

OHLINS S36E

OHLINS Rear Suspension User Manual

Model: S36E HD145 for SPORTSTER All Models

1. INTRODUCTION

Thank you for choosing OHLINS. This manual is designed to provide you with comprehensive instructions for the safe and effective use of your new rear suspension. Proper installation, adjustment, and maintenance are crucial for optimal performance and rider safety. Please read all instructions carefully before proceeding.

Safety Warning: Installation and adjustments should ideally be performed by a qualified motorcycle technician. Improper installation or adjustment can lead to serious injury or damage to your motorcycle.

2. PRODUCT OVERVIEW

The OHLINS S36E HD145 rear suspension is engineered to provide superior handling and comfort for SPORTSTER motorcycles. Key features include:

- **Super Finishing Rod:** Polished to the highest precision to ensure protection against scratches and smooth stroke. Carefully selected materials and superior precision create the initial operating performance unique to Öhlins.
- **Cam-Lock Preload Adjuster:** The most standard type of preload adjuster for Öhlins twin shocks. Allows for 3-stage spring preload adjustment by unlocking.
- **Aluminum Cylinder:** Uses forged aluminum material, contributing to stable driving performance by cooling the high-temperature shock fluid from repeated strokes with excellent heat dissipation.



Image: OHLINS S36E HD145 Rear Suspension units. These units feature black springs and silver aluminum bodies, designed for robust performance and durability.

3. SETUP (INSTALLATION)

Before beginning installation, ensure you have the correct tools and a stable working environment. It is highly recommended to have this product installed by a certified mechanic.

3.1 Pre-Installation Checks

- Verify that the suspension model (S36E HD145) is compatible with your specific SPORTSTER model and year.
- Inspect the new suspension units for any signs of damage from shipping.
- Gather all necessary tools, including a motorcycle lift or stand, wrenches, torque wrench, and appropriate safety gear.

3.2 Installation Procedure (General Guidelines)

1. Secure the motorcycle on a stable stand, ensuring the rear wheel is off the ground.
2. Carefully remove the original rear shock absorbers, noting the orientation and any spacers.
3. Install the OHLINS S36E HD145 units, ensuring all mounting bolts are correctly aligned and tightened to the manufacturer's specified torque values. Refer to your motorcycle's service manual for specific torque settings.
4. Ensure proper clearance around the suspension units and moving parts.
5. Lower the motorcycle and perform a static sag measurement to determine initial preload settings.

4. OPERATING (ADJUSTMENTS)

The OHLINS S36E HD145 allows for preload adjustment to fine-tune the suspension for rider weight and riding conditions.

4.1 Preload Adjustment

The cam-lock preload adjuster allows for 3-stage adjustment of the spring preload. This adjustment affects the ride height and initial compression of the spring.

- To adjust, first ensure the motorcycle is stable and the suspension is unloaded.
- Locate the cam-lock mechanism on the shock body.
- Unlock the mechanism (specific method may vary, refer to detailed OHLINS instructions if provided with the product).
- Rotate the cam to select one of the three preload settings.
- Relock the mechanism securely after adjustment.

Note: Always adjust both left and right shock absorbers equally to maintain balanced handling.

5. MAINTENANCE

Regular maintenance is essential to ensure the longevity and performance of your OHLINS suspension.

- **Cleaning:** Regularly clean the shock absorbers with mild soap and water to remove dirt, grime, and road salt. Avoid high-pressure washers directly on seals.
- **Inspection:** Periodically inspect the shock bodies, springs, and mounting points for any signs of damage, leaks, or wear. Check bolts for proper torque.
- **Service:** OHLINS recommends periodic servicing by an authorized service center. Consult your OHLINS dealer for recommended service intervals based on your riding conditions.

6. TROUBLESHOOTING

If you experience issues with your suspension, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Poor ride quality / Too stiff	Incorrect preload setting	Adjust preload to a softer setting. Ensure both shocks are set equally.
Excessive bottoming out	Insufficient preload	Increase preload. If problem persists, professional re-valving may be required.
Unusual noises (clunking, squeaking)	Loose mounting bolts, worn bushings, internal issue	Check all mounting bolts for proper torque. Inspect bushings. If noise persists, seek professional inspection.
Oil leakage from shock body	Damaged seal, internal component failure	Stop riding immediately. Contact an authorized OHLINS service center for repair.

7. SPECIFICATIONS

Detailed specifications for the OHLINS S36E HD145 Rear Suspension:

Specification	Value
Brand	OHLINS

Specification	Value
Model Name	S36E
Manufacturer Reference	HD145
Shock Total Length	296mm
Stroke Amount	71mm
Spring Rate	16-26N/mm
Spring Total Length	200mm
Standard Preload Amount	25mm
Compatible Models	SPORTSTER All Models
Installation Position	Rear
Material	Aluminum Cylinder
Item Weight	4 Kilograms
Package Dimensions	55 x 25 x 20 cm

8. WARRANTY AND SUPPORT

For warranty information, product registration, or technical support, please refer to the official OHLINS website or contact your authorized OHLINS dealer. Keep your proof of purchase for warranty claims.

OHLINS is committed to providing high-quality products and support. Do not attempt to disassemble or modify the shock absorbers yourself, as this will void the warranty and can be dangerous.