

# REAR SHOCK OWNER'S MANUAL

## WARNING !

This instruction sheet contains important information about the correct installation, service and maintenance of your rear shock. Nevertheless please be informed that special knowledge and tools are essential to install, service and maintain SR SUNTOUR shocks. Common mechanical knowledge may not be sufficient to repair, service or maintain a rear shock. Therefore we strongly recommend getting your rear shock installed, serviced and/or maintained by a trained and qualified bike mechanic. Improper installation, service or maintenance can result in failure of the product, accident, injury or even death.

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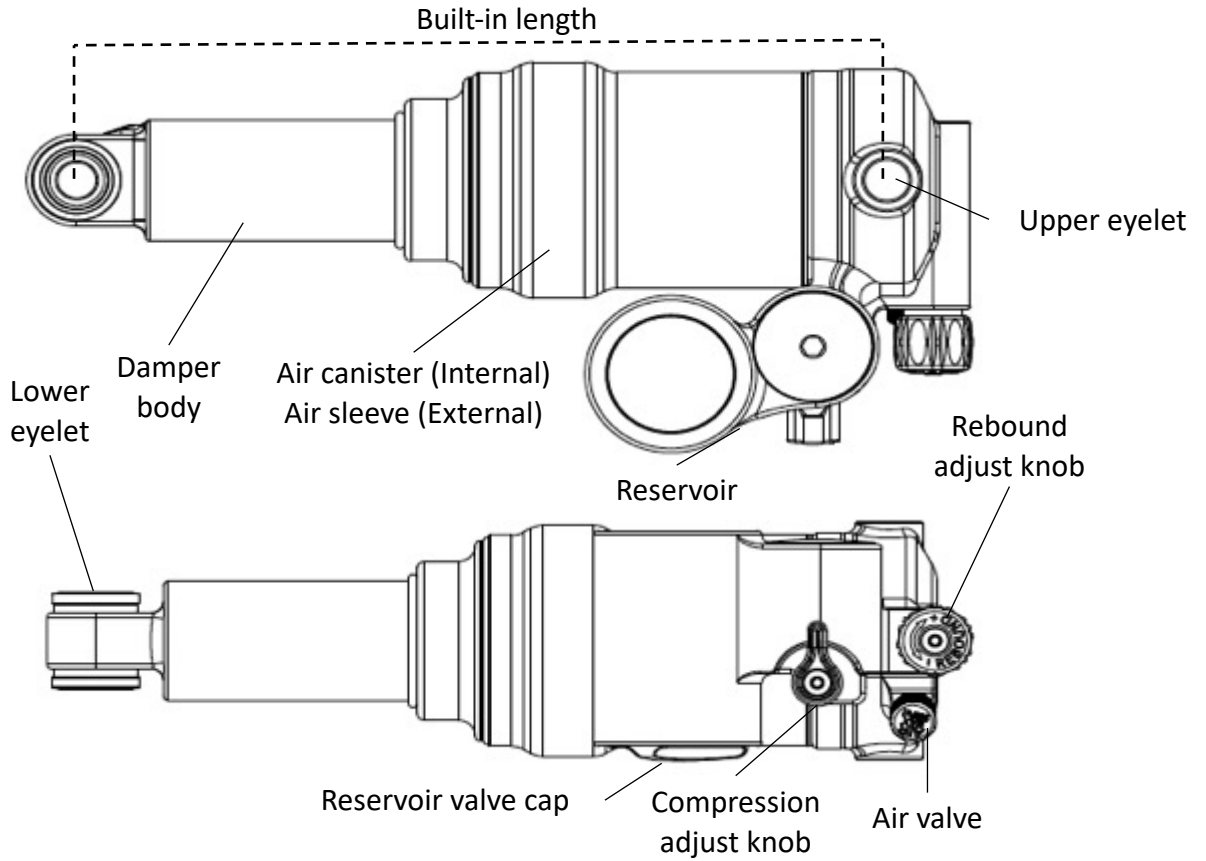


We have language options for Chinese, Dutch, English, French, German, Italian, Japanese and Spanish on our website. Please scan the QR code here to navigate to:

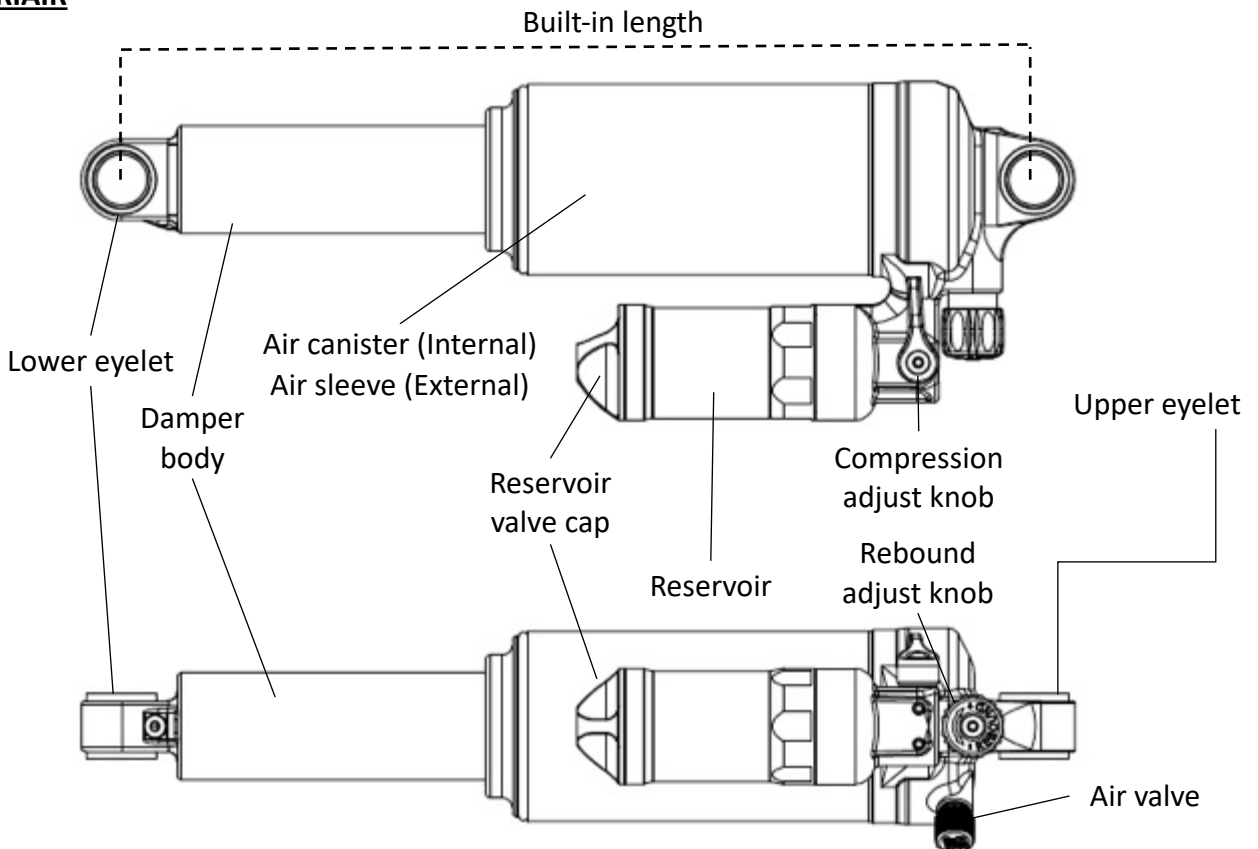
[www.srsuntour-cycling.com](http://www.srsuntour-cycling.com) > Service > Download area > Consumer Downloads > Bike > Owners manuals > General Rear Shock Manual

# OVERVIEW

## TRIAIR2

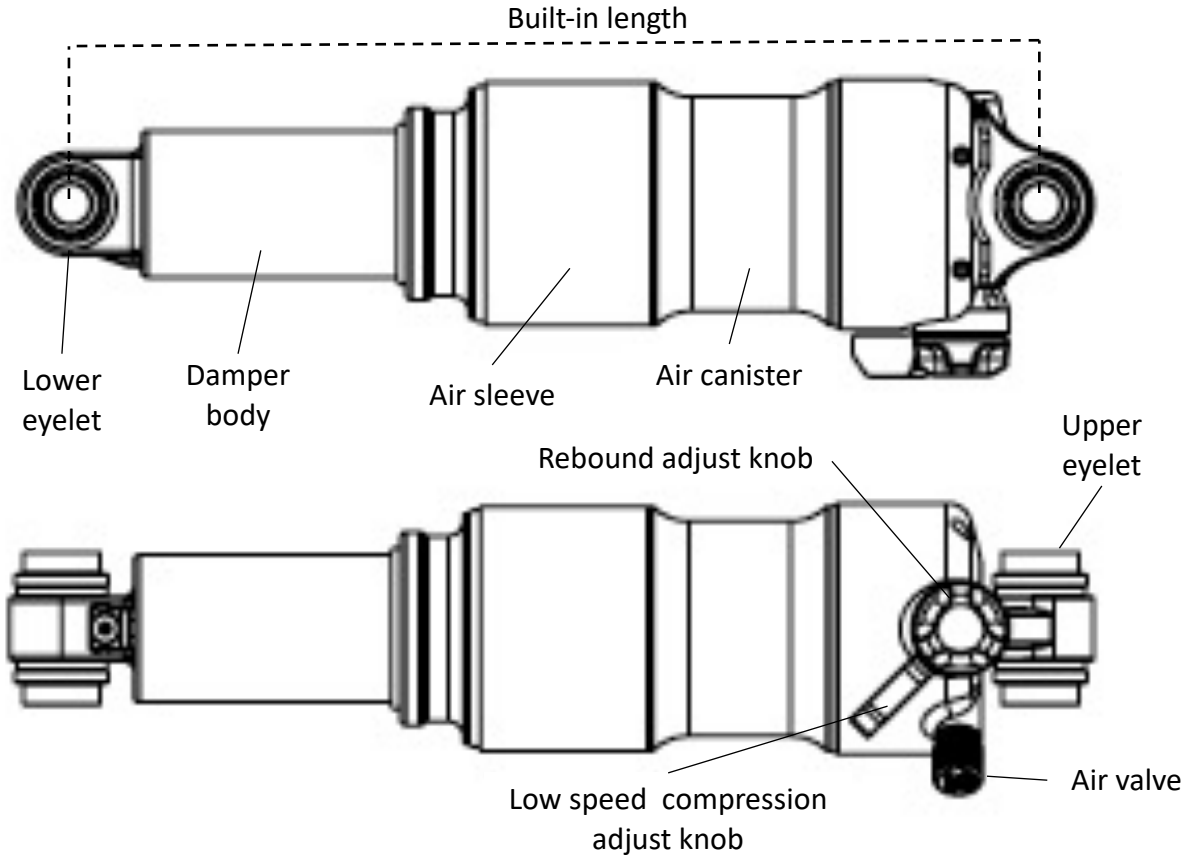


## TRIAIR

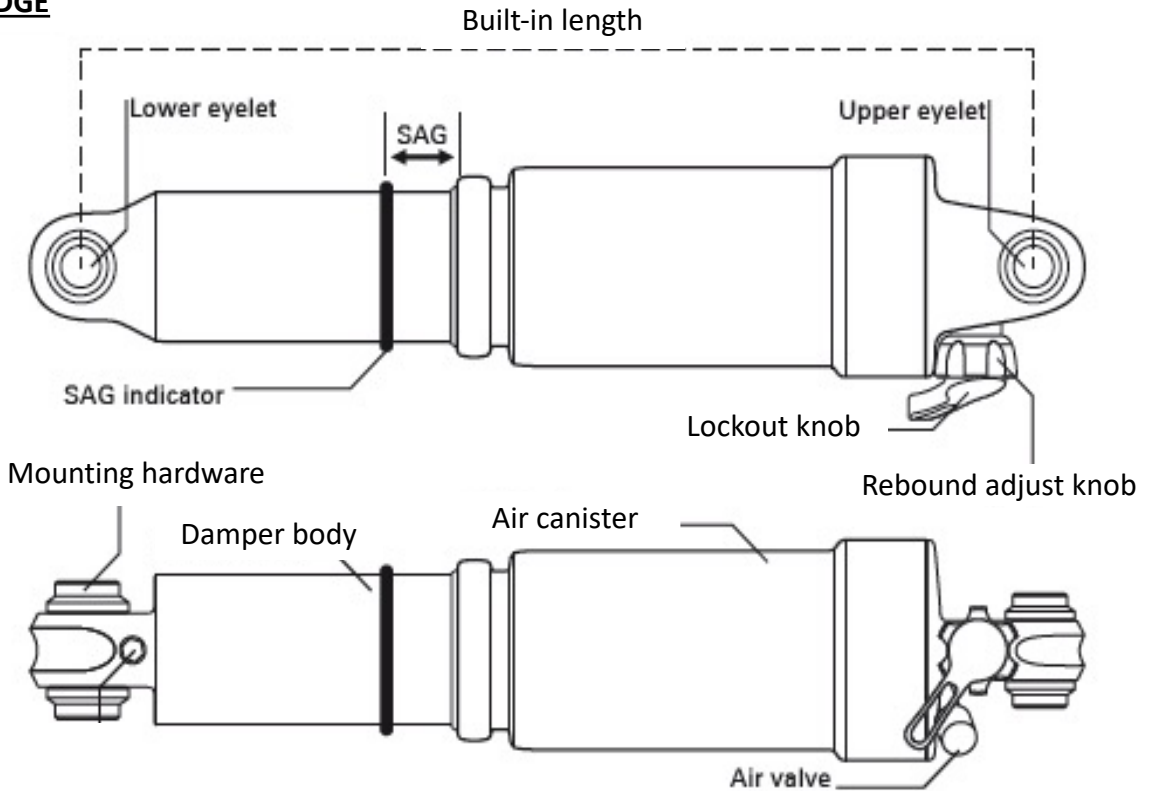


# OVERVIEW

## EDGE-comp



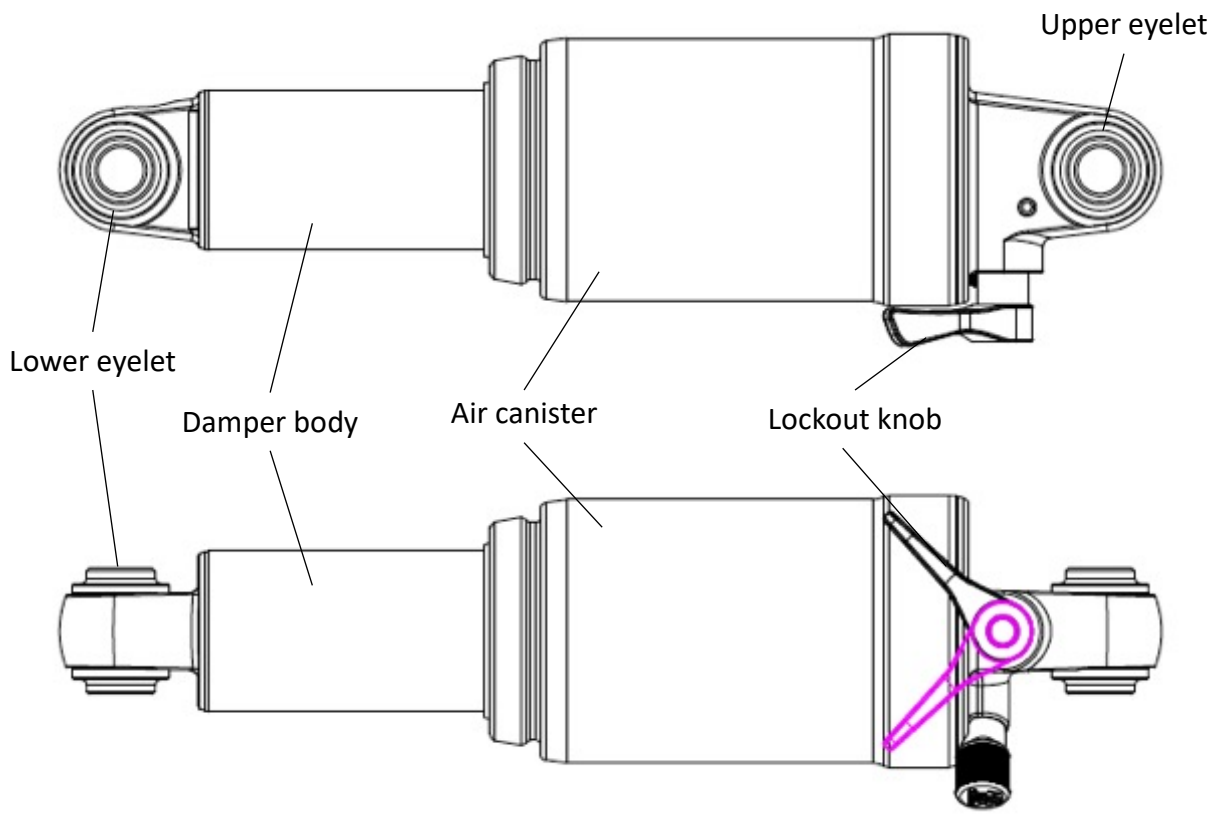
## EDGE



# OVERVIEW

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## RAIDON



## IMPORTANT SAFETY INFORMATION

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### **WARNING !**

**Failure to follow all warnings and safety instructions can cause your product to malfunction, resulting in an accident, severe personal injuries or even death to the rider.**

- Read this manual thoroughly before using your rear shock.
- Our rear shocks contain fluids and gases under extreme pressure, so warnings in this manual must be followed in order to avoid the possibility of injuries or possible death. Never try to open any SR SUNTOUR rear shock ! Opening any SR SUNTOUR rear shock implies the risk of getting seriously injured.
- Use only genuine SR SUNTOUR parts. The use of third-party supplier spare parts voids the warranty of your rear shock and might cause failure to it. This could result into an accident, injury or even death.
- SR SUNTOUR rear shocks are designed for the usage by a single rider.



### **WARNING !**

**These instructions contain important information about the correct installation, service and maintenance of your rear shock. Common mechanical knowledge may not be sufficient. Your rear shock should only be installed, serviced and/or maintained by a trained and qualified bicycle mechanic with specialized tools.**

- Always be equipped with proper safety gear. This includes a properly fitted and fastened helmet. According to your riding style you should use additional safety protection. Make sure your equipment is in flawless condition.
- Select the correct rear shock according to your frame's built in height and your personal riding style. Installing a rear shock which does not match the geometry of your frame could result into a failure of the rear shock itself and will void the shock's warranty.
- Know the limits of your skill and experience, and never ride beyond them.
- Read, understand and follow all owner's manuals provided with your bike and all of its components.



### **WARNING !**

**SR SUNTOUR recommends having the shock installed, maintained and/or serviced by a trained and qualified bike mechanic.**

## BEFORE EVERY RIDE

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### **WARNING !**

**Avoid serious personal injury or even death. Do not ride the bicycle if any of the following criteria is not met ! Correct any condition before you ride.**

- Inspect your bicycle and suspension system including the handlebars, pedals, crank arms, seat post, saddle, etc. for any cracks, dents, bent or tarnished parts. Also search for any oil leaking out of your shocks. Be sure to check hidden areas on the underside of your bike. If any condition exists, consult a trained and qualified bicycle mechanic to determine the cause and make any necessary correction.
- Compress your rear shock with your body weight. If it feels too soft, relating to the proper pressure to achieve an accurate SAG, inflate it until you have reached the required value. Please also refer to the chapter “SETTING SAG”.
- Make sure your brakes are properly installed/adjusted and work correctly.
- If you are using a quick release system to fasten your wheel set, make sure that all levers and nuts are properly tightened. In case you are using a through axle system, make sure that all fixing bolts are tightened with the appropriate torque values. Strictly follow the instructions provided by the manufacturer of the quick release or through axle system.
- Check the cable length and routing of your components. Make sure they do not interfere with your steering actions.
- If you are using reflectors for on-road riding, make sure they are clean and properly installed.
- Bounce your bike slightly on the ground while looking and listening for anything which might be loose.

## REAR SHOCK INSTALLATION

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To replace your old rear shock and upgrade your bike with a SR SUNTOUR rear shock you have to follow the hereafter mentioned steps. Please note that we strongly recommend your new SR SUNTOUR rear shock to be installed by a qualified and trained bike mechanic.

1. Make sure that the “eye-to-eye length”, stroke and mounting hardware are the same as of the originally installed rear shock. The “eye-to-eye length” is the distance from the center of the upper fixing bolt to the center of the lower fixing bolt. Please also refer to the drawing shown on the page 2-3.
2. Remove the old shock off your bike. Clean the inside surface of the frame and swing arm, removing any dirt and make sure that all surfaces are clean.



### **WARNING !**

**If a longer than the original shock length is installed, the geometry of your bike will change. This can lead to steering problems and a higher bottom bracket which disables you to place your feet on the ground. If you are going to install a shock which is shorter than the originally installed one, it will have the same, but inverted negative effects. All this can result into a loss of control and serious injuries or even death.**

3. Make sure that the inner and the outer diameter, as well as the width of the aluminum bushings are correct to fix the rear shock properly and without any play to the frame and swing arm.
4. Check the movement of your new SR SUNTOUR rear shock by releasing all air and moving the swing arm through its complete stroke. Make sure that there is sufficient clearance between the rear shock and all other components. Also keep in mind to check the clearance between your rear shock and a lowered seat post. Make sure the shock does not hit against the seat post in any position.
5. Tighten the screws in accordance with the bicycle’s or frame’s manufacturers specifications.



### **WARNING !**

**Insufficient clearance between the shock, seat post, swingarm and frame can result into a loss of control of your bike, serious injuries or even death.**

# SETTING SAG AND AIR PRESSURE

To achieve the best performance from your SR SUNTOUR air spring rear shocks, adjust the air pressure to attain your proper sag setting. Sag is the amount your shock compresses under your weight and riding gear and luggage. Sag range should be set of total shock travel. Make sure to set sag with the compression knob in the OPEN position.

- Below chart is the suggested SAG range and the original air pressure chart, set for the SR SUNTOUR air spring rear shock from the factory. Remember that these are the starting points. Adjustments will vary based on rider ability, trail conditions, frame design, and personal preference. After setting up your rear shock, check your sag to make sure that you are within the recommended SAG settings.
- The SAG is the compression which is caused by the rider's weight including equipment (such as backpack), seating position and the frame's geometry and not as a result of riding. Every rider has a different weight and seating position. Therefore, the rear shock will sag more or less. To assure a proper function of rear shock and not to interfere its performance, setting a proper SAG is the important way to find the correct air pressure for your air spring rear shock.

## Setting tip for air spring rear shocks

- Step 1: Pump up to the suggested air pressure and compress the rear shock at least 50% of full travel several times in order to equalize the air pressure between the positive and negative air chamber.
- Step 2: Sit on the bike with equipment (such as backpack) and ask somebody to hold the bike, stand on the pedals, and compress the rear shock several times. Then sit on your bike in your normal riding position.
- Step 3: Slide the SAG indicator O-ring down to the top of the dust seal.
- Step 4: Gently step off the bike without compressing the rear shock furthermore.
- Step 5: Check the O-ring position to see if the SAG setting is properly done.
- Step 6: In case if the SAG setting is not properly done, air pressure must be adjusted.
  - In order to increase the SAG, decrease the air pressure.
  - In order to decrease the SAG, increase the air pressure.
- ✓ Repeat the above procedure until you can find the correct SAG setting.
- ✓ Use SR SUNTOUR genuine SAG checking tool as shown in the next page.
- ✓ The recommended SAG range is 20% - 35%, depending on the stroke. Refer to the chart below to find the proper SAG.

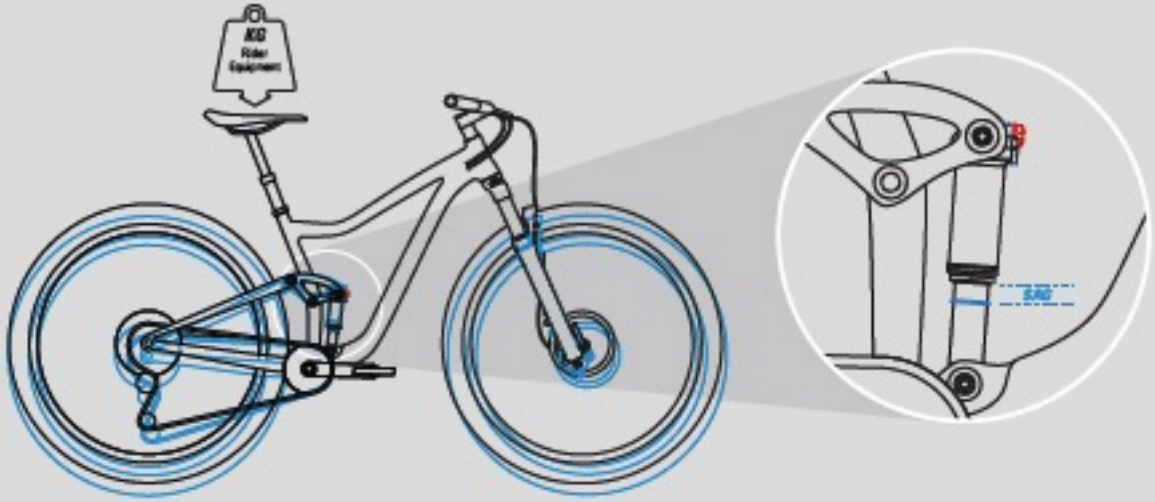


Shock travel	SAG (%)	SAG (mm)
75mm	25 - 35%	18.75 – 26.25mm
70mm		17.50 - 24.50mm
65mm		16.25 - 22.75mm
60mm		15.00 - 21.00mm
55mm	25 - 30%	13.75 – 16.50mm
50mm	20 - 25%	10.00 - 12.50mm
45mm		9.00 - 11.25mm
40mm		8.00 - 10.00mm
35mm		7.00 – 8.75mm
30mm		6.00 - 7.50mm

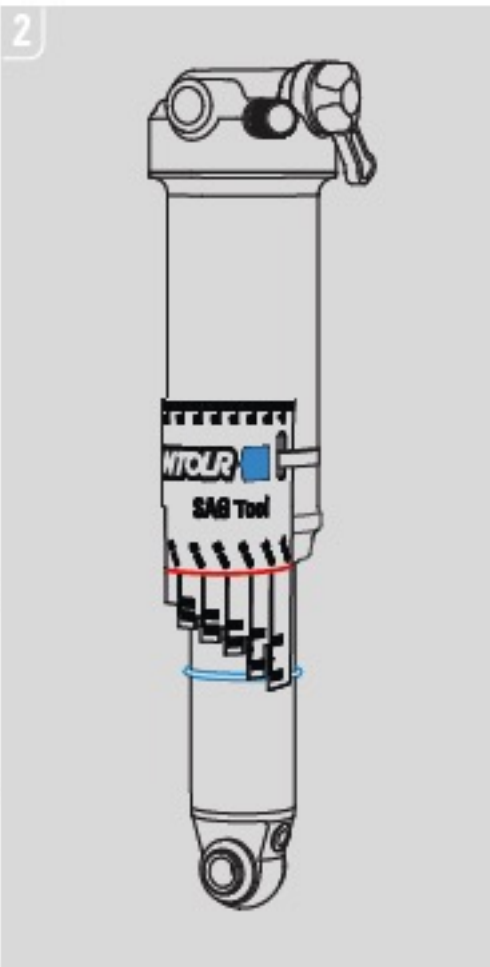
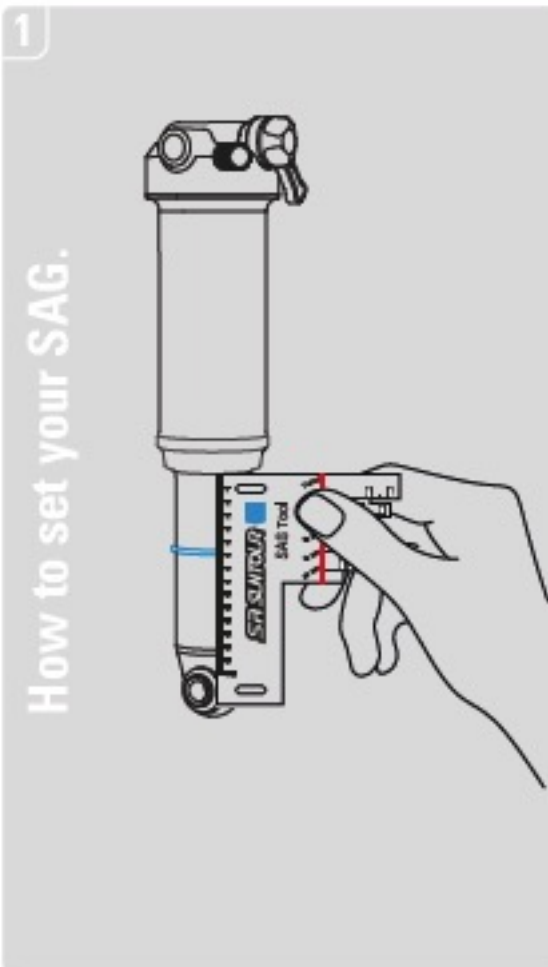


# SETTING SAG

What is SAG?



How to set your SAG.



**0** km/h



# AIR PRESSURE ADJUST

Below is the original air pressure setting when the SR SUNTOUR rear shock is shipped out from the factory. Remember that these are the starting points and adjustments will vary based on rider ability, trail conditions, frame design, and personal preference. After setting up your rear shock, check your sag to make sure that you are within the recommended sag settings.

	Suggested air pressure (psi)									
	Vorocoil		Triair2		Triair		EDGE-comp	EDGE-plus	EDGE	RAIDON
	Main body	Reservoir (IFP)	Main body	Reservoir (IFP)	Main body	Reservoir (IFP)	Main body	Main body	Main body	Main body
<b>Air pressure (factory setting)</b>		200	180	180	180	200	110	110	110	110
<b>Max. pressure</b>		250	300	240	300	240	300	300	300	300

Note:

\* It's important to keep in mind that air pressures will vary depending on the leverage rate of your frame. This is just a starting point until you check your SAG on the following page.

\* Above numbers are for reference only. The correct air pressure might be different according to the frame design, so must be adjusted by individual rider while checking the SAG.



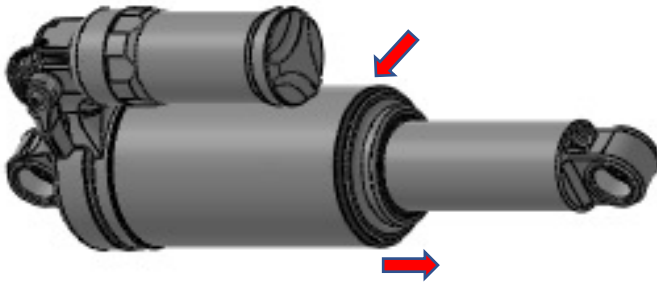
## WARNING !

Riding your bike with an improper air pressure can result in a loss of control, serious injury or even death.

Never exceed the maximum air pressure as shown in the above chart. This can lead to the breakage of the rear shock, serious injuries and voids the warranty of your SR SUNTOUR rear shock.

## AIR VOLUME ADJUST

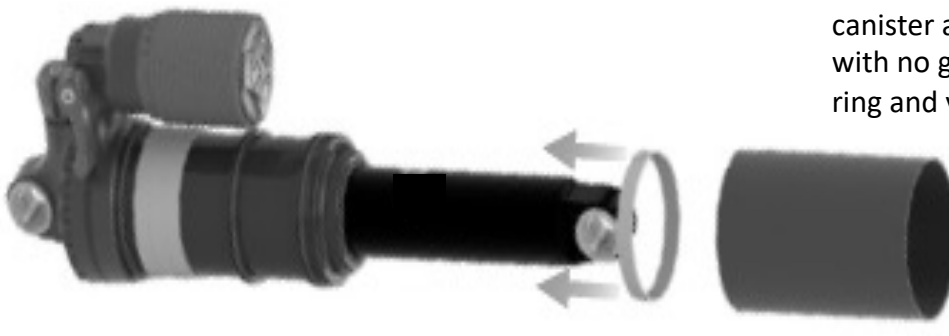
If you are looking for further tuning, the spring curve of the air shock can be adjusted using volume spacers. Air pressure can be used to achieve the correct SAG. If you are harshly bottoming out, the volume spacers will control the progressiveness of the shock.



1. Let all air out of the main canister. Remove the o-ring underneath the air chamber. Be cautious not to damage the o-ring.



2. Twist and push downward to remove the air sleeve.



3. Add or remove your desired amount of air volume spacers. Reinstall the air canister and make sure it is sealed with no gaps present. Reinstall the o-ring and you're ready to ride!

### **ADDING AIR VOLUME SPACERS**

Adding air volume spacers will create a more progressive feeling to your air shock. A more progressive feeling will prevent harsh bottom outs and keep the shock from sitting deep in the stroke.

### **REMOVING AIR VOLUME SPACERS**

Removing air volume spacers will create a more linear feeling to your air shock. A more linear feeling will make it easier to use the full stroke of the shock. If you can't achieve full travel or the shock becomes very harsh towards the end of the stroke, removing air volume spacers will help alleviate that.

# AIR VOLUME ADJUST

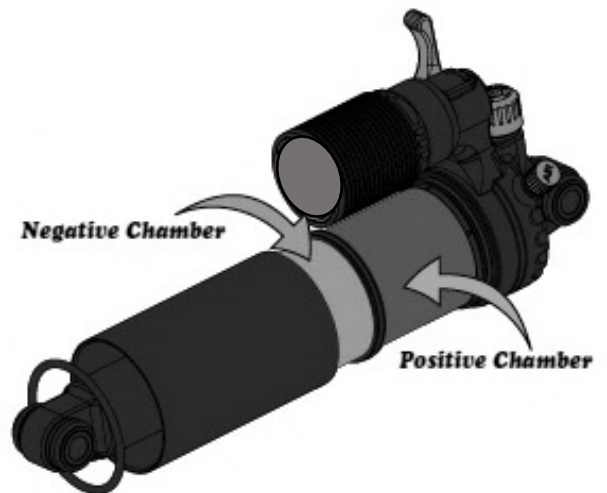
Symptom	Solution	
	Positive chamber	Negative chamber
Bottom out too easily	Add 1-2 positive spacers	
Lacking support for pedaling		Add 1-2 negative spacers
Looking for more mid-stroke support	Add 1-2 positive spacers	Add 1-2 negative spacers
Cannot get full travel	1 <sup>st</sup> step) Remove 1-2 positive spacers	2 <sup>nd</sup> step) If 1 <sup>st</sup> step doesn't work, add 1-2 negative spacers and decrease the air pressure

## Note:

Be careful of contamination when removing the air sleeve. Getting dirt inside the air chamber can cause leaks or failures. Always keep your shock clean when doing this procedure.

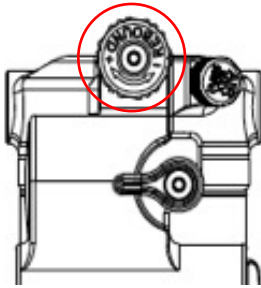
## Air volume adjustable feature

- Triair2: Positive & negative
- Triair: Positive & negative
- EDGE-comp: Negative
- EDGE & EDGE-plus: Positive & negative

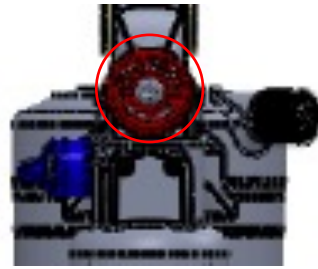


## REBOUND DAMPING ADJUST

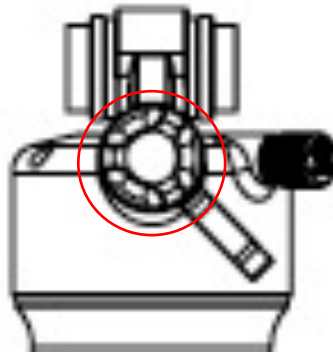
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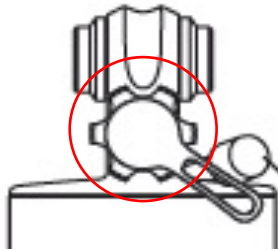
**TRIAIR2**



**TRIAIR**



**EDGE-comp**



**EDGE**



**RAIDON**

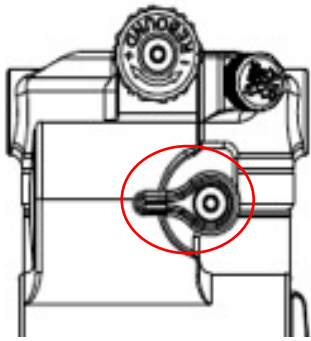
Rebound controls the speed at which the shock extends after compression. Rebound damping control is relative to the main spring rate. Higher pressures require more rebound damping. Lower pressures require less rebound damping, so please adjust accordingly.

- ✓ **For slower (more rebound damping) = Turn clockwise**
- ✓ **For faster (less rebound damping) = Turn counter clockwise**

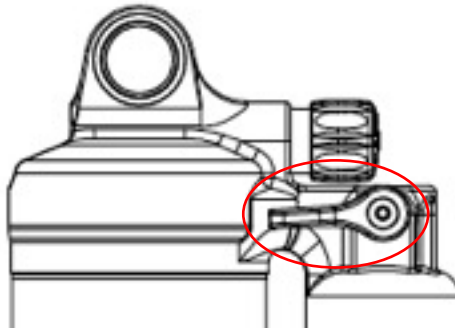
Note:

Rebound settings will vary greatly on bike design, trail conditions and rider preference. It's best to start with the rebound adjuster in the closed setting (full clockwise) and adjust out in two-click increments.

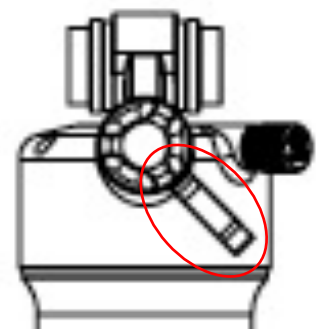
## 3-STEP LOW-SPEED COMPRESSION DAMPING ADJUST



**TRIAIR2**



**TRIAIR**



**EDGE-comp**

### **3C COMPRESSION ADJUST**

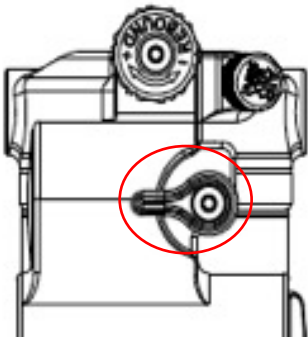
The SR SUNTOUR Triair series and EDGE-comp shocks offers 3-steps compression settings quickly & easily to allow for the rider to adjust the compression damping for any trail condition.

1. Open: it reduces compression damping allowing the oil to easily flow through the circuit, offering maximum sensitivity. Open position is also best for lighter riders or for dry, dusty terrain, where maximum traction is required.
2. Middle: it is for traversing. Sections of the trail where you need it to be active but still maintain a good pedaling platform.
3. Close: it is great for climbing, in order to reduce undesirable suspension bob. The heavy/closed setting is NOT a lock-out, but does offer significant resistance to weight & pedal induced suspension movement.

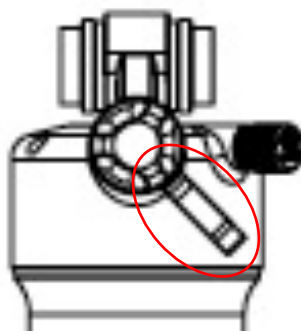
### **Compression setting chart**

Trail style	Compression setting		
	OPEN	MIDDLE	CLOSE
Rough DH	Plush		
Smooth DH	Plush	Supportive	
Technical climb		Supportive	Firm
Smooth climb			Firm
Sandy DH	Plush		
Sandy climb		Supportive	Firm
Muddy DH	Plush		
Muddy climb		Supportive	Firm

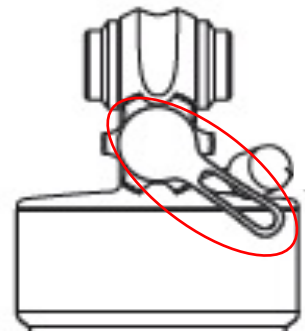
## 2-STEP LOW-SPEED COMPRESSION DAMPING ADJUST



TRIAIR2



EDGE-comp



EDGE-plus

### 2C COMPRESSION ADJUST

The SR SUNTOUR Triair2, EDGE-comp and EDGE-plus shocks offers 2-steps compression settings quickly & easily to allow for the rider to adjust the compression damping for any trail condition.

1. Open: it reduces compression damping allowing the oil to easily flow through the circuit, offering maximum sensitivity. Open position is also best for lighter riders or for dry, dusty terrain, where maximum traction is required.
2. Close: it is great for climbing, in order to reduce undesirable suspension bob. The heavy/closed setting is NOT a lock-out, but does offer significant resistance to weight & pedal induced suspension movement.

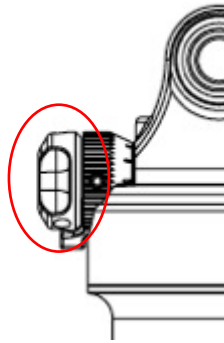


#### **WARNING !**

Nevertheless, you should never set your rear shock to the „Close mode“ while riding in rough terrain, or when the suspension is needed heavily. This implies the risk that the shock will get damaged when it’s being compressed under high load. This could also result into an accident, injuries or even death of the rider.

## INFINITE LOW-SPEED COMPRESSION DAMPING ADJUST

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**EDGE-RC**

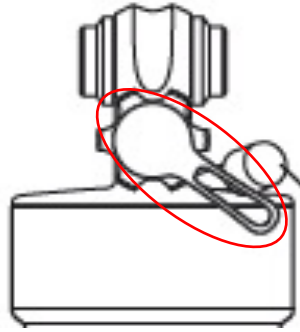
The compression damping adjust function of your SR SUNTOUR rear shocks allows you to tune your shock according to your personal preferences and the terrain you are riding on. This function controls the speed of your rear shock while being compressed.

- When riding on terrain with a lot of small and fast bumps:  
Choose a faster set up in order to bring the maximum possible wheel traction and an sensitive bump compliance. In this mode, your rear shock will react pretty sensitive/fast to every bump. Do not choose this setting on a terrain with big bumps and square edge hits because the risk of bottom out of your rear shock is going to be higher.
- When riding on terrain with big bumps and square edge hits:  
Choose a slower set up. In this mode your rear shock will move slower while being compressed. Therefore it will reduce bottom outs and provides maximum bump absorption. Using this mode on a terrain with small and fast bumps will bring bad traction to your bike. Additionally your rear shock will not use it's full travel if being set to the slow/firm on fast terrain.



## LOCK-OUT OPERATION

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**EDGE-plus**

The Lockout function prevents the shock from compressing until significant impact or downward force occurs. The shock will compress when the force exceeds the damper blow-off circuit resistance. Use the Lockout function for maximum pedaling efficiency on smooth or rolling terrain. Operate the lockout knob to use the lock and unlock function.

Note:

LOR: 100% lock-out

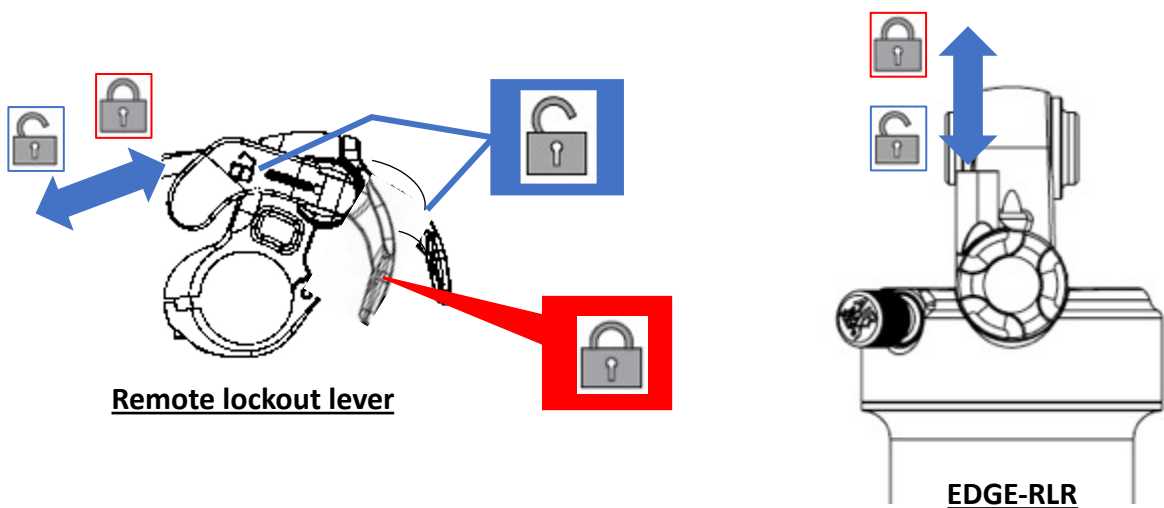
LOR8: 80% lock-out



**WARNING !**

Nevertheless, you should never set your rear shock to the „Lock-Out mode“ while riding in rough terrain, or when the suspension is needed heavily. This implies the risk that the shock will get damaged when it's being compressed under high load. This could also result into an accident, injuries or even death of the rider.

## REMOTE LOCK-OUT OPERATION



The operation of remote lockout function can be done from the remote lever on the handlebar, while gripping the grip without taking your hand off from the handlebar. The remote lever is to use the lock and unlock function.

The Lockout function prevents the shock from compressing until significant impact or downward force occurs. The shock will compress when the force exceeds the damper blow-off circuit resistance. Use the Lockout function for maximum pedaling efficiency on smooth or rolling terrain.

Note:

RLR: 100% lock-out

RLR8: 80% lock-out



### **WARNING !**

Nevertheless, you should never set your rear shock to the „Lock-Out mode“ while riding in rough terrain, or when the suspension is needed heavily. This implies the risk that the shock will get damaged when it's being compressed under high load. This could also result into an accident, injuries or even death of the rider.

## MAINTENANCE

SR SUNTOUR rear shocks are designed for simple maintenance. However, as long as moving parts are exposed to moisture and contamination, the performance of your rear shock might be reduced after several rides. Please keep in mind that a rear shock which has not been serviced in accordance with the maintenance instructions might lose its warranty !

- **Never use a pressure washer or any water under pressure to clean your rear shock, as water might enter the shock at the dust seal level. Never use aggressive cleaners. We recommend to use clear water.**
- **To maintain a high performance, safety and a long life of your rear shock, a periodic maintenance is required.**
- **We recommend that your rear shock is being serviced frequently as indicated below if you ride in extreme weather (winter time) and terrain conditions.**
- **In case if you may feel that your rear shock performance has changed or handles differently, immediately call on your local dealer to inspect your rear shock.**
- **After every ride: Clean the damper body and dust seals and maintain with an oily cloth. Check the damper body for dents, scratches or other discoloration or leaking oil.**
- **Every ride: Maintenance 1**
- **Every 50 hours: Maintenance 2 (at the dealer)**
- **Every 100 hours or once a year: Maintenance 3 (at the dealer, ideally before winter time in order to protect all parts from the effects of weather by proper greasing)**

	Maintenance 1 (Every ride)	Maintenance 2 (Regularly)	Maintenance 3 (every 100 hours / annually whichever comes first)
Clean exterior with mild soap and water only and wipe dry with a soft towel	○		
Inspect the shock for visual damage	○		
Check the function of controls knobs	○		
Check the air pressure (it is normal for air shocks to lose pressure over time)		○	
Check the sag and the damper settings		○	
Check the mounting hardware for proper torque settings		○	
Full shock service including damper rebuild and air seal replacement			○



### WARNING !

Please note that your SR SUNTOUR rear shock is filled with oil and nitrogen. This makes it impossible to open the rear shock without having the knowledge and the special tools on how to carry out this task. Please do not try to open the rear shock for service issues, as this implies a very high risk of getting seriously injured. Besides this, you will not be able to reassemble the shock anymore. Opening the shock will void its warranty. If there is any problem with your rear shock, please consult a dealer and get in contact with SR SUNTOUR.

# CUSTOMER SUPPORT OFFICES

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## WEB LINKS

**For further information please visit [www.srsuntour-cycling.com](http://www.srsuntour-cycling.com). There you will also find:**

- ◆ Service request: <http://www.srsuntour-cycling.com/service/service-request>
- ◆ Tech videos: <http://www.srsuntour-cycling.com/service/tech-videos>
- ◆ Download area: <http://www.srsuntour-cycling.com/service/download-area>
- ◆ Owners manuals: <http://www.srsuntour-cycling.com/service/download-area/consumer-downloads/bike/owners-manuals/>
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