

Bike on a stand.

Bike with rider on.

Setup data

Shock absorber length	364 mm
Shock absorber stroke	106.5 mm
Shock absorber spring part No.	00698-11
Spring preload	8 mm
Free sag	30±5 mm
Ride height	105±5 mm
Rebound damping adjuster	20 clicks
Compression damping adjuster	15 clicks

Checking sag and ride height

Front suspension

F1. ATV on a stand with the suspension fully extended =

F2. ATV on the ground with rider =

Ride height F1 - F2 =

Rear suspension

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

R2. Bike on the ground with rider =

Ride height R1 - R2 =

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.

Mounting Instructions

Öhlins rear shock absorber kit
YA 273 for Yamaha Raptor

Öhlins Type 46PRC

Your new Öhlins shock absorber features the following adjusters:

- Compression damping adjusters.
- Rebound damping adjuster.
- Spring preload adjuster.

NOTE!

Your new shock absorber is dialled-in to Öhlins recommended settings.

If you have "played" with the adjusters, please check the setting.

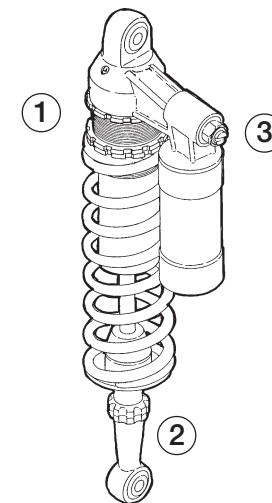
The adjusters have a normal right-hand thread.

On the compression and the rebound damping adjusters, click position zero (0) is when the adjusters are turned clockwise (in) to fully closed.

Using too much force when closing the adjusters may destroy important sealing surfaces.

From position zero (0), turn counter clockwise (out) to open and count the clicks until you reach the recommended number of clicks. See "Setup data" at page 4.

With the adjusters you optimize the suspension for your riding style and the track you are racing at. For details see the "Owners manual".



- 1 Spring preload adjuster**
Adjustments are made with C-spanners
- 2 Rebound damping adjuster**
When adjusting, use no tools, only your fingers
- 3 Compression damping adjuster**



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

Description	Pcs.	Part No.
Shock absorber	1	YA 273
Spacer (2002)	2	01018-02
Spacer (2003)	2	01018-28
Seal	2	00534-01
Sticker Öhlins	2	00197-01
Sticker memo notes	1	01180-01
C-spanner	1	00710-02
Owners manual	1	

Mounting instructions

1

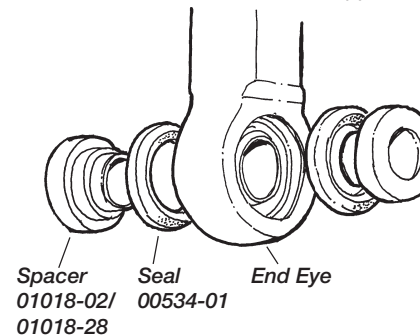
Rise the rear end of the ATV so the rear wheels are free off the ground. Do not apply any lifting force to the swing arm.

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

Support the wheels in position and loosen the shock absorber from its mounts. Start with the lower attachment then loosen the upper mount.



CAUTION!

The YA 273 shock absorber will fit Yamaha Raptor 2002 and 2003. However, the spacers in the end eye differ between models. The model 2002 spacers (01018-02) are slightly thinner than the 2003 spacers (01018-28).

Position the seal rings close to the bearing and use a vice to press the spacers into position. If a vice is not at hand the spacers can be mounted by gentle tapping with a plastic mallet.

3

Fit the Öhlins shock absorber in the same position as the original shock absorbers. The piggy back reservoirs should be directed to the right side of the machine and backwards. Start with the upper mount.

4

Fit the lower attachment to the triangle link.

5

Tighten the attachment bolts to correct torque (see the Owners manual of the ATV)

6

Continue your work according to Owners manual, General settings. For Set-up data and adjustment of spring pre-load, see page 4

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!

The shock absorber is provided with a separate type reservoir filled with high-pressure nitrogen gas. To prevent danger of explosion, study and make certain that you fully understand the following information before handling the shock absorber. The manufacturer cannot be held responsible for damage to property or personal injury that may result from improper handling.

1. Never tamper with or attempt to disassemble the cylinder or the reservoir.

2. Never expose the shock absorber to an open flame or other excessive heat. The shock absorber may otherwise explode due to too high pressure.

3. Be careful not to damage any part of the gas reservoir. A damaged gas reservoir will impair the damping performance or cause malfunction.

4. Take care not to scratch the contact surface of the piston rod of the cylinder; oil could otherwise leak out.

5. Never attempt to remove the plug at the bottom of the nitrogen gas reservoir. Any attempt to remove the plug implies serious danger.

6. When scrapping the shock absorber, follow the instructions for disposal.