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› MEROCA RCT-2 Adjustable Air Spring Coil Over Shock Absorber User Manual

MEROCA RCT-2

MEROCA RCT-2 Adjustable Air Spring Coil Over Shock Absorber User Manual

Model: RCT-2

INTRODUCTION

Thank you for choosing the MEROCA RCT-2 Adjustable Air Spring Coil Over Shock Absorber. This manual provides essential information for the proper installation, adjustment, maintenance, and troubleshooting of your new shock absorber. Please read these instructions carefully before use to ensure optimal performance and safety.

The MEROCA RCT-2 is designed for full-suspension mountain bikes, downhill bikes, and e-motorcycles, offering advanced tuning capabilities for various terrains and riding styles.

PRODUCT OVERVIEW

The MEROCA RCT-2 features a robust design with multiple adjustment options to fine-tune your ride experience.

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190/210/230/240/250/265mm



**Data manually measured - actual specifications may vary.

| Brand | Product Name | | Model | | | |
|--|--------------------------|-------|-------|-------|-------|-------|
| MEROCA | Mountain Bike Coil Shock | | RCT-2 | | | |
| Pounds | Material | | | | | |
| 550LBS | Aluminum alloy | | Black | | | |
| Function | | | | | | |
| Rebound/Compression/Preload /AirPressureAdjustment | | | | | | |
| Length | 190mm | 210mm | 230mm | 240mm | 250mm | 265mm |
| Travel | 50mm | 60mm | 65mm | / | / | / |
| Weight (Excluding Bushings) | 885g | 945g | 1074g | / | / | / |

Image 1: Detailed dimensions and specification table for the MEROCA RCT-2 shock absorber, showing various lengths, travel, and weight options.

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Compatible with Multiple Bike Models



Compatibility:
Designed for full-suspension mountain bikes, downhill MTBs, e-motorcycles, and e-MTBs - fits any model with matching hole-to-hole center length and mounting width.

Image 2: Illustration of the MEROCA RCT-2 shock absorber's compatibility with various bike types, including mountain bikes, downhill bikes, and e-motorcycles.

SETUP AND INSTALLATION

Proper installation is crucial for the performance and safety of your shock absorber. If you are unsure about any step, consult a professional bike mechanic.

Compatibility Check

- Ensure the eye-to-eye length of the MEROCA RCT-2 matches your bike's requirements (available in 190/210/230/240/250/265mm options).
- Verify that your bike frame accommodates 12mm axle mounts.

Installation Steps

1. Remove your existing shock absorber according to your bike manufacturer's instructions.
2. Carefully align the MEROCA RCT-2 shock absorber with the mounting points on your bike frame.
3. Insert the mounting bolts through the eyelets and secure them with the appropriate nuts. Do not overtighten; refer to your bike's torque specifications.

4. Ensure all connections are secure and the shock moves freely without binding.

OPERATING INSTRUCTIONS: ADJUSTMENTS

The MEROCA RCT-2 offers four key adjustments to customize your ride: Rebound, Compression, Preload, and Air Pressure.

1. Air Pressure Adjustment (200-300 PSI)



Image 3: Diagram illustrating the Schrader valve for air pressure adjustment on the MEROCA RCT-2 shock absorber. Increasing air pressure hardens the suspension, while reducing it softens it.

- Locate the Schrader valve on the shock absorber.
- Use a high-pressure shock pump to add or release air.
- **Increased air pressure:** Hardens the suspension, suitable for heavier riders or aggressive riding.
- **Reduced air pressure:** Softens the suspension, suitable for lighter riders or a more comfortable ride.
- Recommended range: 200-300 PSI. Adjust incrementally and test.

2. Rebound Adjustment

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Rebound Adjustment

Rotate the knob to adjust the damping rebound speed, which can be adjusted in multiple stages.



-  Direction rotation, damping increases (slow)
-  Direction rotation, damping reduction (fast)



Image 4: Close-up of the rebound adjustment knob on the MEROCA RCT-2 shock absorber, showing how rotation affects damping speed.

- The red rotary knob controls the rebound damping speed.
- **Clockwise rotation (indicated by '+')**: Increases damping, making the shock rebound slower. This helps maintain tire contact on rough terrain.
- **Counter-clockwise rotation (indicated by '-')**: Decreases damping, making the shock rebound faster. This can be useful for quick recovery over successive bumps.
- Adjust in multiple stages to find your preferred setting.

3. Compression Preload Adjustment

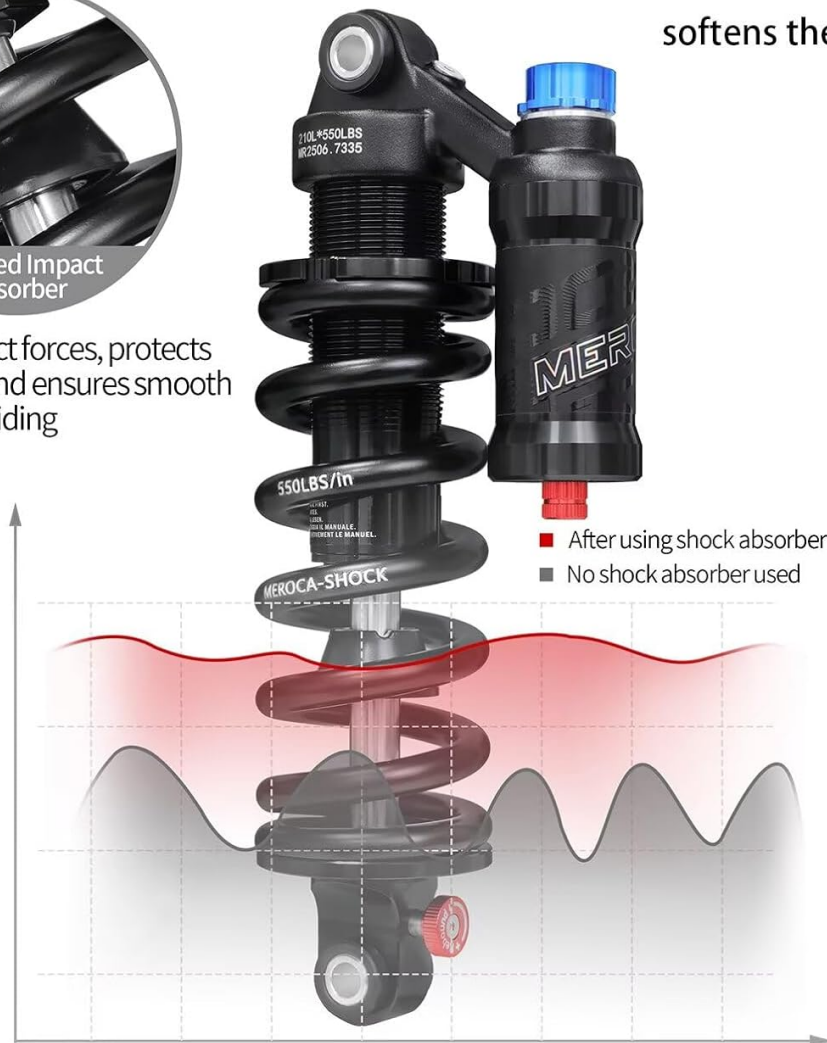
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Compression Preload Adjustment
Rotate the spring's top threaded collar:
clockwise stiffens, counterclockwise
softens the suspension.



Buffered Impact Absorber

Absorbs impact forces, protects components, and ensures smooth riding



Comparison of shock absorption range

Image 5: Diagram showing the compression preload adjustment via the spring's top threaded collar and the function of the buffered impact absorber.

- Rotate the spring's top threaded collar to adjust preload.
- **Clockwise rotation:** Stiffens the suspension, increasing the initial force required to compress the spring.
- **Counter-clockwise rotation:** Softens the suspension, reducing the initial force required to compress the spring.
- Adjust preload to achieve the desired sag (the amount the suspension compresses under your body weight).

4. Compression Adjustment

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190/210/230/240/250/265MM

Mountain Bike Coil Shock

Compression Adjustment

Rebound Damping

Air Pressure Tuning



Image 6: Two views of the MEROCA RCT-2 shock absorber highlighting the locations for Compression Adjustment, Rebound Damping, and Air Pressure Tuning.

- The compression adjustment controls how quickly the shock compresses under impact.
- Refer to the blue knob (often located near the air valve or piggyback reservoir) for compression adjustments.
- **Increasing compression:** Provides more support and prevents bottoming out on large impacts, but can make the ride feel harsher.
- **Decreasing compression:** Allows the shock to compress more easily, providing a plusher ride, but may lead to excessive movement or bottoming out.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your MEROCA RCT-2 shock absorber.

- **Cleaning:** After each ride, especially in muddy or dusty conditions, clean the shock absorber with mild soap and water. Avoid high-pressure washers directly on seals.
- **Inspection:** Regularly check for any signs of damage, leaks, or excessive wear on the seals, spring, and mounting hardware.

- **Lubrication:** Keep the shock shaft clean and free of debris. A small amount of suspension-specific lubricant can be applied to the shaft if recommended by MEROCA.
- **Air Pressure Check:** Verify air pressure before each ride, as it can fluctuate over time.
- **Professional Service:** For internal maintenance or complex issues, it is recommended to seek service from an authorized MEROCA service center or a qualified bike mechanic.

TROUBLESHOOTING

If you encounter issues with your shock absorber, refer to the following common problems and solutions.

| Problem | Possible Cause | Solution |
|---|--|---|
| Shock feels too soft/bottoms out easily | Low air pressure, insufficient preload, compression too low | Increase air pressure, increase spring preload, increase compression damping. |
| Shock feels too stiff/harsh ride | Too high air pressure, excessive preload, compression too high | Decrease air pressure, decrease spring preload, decrease compression damping. |
| Shock rebounds too slowly | Rebound damping too high | Decrease rebound damping (turn knob counter-clockwise). |
| Shock rebounds too quickly/feels bouncy | Rebound damping too low | Increase rebound damping (turn knob clockwise). |
| Oil leakage around seals | Worn seals, damage to shock shaft | Clean shaft, inspect seals. If leakage persists, professional service is required. |
| Unusual noises (creaking, clunking) | Loose mounting bolts, worn bushings, internal issue | Check and tighten mounting bolts to specified torque. Inspect bushings. If noise persists, seek professional service. |

SPECIFICATIONS

| Feature | Detail |
|---------------------------|--|
| Brand | MEROCA |
| Model | RCT-2 |
| Material | 6061-T6 Aluminum |
| Spring Rate | 550 LBS/in |
| Spring Wire Diameter | 9mm |
| Eye-to-Eye Length Options | 190mm, 210mm, 230mm, 240mm, 250mm, 265mm |
| Travel (approx.) | 50-65mm (varies by length) |
| Mounting Hole Diameter | 12mm |

| Feature | Detail |
|--------------------|---|
| Air Pressure Range | 200-300 PSI |
| Adjustments | Rebound, Compression, Preload, Air Pressure |
| Weight (approx.) | 885g (190mm) to 1074g (230mm) |
| Color | Black |

WARRANTY AND SUPPORT

For warranty information, product support, or specific fitment questions, please contact MEROCA customer service. Keep your purchase receipt as proof of purchase.

For further assistance, please visit the official MEROCA website or contact your retailer.