

NORDRIVE N50416

NORDRIVE N50416 Wave 3 Tow Bar Bike Rack Instruction Manual

Model: N50416

1. INTRODUCTION

This manual provides detailed instructions for the safe installation, operation, and maintenance of your NORDRIVE N50416 Wave 3 Tow Bar Bike Rack. This bike rack is designed to securely transport up to three bicycles on your vehicle's tow bar. Please read this manual thoroughly before assembly and use to ensure proper function and safety.

2. SAFETY INFORMATION

- Always ensure the bike rack is securely attached to the tow bar before loading bicycles.
- Do not exceed the maximum weight capacity of 60 kg for the rack or 30 kg per bicycle.
- Verify that all bicycles are properly secured to the rack using the provided straps and locking arms.
- Check that the 13-pin light plug is correctly connected and all lights (brake, turn signals, tail lights) are functioning before driving.
- Be aware of the increased length and width of your vehicle when the bike rack is installed, especially when parking or maneuvering.
- Regularly inspect the rack for any signs of wear, damage, or loose components.
- Adhere to all local traffic laws and regulations regarding vehicle dimensions and visibility of license plates and lights.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- NORDRIVE N50416 Wave 3 Bike Rack main frame
- Mounting hardware for tow bar attachment
- Sliding wheel straps
- 360° articulated locking arms for bike frames
- 13-pin electrical plug and cable
- Instruction Manual (this document)

4. SETUP AND INSTALLATION

Follow these steps to install the NORDRIVE N50416 Wave 3 bike rack onto your vehicle's tow bar:

1. **Unfold the Rack:** The bike rack features a foldable system for compact storage. Carefully unfold the main frame until it locks into its operational position.
2. **Attach to Tow Bar:** Position the bike rack onto the vehicle's tow bar. Secure it firmly using the U-bolt mounting system. Ensure all fasteners are tightened according to the manufacturer's specifications to prevent movement during transit.
3. **Connect Electrical Plug:** Insert the 13-pin electrical plug into your vehicle's tow bar socket. Test all lights (tail lights, brake lights, turn signals) to ensure they are fully functional and visible.
4. **Initial Inspection:** Before loading bikes, double-check all connections and ensure the rack is stable and level.



Image: The NORDRIVE N50416 Wave 3 bike rack, showcasing its foldable design for easy storage and transport.

5. OPERATING INSTRUCTIONS

Loading and securing your bicycles:

1. **Prepare Bikes:** Remove any loose items from your bicycles (e.g., water bottles, bags) that could detach during transit.
2. **Place Bikes:** Lift each bicycle onto the rack, ensuring the wheels rest securely in the designated channels.
3. **Secure Wheels:** Use the sliding straps to firmly secure the wheels of each bicycle to the rack.

4. **Secure Bike Frames:** Utilize the 360° articulated locking arms to clamp onto the bicycle frames. Adjust the arms to achieve a tight and secure fit, then lock them to prevent theft and movement.



Image: The NORDRIVE N50416 Wave 3 bike rack securely installed on a vehicle, transporting three bicycles.

5.1. Tilting System for Trunk Access

The NORDRIVE N50416 features a tilting system, allowing access to your vehicle's trunk even with bicycles loaded on the rack.

1. **Activate Tilt:** Locate the tilt release mechanism (refer to specific diagrams if provided with your product). Engage the mechanism to allow the rack to tilt downwards.
2. **Access Trunk:** Once tilted, the rack provides sufficient clearance to open your vehicle's trunk or tailgate.
3. **Return to Upright:** After accessing the trunk, push the bike rack back into its upright, locked position. Ensure it clicks securely into place before driving.

Sistema di ribaltamento / Tilting system

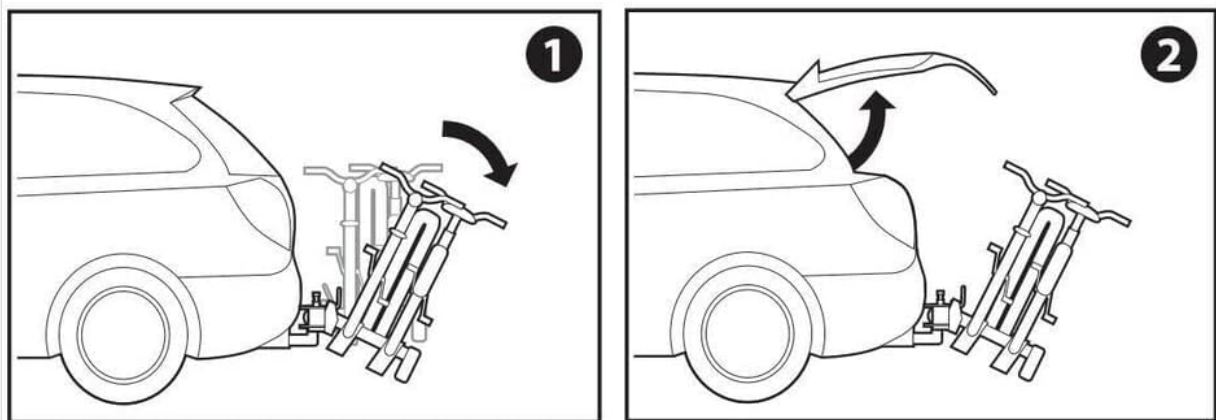


Image: Diagram showing the tilting function of the bike rack, enabling easy access to the vehicle's trunk.

5.2. 360° Articulated Arms

The bike rack is equipped with 360° articulated arms that provide flexible and secure attachment to various bicycle frame types. These arms can be rotated and adjusted to find the optimal clamping position on your

bike's frame, ensuring stability and preventing damage.



Image: Illustration of the 360-degree rotating clamping arm, allowing versatile bike frame attachment.

5.3. Bike Compatibility and Weight Limits

The NORDRIVE N50416 Wave 3 bike rack is compatible with a wide range of bicycle types, including standard, women's, E-bikes, and Fat-bikes. Observe the following limits:

- **Maximum Capacity:** 3 bicycles
- **Maximum Total Weight:** 60 kg
- **Maximum Weight Per Bike:** 30 kg
- **Wheel Diameter:** Minimum 22", Maximum 29"
- **Wheelbase:** Maximum 1260 mm
- **Tire Width:** Maximum 110 mm
- **Frame Diameter:** Minimum $\varnothing 30$ mm, Maximum $\varnothing 50$ mm (round frames)
- **Frame Dimensions:** Minimum 30x60 mm, Maximum 50x70 mm (oval/rectangular frames)



Image: Visual guide for maximum weight capacity (60kg for 3 bikes, 30kg per bike) and compatible bicycle types.



Image: Diagram detailing the minimum and maximum dimensions for compatible bicycle frames and wheels.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your bike rack:

- **Cleaning:** Clean the rack regularly with mild soap and water, especially after exposure to road salt or

dirt. Rinse thoroughly and dry.

- **Lubrication:** Periodically apply a suitable lubricant to moving parts, such as hinges and locking mechanisms, to ensure smooth operation.
- **Fastener Check:** Before each use, inspect all bolts, nuts, and straps for tightness. Re-tighten any loose fasteners.
- **Strap Inspection:** Check the condition of all straps for cuts, fraying, or excessive wear. Replace damaged straps immediately.
- **Electrical Connection:** Ensure the 13-pin plug and cable are free from damage. Clean the contacts if necessary.

7. TROUBLESHOOTING

Here are solutions to common issues you might encounter:

- **Rack feels loose on tow bar:** Ensure the U-bolt mounting system is fully tightened. Refer to the installation section for proper procedure.
- **Bicycles are not stable:** Re-check that the 360° articulated arms are securely clamped and locked onto the bike frames, and that wheel straps are tight. Adjust bike positioning if necessary to distribute weight evenly.
- **Lights not working:** Verify the 13-pin electrical plug is fully inserted into the vehicle's socket. Check vehicle fuses and the rack's wiring for any visible damage. Clean electrical contacts if corroded.
- **Tilting mechanism is stiff:** Apply lubricant to the hinge points of the tilting system. Ensure no debris is obstructing the mechanism.

For issues not covered here, please contact NORDRIVE customer support or your retailer.

8. SPECIFICATIONS

Feature	Specification
Model Number	N50416
Product Type	Tow Bar Bike Rack
Bicycle Capacity	3 bikes
Maximum Total Weight	60 kg
Maximum Weight Per Bike	30 kg
Material	Aluminum, Alloy Steel
Foldable	Yes
Mounting Type	U-bolt (for tow bar)
Vehicle Compatibility	Car (Universal Fit)
Electrical Connection	13-pin plug

Package Dimensions (L x W x H)	120 x 81 x 23 cm
Package Weight	22.62 kg
Compatible Wheel Diameter	Min 22", Max 29"
Compatible Wheelbase	Max 1260 mm
Compatible Tire Width	Max 110 mm
Compatible Round Frame Diameter	Min Ø30 mm, Max Ø50 mm
Compatible Oval/Rectangular Frame Dimensions	Min 30x60 mm, Max 50x70 mm

9. WARRANTY INFORMATION

For detailed warranty information, please refer to the warranty card included with your product or contact your retailer. Warranty terms and conditions may vary by region and retailer.

10. SUPPORT

If you require further assistance, have questions about installation, operation, or maintenance, please contact NORDRIVE customer service or the retailer from whom you purchased the product. Please have your model number (N50416) and purchase details ready when contacting support.
