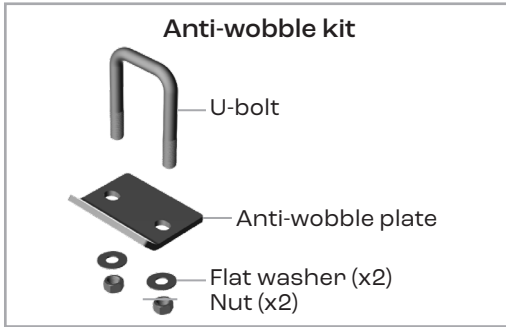
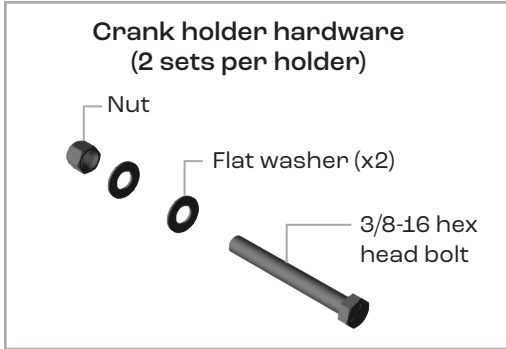
NOTICE

Improper maintenance of the rack may result in unexpected movement of the load during use. Always check that the rack and vehicle receiver are in working condition and all bolts are tight before each use.

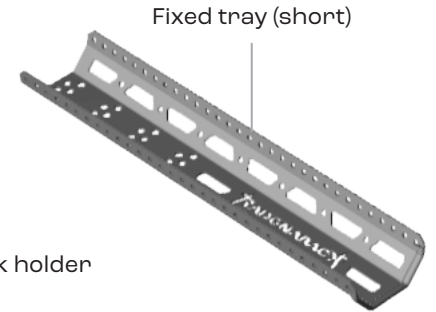
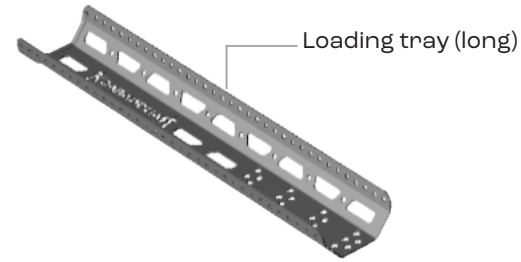
Use of the rack to transport objects or equipment it was not designed for may result in unexpected accidents and/or damage to the product. Overloading the rack or using the rack for purposes it was not designed for will void the products warranty (see section 7.0 for product specifications).

2.0 PARTS AND FEATURES

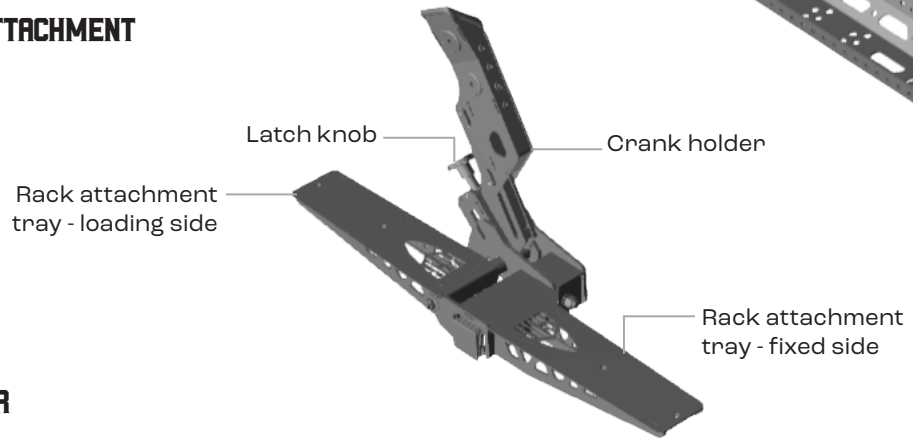
The following parts are included with your bike rack. If necessary, please contact us at ABC-DEF-GHIJ for missing, damaged or replacement parts.



WHEEL TRAYS



BIKE RACK ATTACHMENT



MODULAR BAR



Important! Due to the variety of hitch pins and personal preferences, the hitch pin is not included. You will need to purchase a hitch pin before installing the rack.

3.0 INSTALLING THE BIKE RACK

Before assembling and installing the bike rack:

1. Carefully cut the zip ties used for shipping.
2. Check that all the parts are included and undamaged.

Installing the bike rack consists of the following steps:

- Assembling, and attaching, the **Anti-wobble Plate**
- Inserting the **Modular Bar** into the hitch receiver
- Attaching the **Bike Rack Attachments** to the **Modular Bar**
- Attaching the **Wheel Trays** to the **Bike Rack Attachments**
- Check the **Wheel Trays** position
- Adjust the **Crank Holder** position (if necessary)

3.1 ASSEMBLE THE ANTI-WOBBLE PLATE

1. Insert the square U-bolt through the **Anti-wobble Plate** (Image 3.1.1).
2. Place the flat washers onto the U-bolt.
3. Screw the shoulder nuts onto the U-bolt. Loosely tighten so the plate can slide under the hitch receiver after the **Modular Bar** is inserted.

3.2 INSERT THE MODULAR BAR

4. Orient the **Anti-wobble Plate** so the flat side is towards the hitch receiver. Slide the **Anti-wobble plate** onto the **Modular Bar** (Image 3.2.1).
5. Insert the **Modular Bar** into the hitch receiver as far as possible. Line up the holes in the hitch receiver with the holes in the **Modular Bar**.

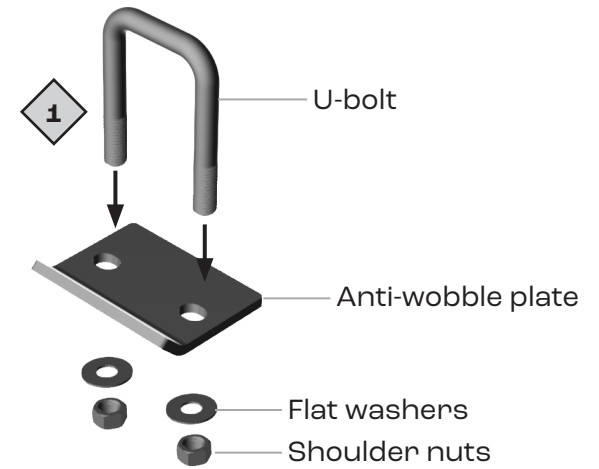


Image 3.1.1 Assemble the anti-wobble plate

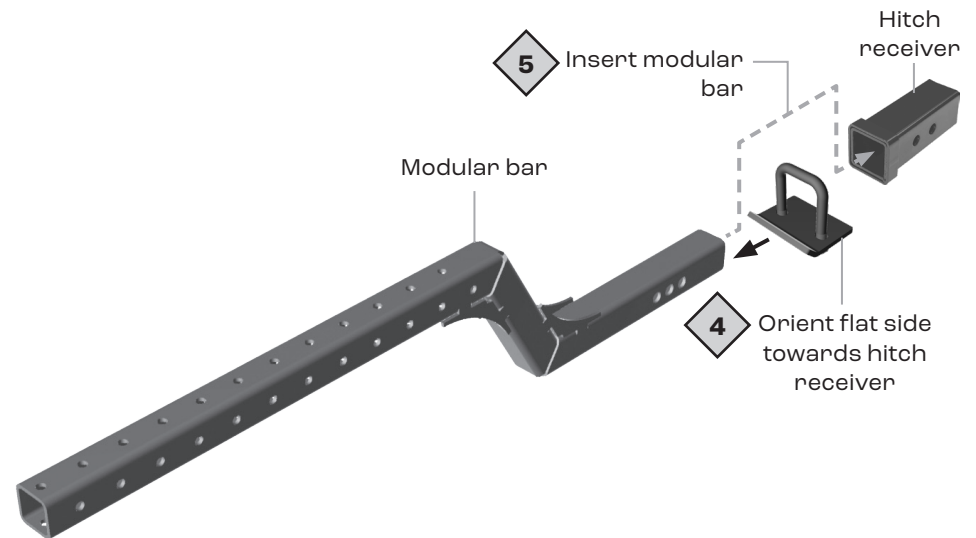


Image 3.2.1 Insert the modular bar

6. Insert the hitch pin through the **Modular Bar** and hitch receiver. Ensure the hitch pin is secured (with cotter pin, locking pin etc.) and cannot fall out (Image 3.2.2).

Note: Due to the variety of hitch pins and personal preferences, the hitch pin is not included.

7. Slide the **Anti-wobble Plate** up against the hitch receiver so the plate is underneath the hitch receiver. Firmly tighten the shoulder nuts.
8. Check the **Modular Bar** for movement (wobble). Re-adjust if necessary.

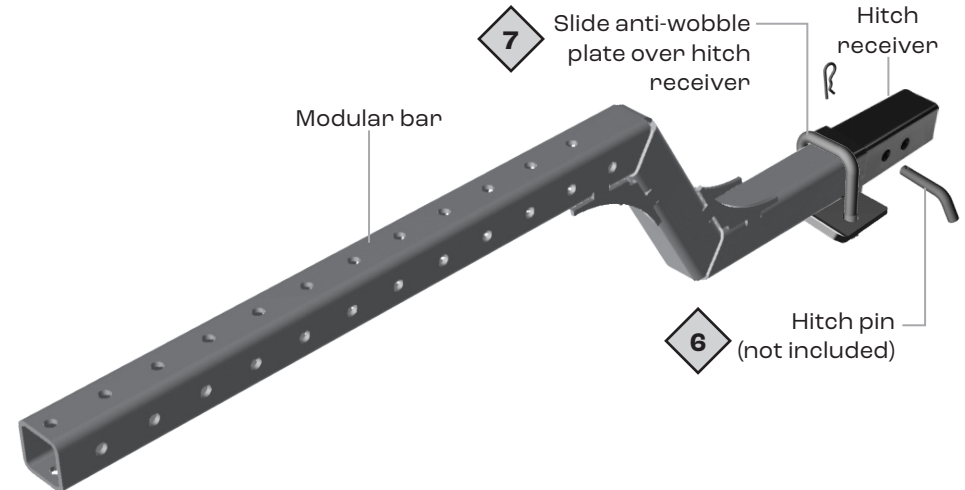


Image 3.2.2 Slide anti-wobble plate

3.3 ATTACH THE BIKE RACK ATTACHMENTS

The bike rack can accommodate two **Bike Rack Attachments**. Follow these steps to attach the **Bike Rack Attachments** to the **Modular Bar**.

Important! Never use power tools to unscrew or tighten the bolts and screws.

9. Remove the 3/8-16 hex head bolts from the **Bike Rack Attachment** (Image 3.3.1).

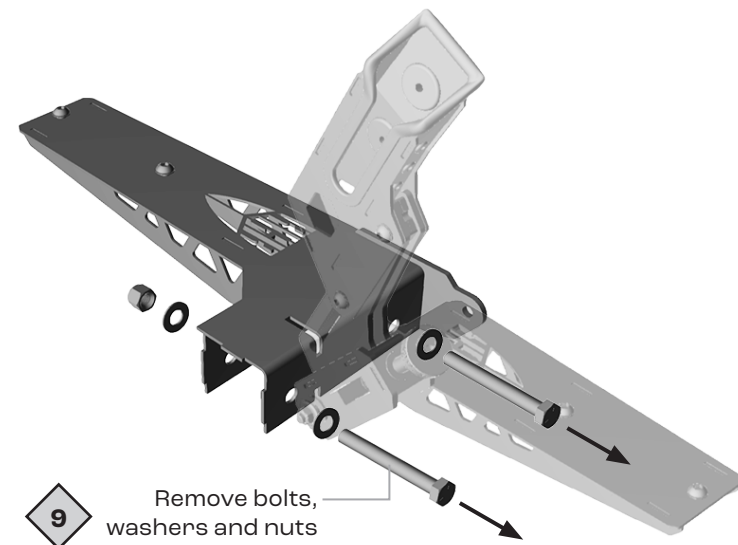


Image 3.3.1 Remove 3/8-16 bolts

10. Orient the first **Bike Rack Attachment** (the one closest to the vehicle) so the **Crank Holder** is facing away from the vehicle (Image 3.3.2).

11. Place the **Bike Rack Attachment** onto the **Modular Bar**. Position the rack over the mounting holes closest to the vehicle.

Note: Some vehicles may require the **Load Tray** to be unlocked and in the down position to clear the **Crank Holder** when hatch back, tail gate or doors are opened. Check the clearance and move the **Bike Rack Attachment** forward one mounting hole at a time if clearance is needed.

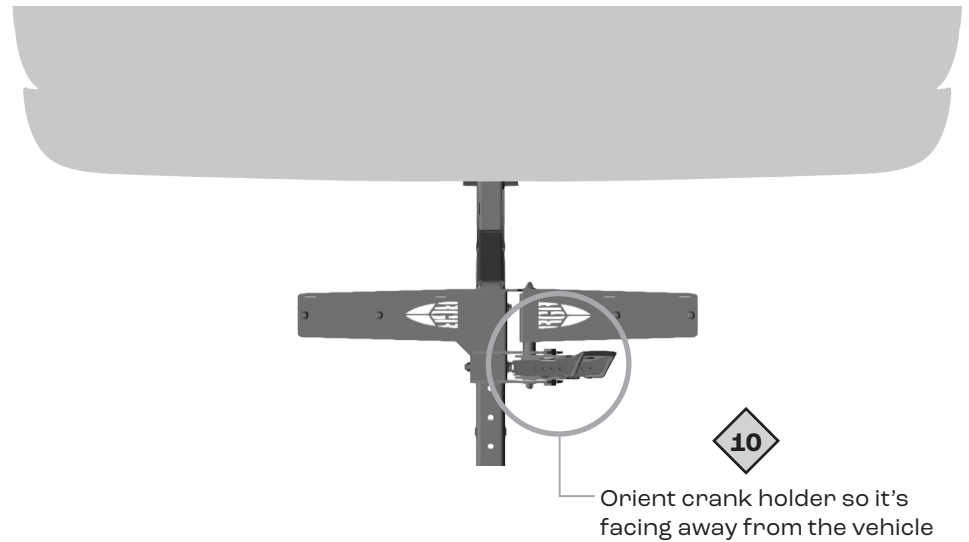


Image 3.3.2 Orient bike rack attachment closest to the vehicle

12. Place a flat washer onto a 3/8-16 hex head bolt and insert it through the **Bike Rack Attachment** and the **Modular Bar** (Image 3.3.3).

13. Place the second flat washer and nut onto the bolt and firmly tighten.

14. Repeat steps 4 and 5 for the second **Bike Rack Attachment** bolts.

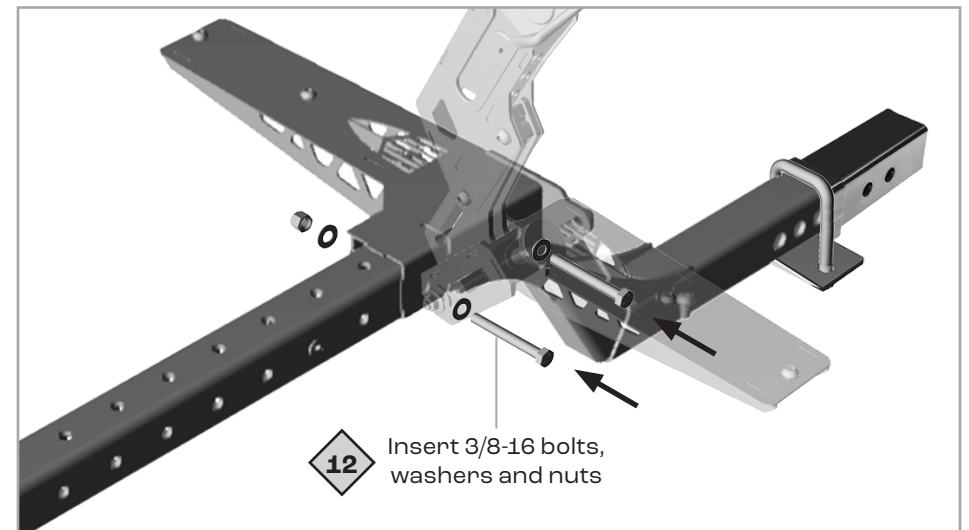


Image 3.3.3 Insert 3/8-16 bolts

Follow these steps if a second **Bike Rack Attachment** is being used.

- a. Orient the second rack so the **Crank Holder** is facing towards the vehicle (Image 3.3.4).
- b. Place the **Bike Rack Attachment** onto the **Modular Bar**.
Note: For ease of loading, space the rack attachments at least 12" apart.
- c. Place a flat washer onto a 3/8-16 hex head bolt and insert it through the **Bike Rack Attachment** and the **Modular Bar**.
- d. Place the second flat washer and nut onto the bolt and firmly tighten.
- e. Repeat steps 4 and 5 for the second crank holder bolt. Firmly tighten.

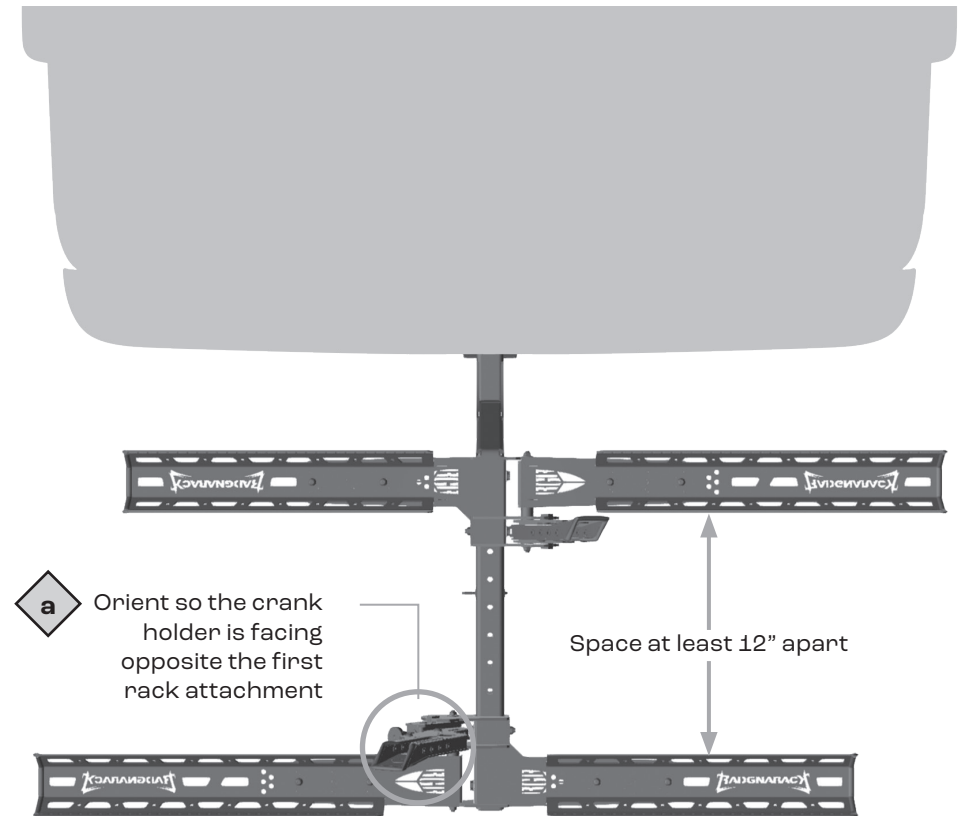


Image 3.3.4 Orient the rack closest to the vehicle

3.4 ATTACH THE WHEEL TRAYS

Follow these steps to attach the **Wheel Trays**.

15. Using the included 5mm hex key, remove the M8x16 screws and lock washers from both **Bike Rack Attachment** trays (Image 3.4.1).

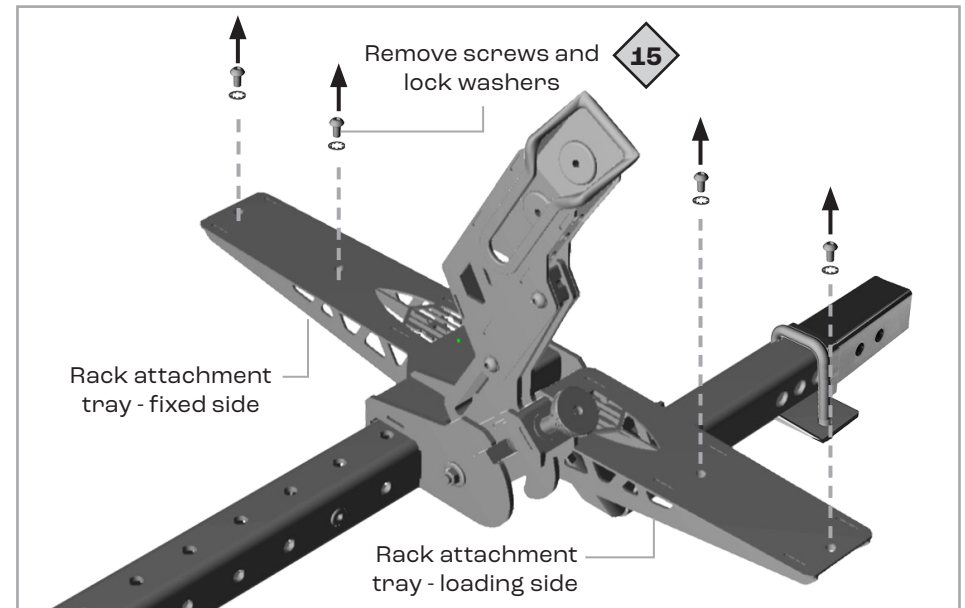


Image 3.4.1 Remove M8x16 screws and lock washers

16. Place the **Wheel Trays** on the correct **Bike Rack Attachment** tray (Image 3.4.2).

Important! The **Loading Wheel Tray** is the long tray and must be attached to the loading side rack attachment tray. The **Fixed Wheel Tray** is the short tray must be attached to the fixed side rack attachment tray.

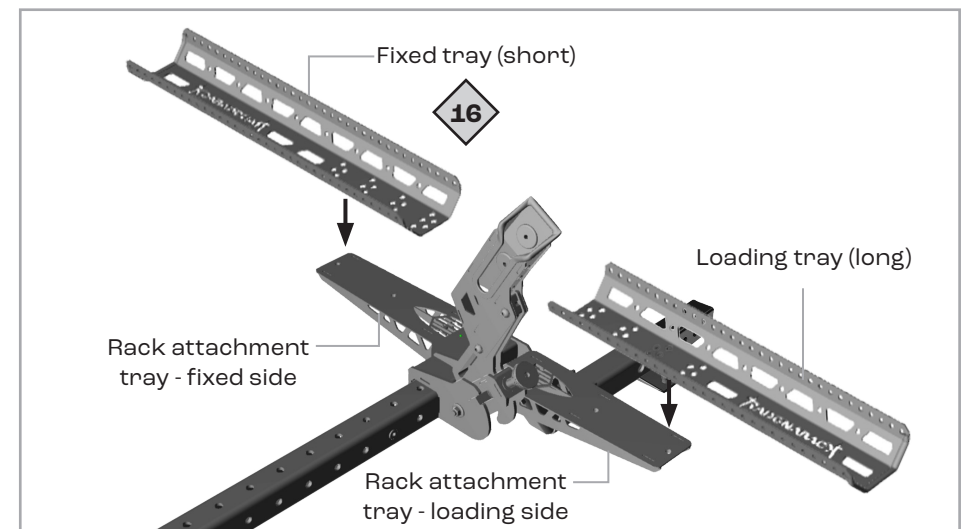


Image 3.4.2 Place wheel trays on rack attachment trays

17. Attach the **Wheel Trays** by screwing the M8x16 screws (with the lock washers) through the **Wheel Trays** and into the **Bike Rack Attachment trays** (Image 3.4.3).

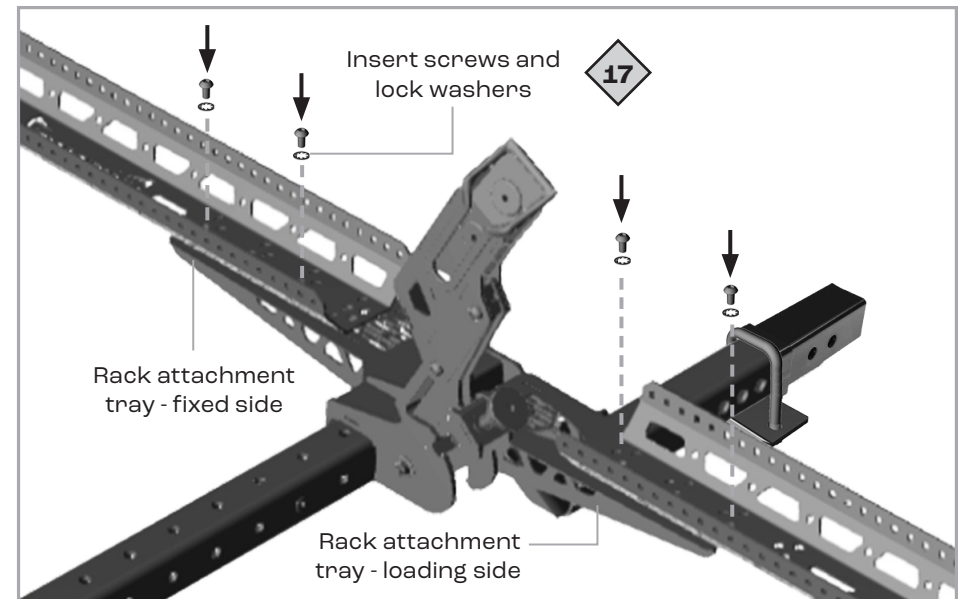


Image 3.4.3 Attach wheel trays to the bike rack attachment trays

4.0 LOADING AND UNLOADING A BIKE

Important! Before loading a bike and traveling the bike must properly fit into the **Crank Holder** and should stand straight-up.

4.1 LOADING A BIKE

Note: The bike rack is designed for vehicles with under 14" of ground clearance and a 2" hitch receiver. It has a maximum load capacity of 240 lbs. Follow these steps to load your bike onto the bike rack.

1. Pull up on the **Latch Knob** (Image 4.1.1) and release the **Loading Tray**.

2. Lower the **Loading Tray** (Image 4.1.2). Guide the front wheel of the bicycle up the **Loading Tray** towards the **Crank Holder**.

Note: Avoid contact with the bikes forks or brake rotor.

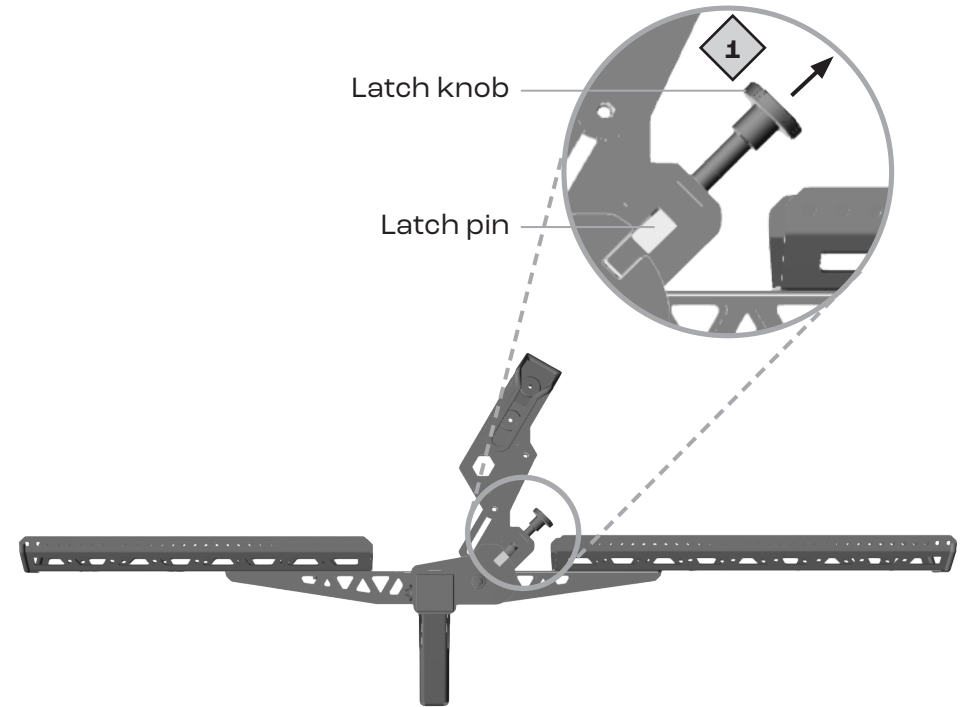


Image 4.1.1 Pull up on the latch knob



Image 4.1.2 Loading tray lowered

3. Rotate the crank arm on the non-drive side of bicycle so it is in line with the opening in the **Crank Holder** (Image 4.1.3).

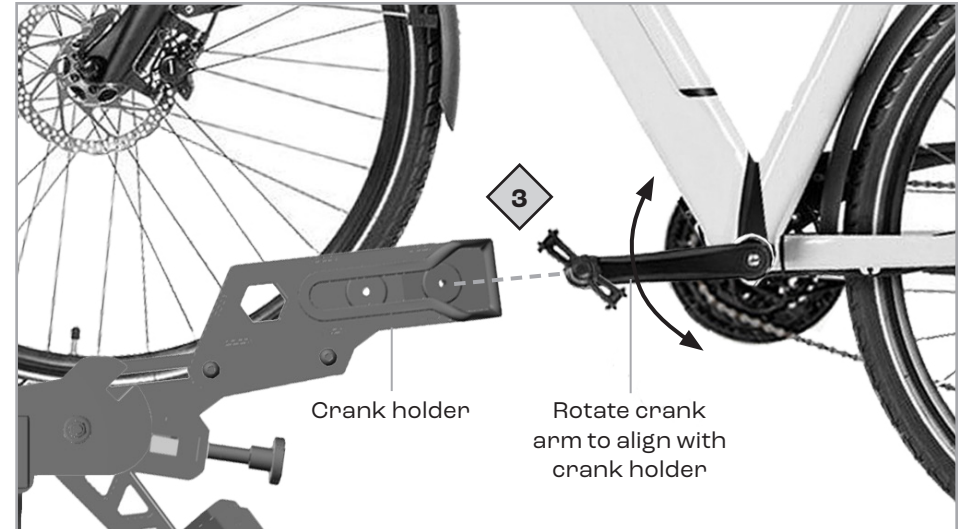


Image 4.1.3 Guide the crank arm into the crank holder

4. Lift the rear of the bicycle up and guide the crank arm on the bicycle into the **Crank Holder** (Image 4.1.4).

WARNING!

The rack has moving parts that may pinch body parts during assembly and use resulting in serious injury. When the rack locks into place a user could injure themselves on the top while locking. Always keep body parts (i.e., fingers, hair) away from the moving parts pinch points.

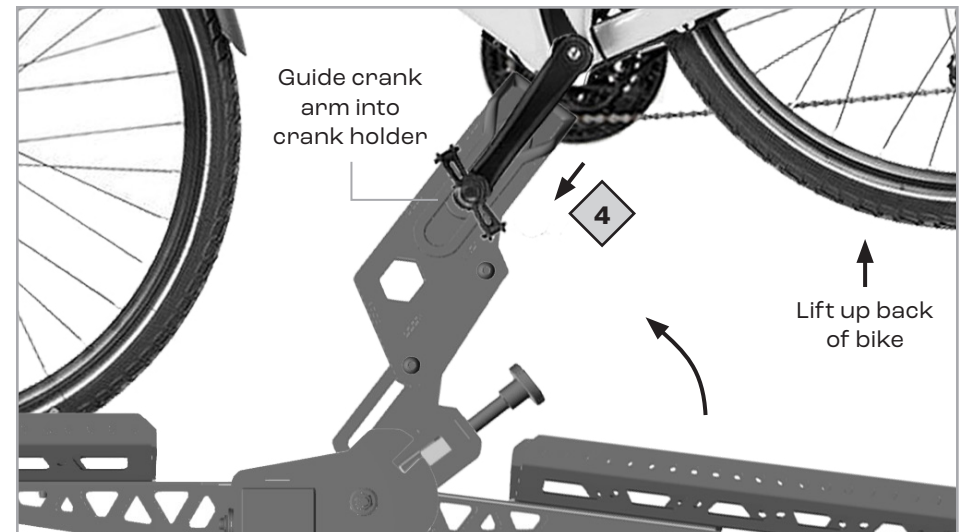


Image 4.1.4 Guide the crank arm into crank holder

5. Push the bicycle forward until you hear a *click* and the **Locking Pin** is securely engaged (Image 4.1.5).

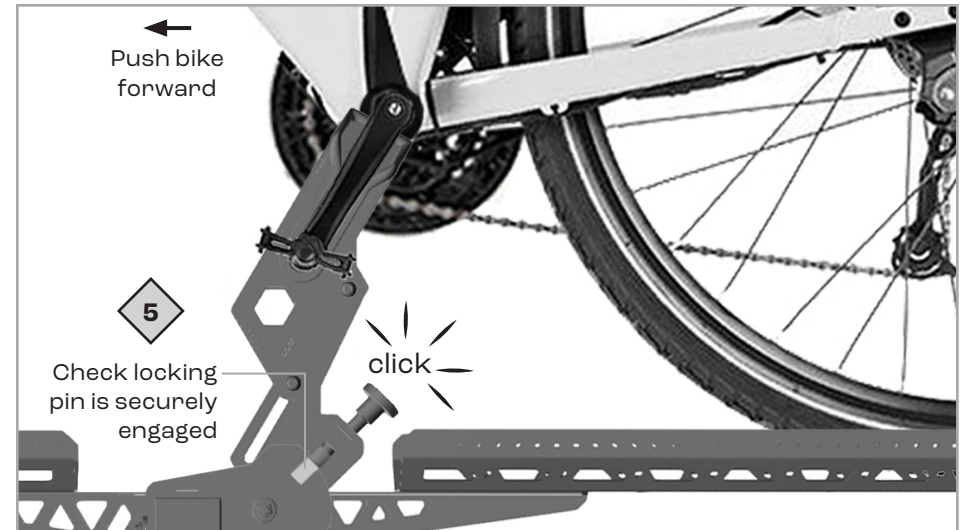


Image 4.1.5 Lock crank holder

6. Check if the crank arm is securely seated in the **Crank Holder** and the bicycle wheels are not touching the **Wheel Tray** side walls. If adjustments are needed proceed to the appropriate section:

- 4.1.1 Adjust the Crank Arm Fit
- 4.1.2 Adjust the Wheel Tray Position

7. Wrap the **Wheel Strap** around the front wheel and check that it is securely engaged (Image 4.1.6).

Note: If the wheel tire is 3" in diameter or less, thread the **Wheel Strap** through the openings in the **Wheel Tray** and wrap the strap around the wheel.

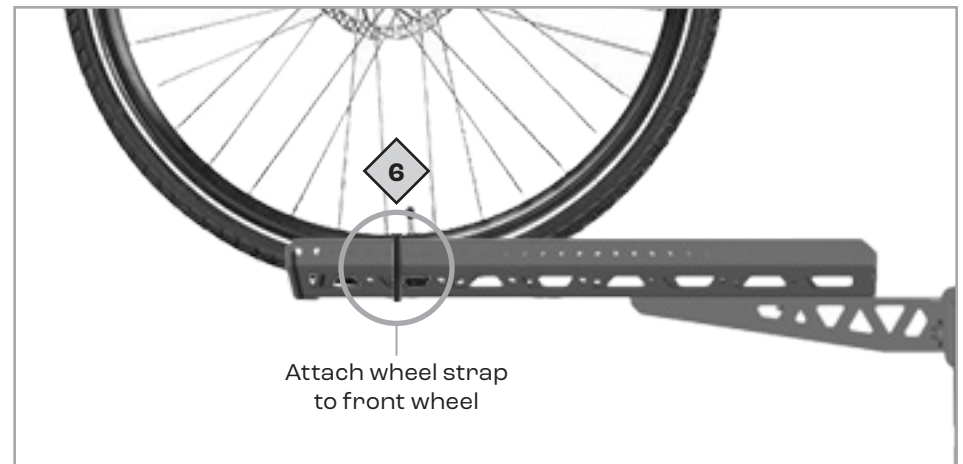


Image 4.1.6 Place wheel strap on front wheel

4.1.1 ADJUST THE CRANK ARM FIT

Important! For the most secure transportation of your bike the crank arm should be fully seated in the **Crank Holder**.

If necessary, follow these steps and adjust the position of the **Crank Holder**.

- a. Loosen the screws holding the **Crank Holder** (Image 4.1.7).
- b. Move the **Crank Holder** up, or down, until the whole crank arm is seated in the **Crank Holder**.
- c. Tighten the screws holding the **Crank Holder**.

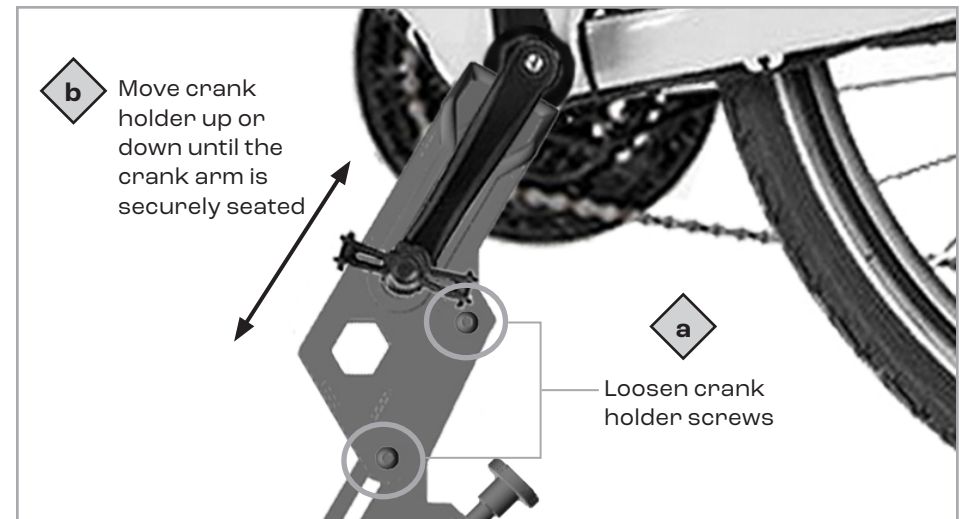


Image 4.1.7 Adjust crank holder position

4.1.2 ADJUST THE WHEEL TRAY POSITION

Important! It will be more difficult to load, and unload, the bicycle if the wheel tires are touching the **Wheel Tray** sidewalls. Check that the wheel tires are not touching the **Wheel Tray** sidewalls and the bike is standing straight-up.

Follow these steps if the **Wheel Trays** need to be adjusted.

1. Determine how much the **Wheel Tray** needs to move so the wheel tires are not touching the **Wheel Tray** sidewalls.
2. Unload the bike (see section 4.3 Unloading a Bike).
3. Remove the M8x16 screws holding the **Wheel Trays** and remove the **Wheel Trays** from the **Bike Rack Attachment** trays.

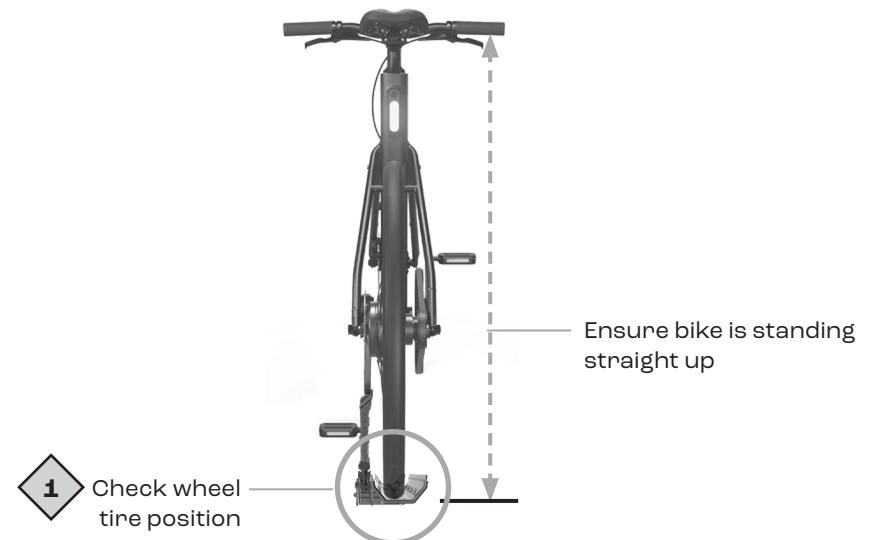


Image 4.1.8 Check bike is straight-up and down

Tire Size	Bottom Bracket Width	Wheel Tray Mounting Hole
N/A	N/A	A
1" - 3"	68/73mm	B
3" - 4"	84mm	C
4" - 4.5"	100mm	D
4.5" - 5"	120mm	E

Table 4.1.1 Remove wheel strap

- Using Table 4.1.1, choose the mounting hole (Image 4.1.9) in the wheel tray that will closely match the distance needed between the **Wheel Trays** and the **Crank Holder**.
- Re-attach the **Wheel Trays** and confirm there is clearance between the wheel tires and the **Wheel Tray** sidewalls. If not, repeat step 3 - 5 and select a different mounting hole.

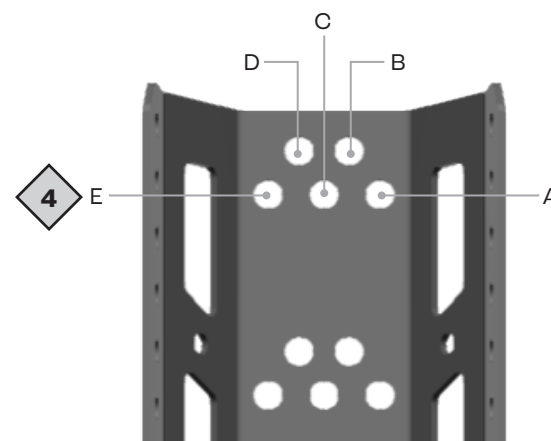


Image 4.1.9 Select mounting hole

4.2 LOADING A BIKE WITH AN EXTENDED WHEEL BASE

The Radgnarack Modular Rack can be used to transport extended wheelbase bikes referred to as a “cargo” bike. This style of bike gets loaded in the **opposite orientation** of eBikes, mountain or road bikes, meaning that the rear tire gets pushed up the **Loading Tray** and the drive side crank is loaded into the **Crank Holder**.

Note: The **Wheel Strap** is still placed on the front tire.

4.3 UNLOADING A BIKE

1. Remove the **Wheel Strap** (Image 4.3.1).

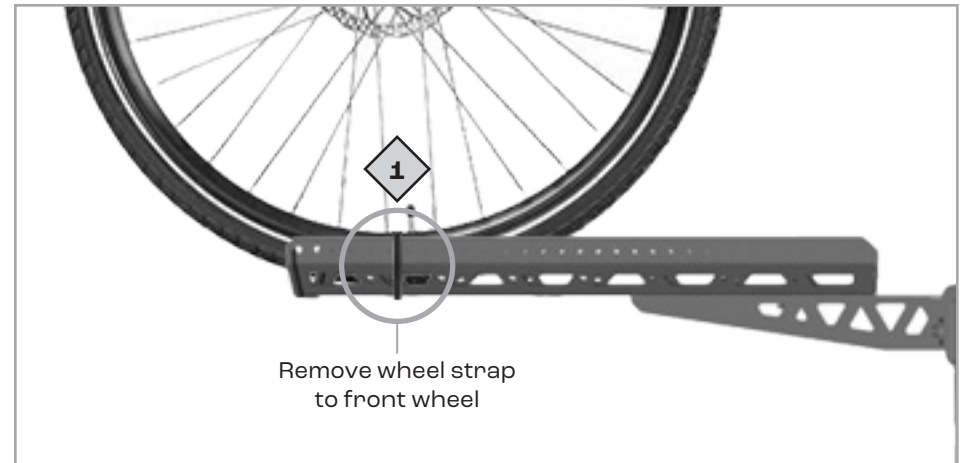


Image 4.3.1 Remove wheel strap

2. Securely hold the bicycle and lightly push forward to release pressure on the latch. Pull up on the **Latch Knob** to release the **Loading Tray** (Image 4.3.2).

Note: Keep the front tire in the **Fixed Tray**.

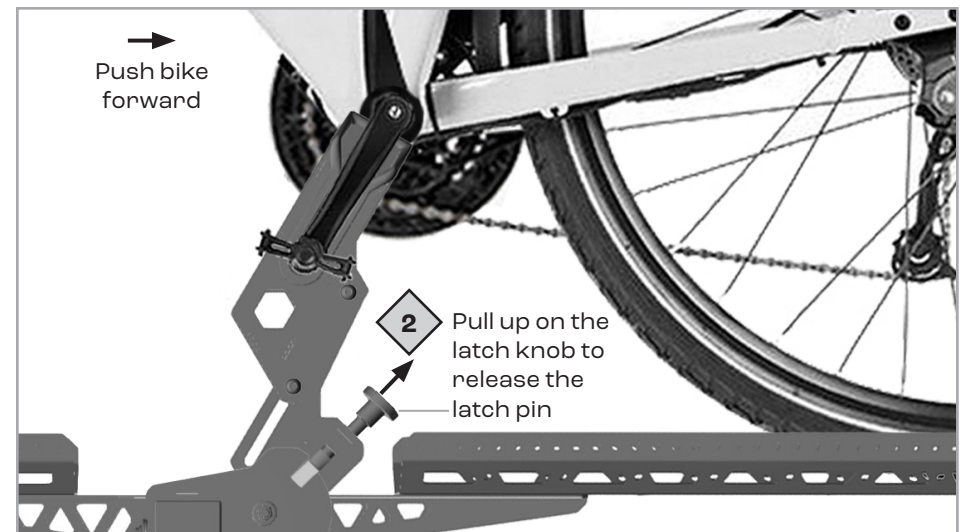


Image 4.3.2 Release the latch pin

3. Continue to hold the bicycle and pull it straight out until the bicycle crank arm (and pedal) is completely out of the **Crank Holder** (Image 4.3.3).
4. Lower the rear wheel to the ground. Feather the rear brake and gently guide the front wheel off the rack onto the ground.

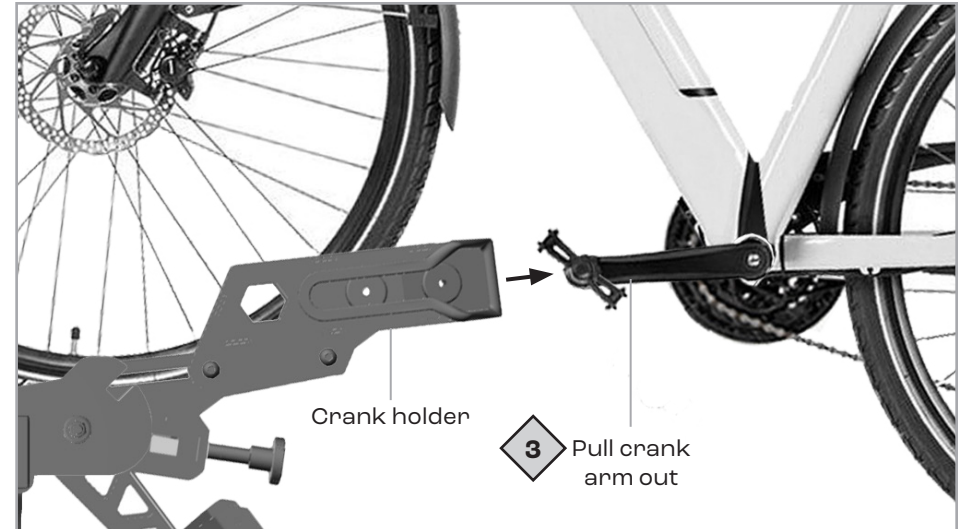


Image 4.3.3 Remove the crank arm from the crank holder

5. Raise the **Loading Tray** up until you hear a *click* and the **Latch Pin** is fully engaged (Image 4.3.4) before you begin your adventure.

WARNING!

The rack has moving parts that may pinch body parts during assembly and use resulting in serious injury. When the rack locks into place a user could injure themselves on the top while locking. Always keep body parts (i.e., fingers, hair) away from the moving parts pinch points.

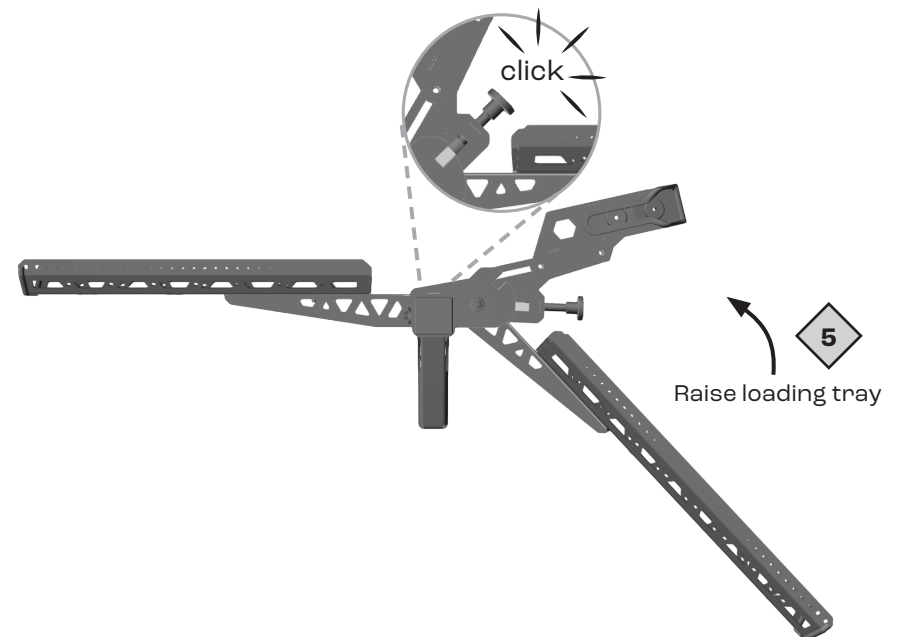


Image 4.3.4 Raise the loading tray

5.0 MAINTENANCE

Before Use

- Check for loose parts and damaged parts. Tighten where needed and replace damaged parts.
- Check the **Loading Trays** for movement. Tighten the pivot bolt until the movement stops.
- Check the **Latch Knob** and **Latch Pin** for friction. Lubricate with WD40 when needed.

After Use

- Clean debris and soil from the rack.
- Inspect bolts for corrosion. Remove, or oil, threads if needed.

6.0 PRODUCT SPECIFICATIONS

Hitch Receiver: 2" receiver (do not use a 1.25" receiver)

Adapters: Do not use adaptors

Maximum Bike Weight: 250 lbs. (total for two bikes)

Maximum Wheelbase: 55" (all eBikes)

Tire Width: 1" to 5" tire width

Mod. Bar Rating: 500 lbs. of evenly distributed weight

7.0 WARRANTY

Rad Gnar Products, LLC (“we” or “our”) provides this Limited Lifetime Warranty for its bike racks to the original purchaser (“you” or “your”) of the product. This Limited Lifetime Warranty covers defects in materials and workmanship under normal use and service for the lifetime of the product, as long as you own it.

Warranty Details:

What is Covered: This warranty covers defects in materials and workmanship of our bike racks. We will, at our discretion, repair or replace any parts that prove to be defective during the lifetime of the product.

What is Not Covered: This warranty does not cover damage resulting from misuse, abuse, accidents, modifications, unauthorized repairs, normal wear and tear, exceeding stated load capacity, and any damage caused by transportation or improper installation.

Proof of Purchase: To be eligible for warranty service, you must provide proof of purchase, such as a sales receipt or purchase order.

Warranty Claims:

To initiate a warranty claim, contact our customer service department at info@radgnarack.com. You will be required to provide proof of purchase and describe the issue in detail. Upon approval of your claim, we will provide you with instructions for returning the product or specific parts for evaluation.

Warranty Limitations:

The warranty is non-transferable and only applies to the original purchaser. Rad Gnar Products, LLC reserves the right to use refurbished or replacement parts of equal quality in the repair or replacement of products under this warranty. The lifetime warranty does not cover shipping costs associated with returning the product or parts for warranty service outside of the United States of America. Any tampering with or modification of the product by unauthorized persons will void the warranty.

Disclaimer:

Except for the warranties expressly stated in this Limited Lifetime Warranty, we make no other warranties, whether expressed or implied, including any warranties of merchantability, fitness for a particular purpose, or non-infringement.

Limitation of Liability:

To the fullest extent permitted by law, Rad Gnar Products, LLC shall not be liable for any direct, indirect, incidental, special, or consequential damages arising out of the use or inability to use our bike racks.

Your Legal Rights:

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state or country to country.

Effective Date:

This Limited Lifetime Warranty is effective as of October 1st, 2023.

Rad Gnar Products, LLC

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Modular Racks Redefined

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