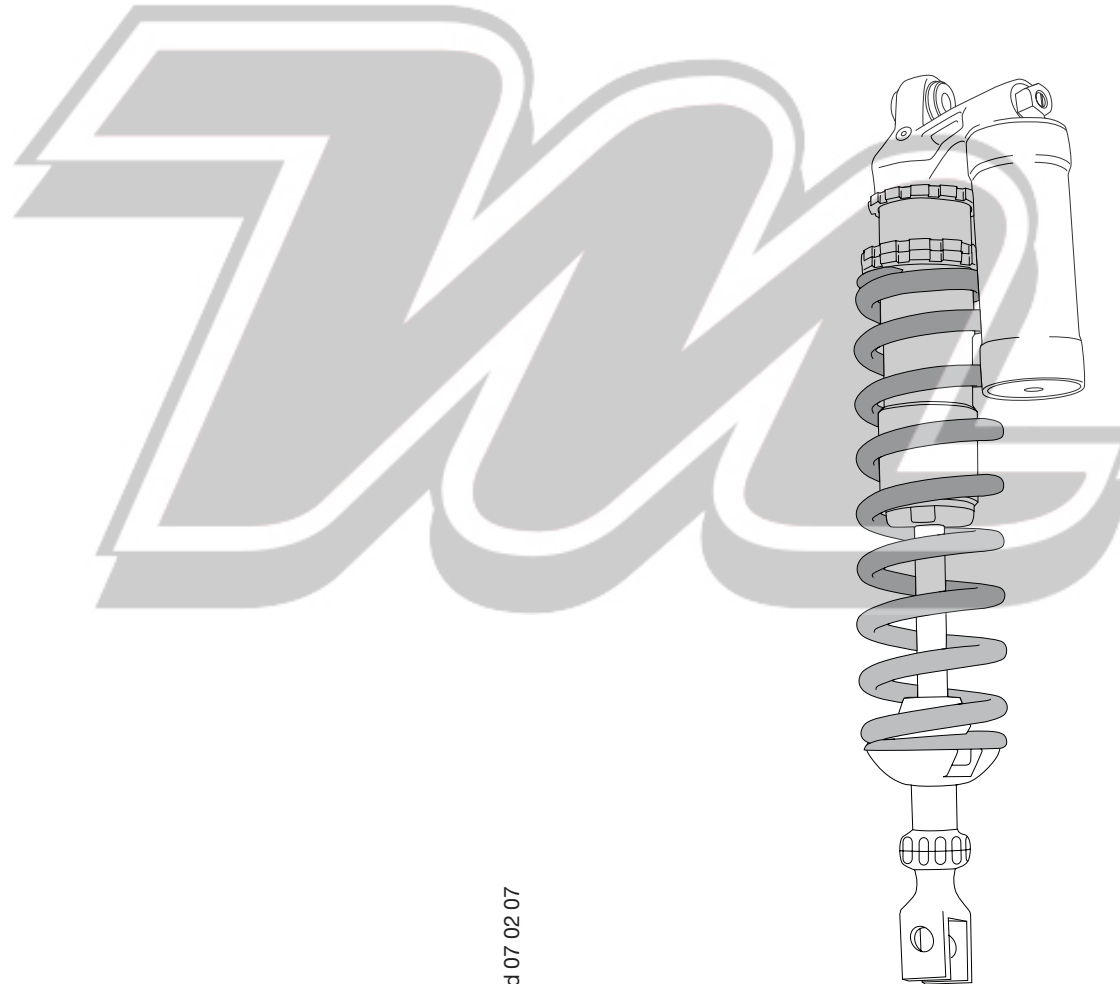


# Mounting Instructions

Öhlins shock absorber kit KA 590  
for Kawasaki KX 85



## Kit Contents

Before installing the shock absorber, please check the contents of the kit. If anything is missing, please contact your Öhlins dealer.

Description	Pcs.	Part No.
Shock absorber	1	KA 590
Spring clip	1	00516-01
Screw	1	00439-19
Washer	1	00153-06
C-spanner	1	00710-02
Sticker Öhlins	2	00197-01
Sticker memo notes	1	01180-01
Owner's manual	1	

## Before Installing

Öhlins Racing AB cannot be held responsible for any damage to shock absorber or vehicle, or injury to persons, if the instructions for fitting and maintenance are not followed exactly.

Similarly, the warranty will become null and void if the instructions are not adhered to.

*Öhlins products are subject to continuous improvement and development. Consequently, although these instructions include the most up-to-date information available at the time of printing, there may be minor differences between your shock absorber and this manual. Please consult your Öhlins dealer if you have any questions regarding the contents of this manual.*

KA 590\_1, issued 07 02 07



ADVANCED SUSPENSION TECHNOLOGY

Öhlins Racing AB, Box 722, S-194 27 Upplands Väsby, Sweden.  
Phone +46 8 590 025 00. Fax +46 8 590 025 80.

[www.ohlins.com](http://www.ohlins.com)

© Öhlins Racing AB. All rights reserved. Any reprinting or unauthorized use without the written permission of Öhlins Racing AB is prohibited. Printed in Sweden.



ADVANCED SUSPENSION TECHNOLOGY

## Safety Signals

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



The Safety alert symbol means:  
Attention! Your safety is involved.

### WARNING!

Failure to follow warning instructions could result in **severe or fatal injury** to anyone working with, inspecting or using the shock absorber, or to bystanders.

### CAUTION!

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

### NOTE!

Indicates information that is of importance regarding mounting procedures.

### WARNING!

1. Installing a shock absorber, that is not approved by the vehicle manufacturer, may affect the stability of your vehicle. Öhlins Racing AB cannot be held responsible for any personal injury or damage that may occur after fitting the shock absorber. Contact an Öhlins dealer for advice.

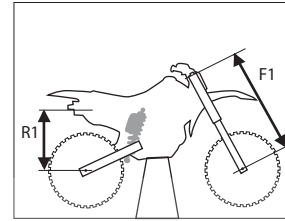
2. Please study and make certain that you fully understand all the mounting instructions and the owner's manual before handling this shock absorber kit. If you have any questions regarding proper installation procedures, contact an Öhlins dealer.

3. The vehicle service manual must be referred to when installing the Öhlins shock absorber.

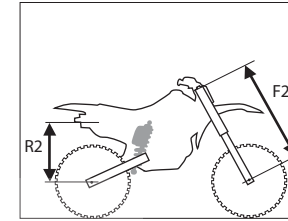
### NOTE!

During storage and transportation, especially at high ambient temperature, the oil and grease used for assembling may run out inside the packing and damage the expanded polystyrene packing material. This is not unusual and is in no way detrimental to the shock absorber.

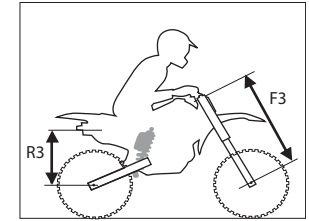
## Checking sag and ride height



Bike on a stand.



Bike on the ground.



Bike with rider on.

### Front suspension

F1. Bike on a stand with the suspension fully extended = .....

F2. Bike on the ground without rider = .....

F3. Bike on the ground with rider = .....

Free sag F1 - F2 = .....

Ride height F1 - F3 = .....

### Rear suspension

R1. Bike on a stand with the suspension fully extended = .....

R2. Bike on the ground without rider = .....

R3. Bike on the ground with rider = .....

Free sag R1 - R2 = .....

Ride height R1 - R3 = .....

### Setup data

Length	380 mm
Stroke	111 mm
Rebound adjustment	18 clicks
Low speed comp. adj.	15 clicks
High speed comp. adj.	1½ turns
Free sag, rear	25±5 mm
Free sag, front	25±5 mm
Ride height, rear	70±5 mm
Ride height, front	60±5 mm
Front fork adjustment	std.

### NOTE!

Make notes when the correct spring is mounted and sag and ride height is adjusted.

Spring pre-load \_\_\_\_ mm

### NOTE!

If ride height is higher than recommended, softer spring/springs must be used.

If ride height is lower than recommended, harder spring/springs must be used.

Contact your Öhlins dealer for advice.

## Spring guide

	Rider's weight Kg/pounds	Spring Part no.	Spring rate N/mm
<b>Kawasaki</b> KX 85cc	35/77	698-05	42
	40/88	698-06	44
	45/99	698-07	46
	50/110	698-08	48
	55/121	698-09	50

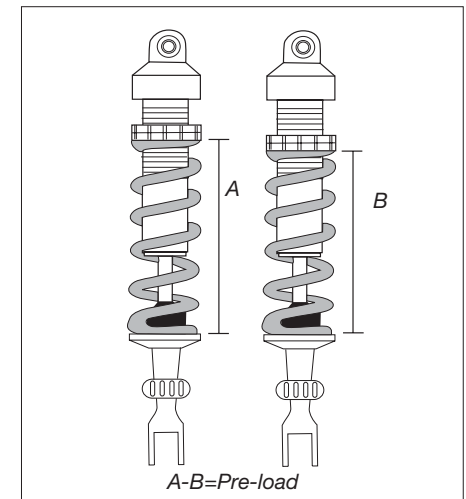
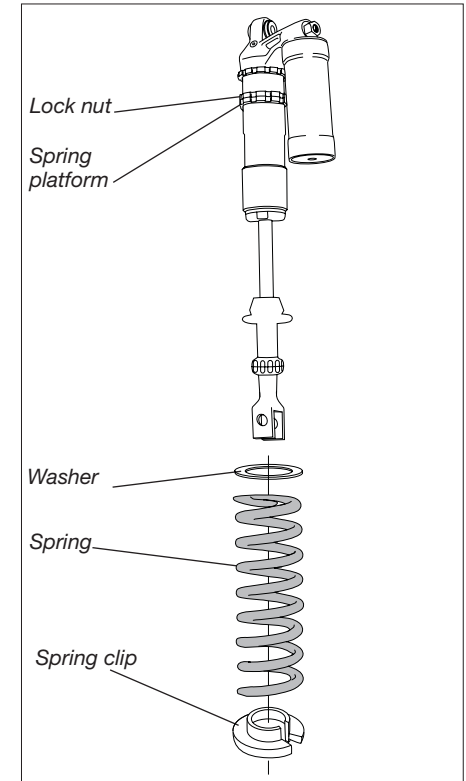
## Mounting Instructions - Step 1

### Assembly of Öhlins Shock Absorber with spring separately supplied

#### ⚠ WARNING!

1. It is advisable to have an Öhlins dealer install your shock absorber.
2. Instructions in the vehicle service manual are to be followed when changing the shock absorber.
3. When working on a lifted vehicle make sure it is securely supported to prevent it from tipping.

- 1**  
Make sure that all components listed on the front page of this manual under "Kit contents" are included.
- 2**  
Measure the free length of the spring.
- 3**  
Fit the spring clip, turn the shock absorber so the spring rests against the spring platform and turn the rings (lock nut and spring platform) so they touch the upper surface of the spring.
- 4**  
With a C-spanner, turn the upper spring platform approximately 8 laps (10 mm) clockwise to pre-load the spring before fitting the shock absorber to the motorcycle.



## Mounting Instructions - step 2

### Installing the Shock Absorber

#### ⚠ WARNING!

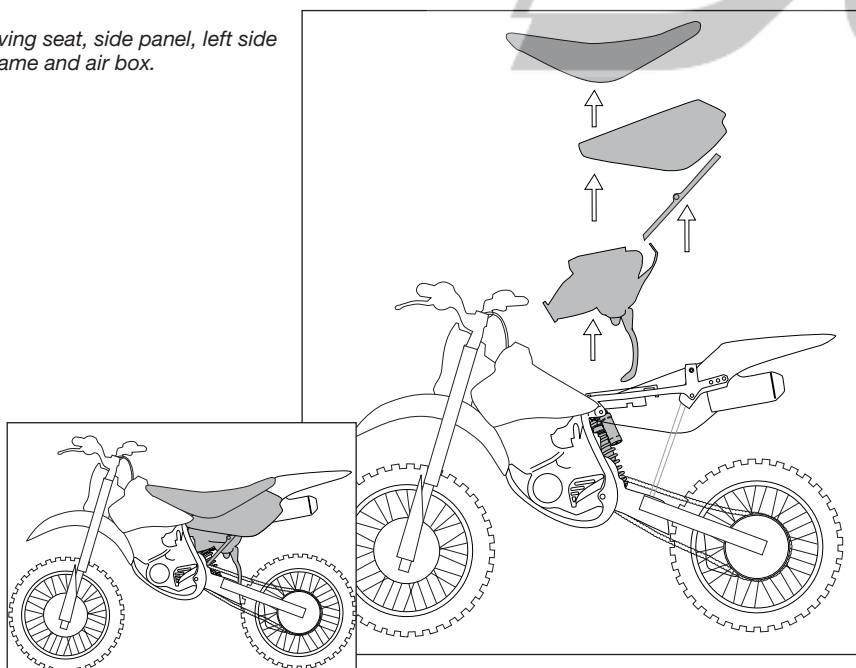
1. It is advisable to have an Öhlins dealer or other qualified person install your shock absorber.
2. Instructions in the vehicle service manual are to be followed when changing the shock absorber.
3. When working on a lifted vehicle make sure it is securely supported to prevent it from falling.

1  
Put the motorcycle on a stand so the rear wheel is off the ground. Make sure that the vehicle is securely positioned so that it will not fall over.

2  
Remove the seat by loosening the rear attachment screws.

3  
Remove the left side panel and the removable part of the left sub-frame. Loosen the hose clamp from the air box and remove the air box.

Fig.  
Removing seat, side panel, left side sub-frame and air box.



4  
Loosen the lower and the upper attachment of the original shock absorber and remove it.

5  
Attach the Öhlins shock absorber in the same way as the original unit. Fasten it by using the chamfered screw and washer provided in this kit for the upper attachment. Use the original screw for the lower linkage.

6  
Place the seat support and seat back in position and fasten them.

#### NOTE!

Make sure that all bolts are tightened to the correct torque and that nothing fouls or restricts movement of the shock absorber when the suspension is being fully compressed or extended.

7  
Continue your work according to the Owner's Manual.

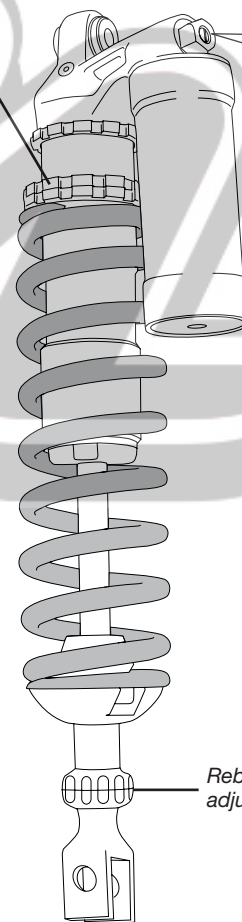
## Adjustments

Your Öhlins shock absorber type 46 PRXW features the following adjusters:

#### Spring pre-load adjuster

Adjust spring pre-load by turning the rings on the cylinder house. Use a C-spanner.

Spring pre-load adjustment



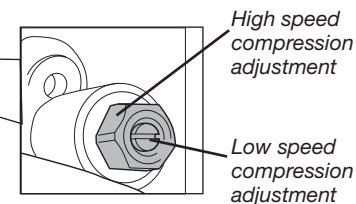
Rebound adjustment

#### Compression damping adjuster

Adjustments are made on top of the reservoir. Low speed adjustments: Slotted centre screw. High speed adjustments: Hexagon screw.

#### Rebound damping adjuster

Adjuster wheel on the piston shaft above the end bracket.



#### NOTE!

When delivered the Öhlins shock absorber is dialed to recommended settings for the specific brand and make of the motorcycle. If you have changed the settings, reset according to the following:

The adjusters have a normal right hand thread. Turn the damping adjusters clockwise to fully closed (pos. zero [0]). Turn counter clockwise to open and count the clicks until you reach the recommended number. See Set-up data on the last page of this manual.

#### CAUTION!

Do not use too much force, delicate sealing surfaces can be damaged.