

## 

Read this manual before installing the product. 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 excess 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



# **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.

## 

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

## 

If the suspension makes an abnormal noise, or the function is irregular, or if you notice any leakage from the product, stop riding the bicycle immediately and return the product to point of purchase or an authorized Öhlins MTB service center.

## 

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 authorized Öhlins MTB service center.

#### 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.

## 

This product was developed and designed for the bike industry and shall only be installed onto related vehicles, including pedal-assisted motorized cycles that produce a maximum of 250 watts of power. DO NOT use Öhlins bicycle suspension products on any throttle-equipped motorized cycles or vehicles carrying more

#### SAFFTY SYMBOLS

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

## A

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

## <u> Marning!</u>

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.

than one operator or rider, such as a tandem bicycle or heavy utility bicycle. Any use outside of these terms must be approved by Öhlins on a case-by-case basis. Any such unauthorized misuse may result in failure of the suspension, which could cause a crash and result in property damage, SERIOUS INJURY OR DEATH, and a voided warranty.

## 

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.

### 

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. In some cases the shock absorber may need to be sent to another region for service.

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# MOUNTING INSTRUCTIONS

## 

It is advisable to have an authorized Öhlins service center install the shock absorber.

### 

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!

Clean the bicycle thoroughly before installing the product.

#### Note!

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

#### Installing your shock

### 

Rear shock setup and configuration varies greatly between different bicycle manufacturers. Be sure to mount the shock according to instructions in the owner's manual for your bicycle. We advise you to have your Öhlins shocks installed by an authorized service center. Improperly installed shocks can fail, causing the rider to lose control, resulting in SERIOUS INJURY OR DEATH.

Install the shock on to your frame using the appropriate hardware. Release the air pressure slowly by using the shock pump. Carefully compress the suspension through its entire travel and make sure that the shock has clearance against the frame at any point. Set sag according to page 4.

### Before you ride

Clean the outside of your shock with mild soap and water and wipe dry with a soft rag. Do not use any solvents or de-greasers as these products can damage the shock's exterior finish.

Do not use a high pressure washer or spray water directly on the seal/shock body junction. Inspect the exterior of your shock. The shock should not be used if any of the exterior parts appear to be damaged.

Contact your local Öhlins dealer for further inspection or repair.

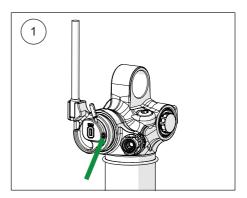
### Caution!

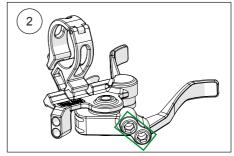
Ensure that all screws are tightened to the correct torque and that nothing fouls or restricts movement of the shock absorber when the suspension is fully compressed or extended.

## ⚠ Warning!

Do not exceed maximum air pressure in the Air spring. Maximum air pressure: 350 PSI

#### Remote installation





4

Install the remote connection wire with no slack in the system. Use a 2 mm hex torque wrench to tighten the set screw to 0.4 Nm.

2

Use a 5 mm hex key to adjust the pre tension on the wire. Adjust until placing the remote lever in lock out mode results in a stiff feeling in the shock while trying to compress it.

# **SETTING SAG**

#### Sag setup

Keep track of your personal settings to make it more easy setting up your bike after different type of terrain or to do a quick pre-ride control. When controlling pressures be aware that the pump takes up to 10 PSI when connected.

#### Note!

Make sure the high speed adjuster is in position 1 while setting sag. Setting sag in position 2 or 3 will result in a faulty setup.

1

Use a shock absorber pump to fill up the shock absorber. Start with 200 PSI

#### Caution!

Always remove the shock absorber pump before cycling the shock otherwise there is a risk that the pump will damage the frame or the shock absorber.

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 your 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:

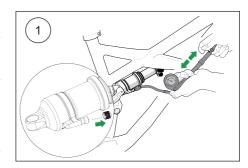
Heavy, hard-charging riders may require less sag while a smoother rider may benefit from more sag. If you have any questions, contact an Öhlins service center for advice.

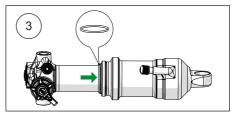
If you bottom out too often or don't use the whole stroke length, see page 7 or contact an Öhlins service center for advice.

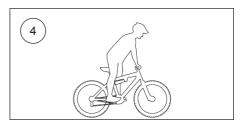
#### Recommended sag

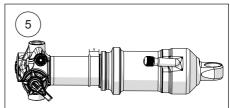
The recommended sag is 20-30% of the shock stroke.

Example: A 190x45 shock with 20% sag. 0 2x45=9 mm









# **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

The adjusters have a normal right hand thread. Turn the adjuster clockwise to fully closed position (position zero [0]). Then, turn counterclockwise to open, and count the clicks until you reach the recommended number of clicks. For rebound use a 3 mm Allen key to adjust.

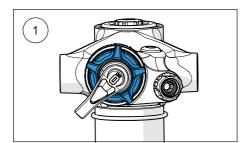
#### Caution!

Turn gently to avoid damaging the adjusters. The end positions have a distinct stop. Do not use force to turn the adjusters further, this can damage the adjusters and lead to oil leakage.

# Compression damping adjuster

#### 1. Adjust low speed

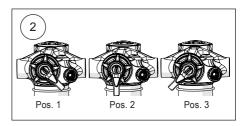
Turn the blue adjuster clockwise to increase damping, turn counterclockwise to decrease. The low speed adjuster will only affect the damping in ride position 1.



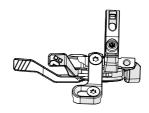
#### 2. Ride mode selection

To switch between ride modes use the black leaver or the remote adjuser. There are three different modes:

- 1. Open
- 2. Pedal mode
- 3. Lock out



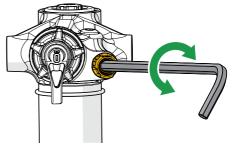
Push the lower remote lever to increase damping, push the upper remote lever to decrease.



# Rebound damping adjuster

#### 1. Adjust rebound

Use a 3 mm Allen key to turn the adjuster in the center of the gold colored part. Turn clockwise to increase damping, turn counterclockwise to decrease.



# **SETTING UP**

## Stability and traction

All bicycles are designed with a suspension geometry that includes 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 optimal 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 and some compromises will need to be made

However, you should always prioritize

- safety
- · stability
- · comfort

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

## Adjustment range

The TXC 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 has a hard, harsh feeling, 'packs down' over bumps, 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 rider's body movement.

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 (counterclockwise).

#### Ride modes

### Position 1

Open. To be used when maximum traction and control is needed. In this mode it is possible to further adjust the amount of compression damping with the low speed compression adjuster.

#### Position 2

Pedal mode. Adjusts initial movement in the damper to increase pedal efficiency. Helps to carry momentum and reduce fatigue while supporting tire traction, even on rough terrain. Maximizes overall efficiency when riding over choppy surfaces.

#### Position 3

6/12

Lock out. To be used on flat terrain when no suspension is needed. Maximizes pedal efficiency.

# **SETTING UP**

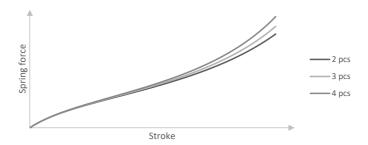
## Air pressure

The correct air pressure and sag, along with number of clicks, are crucial to finding a setup that best suits your riding style. Start with basic sag and go through the adjusters, but keep in mind the adjusters will not fully compensate for a too soft or hard air spring.

### Air spring volume adjustments

Adjusting the air spring volume by adding or removing volume spacers/oil affects the ramp characteristics of the spring. Adding spacers/oil will increase the end stroke spring rate and removing them will decrease the rate.

There are two possible ways to alter the air spring progressivity, either by adding oil or volume spacers.



Use The Performance Suspension Guide (PSG) to find the base setup recommendations for number of air spacers and air pressure for your specific bike. Scan the QR code for PSG.



https://www.ohlins.com/performance-suspension-guide/

# **SETTING UP**

## 

Make sure that all pressure is released from the air spring before starting to work on it.

## 

Never install more spacers than the specified maximum amount. See page 10.

#### 1

Release the air pressure, check your settings so it is easier to find correct sag.

### 2

Remove the air sleeve using a rubber strap wrench or specific tool.

#### 3

Pull up the air sleeve.

#### 4

Snap on the volume spacers (1 ml) to the spacer holder on the shaft.

#### 5

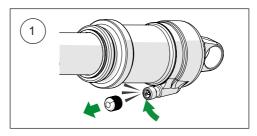
If the spacer holder is full, you can add additional spacers (0.7 ml) on the end eye. Note, this is another spacer that can be snapped onto the end eye.

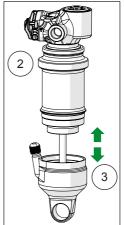
### 

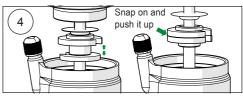
The 0.7 ml spacer is not allowed to assemble on all shocks. See table on page 10 for maximum number of volume spacers allowed on different shocks.

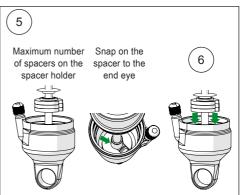
#### 6

Push down the shim, O-ring and the spacer holder to the end eye. Assemble the air sleeve and set pressure.









1

Release the air pressure, check your settings so it is easier to find correct sag.

### 2

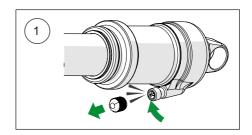
Remove the schrader valve core using a proper tool.

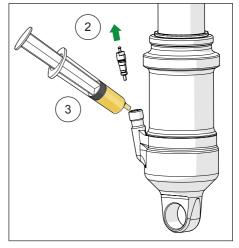
### 3

Add 1 ml of Öhlins Gold fluid with a syringe (total oil amount max 3 ml).

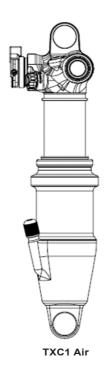
#### 4

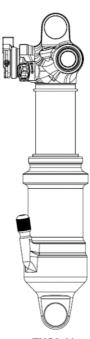
Mount all parts and set your air pressure.





Shock type	Stroke (mm)		Maximum number of spacers on the spacer holder (1 ml)	Maximum number of spacers on the end eye (0.7 ml)	Maximum oil amount
TXC1Air	50	40	4 pcs	2 pcs	3 ml
	47.5	37.5			
TXC2Air	55	45	3 pcs	0 pcs	- 3 ml
	52.5	42.5		1 pcs	
	50	40		2 pcs	
	47.5	37.5		3 pcs	





## Stroke adjustment

### Caution!

Never use more stroke than what is specified for your bike otherwise there is a risk that you damage the frame or the shock absorber.

### 

Make sure that all pressure is released from the air spring before starting to work on it.

## 

Never install more spacers than the maximum specified amount.

#### 1

Release the air pressure, check your settings so it is easier to find correct sag.

#### 2

Remove the air sleeve using a rubber strap wrench or specific tool.

#### 3

Pull up the air sleeve.

#### 4

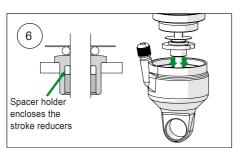
Pull up the spacer holder.

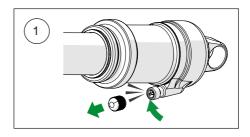
#### 5

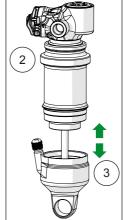
Snap on the stroke reducer(s) to the shaft under the spacer holder. Each spacer reduces the stroke with 2.5 mm. Use 1, 2 or 3 spacers to reduce the stroke.

#### 6

Make sure the spacer holder encloses the stroke reducers. Push down the shim, O-ring and the spacer holder to the end eye. Assemble the air sleeve and set pressure.









	Delivered with	Maximum
	stroke (mm)	number of
	(0 stroke	stroke reducers
	reducers)	(Stroke lengths)
MTBM 2310	40	1 reducer
MTBM 2311	40	(37.5)
MTBM 2312	50	1 reducer
MTBM 2313	50	(47.5)
MTBM 2320		
MTBM 2321	45	3 reducers
MTBM 2324	45	(37.5)
MTBM 2325		
MTBM 2322		
MTBM 2323	55	3 reducers
MTBM 2326	55	(47.5)
MTBM 2327		

# SETUP DATA

## 

Before riding, always make sure that the basic settings are in line with the recommended setup data. Read about adjustments and setting up in the shock Owner's Manual before you make any adjustments. Contact an authorized Öhlins service center if you have any questions about setting up the shock.

# **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
Air spring service	100 hours/ 1 year
Damper service	100 hours/ 2 years

Frequent service will keep performance at its best and ensure years of great riding on your Öhlins product. These are the minimum service interval recommendations. Riding style, riding conditions and setup have a big impact on service intervals. For example, heavy, hard-charging riders will require more frequent service intervals.

Ohlins products are subject to continuous improvement and development. 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 Part no. OM 07258-14 TXC Air an authorized Öhlins service center Please contact an authorized Öhlins service center if you have any questions regarding the contents in this document.

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