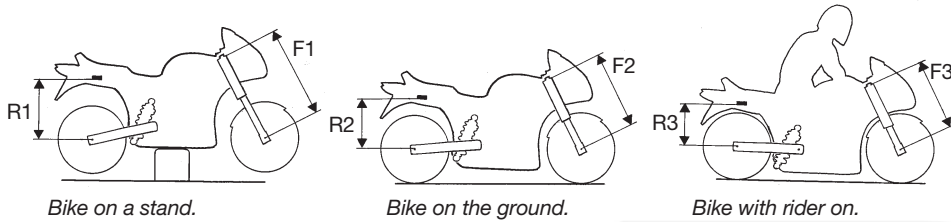


Owners Manual

Mounting instructions Öhlins shock absorber kit BM 204 for BMW F 650 CS



Setup data

Shock absorber length	301 mm
Shock absorber stroke	52 mm
Spring preload	11 mm
Rebound damping adjuster	16 clicks

13

Refit the brake fluid reservoir and the seat.

14

Refit the sub frame, the brake fluid reservoir, the silencer and the seat.

NOTE!

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

15

Continue your work according to owners manual

Checking sag and ride height

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 $F1 - F2 = \dots\dots\dots$

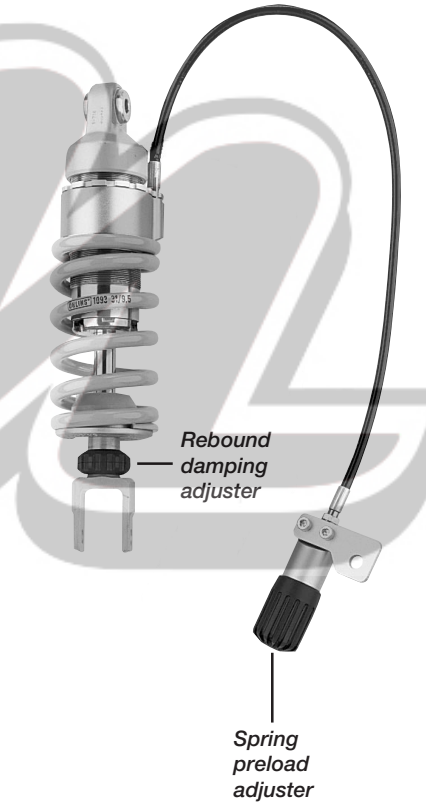
Ride height $F1 - F3 = \dots\dots\dots$

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 $R1 - R2 = \dots\dots\dots$

Ride height $R1 - R3 = \dots\dots\dots$



Öhlins shock absorber 46 ERS

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

Rebound damping adjuster

Adjuster wheel on the piston shaft above the end bracket.

Spring preload adjuster

Adjustments are made by turning the knob on the hydraulic adjuster. Clockwise for harder adjustment, counter clockwise too release the preload.

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 setting check like this:

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 of clicks. See Setup data at page 4.

CAUTION!

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



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

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Safety signals

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



The Safety alert symbol means:
Caution! 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 suspension, or to bystanders.

CAUTION!

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

NOTE!

This indicates information that is of importance with regard to procedures.

Before installation

Öhlins Racing AB can not be held responsible for any damage whatsoever 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.

⚠ 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 whatsoever that may occur after fitting the shock absorber. Contact an Öhlins dealer or other qualified person for advice.

2. Please study and make certain that you fully understand all the mounting instructions and the owners manuals before handling this shock absorber kit. If you have any questions regarding proper installation procedures, contact an Öhlins dealer or other qualified person.

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

Öhlins products are subject to continual 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 suspension and this manual. Please consult your Öhlins dealer if you have any questions with regard to the contents of the manual.

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.

Kit contents

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

Description	Pcs.	Part No.
Shock absorber 46 ERS	1	BM 204
Bolt M10x40	1	01046-24
Tie-rop	2	00231-01
Sticker memo notes	1	01180-01
Sticker Öhlins	2	00192-01
Owners manual	1	

Mounting instructions

1

Put the motorcycle on a stand so the rear wheel is clear of the ground. The swing arm must be free, so the suspension is unloaded. Make sure it's steadily fixed so it will not fall over.

⚠ WARNING!

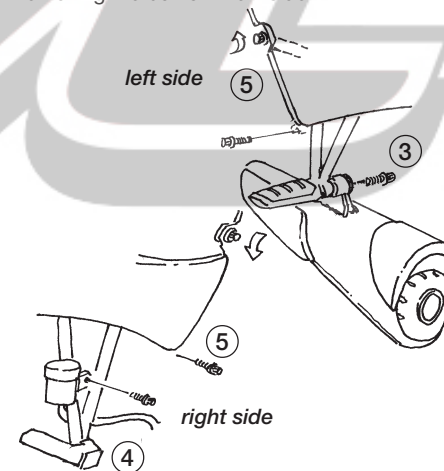
1. It's advisable to have an Öhlins dealer or other qualified person to fit your shock absorber.
2. Instructions in the vehicle service manual are to be followed when changing the shock absorber.
3. When working on a lifted vehicle it must be securely supported to prevent it from falling.

2

Loosen the rear seat and lift it off.

3

Loosen the silencer from the left rear foot rest by removing the bolt on the inside.



4

Remove the brake fluid reservoir on the right side. the sub frame, loosen the hose from its bracket.

5

Remove the two lower bolts of the sub frame and loosen the two upper bolts, so the sub frame can be tilted upwards.

6

Tilt and secure the sub frame in a position so the upper mount of the shock absorber is accessible.

7

Loosen the lower shock absorber bracket from the triangle link.

8

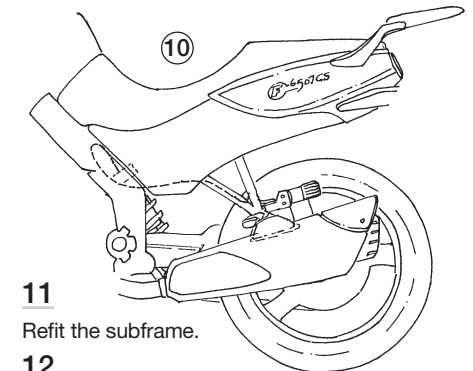
Loosen the upper shock absorber mount and remove the shock absorber upwards.

9

Mount the Öhlins shock absorber in reverse order, first the upper attachment then the lower one.

10

Put the spring preload adjuster hose through the frame as illustrated.

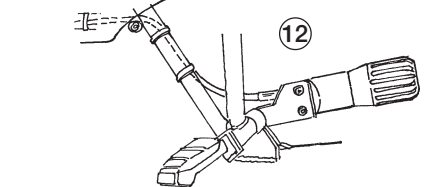


11

Refit the subframe.

12

Attach the spring preload adjuster to the rear silencer bracket. Use bolt provided to attach the adjuster and the silencer.



NOTE!

Make sure that the hose has soft bends and not will be squeezed anywhere.

