

# User Manual SUSPENSION FORKS

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### IMPORTANT SAFETY INFORMATION



### WARNING!

Not heeding the warnings and safety instructions can cause the product to malfunction or can result in personal injuries or even death to the rider.

- Please read these instructions thoroughly before using your suspension fork. Improper use of the suspension fork can cause the product to become damaged or result in severe injuries or even death to the rider.
- Suspension forks and rear shock absorbers contain highly pressurised liquids and gases. The warnings contained in this manual must be followed carefully in order to prevent injuries or even death. Never attempt to open SR SUNTOUR cartridges and rear shocks, they contain highly pressurised liquids and gases, as mentioned above. You will risk severe injuries if you open SR SUNTOUR absorber cartridges and rear shock absorbers.
- Use only original spare parts from SR SUNTOUR. Using accessories and spare parts of other manufacturers voids the warranty of your fork and the fork may not work as intended.
   Furthermore, this can lead to accidents, injuries and even injuries resulting in death.
- SR SUNTOUR suspension forks are made for a single rider.



These instructions contain important information for the proper assembly, maintenance and servicing of your suspension fork. Please note that expertise and special tools are required in order to install, maintain and service SR SUNTOUR forks. General knowledge of mechanics is likely to be insufficient to repair, maintain and service a suspension fork. Therefore, we recommend having the fork installed, maintained and/or serviced by a trained and qualified bicycle mechanic. Improper installation, service or maintenance can result in the product malfunctioning, accidents, injury or even death.

- Ride while wearing appropriate protective clothing only. This includes wearing a fitting and firmly seated helmet. Additional protective components should be used depending on your riding style. Make sure that your equipment is always in perfect condition.
- Select the proper fork based on the frame height and your personal riding style. Installing a fork that does not correspond to the geometry of your frame can cause the fork to become damaged and will void the warranty. Installing a suspension fork changes the geometry of the bicycle and how it is used. Get used to it gradually and practice. Make sure you properly assess your limits and do not go above them.
- If you are using a bicycle rack that requires the front wheel to be removed, the quick release skewer must always be open if it is not used to fasten the bicycle. If the quick release is not opened completely, then this can cause the fork to become bent, broken or otherwise structurally damaged when the bicycle is removed from the bicycle rack. If the bicycle has fallen off the bicycle rack, have it inspected by a qualified bicycle mechanic before riding it again. If you are using a bicycle rack that fastens the bicycle at the front dropouts only, then the rear wheel must be fastened too. Improperly fastening the bicycle can cause it to wiggle which may cause the fork dropouts to break.

- Please note that SR SUNTOUR suspension forks are not equipped with front reflectors for use in road traffic. If you intend to use your bicycle on public roads or bicycle paths, you must install the required front reflectors on the fork. Please contact your specialised dealer.
- Carefully read the operating instructions included with your bicycle and familiarise yourself with the individual components of your bicycle.



Please also note that your fork is not intended for jumps, aggressive downhill rides, freeride or dirtjump if the warning sticker on your suspension fork prohibits these. Disregarding these instructions may cause your product to fail or may even cause accidents or death. Not heeding these instructions will void the warranty!

### **BEFORE EVERY RIDE**



Do not ride the bicycle if one of the following criteria is not met! If the bicycle is damaged or if the necessary adjustments were not made but the bicycle is used regardless, then this can result in accidents, serious injuries or even death.

- Are there any cracks, dents or deformations on the fork or on another part of your bicycle? If this is the case, contact a trained and qualified bicycle mechanic to inspect your fork and the bicycle.
- Is oil leaking from the fork? Also check hidden areas such as the underside of the fork crown. If this is the case, contact a trained and qualified bicycle mechanic to inspect your fork and the bicycle.
- Put your full body weight onto the fork. If it seems too soft (i.e. if the pressure for an exact negative spring stroke is incorrect), pump up the fork until the desired value is reached. Further information can also be found under "AIR PRESSURE AND "SAG"".
- Make sure that the brakes are properly installed, adjusted and functioning. This also applies to all other bicycle parts such as the handlebar, pedals, crankset, saddle, seat-post etc. Further information can also be found in the operating instructions of the other parts' manufacturers. Make sure the wheels are perfectly centred so that the suspension fork and the brake system do not touch.
- If you are using a quick release system to attach your wheelset, make sure the quick release has the required clamping force. If you are using a thru-axle system, make sure all screws are tightened to the proper torque.
- Check the cable length and the cable routing of the components. The cables must not interfere with the steering movements.
- If you are using front reflectors for use on public roads, make sure they are clean and properly installed.
- Gently bounce your front wheel off the ground and check/listen whether there are any loose parts.



### WARNING!

SR SUNTOUR recommends having the fork installed, maintained and/or serviced by a trained and qualified bicycle mechanic.

Expertise and special tools are required to install SR SUNTOUR forks. General knowledge of mechanics is likely to be insufficient to repair, maintain and service an SR SUNTOUR suspension fork. If you prefer to assemble the fork yourself, please have it inspected by a trained and qualified bicycle mechanic after assembly. Note that incorrectly installed forks are extremely dangerous and can lead to damage to the product or cause serious injuries and even death to the rider.

# **ASSEMBLY INSTRUCTIONS**

### Note!

All mounting screws must be tightened with the respective torques specified by the manufacturer.

- 1. Remove the old fork from your bicycle. Remove the headset cup from the fork.
- Measure the length of the steerer tube of your old fork and compare it to the length of the steerer tube of the SR SUNTOUR fork. The standard length of SR SUNTOUR suspension fork steerer tubes is 255 mm. It may be necessary to shorten the steerer tube to the corresponding length

You can use the following formula to determine the proper length of the steerer tube:

Head tube of the frame

- + Headset height
- + Spacer if applicable
- + Height of the handlebar stem clamp
- 3 mm distance
- = Length of the steerer tube



Do not add a thread if your SR SUNTOUR fork is shipped with a threadless steerer tube. Steerer tubes made by SR SUNTOUR are uniquely press-fitted and cannot be disassembled. Do not attempt to replace the steerer tube with a threaded steerer. This voids the warranty of the fork. It may cause the product to malfunction or cause serious injury or even death to the rider.

- 3. Install the fork headset cup (30 mm for 1 1/8") firmly at the top of your fork crown. Reattach the fork assembly (headset, spacer, handlebar stem) to the bicycle. Adjust the headset until no more play is observed. Further information can be found in the installation instructions of the headset manufacturer.
- 4. Install the brakes according to the manufacturer's instructions. Properly adjust the brake pads. If you are using a disc brake, install the brake only into the designated receptacle hole for the disc brake. Use only cantilever brakes that are made for use without support system.

- Check and heed the assembly instructions of your brake manufacturer. Select the proper length for the brake cable so that it does not interfere with the fork.
- 5. Reattach the front wheel. Make sure that all clamping levers and nuts are set and tightened properly (at least four threads must engage in the nut when the quick release is locked). If the fork is equipped with a thru-axle system, then all screws must be checked for proper torque.

# **ADJUSTING THE DOUBLE CROWN** (Rux series)



WARNING!
Pay attention to the minimum and maximum values.
Do not deviate from these numbers.



### **CLAMPING OF THE CROWNS**

It is extremely important to properly tighten the clamps for the fork stanchions and steerer tube. Evenly and gradually tighten the screws in a criss-cross pattern (i.e. top left, bottom right, bottom left, top right) until the proper torque of 6-8 Nm is reached.

If you do not heed this information, you risk having a loose fork crown, steerer tube and fork stanchions.



# **TYRE CLEARANCE**

Please check in advance whether the wheel and fork are compatible. The necessary information can be found on the side of the tyre. Every tyre has a different external diameter (width and height of the tyre). For this reason, check the distance between your tyre and the fork to make sure your tyre does not touch the fork under any circumstances. Bear in mind that the narrowest part of the fork is at the brake boss level. If you want to remove your tyre, you must release the air from your tyre, among other things, in order to fit it through the brake boss socket.



Note! Using a tyre that is larger than the maximum tyre size for your fork is very dangerous and can cause accidents, serious injuries and even death.

### TYRE CLEARANCE TEST

- 1. Depressurise the fork. (if equipped with air suspension)
- 2. Press the fork together all the way.
- 3. Measure the distance between the top of your tyre and the underside of the fork crown. The distance must not be less than 10 mm! If the tyre is too big, it will touch the underside of the crown when the fork is fully pressed down.
- 4. Relieve the fork and pump it up again if it is an air fork.
- 5. Take into account that the gap is reduced if you are using a fender!
  Repeat the "tyre distance test" to ensure that the distance is big enough. You must repeat this test every time you change your tyres to another size!

# **Q-LOC ASSEMBLY INSTRUCTIONS**

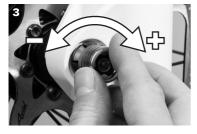
### **REMOVAL**



check the flange to be expanded before installation and open the lever completely

slide in axle until it "clicks"



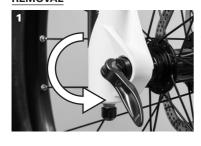


Set the tension with a semi-open lever until the flange is flush with the dropout

Lock the lever completely. Check if firmly seated and re-tighten if necessary



### **REMOVAL**



Open completely

Press nut until flange retracts.





Turn nut clockwise until flange stays latched

Pull out axle



# 20 MM CROSS AXLE ASSEMBLY



Slide in the axle on the quick-lock side

Tighten the axle with the red lever





It is now possible to slide the lever into the axle

Lock the quick release





Set the tensioning force with a 4 mm Allen wrench if needed

the lever should be flush to the bottom case



### AIR PRESSURE AND "SAG"

The "SAG" (negative spring stroke) is the compression that is caused solely by the body weight and the position of the rider. The "SAG" depends on the position and weight of the rider and should be between 15% and 30% of the fork's max travel depending on the intended use and preferences.







### **SETTING THE AIR PRESSURE AND "SAG"**

- 1. Unscrew the valve cap. Screw a fork / shock pump onto the valve.
- 2. Pump the suspension fork up to the desired pressure. Never exceed the recommended maximum air pressure. Note the table below.
- 3. Sit on the bicycle in normal riding position and check the "SAG". Add or release air as needed. In order to properly assess the "SAG", attach a cable zip tie to the fork stanchion. You can lean against a wall in order to be able to sit still on the bicycle, in order to measure the "SAG".





Max. pres- sure	Series
150 psi	Durolux Auron Rux,NCX NRX
165 psi	Axon
180 psi	Epixon Raidon XCR

# ADJUSTABLE AIR CHAMBER VOLUME (through spacer)

The RUX RC2 has an air chamber with adjustable volume. This function allows the rider to choose between a more linear or a more progressive characteristic curve.

It can be adjusted in five stages with spacers. The more spacers are installed, the more progressive the characteristic curve.

The spacers can be pushed out and reinserted without tools.



### WARNING!

The air chamber is pressurised! Before opening, let the air out of the fork completely to prevent the valve and the spacer unit from being ejected forcefully and potentially causing injuries.



# **COIL SPRING PRELOAD**

The fork can be adjusted to the rider's weight and preferred riding style via the spring preload.

It is not the coil spring hardness that is set, but the spring preload. This reduces the "SAG" of the fork when the rider sits down. A semi-hard spring is used by default. Turn the preload adjust knob clockwise to increase the spring preload and turn it counter-clockwise to reduce it. Two additional spring stiffnesses are available for SR SUNTOUR suspension forks - softer and harder than the standard coil spring.



# **LOCK-OUT SYSTEMS**

The "lock-out" function of the SR SUNTOUR forks prevents swinging up/dipping of the suspension fork when riding standing up or riding uphill. The fork is not locked 100%. A couple of millimetres of the suspension travel, the so-called "anti-blow-off system", remains. This system protects you when riding in demanding terrain in case you forgot to unlock the fork.



But regardless, you should never switch your fork to "lock-out mode" when riding in demanding terrain or when jumping. The fork may become damaged when it is compressed under a high load. This can also lead to accidents and injuries.

### **SPEED LOCKOUT**

Turn the "Speed lock-out" lever by 90° clockwise to lock the fork. Turn it counterclockwise to release the lock.



LO-RC cartridge



LO-R cartridge



LO cartridge

### REMOTE SPEED LOCKOUT

Press the "Remote lock lever" on the handlebar to lock the fork. Press the button below that to release the lock.



RL-RC cartridge



RL-RC & RL-R cartridge



RL-R cartridge



RL-RC & RL-R cartridge



RL cartridge



RL cartridge

# **INSTALLATION OF REMOTE LOCK-OUT** (RL-RC & RL-R cartridges)

Install the "Remote lockout lever" with an Allen wrench (3 mm) on the right of your left-hand side grip on the handlebar. Make sure there is enough space between the grip and the lockout lever (min. 3 mm).



Remove cover with a 2.5 mm Allen wrench

Release the cable fixing bolt with a 2 mm
Allen wrench.





Thread the cable through, tension slightly and fasten

Let the control cable protrude by about 15 mm to prevent jamming





Install the cover

adjust cable tension if necessary



If the fork is not locking, the tension of the cable is probably too low. In this case you should increase the cable tension by turning the adjusting screw counter-clockwise. If the cable tension is too high and the fork lock cannot be released, turn the adjustment screw clockwise.

# **INSTALLATION OF THE REMOTE LOCKOUT (RL cartridges)**

Install the "Remote lockout lever" with an Allen wrench (3 mm) on the right of your left-hand side grip on the handlebar. You can then reinstall the brake and the control lever.



Pull the control cable from the front through the cover.

Slightly tension the cable. Tighten clamping screw for cable with 2 mm Allen wrench.





Let the control cable protrude by approx. 12 mm and cut off.

adjust cable tension if necessary



Use an end cap to protect against the sharp cable end. the fork is not locking, the tension of the cable is probably too low. In this case you should increase the cable tension by turning the adjusting barrel at the "Remote lock lever" counter-clockwise. If the cable tension is too high and the fork lock cannot be unlocked, turn the adjustment screw clockwise.

# ADJUSTING REBOUND DAMPING

Rebound damping allows you to adjust the speed with which the fork rebounds after it was compressed.

Turn the adjusting screw counter-clockwise (less damping) to increase the extension (rebound) speed of your fork. To reduce the extension (rebound) speed, turn clockwise (more rebound).

To find the right rebound speed, turn the adjusting screw as far clockwise as possible (slowest extension). Put your



entire body weight on the suspension fork and let it rebound abruptly. Now decrease the rebound gradually (fastest extension) and repeat this procedure until the suspension fork almost jumps when it rebounds. The quicker the fork rebounds, the more traction it provides. Rebounding too slow achieves the opposite.

# ADJUSTING COMPRESSION DAMPING

Compression damping adjusts the compression speed of the suspension fork.

A low-speed and a high-speed compression setting are available (not available on all models).

Low-speed compression: Setting for slow impacts (deep bumps/potholes)

High-speed compression: Setting for fast impacts (small bumps/potholes at high frequency)



Turn the adjusting screw counter-clockwise (less damping) to increase the compression speed of your fork. Turn it clockwise (more damping) to reduce the compression speed.

### TRAVEL ADJUST FUNCTION

This function allows you to continuously reduce the suspension travel of the fork by up to 40 mm. In this version, the valve cap is located at the bottom end of the bottom case.







- 1. Press and hold the button
- 2. Compress the fork
- 3. Release the button

### Extend travel:

- 1. Press and hold the button
- 2. Relieve the fork



### MAINTENANCE OF THE FORK

SR SUNTOUR forks are designed to be almost maintenance-free. But because the moving parts are exposed to moisture and dirt, the performance of your fork may decrease after a number of rides. To ensure high performance, safety and a long service life, regular maintenance and care of the fork is required.

- Please remember that the warranty is void if the fork is not cared for according to the maintenance instructions!
- Do not use high-pressure cleaning equipment or other cleaning procedures that use highly pressurised water to clean the fork, because water could potentially get past the dust seals and into the fork.
- We recommend that you service the fork more frequently than listed in the table below if the bicycle is used in extreme weather (e.g. winter) or extreme terrain.
- If you believe that the performance of your fork has changed or if it feels differently, contact your specialised dealer immediately and have it inspected.

### **MAINTENANCE PLAN**

- after every ride: Clean the fork tubes and dust seals and maintain with an oily cloth / check stanchion tubes for scratches
- every 50 hours: Maintenance 1 (at dealer)
- every 100 hours or once a year: Maintenance 2 (at dealer, ideally before winter time in order to protect all parts from the effects of weather by proper greasing)

### **MAINTENANCE 1:**

Check function of fork / check torques of mountings screws and nuts at dropout (10 Nm) / check for scratches, dents, cracks, discolouration, signs of wear and signs of minor corrosion (maintain with oily cloth).

### **MAINTENANCE 2:**

Maintenance 1 + disassembly / cleaning the entire fork inside and out / cleaning and lubricating dust seals and slider sleeves / checking torques / adjusting to the riders liking.

Before disassembly, check the slider sleeve play of the fork. To do so, apply the front wheel brake and gently push the bicycle back and forth at the handlebar stem shaft. Replace the slider sleeves if the play is too big (more than 1 mm at the fork brace).

### LIMITED WARRANTY

For normal use, SR SUNTOUR guarantees that the suspension fork is free from material and workmanship defects for two years from the date of purchase. This guarantee of SR SUNTOUR Inc. applies only to the original purchaser and is not transferable to third parties. A claim under this warranty may be made only at the retailer where the bicycle or the SR SUNTOUR suspension fork was purchased.

The original receipt must be presented as proof of purchase.

### LOCAL LAW:

This warranty gives you specific legal rights. Depending on the state (USA) or province (Canada) or the country in which you live, you may have other rights that vary from the warranty set forth herein. These conditions should be adapted to the local regulations so that they correspond to these laws.

### LIMITED WARRANTY:

This limited warranty does not apply to damage to the suspension fork that is caused by one of the following: improper installation, dismantling and reassembling, wilful damage, alterations or modifications to the fork, misuse or abuse of the product or the use of this product for a purpose other than the intended use, accidents, crashes, improper maintenance, improperly carried out repairs. The obligations under this "Limited Warranty" are limited to repair or replacement of the suspension fork or any part thereof within a period of two years when a material or workmanship defect exists. Beyond the above conditions, SR SUNTOUR makes no direct or indirect guarantee that this product is suitable or tradable for a particular purpose. SR SUNTOUR shall not be liable for incidental or consequential damages under any circumstances. Damage caused by the use of spare parts from other manufacturers or spare parts that are not intended or suitable for SR SUNTOUR suspension forks are not covered by this warranty. This warranty does not apply to conventional wear and tear. The following parts are subject to wear: dust seals, moving rubber parts, O-rings, fork stanchions, lock-out and travel adjust cartridges.

Please note that all SR SUNTOUR cartridges and metal bushings have a limited warranty of one year! Plastic slider sleeves have a limited warranty of six months!

# For more information visit our website at www.srsuntour-cycling.com. There you will also find:

- Forms for product registration and services
- "Identify your product" instructions
- Suspension fork glossary
- Technical videos
- Instruction manuals
- Exploded drawings
- f www.facebook.com/srsuntour

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