

# OWNERS MANUAL

**WP Competition Shock Absorber**  
KTM 125/200/390 RC and DUKE models



## INTRODUCTION

### Safety information

Important information concerning safety is distinguished in this manual by the following notations.

#### **WARNING!**

Failure to follow warning instruction may result in serious injuries and/or death.

#### **CAUTION!**

Caution indicates that special precautions must be taken to avoid damage to the suspension.

#### **NOTE!**

This indicates information that is of importance in regards to procedures.

## BEFORE INSTALLATION

#### **WARNING!**

Installing a shock absorber that is not approved by the vehicle manufacturer may affect the stability of your vehicle. WP Suspension cannot be held responsible for any personal injury or damage that may occur after installing the shock absorber.

#### **WARNING!**

Please ensure that you fully understand all the mounting instructions before you start the installation procedure. If you have any questions regarding proper installation procedures, please contact an authorized WP service centre.

### INSTALLATION INSTRUCTION:

- Remove the serial shock absorber according to the vehicle manufacturer's instruction.
- Install the WP competition shock absorber body by using the original screws, nuts and tightening torques.
- To mount the reservoir, use the clamp and the mounting sheet which comes along with your suspension.

Mount the reservoir as shown on below picture:



NOTE: All screws needs to be locked by means of Loctite® 243.  
Tightening torque M6 screws: 10Nm.  
Tightening torque M8 screws: 24 Nm.

Ensure that the connection hose is located freely and does not interfere with any ancillaries.

### SETTING THE SPRING PRELOAD

The spring preload is very important because it directly affects the motorcycle height as well as the fork angle. Consequently, handling characteristics can be changed - even negatively. Because of this, it is very important that the front- and rear-heights are within the specified values.

#### 1. Measuring:

Proceed as follows: (two persons necessary)

- Place the motorcycle on an even surface.
- Lift up the rear so that the shock is in fully extended position.
- Measure the distance from the lower edge of the rear mudguard or from a point marked by a piece of tape, immediately above the rear wheel axle, to the wheel axle. (Fig. 1)
- Make a similar measurement on the front axle, e.g. From the bottom of the upper triple clamp to the front wheel axle. The fork must also be fully extended.
- Now only hold the motorcycle (without rider) in upright position so the motorcycle weight puts load on the suspension springs and repeat the measuring procedure. (Fig.2)

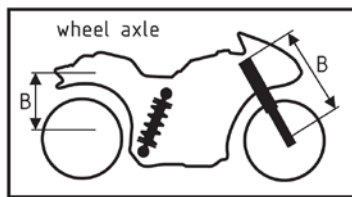


Fig.1

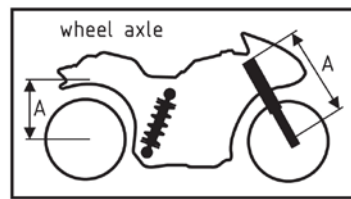


Fig.2

Subtract the second measuring result from the first measuring result. The outcome should not exceed the below range:

**Without rider: (A-B)**

Rear: 10mm

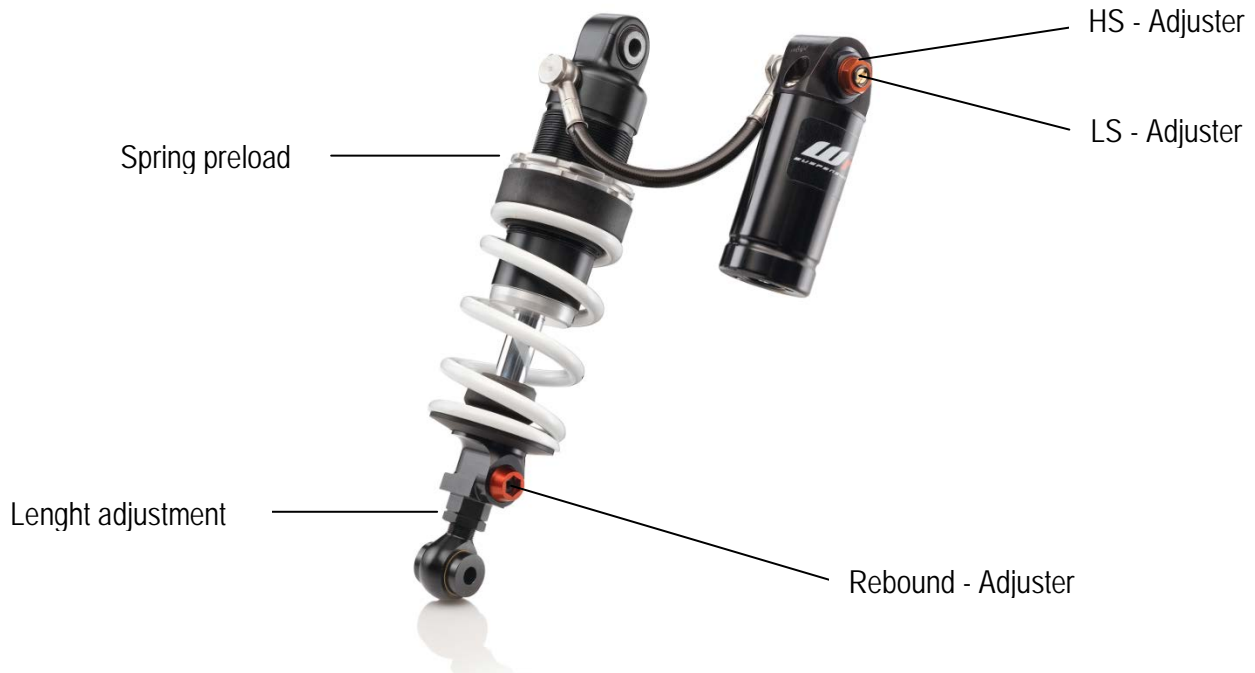
Front: 22 - 25mm

**Adjusting:**

To adjust the spring preload, open the upper counter nut by means of a hook wrench. Now lower or increase the spring preload by adjusting the position of the lower counter nut. As soon as the desired position is adjusted, lock the position by countering the lower and the upper counter nut against each other.

## SETTINGS

Your WP competition shock absorber provides the following features:



### Basic setting

High speed - HS	Low speed -LS	Rebound	Preload
1,5 turns closed	14 clicks open	14 clicks open	12 mm

**NOTE:** "Clicks" are always counted from fully closed position!  
Free length of spring: 130mm

Standard spring rate: **72 N/mm<sup>2</sup>** (Part no. 70189001)

Available optional spring rates:

- 68N/mm<sup>2</sup> (Part no. 70189016)
- 70 N/mm<sup>2</sup> (Part no. 70189017)
- 74N/mm<sup>2</sup> (Part no. 70189002)
- 76 N/mm<sup>2</sup> (Part no. 70189003)
- 78N/mm<sup>2</sup> (Part no. 70189004)

Ask your local WP dealer for availability and pricing.

[www.wp-group.com/en/dealer](http://www.wp-group.com/en/dealer)

## SETTING YOUR MOTORCYCLE

All adjustments may be tuned to perfectly suit your personal weight, driving skill as well as track condition. Always begin with the basic setting recommended by WP Suspension. If further adjustments are necessary, always make notes and change adjustments in small steps only (2 clicks at a time). It is recommended to only change one adjuster at a time.

Turning the adjusters clockwise, will increase damping, counter clockwise will reduce damping.

### **WARNING!**

Never alter the gas pressure!

### **NOTE!**

Regular maintenance and inspection are necessary to prevent functional disturbances.

### **WARNING!**

Rebound damping affects the characteristics the most, do not ride with fully closed rebound damping! The setting adjustment screw of the rebound damping is at the bottom of the piston rod.

The compression high-speed and the compression low-speed damping can be adjusted at the external reservoir

### **NOTE!**

When making new adjustments it is easiest to go back to fully closed, and then count forward to the new setting. The adjustment screws should not be screwed in too hard.

## SETTING THE SHOCK ABSORBER LENGTH

Sensitivity of the steering can be adjusted by altering the length of the shock absorber, without affecting other characteristics. The length may be changed by changing the position of the lower shock mounting eye.

### **WARNING!**

The maximum allowed length is reached as soon as the groove in the mounting eye thread is fully visible beneath the lock nut. Make sure that the lock nut is tightened after adjustment.

NOTES:

## WP Performance Systems GmbH

Gewerbegebiet Nord 8  
5222 Munderfing| Austria  
Tel +43(0) 7744/20240  
[www.wp-group.com](http://www.wp-group.com)

Part no. 53000113