Ohlins HO 819

Ohlins STX36 Mini Rear Shock HO 819 User Manual

For Honda Z125M

Introduction

This manual provides essential information for the proper installation, adjustment, maintenance, and troubleshooting of your Ohlins STX36 Mini Rear Shock, model HO 819. This shock absorber is specifically designed for the Honda Z125M motorcycle to enhance performance and handling. Please read these instructions carefully before installation and use to ensure optimal performance and safety.

Safety Information

Always prioritize safety. Improper installation or adjustment of suspension components can lead to loss of control and serious injury. If you are unsure about any part of this process, consult a qualified motorcycle technician.

- Wear appropriate personal protective equipment (PPE) during installation.
- Ensure the motorcycle is securely supported on a stand before beginning work.
- Do not attempt to disassemble the shock absorber. It contains high-pressure nitrogen gas and oil, which can cause injury if released improperly.
- Use only genuine Ohlins parts and recommended tools.
- Regularly inspect the shock for damage, leaks, or wear.

Setup and Installation

Pre-Installation Checks

Before installing the new shock, ensure all components are present and undamaged. Verify that the shock model HO 819 is correct for your Honda Z125M.

Tools Required

- Motorcycle stand
- Torque wrench
- Socket set (appropriate sizes for your motorcycle)

- Allen key set
- Measuring tape or ruler
- Grease

Installation Steps

1. Secure the motorcycle on a stand so the rear wheel is off the ground and the swingarm can move freely.
2. Carefully remove the original rear shock absorber, noting the orientation of all components.
3. Clean the mounting points on the frame and swingarm. Apply a thin layer of grease to the mounting bolts if recommended by the motorcycle manufacturer.
4. Install the Ohlins STX36 Mini Rear Shock (HO 819) with the reservoir facing the correct direction as per the specific vehicle instructions (refer to your Honda Z125M service manual for exact orientation).
5. Hand-tighten all mounting bolts.
6. Lower the motorcycle slightly to allow the shock to settle, then torque all mounting bolts to the manufacturer's specified values. Refer to your Honda Z125M service manual for torque specifications.
7. Ensure there is no binding or interference with other motorcycle components throughout the full range of suspension travel.

Initial Adjustments (Static Sag)

Static sag is crucial for proper suspension function. It refers to how much the suspension compresses under the motorcycle's own weight.

- With the motorcycle on its stand, measure the distance from the rear axle to a fixed point on the chassis (e.g., a bolt head). Record this as Measurement A.
- Remove the motorcycle from the stand and allow it to rest on its wheels. Gently bounce the rear a few times to settle the suspension.
- Measure the distance from the rear axle to the same fixed point on the chassis. Record this as Measurement B.
- Calculate the static sag: **Static Sag = Measurement A - Measurement B**.
- Adjust the spring preload ring on the shock to achieve the recommended static sag for your Honda Z125M (typically 5-15mm for street use, consult your motorcycle's manual or Ohlins recommendations). Turn the preload ring clockwise to increase preload (reduce sag) and counter-clockwise to decrease preload (increase sag).

Image: Ohlins STX36 Mini Rear Shock HO 819 installed on a motorcycle. This image illustrates the proper mounting position of the shock absorber on the rear swingarm of a motorcycle, showing the reservoir and adjustment knobs.

Operating and Adjustments

The Ohlins STX36 Mini Rear Shock offers adjustable damping to fine-tune your ride. The primary adjustments are rebound and compression damping.

Rebound Damping Adjustment

Rebound damping controls the speed at which the shock extends after compression. Too little rebound can cause the suspension to feel bouncy; too much can cause it to pack down over successive bumps.

- The rebound adjuster is typically located at the bottom of the shock body.
- Turn the adjuster clockwise to increase rebound damping (slower extension).
- Turn the adjuster counter-clockwise to decrease rebound damping (faster extension).

- Start with the recommended settings in your Ohlins documentation or motorcycle manual, then adjust in small increments (e.g., 1-2 clicks) based on riding feel.

Compression Damping Adjustment

Compression damping controls the speed at which the shock compresses. Too little compression damping can make the suspension feel soft and prone to bottoming out; too much can make it feel harsh.

- The compression adjuster is typically located on the reservoir.
- Turn the adjuster clockwise to increase compression damping (firmer ride).
- Turn the adjuster counter-clockwise to decrease compression damping (softer ride).
- Adjust in small increments, testing the feel after each change.

Image: Close-up of Ohlins STX36 Mini Rear Shock adjustment knobs. This image highlights the location of the rebound and compression damping adjusters, typically found at the bottom of the shock body and on the external reservoir, respectively.

Your browser does not support the video tag.

Video: Guide to adjusting Ohlins STX36 Mini Rear Shock damping. This video demonstrates the process of locating and turning the rebound and compression damping adjusters, explaining the effect of each adjustment on ride quality.

Maintenance

Regular maintenance ensures the longevity and optimal performance of your Ohlins STX36 Mini Rear Shock.

Cleaning

- Clean the shock absorber regularly with mild soap and water.
- Avoid using high-pressure washers directly on seals or adjusters.
- Dry thoroughly with a soft cloth.

Inspection

- Periodically check for oil leaks around the shaft seal and reservoir.
- Inspect the spring for cracks or damage.
- Ensure all mounting bolts are tight and free from corrosion.
- Check the shock shaft for pitting or scratches.

Service Intervals

Ohlins recommends professional servicing of the shock absorber at regular intervals, typically every 20,000 km or annually, depending on riding conditions and intensity. This service includes oil change, seal replacement, and nitrogen recharge.

Troubleshooting

This section addresses common issues you might encounter with your Ohlins STX36 Mini Rear Shock.

Problem	Possible Cause	Solution
Suspension feels too soft / bottoms out easily	Insufficient spring preload, too little compression damping	Increase spring preload, increase compression damping (clockwise)
Suspension feels too harsh / stiff	Too much spring preload, too much compression damping	Decrease spring preload, decrease compression damping (counter-clockwise)
Rear wheel feels bouncy / unstable	Too little rebound damping	Increase rebound damping (clockwise)
Rear wheel packs down over bumps	Too much rebound damping	Decrease rebound damping (counter-clockwise)
Oil leakage from shock	Damaged seal, internal component failure	*Do not attempt to repair.* Contact Ohlins service center for professional repair.

For issues not listed here or if solutions do not resolve the problem, contact Ohlins customer support or an authorized service center.

Specifications

Key specifications for the Ohlins STX36 Mini Rear Shock (HO 819).

- **Brand:** Ohlins
- **Model Number:** HO 819
- **Auto Part Position:** Rear
- **Style:** Monotube
- **Vehicle Service Type:** Motorcycle (specifically Honda Z125M)
- **Material Type:** Steel or Aluminum
- **Exterior Finish:** Black

Warranty Information

Ohlins products are covered by a limited warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary by region and product. Please retain your proof of purchase. For detailed warranty information, please refer to the official Ohlins website or contact your authorized Ohlins dealer.

Customer Support

For technical assistance, spare parts, or service inquiries regarding your Ohlins STX36 Mini Rear Shock, please contact your nearest authorized Ohlins service center or visit the official Ohlins website:
Ohlins Official Website: www.ohlins.com
Contact Information: Refer to the website for regional contact details.