

Kit Contents

Description	Part No	Pcs
Shock absorber	STX22Air	1

⚠ Warning!

Before installing this product, read this manual. The shock absorber is an important part of your bicycle and will affect the stability.

👁 Note!

Please note that the images in this manual are a general representation of the product and may differ slightly from your product.

👁 Note!

Please note that during storage and transportation, especially at high ambient temperature, some of the oil and grease used for assembling may leak and stain the packaging. This is in no way detrimental to the product, wipe off the excessive oil/grease with a cloth.

👁 Note!

This manual refers to different bikes so pictures might differ from the actual bike but procedure is the same.

Shock absorber for Specialized Enduro, Stumpjumper, Rhyme and Levo

STX22Air

Owner's Manual/ Mounting Instructions



SAFETY PRECAUTIONS

Note!

The shock absorber is an important part of the bicycle and will affect the stability.

Note!

Read and ensure you understand the information in this manual and other technical documents provided by the bicycle manufacturer before using the product.

Note!

Öhlins Racing AB can not be held responsible for any damage to the shock absorber, bicycle, other property or injury to persons, if the instructions for mounting, usage and maintenance are not followed exactly.

Warning!

After you have installed the Öhlins product, take a test ride at low speed to ensure that the bicycle has maintained stability.

Warning!

If the suspension makes an abnormal noise, or the function is irregular, or if you notice any leakage from the product, stop the bicycle immediately and return the product to an MTB authorized Specialized service centre. Products for Specialized bicycles can also be handled by an authorized Specialized service centre.

Warning!

The product warranty shall only apply if the product has been operated and maintained in accordance with recommendations in this manual. If you have any questions regarding usage, service, inspection and/or maintenance please contact an MTB authorized Specialized service centre. Products for Specialized bicycles can also be handled by an authorized Specialized service centre.

Note!

When working with the Öhlins product, always read the bicycle manufacturer's manuals.

Note!

This manual shall be considered as a part of the product and shall therefore accompany the product throughout its life cycle.

SAFETY SYMBOLS

In this manual and other technical documents, important information concerning safety is distinguished by the following symbols:



The Safety Alert Symbol means: Warning! Your safety is involved.

Warning!

The Warning Symbol means: Failure to follow warning instructions can result in severe or fatal injury to anyone working with, inspecting or using the shock absorber, or to bystanders.

Caution!

The Caution Symbol means: Special precautions must be taken to avoid damage to the shock absorber.

Note!

The Note Symbol indicates information that is important regarding procedures.

Warning!

This product was developed and designed exclusively for a specific bicycle model and shall only be installed on the intended bicycle model in its original condition as delivered from the bicycle manufacturer.

Warning!

This product contains pressurized air. Do not open, service or modify this product without proper education and proper tools. All hydraulic servicing must be completed by an Authorized Öhlins MTB Service Center. All other servicing must be completed by an Authorized Öhlins MTB Service Center alternatively you can conduct the service yourself if you have the necessary skills, genuine parts and tools. Products for Specialized bicycles can also be handled by an authorized Specialized service centre. In some cases the shock absorber may need to be sent to another region for service.

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MOUNTING INSTRUCTIONS

⚠ Warning!

It is advisable to have an Authorized Specialized Service Centre install the shock absorber.

⚠ Warning!

If the bicycle is mounted in a work stand please make sure to hold the frame when shock is removed to prevent damage to paint and (or) finish.

👁 Note!

Before installing this product clean the bicycle thoroughly.

👁 Note!

When working on this product, always see the bicycle service manual for specific procedures and important data.

1

Remove the upper attachment bolt.

2

Remove the two bolts at the yoke.

3

Remove the original shock absorber together with the yoke in one unit.

4

Place the original shock absorber in a vise with soft jaws. Remove the shock absorber from the yoke.

5

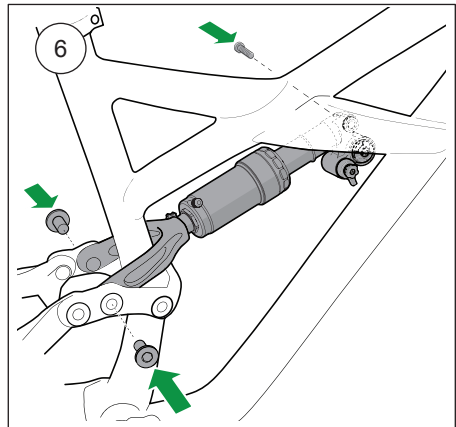
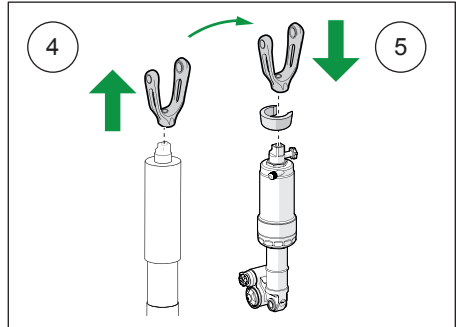
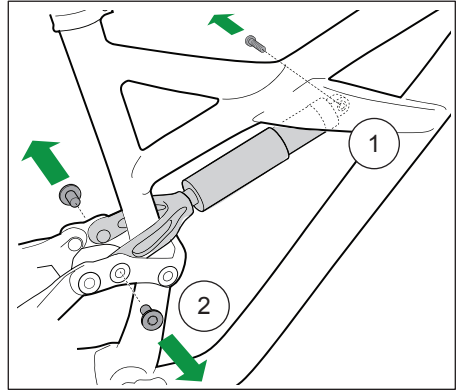
Place the Öhlins shock absorber in a vise with soft jaws. Mount the plastic spacer. Install the yoke on the Öhlins shock absorber. Tighten according to the bicycle service manual.

6

Install the shock absorber with yoke on the bicycle. Do not tighten yet.

7

Place the bicycle on the ground and let the bicycle's weight adjust the free play. Tighten according to the bicycle service manual.



👉 Caution!

Ensure that all screws are tightened to the correct torque and that nothing fouls or restricts movement of the shock absorber when the suspension is fully compressed or extended.

SETTING SAG

Setting sag is a crucial part of setting your bicycle since it affects the height of the bicycle and the fork angle. In the following chapter we will describe two alternative ways of setting the sag.

Note!

This procedure must be performed on a flat surface. Do not jump or bounce on your bicycle as it will result in an inaccurate sag measurement.

Setting sag alternative 1:

Auto-sag setup

The auto-sag feature simplifies the air pressure adjustment and automatically determines the correct amount of sag.

1

Use a shock absorber pump and fill up the shock absorber to 250 psi.

2

Dressed in full riding gear assume normal riding position on the bicycle.

3

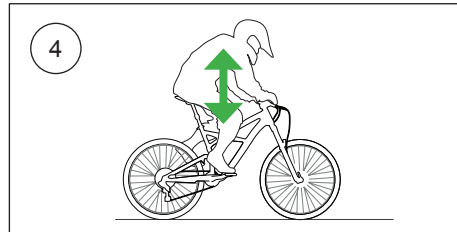
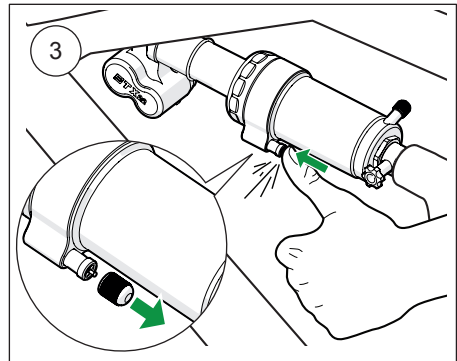
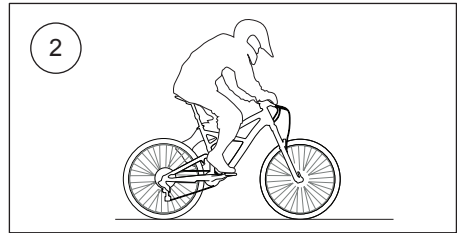
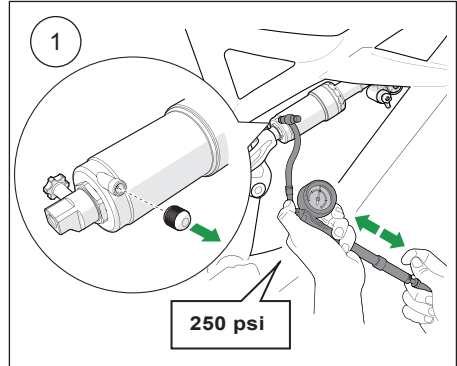
Release the air pressure until air flow stops.

4

Cycle the shock a couple of times to even out the pressure between the air chambers.

5

If this sag is not suitable for your riding style see section Setting sag alternative 2 Manual sag setup.



SETTING SAG

Setting sag alternative 2:

Manual sag set up

Keep track of your personal settings and it is easier to adjust your set up after different type of terrain or to do quick pre-ride control. When controlling pressures be aware that the pump takes up to 10 psi when connected. The table below is a guideline but differs slightly for different bikes.

Recommended sag

Enduro	17 mm
Stumpjumper, Rhyme and Levo	12,5 mm

Start pressures

Rider weight	29	650B
60 kg	140 psi	160 psi
70 kg	150 psi	170 psi
80 kg	160 psi	180 psi
90 kg	170 psi	190 psi
100 kg	180 psi	200 psi

1

Use a shock absorber pump to fill up the shock absorber to the recommended air pressure according to the table above.

2

Cycle the shock a couple of times to even out the pressure between the air chambers.

3

Set the O-ring (sag indicator) at the position closest to the air sleeve.

4

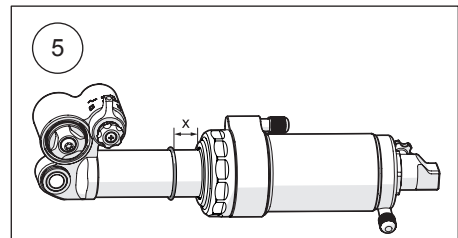
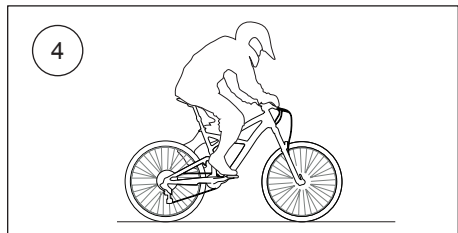
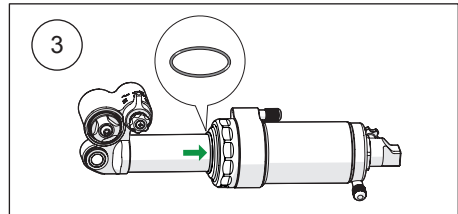
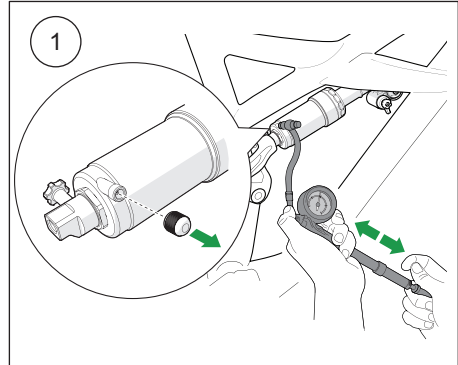
Dressed in full riding gear assume normal riding position on the bicycle.

5

Step off the bicycle and measure the distance the O-ring (sag indicator) has moved.

General recommendations:

- too little sag: release air
- too much sag: fill up with more air



General recommendations:

Heavy hard charging rider may require less sag while a smoother rider may benefit from more sag. If you have any questions, contact an Authorized Specialized Service Centre for advice.

ADJUSTERS

Compression damping controls the energy absorption when the shock absorber is being compressed, thus controls how easily the shock absorber compresses when you hit a bump. Rebound damping controls the energy absorption when the shock absorber is being extended and controls how fast the shock absorber returns to its normal position after being compressed.

To set the adjusters

Low speed compression and rebound have a normal right hand thread. High speed adjuster differs between the shocks. Check the markings on your shock. On the Stumpjumper and Rhyme the high speed adjuster closes towards the drive side.

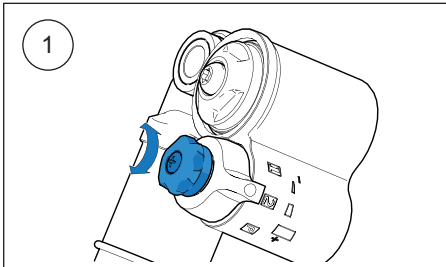
⚠ Caution!

Turn gently not to damage delicate sealing surfaces. Tighten with your hand only.

Compression damping adjuster

1. Adjust low speed

To adjust, turn the blue coloured adjuster on the side of the cylinder head. Turn clockwise to increase damping, turn counter clockwise to decrease.



2. Adjust high speed

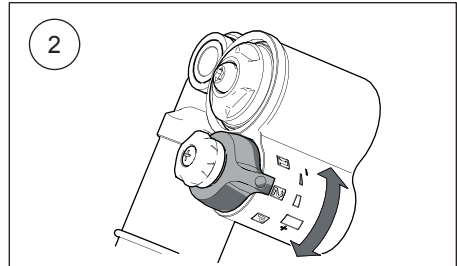
To adjust, turn the black coloured adjuster on the side of the cylinder head.

Position

- | | |
|---|------------------------------|
| 1 | Soft |
| 2 | Medium |
| 3 | Additional platform control* |

👁 Note!

*Position 3: Additional platform control is designed to be used for long climbs and not for normal riding. If used for normal riding you may experience loss of traction and bump absorption.



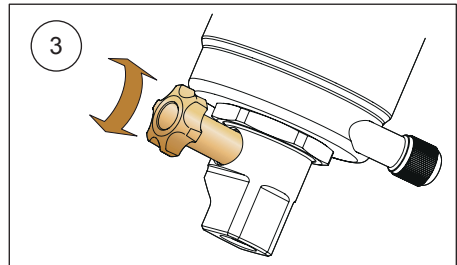
Rebound damping adjuster

3. Adjust rebound

Turn the gold coloured adjuster on the end eye/ bracket. Turn clockwise to increase damping, turn counter clockwise to decrease.

👁 Note!

The rebound adjuster is designed to compensate for temperature changes, the number of clicks may differ between a cold and a warm shock absorber. The recommended setting applies for room temperature.



SETTING UP

Stability and traction

All bicycles are designed with a suspension geometry that include height and fork angle. Changing any components may affect the suspension geometry and it is therefore essential that the front and rear ends match each other. Changing to Öhlins suspension gives optimum performance only when both the front fork and the rear suspension interact properly. It is very important that the front and the rear ride heights are within the specified values.

General setup

By adjusting the shock absorber and testing by trial and error you can learn how the different settings affect your bicycle. Always begin your setup process by taking a test ride with all adjustments at their recommended basic settings. Choose a short run of varying character, for example with long as well as sharp bends, hard and soft bumps. Stay on the same run and adjust only one setting at a time.

When you set up your bicycle you need to do it together with the front fork and on all types of tracks that you want to optimize, there are no setups that will be 100% perfect on all tracks, some compromises will need to be made.

Always keep priority at

- safe feeling
- stability
- comfort

This will allow you to ride safer, with more confidence and use less energy.

Adjustment range

The STX shock is designed for use within the full adjustment range, and using the shock fully open or closed is normal for some riders.

Rebound damping

If the bike feels loose, nervous over bumpy sections and kicking in jumps, close the rebound adjuster one click.

If the bicycle feels hard, harsh (no comfort), packs down under bumps and is difficult to enter corners with or does not stay in line over bumpy sections, open the rebound adjuster 1 click.

If the bicycle feels

- unstable
- loose
- bouncy

→ Increase rebound damping

If the bicycle feels

- hard
- nervous
- low traction

→ Decrease rebound damping

Low speed compression damping

The low speed adjuster is used for controlling the chassis movement towards the ground.

If you feel that the shock absorber feels soft, spongy, or the bicycle feels unstable (for example when going into a corner), close 1 click (clockwise).

If you feel that the bicycle feels hard and has poor traction, open 1 click (counter-clockwise).

High speed compression damping

The high speed adjuster has three positions, 1 soft, 2 medium and 3 additional platform control.

The shocks are delivered with the adjuster set to position 2. This is the best all-round set up and has the function that should suit most riders and tracks.

When bump absorption and maximum traction is wanted go to position 1. →

Position 3 is for those long climbs where the need for traction is limited and additional platform control helps to gain efficiency.

If the bicycle feels

- soft
 - low
 - is bottoming
- Increase compression damping

If the bicycle feels

- harsh
 - hard
- Decrease compression damping

Air pressure

The correct air pressure and sag is along with the clicks, crucial to find the best set up that suits your riding style. Start with basic sag and go through the adjusters but the adjuster will not fully compensate for a too soft or hard air spring.

Note!

For a more progressive spring characteristics contact an Authorized Specialized Service Centre.

SETUP DATA


Warning!

Before riding, always make sure that the basic settings are according to recommended Set-up Data. Read about adjustments and setting up in the shock Owner's Manual before you make any adjustments. Contact an Authorized Specialized Service Centre if you have any questions about setting up.

	Enduro	Stumpjumper/ Rhyme/Levo	
Length	216	197	mm
Stroke	57	47	mm
Rebound	3	3	clicks
Compression low	4	4	clicks
Compression high	pos 2	pos 2	
Recommended sag	17	12,5	mm

MAINTENANCE

Maintenance	Interval
Clean dirt and debris from shock absorber	Every ride
Check air pressure and set sag	Every ride
Check torque on shock absorber mounting bolts	Every ride
Full shock absorber air spring rebuild at service centre	100 hours/ 1 year

 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 Authorized Specialized Service Center. Please contact an Authorized Specialized Service Center if you have any questions regarding the contents in this document.

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