

## M-Wave 16400931

# M-Wave Carry All 20 Inch Bicycle Trailer User Manual

Model: 16400931

## 1. INTRODUCTION

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Thank you for choosing the M-Wave Carry All 20 Inch Bicycle Trailer. This versatile trailer is designed to provide a secure and convenient solution for transporting goods by bicycle or as a standalone trolley. Featuring a durable aluminum frame, a 100% waterproof hard luggage box, and easy-to-use quick-release wheels, it offers reliability and ease of use for various transport needs. Please read this manual thoroughly before assembly and operation to ensure safe and optimal performance.

## 2. SAFETY INFORMATION

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Your safety and the safety of others are paramount. Adhere to all safety guidelines to prevent injury or damage.

- **Maximum Load Capacity:** Do not exceed the maximum load of 25 kg (55 lbs) for the main compartment and 3 kg (6.6 lbs) for the lid luggage rack. Overloading can compromise stability and control.
- **Secure Attachment:** Always ensure the trailer is securely attached to your bicycle using the universal quick release connector. Verify the connection before each use.
- **Weight Distribution:** Distribute cargo evenly within the trailer to maintain balance and stability during towing. Heavy items should be placed at the bottom and centered.
- **Visibility:** Ensure the safety deflector is properly installed and visible. Consider adding additional reflective tape or lights for enhanced visibility, especially during low-light conditions.
- **Braking Distance:** Be aware that towing a trailer increases your overall braking distance. Adjust your speed and maintain a safe distance from other vehicles and obstacles.
- **Maneuvering:** Practice turning and maneuvering with the trailer in an open, safe area before using it in traffic. The trailer will affect the turning radius of your bicycle.
- **Tire Pressure:** Maintain correct tire pressure for optimal performance and safety. Refer to the tire sidewall for recommended pressure.
- **Regular Inspection:** Periodically inspect all components, including wheels, tires, frame, and attachment points, for wear, damage, or loose parts. Do not use the trailer if any damage is found.

## 3. PACKAGE CONTENTS

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Upon opening the package, please verify that all components are present and undamaged.

- M-Wave Carry All Trailer Unit with Hard Luggage Box

- 20-inch Wheels with Air Tyres (2x)
- Quick Release Axles for Wheels (2x)
- Universal Quick Release Connector for Bicycle Attachment
- Safety Deflector
- Keys for Luggage Box Lock
- Instruction Manual (this document)

## 4. SETUP

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### 4.1. Attaching the Wheels

1. Locate the wheel axles on the trailer frame.
2. Insert the 20-inch wheels onto the axles.
3. Secure the wheels using the quick-release mechanisms. Ensure they are firmly seated and the quick-release levers are fully closed and tightened.



Figure 1: Fully assembled M-Wave Carry All 20 Inch Bicycle Trailer, showing the main unit, wheels, and tow arm.

### 4.2. Attaching to Your Bicycle

1. Identify the universal quick release connector. This connector typically attaches to the rear axle of your bicycle.
2. Follow the instructions provided with your bicycle's quick release axle for proper installation of the connector. Ensure it is securely fastened and does not interfere with braking or gear shifting.

3. Connect the tow arm of the M-Wave trailer to the universal quick release connector. Ensure the connection is secure and the safety pin (if applicable) is engaged.
4. Verify that the safety deflector is positioned correctly and visible from the rear.

### **4.3. Converting to Trolley Mode**

The M-Wave Carry All trailer can also be used as a standalone trolley.

1. Disconnect the trailer from your bicycle.
2. The tow arm is designed to pivot or detach and reattach to form a handle for manual pulling. Refer to the specific mechanism on your unit to convert the tow arm into a trolley handle.
3. Ensure the handle is securely locked in the upright position for comfortable pulling.



Figure 2: The M-Wave Carry All trailer being used in trolley mode, demonstrating its versatility.

## 5. OPERATING INSTRUCTIONS

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### 5.1. Loading and Unloading Cargo

- **Opening the Lid:** The lid features a hydraulic opening rod for comfortable and safe loading/unloading. Gently lift the lid, and the rod will assist in holding it open.
- **Cargo Placement:** Place items inside the hard luggage box. Ensure heavy items are at the bottom and centered to maintain the trailer's balance.
- **Securing Cargo:** While the box is waterproof, consider securing loose items to prevent shifting during transit.
- **Using the Luggage Rack:** The lid includes a luggage rack for additional items, up to 3 kg. Secure items firmly with straps (not included) to prevent them from falling off.
- **Closing the Lid:** Gently push the lid down until it clicks securely into place.



Figure 3: The hard luggage box with its lid open, showcasing the internal storage capacity and hydraulic opening rod.

### 5.2. Locking the Luggage Box

The hard luggage box is lockable for security.

- Insert the provided key into the lock mechanism located on the front of the box.
- Turn the key to lock the lid securely.
- Remove the key and store it safely.



Figure 4: Rear view of the trailer, highlighting the integrated lock mechanism and the M-Wave branding.

## 6. MAINTENANCE

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Regular maintenance will extend the life of your M-Wave Carry All trailer.

- **Cleaning:** The hard luggage box is 100% waterproof. Clean the exterior with a damp cloth and mild detergent. Avoid abrasive cleaners.
- **Wheel and Tire Care:**
  - Check tire pressure regularly and inflate to the recommended PSI (found on the tire sidewall).
  - Inspect tires for wear, punctures, or damage. Replace if necessary.
  - Ensure quick-release mechanisms are clean and functioning smoothly.
- **Frame Inspection:** Periodically check the aluminum frame for any signs of bending, cracks, or corrosion.
- **Connection Points:** Regularly inspect the universal quick release connector and the trailer's tow arm for wear or damage. Ensure all bolts and fasteners are tight.
- **Storage:** Store the trailer in a dry place away from direct sunlight when not in use to prevent material degradation.

## 7. TROUBLESHOOTING

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Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Trailer wobbles or feels unstable during towing.	Uneven cargo distribution; loose wheel attachment; low tire pressure.	Redistribute cargo evenly. Ensure wheels are securely attached with quick releases. Check and inflate tires to recommended pressure.
Difficulty attaching/detaching from bicycle.	Connector misaligned; quick release mechanism not fully open/closed.	Ensure the bicycle's quick release axle and the trailer connector are properly aligned. Fully open the quick release lever before attaching, and fully close it to secure.
Lid does not stay open or close securely.	Hydraulic rod issue; debris in latch mechanism.	Check the hydraulic opening rod for damage. Clear any debris from the lid's latching mechanism.
Wheels are difficult to remove/install.	Quick release mechanism is too tight or dirty.	Loosen the quick release nut slightly. Clean and lubricate the quick release mechanism if necessary.

## 8. SPECIFICATIONS

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<b>Brand</b>	M-Wave
<b>Model Number</b>	16400931
<b>Color</b>	Black
<b>Frame Material</b>	Aluminum
<b>Product Dimensions (L x W x H)</b>	24.41" x 21.46" x 9.25" (62 cm x 54.5 cm x 23.5 cm)
<b>Item Weight</b>	10.23 Kilograms (22.55 lbs)
<b>Box Capacity</b>	Approx. 70 litres
<b>Box Dimensions (W x L x H)</b>	Approx. 60 cm x 68 cm x 27 cm (23.6" x 26.8" x 10.6")
<b>Maximum Load (Main Box)</b>	25 Kilograms (55 lbs)
<b>Maximum Load (Lid Rack)</b>	3 Kilograms (6.6 lbs)
<b>Wheel Size</b>	20 Inch (Air Tyres)
<b>Features</b>	100% Waterproof Hard Luggage Box, Lockable, Hydraulic Opening Rod, Luggage Rack on Lid, Removable Quick Release Wheels, Converts to Trolley.
<b>UPC</b>	887539017347

## 9. WARRANTY AND SUPPORT

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Specific warranty details for the M-Wave Carry All 20 Inch Bicycle Trailer are not provided in this manual. For warranty information, technical support, or to inquire about replacement parts, please contact M-Wave customer service or refer to the official M-Wave website.

You may also visit the [M-Wave Store on Amazon](#) for additional product information or to contact the seller.

## Related Documents

	<p><a href="#">M-WAVE TW-4/24 Torque Wrench Manual</a></p> <p>Instructions and specifications for the M-WAVE TW-4/24 torque wrench, including parts description, operating instructions, and important notices for accurate and safe use.</p>
	<p><a href="#">M-WAVE Art. 230187 Folding Lock Manual</a></p> <p>Instructions for using and maintaining the M-WAVE Art. 230187 folding lock, including battery replacement and safety precautions.</p>
	<p><a href="#">M-WAVE Bicycle Trailer Adaptors - Technical Specifications and Compatibility</a></p> <p>Explore M-WAVE's range of bicycle trailer axle adaptors, including Shimano, Syntace, and Maxle types. Learn about compatibility, thread pitches, and installation guidelines for 12mm thru-axles.</p>
	<p><a href="#">M-WAVE Art. 440400 Bicycle Rack Bag Holder - User Manual</a></p> <p>User manual for the M-WAVE Art. 440400 bicycle rack bag holder. Learn about maximum load capacity, secure luggage attachment, pre-ride checks, and usage guidelines.</p>