

Kit Contents		
Description	Part No	Pcs
Shock absorber 46HRCS	BM048	1
Tie rap	00231-01	2
Sticker Öhlins	00192-01	2
Memo sticker	01180-01	1
Owners manual		1

**👁 Note!**

Please note that there can be small differences between your product and the images in these instructions.

**👁 Note!**

Please note that during storage and transport, especially at high ambient temperature, some of the oil and grease used for assembly may leak and stain the packaging. This will not cause damage to the product, wipe off the excessive oil or grease with a cloth.

**👁 Note!**

Before you install this product, check the kit contents. If anything is missing, please contact an Öhlins dealer.

**⚠ Warning!**

Before you install this product, read the Öhlins Owner's manual. This product is an important part of the vehicle and the vehicle stability.

Shock absorber for BMW F 650 GS

**BM 048**

Mounting Instructions



# MOUNTING INSTRUCTIONS

## **⚠ Warning!**

We strongly recommend to let an Öhlins dealer install this product.

## **⚠ Warning!**

If you work with a lifted vehicle, make sure that it is safely supported to prevent it from tipping over.

## **👁 Note!**

When you work with this product, see the vehicle service manual for vehicle specific procedures and important data.

## **👁 Note!**

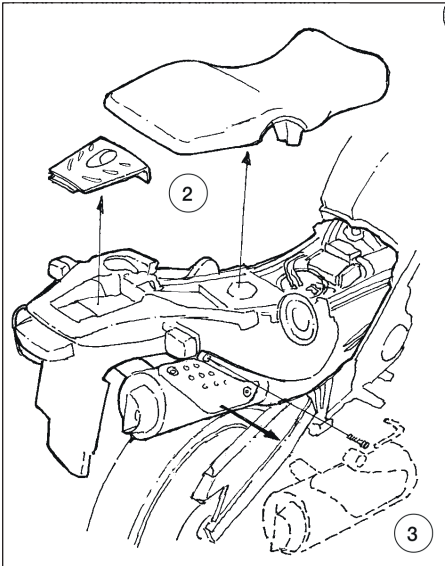
Before you install this product clean the vehicle.

**1**

Put the motorcycle on a work stand so that the rear wheel barely touches the ground.

**2**

Open the toolbox and pull the T-handle to loosen the rear seat and lift it off.



**3**

Loosen the screw of the right silencer bracket and remove the right silencer just by pulling it outwards.

## **👁 Note!**

Lower the vehicle so that the suspension is slightly compressed before you tighten the screws.

## **👉 Caution!**

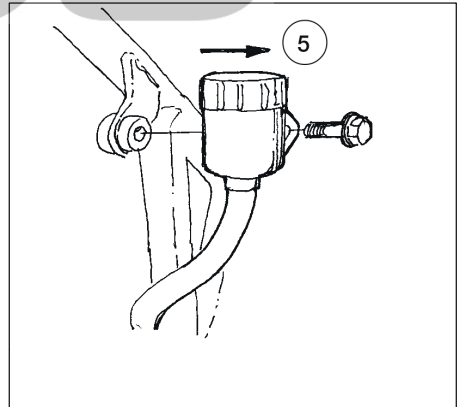
Make sure that you tighten all screws to the correct torque and that nothing fouls or restricts movement of the shock absorber/front fork/steering damper when the suspension is fully compressed or extended.

**4**

Loosen the exhaust pipe with a 15mm key and remove the left silencer by pulling it straight rearwards.

**5**

Loosen the brake fluid reservoir on the right side and let it hang down.



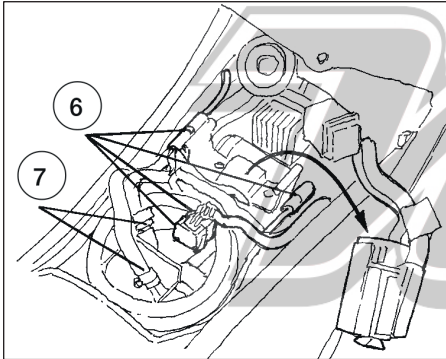
# MOUNTING INSTRUCTIONS

6

Remove the control box and all electric connections (4pcs) and let the loose wiring hang out to the right side of the motorcycle.

## ⚠ Caution!

*When removing the fuel tank it must be emptied or contain very small amounts of fuel. Otherwise it will flow over when the fuel lines are loosened.*

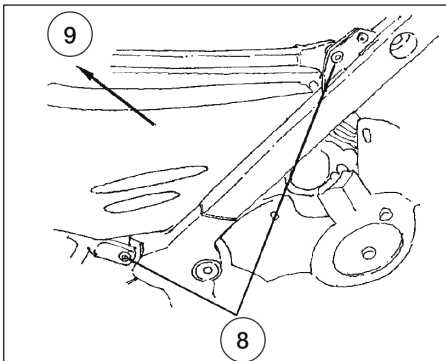


7

Loosen the two fuel lines.

8

Loosen the four bolts holding the rear subframe unit.



9

Lift the rear unit backwards, upwards and remove it from the motorcycle.

10

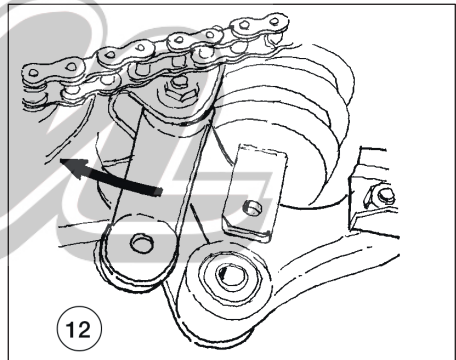
Remove the original reservoir by loosening the two o-rings of the bracket.

11

Loosen and remove the original hydraulic pre-load adjuster and the bracket.

12

Loosen the lower bracket of the right droplink and pull it backwards, so the lower shock absorber mount is reachable.



13

Loosen the lower shock absorber mounting bolt to release the shock absorber from the triangle link.

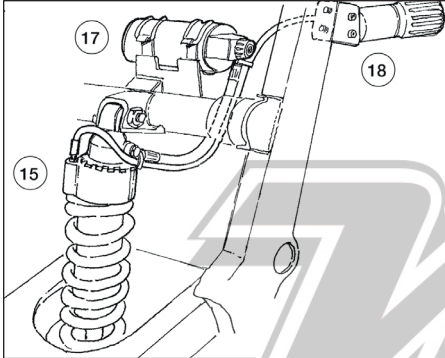
14

Loosen the upper shock absorber mounting bolt and remove the shock absorber by lifting it upwards.

# MOUNTING INSTRUCTIONS

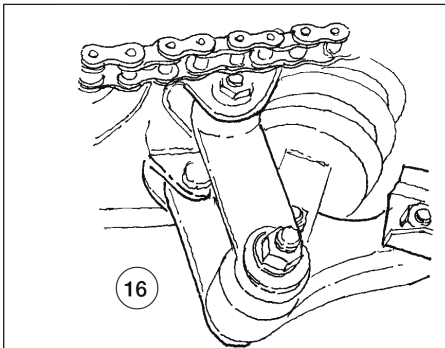
**15**

Fit the Öhlins shock absorber in reverse order. First fit the lower shock absorber mounting bolt.



**16**

Then fit the upper shock absorber mounting bolt and tighten. Bring the droplink back in position again and fit the pivot bolt and nut.



**17**

Fit the reservoir in the original bracket. Pull the hose under the upper shock absorber bracket.

**18**

Attach the new pre-load adjuster bracket to frame and attach the hose with the tierap provided.

**19**

Refit the fuel tank and fix the bolts. Refit the fuellines and the electrical connections. Refit the control box.

**20**

Put the brake fluid reservoir back in position.

**21**

Refit first the left and then the right silencer.

**22**

Put the seat back in position and lock it. Close the toolbox lid.

## **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.*

**23**

Continue your work according to Owners manual.

# MOUNTING INSTRUCTIONS



# MOUNTING INSTRUCTIONS



# MOUNTING INSTRUCTIONS



# ADJUSTMENTS

## **⚠ Warning!**

*Before you ride/drive, always make sure that the setup is according to the recommended setup data. Read about adjustments and setting up in the Öhlins Owner's Manual before you make any adjustments. Contact an Öhlins dealer if you have any questions about setting up.*



## SETUP DATA

Length	328.5	mm
Stroke	60.5	mm
Rebound	14	clicks
Compression	12	clicks
Spring preload	15	mm

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 an Öhlins distributor. Please contact Öhlins if you have any questions regarding the contents in this document.

Part no. MI\_BM048\_0  
Issued 2009-05-13

© 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)