

Mounting Instructions

Öhlins Shock Absorber kit BM 942
for BMW R 1100 GS, R 1150 GS - Rear

Setup data

Shock absorber length	376 mm
Shock absorber stroke	56 mm
Spring preload	16 mm
Rebound damping adjuster	12 clicks

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 =

Ride height F1 - F3 =

Rear suspension

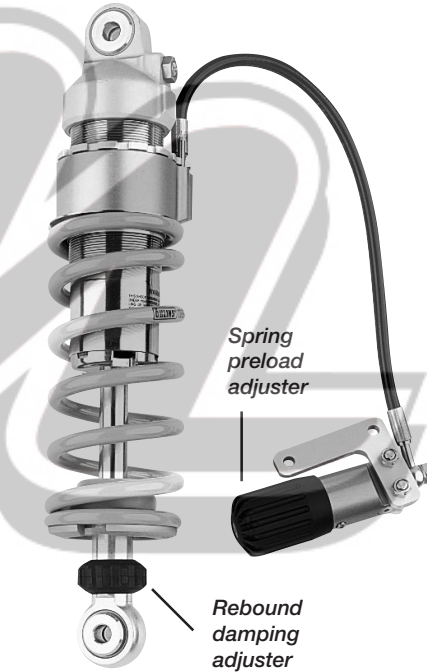
- R1. Bike on a stand with the suspension fully extended =
- R2. Bike on the ground without rider =
- R3. Bike on the ground with rider =

Free sag R1 - R2 =

Ride height R1 - R3 =

Recommendations

F1 - F2:	40 - 50 mm
F1 - F3:	55 - 65 mm
R1 - R2:	5 - 15 mm
R1 - R3:	25 - 35 mm



Öhlins shock absorber 46 DRS

Your Öhlins shock absorber type 46 DRS 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 last page.

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

Part No. BM 942. Issued 09 05 13

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



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 DRS	1	BM 942
Sticker memo notes	1	01180-01
Sticker Öhlins	2	00192-01
Owners manual	1	

Mounting instructions

1

Place the motorcycle on the center stand.

⚠ 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

Remove passengers seat and driver seat.

3

Loosen the brake caliper.

4

Remove rear wheel.

5

Loose the adjustment cylinder to the hydraulic spring pre-load adjuster.

6

Remove lower shock absorber bolt.

7

Remove right front seat bracket and remove upper shock absorber bolt.

8

Remove the shock absorber together with the hydraulic spring pre-loader adjuster.

9

Mounting the Öhlin shock absorber in upper bracket with the gas valve backwards, use the original bolt.

10

Mount the adjustment cylinder to the hydraulic spring pre-load adjuster in original bracket. The hose shall be routed between the air box and the battery box.

11

Mount the shock absorber in lower bracket.

12

Mount the rear wheel and the brake caliper.

13

Make sure that all bolts are tightened.

14

Mount seat bracket, drivers seat and passengers seat.

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.

⚠ WARNING!

Certain modifications are necessary to install the Öhlins shock absorber. It is vital that the mounting instructions are carefully followed.