

# Mounting Instructions

Öhlins shock absorber kit BU202  
for Buell Lightning XB9S

## 12

Refit the battery, the fairings and the 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

## 13

Continue your work according to the Owners manual, section adjustments.

### Setup data

Shock absorber length	358 (+11/-1) mm
Shock absorber stroke	78 mm
Spring pre-load	10 mm
Rebound damping adjuster	15 clicks
Compression damping adj.	14 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

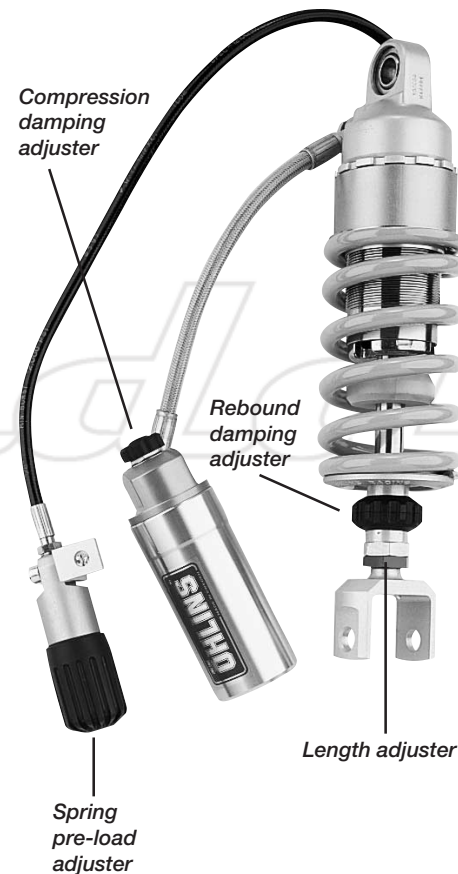
R1. Bike on a stand with the suspension fully extended = .....

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

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

Free sag R1 - R2 = .....

Ride height R1 - R3 = .....



### Öhlins shock absorber 46 HRCLS

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

#### Compression damping adjuster

Adjustments are made on top of the reservoir.

#### Rebound damping adjuster

Adjuster wheel on the piston shaft above the end bracket.

#### Spring pre-load adjuster

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

#### Length adjuster

Adjustment is made by turning the end eye and tightening with the lock nut.

### 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.



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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.

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 46HRCLS	1	BU 202
Washer	2	00153-04
Nut M6	2	00430-02
Bolt MC6S 6x25	2	01046-17
Bolt UC6S 1/4 UNC x 5/8	4	03202-01
Bolt UC6S 1/4 UNC x 1"	1	03202-02
Bracket	1	01084-01
Spacer	4	01138-01
Tie-rop	4	00231-01
Sticker memo notes	1	01180-01
Sticker Öhlins	2	00192-01
Owners manual	1	

## 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

## Mounting instructions

1

Put the motorcycle on a stand so the rear wheel is clear of the ground. 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

Remove the seat.

3

Release the external reservoir under the seat.

4

First loosen the lower shock absorber attachment then the upper shock absorber attachment.

5

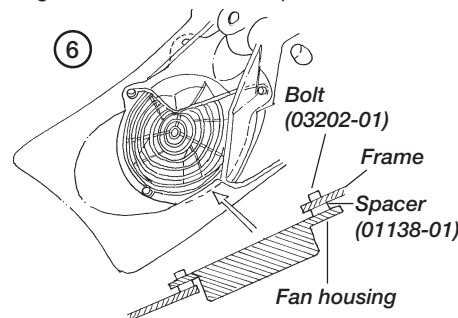
Raise the rear end of the motorcycle, so the swing arm can swing downwards and remove the shock absorber upwards.

6

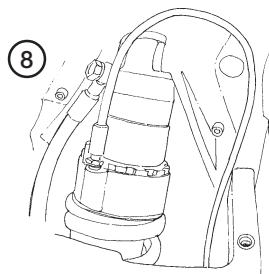
The cooling fan must be tilted to provide space for the shock absorber. This is achieved by mounting the spacers and bolt provided according to the illustration.

7

Mount the Öhlins shock absorber by first fitting the hydraulic spring pre-load adjuster and the reservoir down towards the swing arm. Lift the shock absorber in position in the same way the original shock absorber was positioned.



8



8

Attach the shock absorber to the upper bracket.

9

Lift the swing arm and fit the shock absorber to the rear bracket.

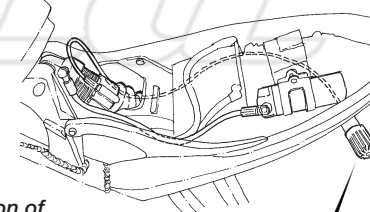
### NOTE!

To fit the reservoir the original bracket must be opened wider. Fix the reservoir with tie-raps.

10

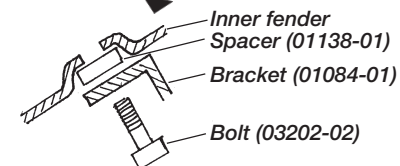
Fit the reservoir to the original reservoir bracket. Fix the bracket with tie-raps. Make sure that the hose runs in soft turns.

10



Position of the external reservoir and the spring pre-load adjuster

11



11

Mount the bracket to the pre-loader adjuster with bolt and spacers provided. Fit the adjuster to the bracket.