

# Set-up Data

## Recommended set-up:

Rebound adjustment	13 clicks
Compression adjustment	1 turn
Spring preload	2 mm
Oil level	150 mm
Öhlins Front Fork fluid	Part No. 01309-01

## Recommended sag and ride height:

The measures should not differ from the following recommendations:

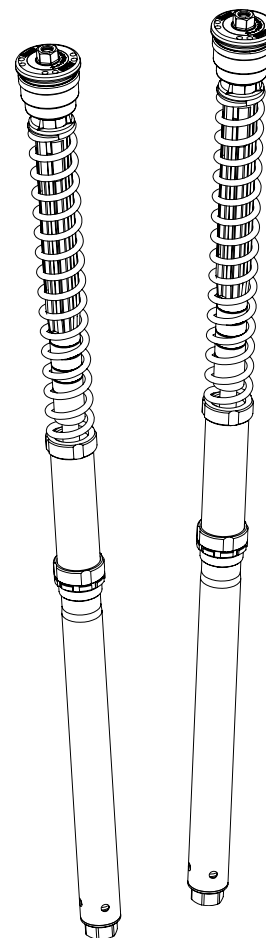
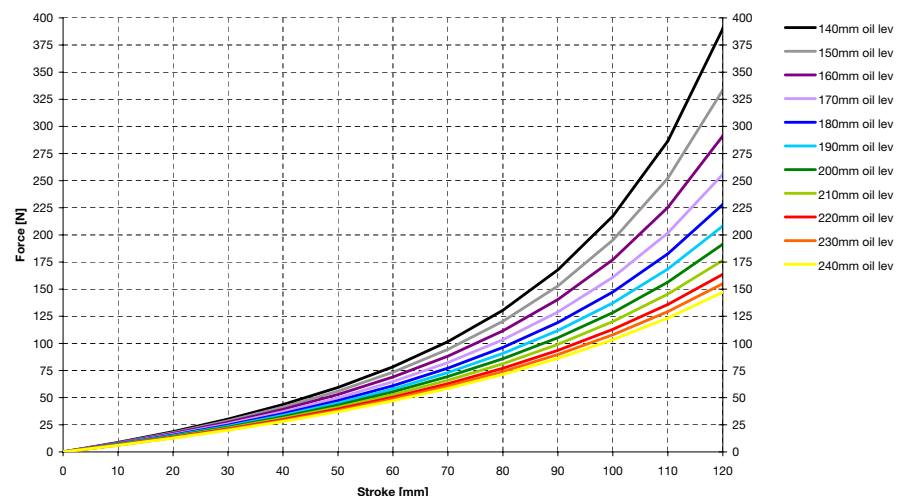
### Without rider:

Rear	5 - 15 mm (R1-R2)
Front	20 - 30 mm (F1-F2)

### With rider:

Rear	25 - 35 mm (R1-R3)
Front	30 - 40 mm (F1-F3)

## Diagram - Oil Level - Force



Before installing this product, check the contents of the kit. If anything is missing, please contact your nearest Öhlins dealer.

## Kit Contents

	Part No.	Pcs.
Front fork kit	FGK133	1
Öhlins Sticker (60x23) white	00191-32	2
Öhlins Sticker (60x23) blue	00191-33	2

## Warning!

This kit should only be installed by an authorized Öhlins dealer. The installation procedure requires certain tools.

Please note that during storage and transportation, especially at high ambient temperature, some of the oil and grease used for assembling may leak and stain the packaging. This is in no way detrimental to the product, wipe off the excessive oil/grease with a cloth.

## Warning!

Before installing this product, read the Öhlins Owner's Manual. The front fork is an important part of your vehicle and will affect the stability.

Öhlins products are subject to continuous improvement and development, therefore, although these instructions include the most up-to-date information available at the time of printing, minor updates may occur.

To find the latest information contact your Öhlins distributor. Please consult your Öhlins dealer if you have any questions regarding the contents in this document.

Part no. FGK133\_3  
Issued 2009-05-14



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

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)

## Front Fork Kit for Kawasaki ZX-6R

# FGK 133

## Mounting Instructions



## 👁 Note!

The front fork is a very important part of the vehicle and will therefore affect the stability.

👁 Read and make sure that you understand the information in this manual before you use this product. If you have any questions regarding installation or maintenance please contact your nearest Öhlins dealer.

👁 Öhlins Racing AB can not be held responsible for any damage to the front fork, vehicle, other property or injury to persons, if the instructions for installing and maintenance are not followed exactly.

## ⚠ Warning!

This product was developed and designed exclusively for a specific vehicle model and should only be installed on the intended vehicle model in its original condition as delivered from the vehicle manufacturer.

⚠ After installing this product, take a test ride at low speed to make sure that your vehicle has maintained its stability.

## 👁 Note!

When working on this product, always consult your Vehicle Service Manual.

👁 This Manual should be considered as a part of the product and should therefore accompany the product throughout its life cycle.

## Safety Symbols

In this manual, mounting instructions and other technical documents, important information concerning safety is distinguished by the following symbols:



The Safety Alert Symbol means: *Warning! Your safety is involved.*

## ⚠ Warning!

The Warning Symbol means: *Failure to follow warning instructions can result in severe or fatal injury to anyone working with, inspecting or using the front fork, or to bystanders.*



## Caution!

The Caution Symbol means: *Special precautions must be taken to avoid damage to the front fork.*

## 👁 Note!

The Note Symbol indicates information that is important regarding procedures.

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

## ⚠ Warning!

Before riding, always make sure that the basic settings made by Öhlins are according to recommended Set-up Data. Contact an Öhlins dealer if you have any questions about setting up the front fork.

**1. Spring Preload Adjuster.** Adjust by turning the nut on the top of the fork leg. Turn clockwise to increase and counter clockwise to decrease the spring preload.

**2. Rebound Damping Adjuster.** Adjust by turning the screw with an allen key.

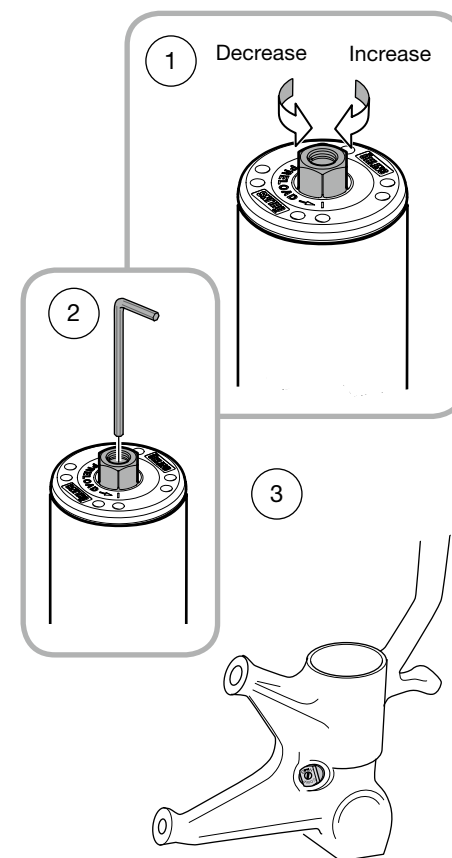
**3. Compression Damping Adjuster.** Adjust by turning the screw, use proper tool.

## To Reset

The adjusters have a normal right hand thread. Turn the damping adjuster clockwise to fully close (pos. zero [0]). To open, turn the damping adjuster counter clockwise - count the clicks or turns from fully closed until you reach the recommended setting. **See Set-up data** in this manual.

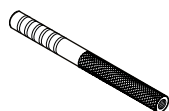
## 👁 Caution!

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

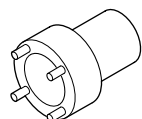


## Tools

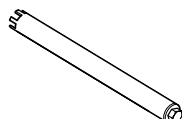
Tool 1765-03



Tool 0797-01



Tool 1797-07



## ⚠ Warning!

Before riding, always ensure that the basic settings made by Öhlins are intact. Take notes, adjust in small steps and make only one adjustment at a time.

## Step 1

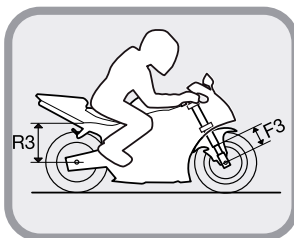
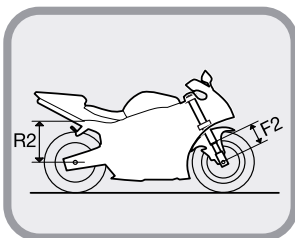
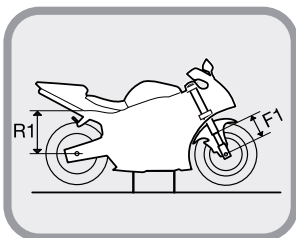
### Spring Preload - Free Sag - Ride Height

Spring preload is a crucial part of setting your motorcycle since it affects the height of the motorcycle and the fork angle.

## 👁 Note!

The following procedure should be performed on a flat surface.

1. Put the motorcycle on a workstand so that both wheels are off the ground and the suspension is unloaded.
2. Mark, for example with a piece of tape, a point immediately above the rear wheel axle.
3. Measure the distance from the marked point to a fixed point, for example the wheel axle (R1).
4. Measure the distance from the bottom of the outer tube to a fixed point, for example the front wheel axle (F1).
5. Put the motorcycle on the ground so that the front and the rear suspensions are slightly compressed. Repeat the measuring procedures (R2 and F2).
6. Sit on the motorcycle in normal riding position, properly outfitted in your riding gear. Repeat the measuring procedure (R3 and F3).



## Recommended Measures

Recommended measures for Free Sag and Ride Height; see Set-up Data.

## 👁 Note!

Always check on the Öhlins web site [www.ohlins.com](http://www.ohlins.com) or with your Öhlins dealer/ distributor for the latest information.

## Step 2

### Adjust spring preload

1. If your measures differ significantly from the recommendations in the Set-up Data, adjust the spring preload. (See Adjustments this manual).
2. If the ride height still differs from the recommendations, you may need to change to softer/harder spring. Contact your Öhlins dealer for advise.

## ⚠ Warning!

Incorrect spring rate may result in a front geometry that is either too steep or too flat. This can result in a tendency of under or over steering, that could seriously affect the handling characteristics of the motorcycle.

## ⚠ Warning!

It is advisable to have an Öhlins dealer install the front fork.

When installing, consult your Vehicle Service Manual.

## 1

Put the motorcycle on a workstand so that the front wheel barely touches the ground.

## ⚠ Warning!

Make sure the vehicle is securely supported so that it will not tip.

## 2

Remove the front fender, brake caliper and the front wheel.

## 3

Measure the position of the front fork: Measure the distance from the top of the fork leg to the top of the upper fork crown.

## 👁 Note!

It is very important that the front fork is reattached at the exact same position.

## 4

Release the spring preload.

## 5

Loosen the upper fork crown by loosening the screws.

## 6

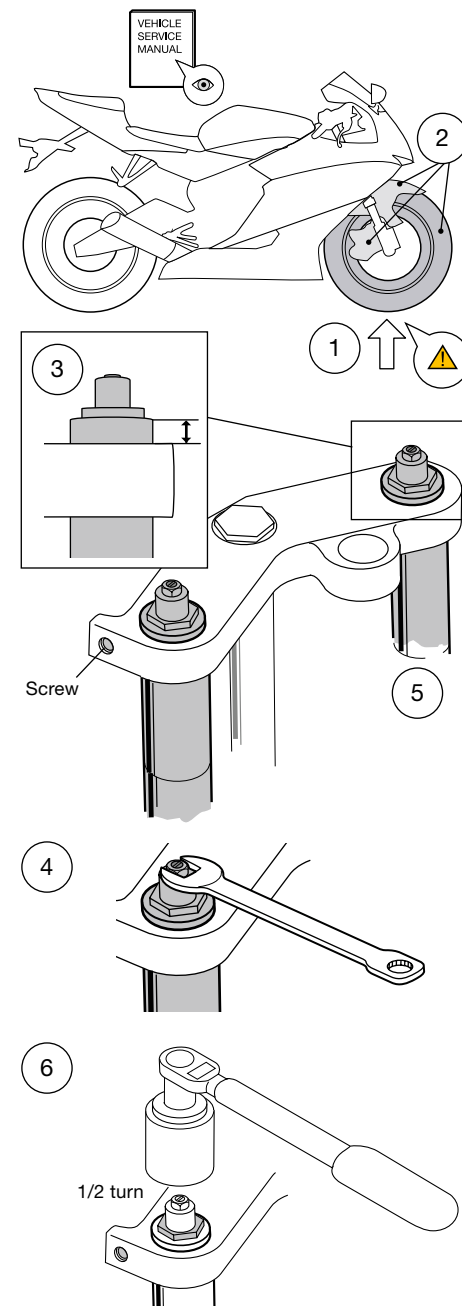
Loosen (do not remove) the top cap 1/2 turn.

## 7

Loosen the lower fork crown by loosening the screws.

## 8

Remove the fork legs from the fork crowns.



## 2 - Disassemble Original Front Fork

### 2.1

Remove the original top cap from the fork leg.

### 2.2

Remove the original cartridge from the fork leg.

### 2.3

Turn the fork legs upside down to pour out all oil.

## 3 - Install Öhlins Front Fork Kit

### 3.1

Remove the Öhlins top cap from the shaft.

### 3.2

Remove the spring support, spring and the preload tube.

### 3.3

Put the cartridge into the fork leg.

### 3.4

Tighten the cartridge with tool 01797-07 to torque 20 Nm. Smear some loctite 243 on the threads.

### 3.5

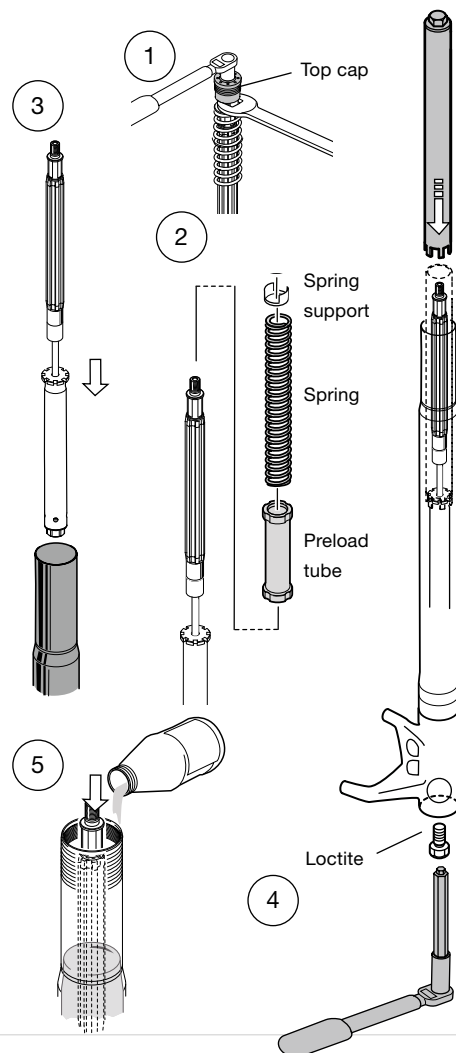
Remove tool 01797-07 and pour approximately 0,5 litre Öhlins Front Fork fluid into the fork leg.

### 3.6

Open the rebound adjuster fully. Install the top cap directly to the cartridge (no spring or preload tube). Pull up the front fork outer tube and screw it to the top cap. **Handtighten only. Pump out all air from the cartridge by pulling the outer tube up and down 10-15 times.**

### 3.7

Remove the top cap from the fork leg.



## 3 - Install Öhlins Front Fork Kit

### 3.8

Make sure the piston shaft is in the bottom of the fork leg and that the outer fork leg is in the bottom position. *Measure the oil level with a ruler. Recommended setting according to chapter **Set-up data** and **Diagram: Oil level-force**.*

### 3.9

Put the preload tube and the spring on top of the cartridge.

### 3.10

Fasten tool 01765-03 on the top of the shaft. Install the spring support by leading it over the tool.

### 3.11

Pull up the piston shaft with tool 01765-03 and grab the spring support with a 19 mm wrench.

### 3.12

Open the rebound adjuster fully. Remove the pull-up tool and install the top cap to the shaft. Tighten with torque 15 Nm.

### 3.13

Pull up the outer tube. *Make sure the fork leg is in a fully extended position. Use tool 00797-01 to tighten the top cap.* Tighten the top cap with torque 10 Nm.

### 3.14

Set the spring preload, rebound and compression adjusters according to **Adjustments and Set-up data in this manual**.

### 3.15

Install the front fork legs into the fork crowns. Tighten the upper fork crown with torque 20 Nm, and the lower fork crown with torque 10 Nm.

### 👁 Note!

*It is very important that the front fork is in the same position as before changing the fork kit!*

