Recommended Rear Ride height

- Pro Action suspension

With rider on the snowmobile, wearing all riding gear, we recommend the coupling adjuster free play to be equal in both directions (see figure to the right), assuming that the coupling adjuster is in its standard setting.

Increase or decrease the spring preload until you have reached the middle position of the coupling adjuster.

If you carry heavy luggage, or a passenger on a 2-seater, you will need to do these adjustments under these specific conditions.

Mono Shock suspension

Raise the rear end of the snowmobile slightly, but only until the drive track barely lifts off the ground. On the running board, mark with a pen just above the rear axle. Measure the distance from the marking on the running board to the ground (D1).

With a rider on the snowmobile, measure the distance from the same marking on the running board to the ground (D2).

Recommended rear ride height: D1 - D2 = approximately 65 mm / 2.5 "

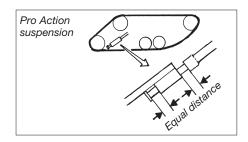
NOTE!

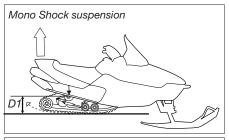
The spring pre-load affects the ride height – it does not affect bottoming.

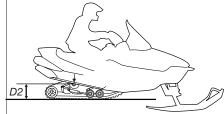
You may need to increase the rebound damping slightly when using more spring pre-load than the delivered setting.

If you experience the suspension bottoming out too often, do not increase spring pre-load. Your ride height might make your coupling adjuster run out of the range described above, thus creating a harsh ride. Instead, change to a stiffer spring and adjust your spring pre-load as described above.

If you experience that the suspension is too stiff, do not decrease spring pre-load. It will not fix your problem, and your ride height might make your coupling adjuster run out of the range described above, thus creating a harsh ride. Instead, change to a softer spring and again adjust your spring pre-load as described above.







Setup Data

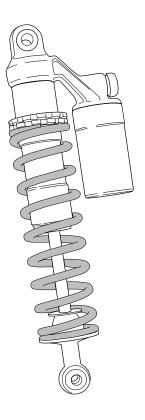
Shock absorber length
Shock absorber stroke
Spring rate
Free spring length
Compression damping adj.
Spring pre-load
419.5 mm
131 mm
28 N/mm
270 mm
10 clicks
5 mm

YA 655 issued 05 08

Mounting Instructions

Öhlins Shock Absorber kit YA 655

for YAMAHA, Front: RX-1 ER SP/GT (EUR), Apex RTX/ER/GT (US), RX Warrior (EUR), Attak (US), RS Vector ER SP (EUR), Nytro (US), RS Rage, RS Vector, RS Vector ER/GT



Kit Contents

Before installing the shock absorber, please check the contents of the kit. If anything is missing, please contact your Öhlins dealer.

Description

 Shock absorber 36 PC
 YA 655 (1 pair)

 C-spanner
 00710-01 (1)

 Sticker memo notes
 01180-01 (1)

 Sticker Öhlins
 00192-01 (2)

 Owner's Manual
 (1)

Before Installation

Öhlins Racing AB cannot be held responsible for any damage 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.

Öhlins products are subject to continuous improvement and development. All information in this manual is based on the latest product information available at the time of approval for publishing. Consequently, there may be minor differences between your suspension and the suspension in this manual. Please consult your Öhlins dealer if you have any questions regarding the contents of this manual.



Safety Signals

Important information concerning safety is distinguished in this manual by the following notations:



The Safety alert symbol means: Attention! 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.

Mounting Instructions

WARNING!

- 1. It is advisable to have an Öhlins dealer or other qualified person install 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 make sure that it is securely supported to prevent it from falling.

1

Lift the front end of the snowmobile so the skis have proper ground clearance. Make sure it is steadily positioned and will not fall over.

2

Remove the original shock absorbers. The two washers at the upper bracket must be removed.

CAUTION!

For certain snowmobiles we advise you **not** to roll them over or lay them on the side. Especially machines with injection oil system, as loss of lubrication due to air in the system can damage the engine. Fuel can also leak from the gasoline tank. Check the Owner's Manual of the snowmobile for procedures.

▲ 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 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 owner's manual 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

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.

NOTE!

When disassembling suspension components we recommend you to first loosen, and not remove all bolts, and then removing the components. Reversed order when assembling – finish with tightening the bolts.

3

Fit the Öhlins shock absorbers. Fit the shock absorber with the piggy back reservoir directed outward and upward.

4

Continue your work according to the Öhlins Owner's Manual, section Settings.

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.

Adjustments

Your Öhlins shock absorber type 36 PC features the following adjusters:

Compression Damping Adjuster

Adjustments are made on top of the reservoir.

Spring Pre-load Adjuster

Adjustments are made by turning the rings on the threaded cylinder body. Use a C-spanner.

NOTE!

When delivered the Öhlins shock absorber is dialed to recommended settings for the specific brand and make of the snowmobile. To readjust the settings:

The adjuster has a normal right hand thread. Turn the damping adjuster 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, next page.

CAUTION!

Do not use too much force, delicate sealing surfaces can be damaged.

Set-up Recommendations

NOTE!

It is of importance that these adjustments are carried out on a flat surface. The most correct settings are made indoors when the snowmobile is thawed out/warmed.

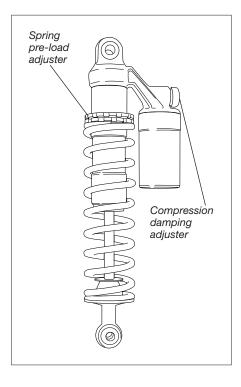
Rear Ride Height and Suspension Comfort

It is very important that the rear ride height is adjusted correctly. The rear ride height and comfort are linked together, due to the coupling device in the rear suspension. If the ride height is not within the right range, the center and rear shock absorbers may start working parallel in unwanted situations, thus creating a too stiff suspension and a harsh ride.

Front Ride Height

The basic spring pre-load is carefully set with highly skilled test riders. If you want to make an adjustment, start with the basic setting and return to it if you are not sure that your adjustment made an improvement for you.

Tip: Measure and note the spring length with the shock absorber fully extended, before and after changes.



Recommended Rear Ride Height - Pro Active suspension

With rider on the snowmobile, wearing all riding gear, recommended coupling adjuster free play is 17 mm (see fig below), assuming that the coupling adjuster is in it's standard setting.

Increase or decrease the spring pre-load until you have reached this position of the coupling adjuster.

If you carry heavy luggage, or a passenger on a 2-seater, you will need to do these adjustments under these specific conditions.

