

Setup data

492 mm
132 mm
25 clicks
15 clicks
1.5 turns
30±5 mm
30±5 mm
100±5 mm
80±5 mm
std.
std.

NOTE!

Make notes when the correct spring is mounted and sag and ride height is adjusted.

Spring pre-load____mm

Notes

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	=

F1 - F3 =

Rear suspension

Ride height

R1. Bike on a stand with the
suspension fully extended

R2.Bike	on th	e ground	without rider	=

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

Free sag	R1 - R2 =
icc sag	

Ride height	R1 - R3 =
niue Helulii	111 110

NOTE!

If ride height is higher than recommended, softer spring/springs must be used.
If ride height is lower than recommended, harder spring/springs must be used.
Contact your Öhlins dealer for advice.

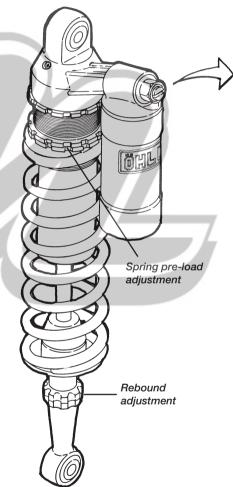


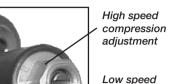
Öhlins Racing AB, Box 722, S-194 27 Upplands Väsby, Sweden. Phone +46 8 590 025 00. Fax +46 8 590 025 80.

www.ohlins.com

Mounting Instructions

Öhlins shock absorber kit YA 594 for Yamaha YZ 450F 2005





adjustment

compression

Öhlins shock absorber 46 PRXW
Your Öhlins shock absorber type 46 PRXW

Compression damping adjuster

features the following adjusters:

Adjustments are made on top of the reservoir. Low speed adjustments: Slotted centre screw. High speed adjustments: Hexagon screw.

Rebound damping adjuster

Adjuster whell on the piston shaft above the end bracket.

Spring pre-load adjuster

Adjustment made by rings on cylinder house. Use C-spanner.

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 settings, 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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YA 594, issued 05 04 05

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.



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.

A 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, listed on the front page of this instruction. If anything is missing, contact your Öhlins dealer.

Description	Pcs.	Part No.
Shock absorber	1	YA 594
Spring clip	1	00629-01
C-spanner	1	00710-02
Sticker Öhlins	2	00197-01
Sticker memo notes	_1	01180-01
Owners manual	1	



Notes	

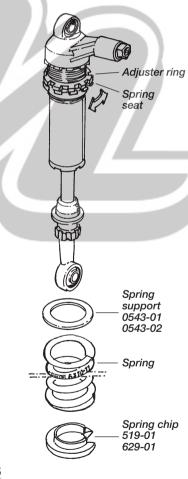
Assembly of Öhlins Shock Absorber with spring separately supplied

1

Make sure that all components are included; spring, spring clip and washer. Measure the free length of the spring.

2

Place the washer between the upper spring platform and the spring. The text on the spring should be facing upward.



3

Fit the spring clip, turn the shock absorber so the spring rests against the spring seat and turn the rings (upper spring platform and locking nut) so they touch the upper surface of the spring. 4

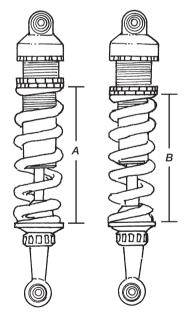
Turn the upper spring platform approximately 8 laps (10 mm) clockwise to pre-load the spring before fitting the shock absorber to the motorcycle.

5

Fit the shock absorber and measure the free sag with the motorcycle off the ground. (See page 4 for procedures)

6

Let the motorcycle stand on the ground without rider. Fine adjust the pre-load by turning the spring platform until recommended sag is achieved (see Setup data). Measure the spring again and make a note of the pre-load (= free spring length with the length of the compressed spring subtracted).



A-B=Pre-load

Mounting instructions

1

Put the motorcycle on a stand so the rear wheel has ground clearance. Make sure it's steadily positioned and 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 by loosening the rear attachment screws.

3

Loosen the rear frame and the hose clamp from the air filter. Disconnect electrical wires. Remove the whole unit with air filter and muffler.



Loosen the lower and the upper attachment of the original shock absorber and remove it.

5

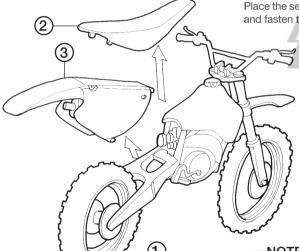
Fit the Öhlins shock absorber in the same way as the original unit. Fasten it by using the two original bolts.





6

Place the seat support and seat back in position and fasten them.



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.

7

Continue your work according to the Owners Manual, section Adjustments.

Spring guideline Moto-X 2005

		Shock	Absorber	Rear	Rear	Front	Front
Brand	Riders weight	Spring	Spring rate	Recom.	Recom.	Recom.	Recom.
	Kg/pounds	Part.No.	N/mm	Static sag	Ride height	Static sag	Ride height
Yamaha	35/77	698-05	42	25±5 mm	70±5 mm	25±5mm	60±5 mm
YZ 85	40/88	698-06	44				
	45/99	698-07	46				
	50/110	698-08	48				
	55/121	698-09	50				
Yamaha	55/121	596-04	40	30±5 mm	100±5 mm	30±5 mm	80±5 mm
YZ 125	60/132	596-05	42				
	65/143	596-06	44				
	70/154	596-07	46				
	75/165	596-08	48				
	80/176	596-09	50				
	85/187	596-10	52				
Yamaha	65/143	596-07	46	30±5 mm	100±5 mm	30±5 mm	80±5 mm
YZ 250	70/154	596-08	48				
	75/165	596-09	50				
	80/176	596-10	52				
	85/187	596-11	54				
	90/198	596-12	56				
	95/209	596-13	58				
Yamaha	65/143	596-06	44	30±5 mm	100±5 mm	30±5 mm	80±5 mm
YZ 250F	70/154	596-07	46				
	75/165	596-08	48				
	80/176	596-09	50				
	85/187	596-10	52				
	90/198	596-11	54				
Yamaha	65/143	596-06	44	30±5 mm	100±5 mm	30±5 mm	80±5 mm
YZ 450F	70/154	596-07	46				
	75/165	596-08	48				
	80/176	596-09	50				
	85/187	596-10	52				
	90/198	596-11	54				
	95/209	596-12	56				

50 mm Shock Absorber

Yamaha YZ 450F 16 mm pre-load

	70/154	6310-08	48	30±5 mm	100±5 mm	30±5 mm	80±5 mm
	75/165	6310-09	50				
load	80/176	6310-10	52				
	85/187	6310-11	54				
	90/198	6310-12	56				
	95/209	6310-13	58				