

## Suspension front fork with <air/air> / <air/hydraulic> or <coil spring/hydraulic> system

### Before using the suspension fork

Read this instruction sheet thoroughly before using the suspension fork. Using the suspension fork inappropriately may cause serious injuries. Be sure to follow all warnings and caution indications. The instruction sheet contains important information on the correct installation and usage of the fork. After reading this instruction sheet, please be sure to keep it in a safe place for future reference. When transferring ownership of the suspension fork, give this instruction sheet to the new owner. As with any new suspension fork, there is a short period within moving parts will break in. During the first 300-500 km, the ride dynamics of the fork may change slightly. One of the things you may notice, is a small amount of play in the lower tubes. This movement is normal. Suspension forks can dramatically improve the comfort and control of your bicycle, but they can also change the way it handles, so always exercise caution and good judgement when getting used to your new setup.



### IMPORTANT SAFETY INFORMATION

- 1.) Before riding the bicycle, be sure the brakes are properly installed and adjusted. If the brakes do not work properly, the rider could suffer serious injuries.
- 2.) Do not ride the bicycle if you notice bent or broken parts at the fork, especially after a collision, sounds of excessive topping out, or other indications of a possible fork failure. In these cases, take your bike to a qualified bicycle mechanic for inspection and repair.
- 3.) Always use genuine SR Suntour parts. The use of other replacement parts voids the warranty and could cause structural failure to the suspension fork.

### INSTALLATION

SR SUNTOUR recommends that your suspension fork be installed by a qualified bicycle mechanic, because it must be properly installed, adjusted and checked for safety.

- The steerer tube must be cut to proper length correctly
- Special tools and skills are required
- If you install the fork by yourself, the completed installation must be inspected by a qualified bicycle mechanic and signed off to validate your warranty.

### Installation instructions:

The SR Suntour suspension forks with hydraulic system are available only with threadless steerer:

choose the right headset for this „Ahead“ type of steerer. See manufacturer's installation guide for the headset and handlebar stem you are using!

- The SR SUNTOUR steerer tube may need cutting to the proper length.
- To cut the steerer tube is not a job for untrained people, so let a professional mechanic install the fork.

**If you are going to tackle this job by yourself, get a good book on repairing bicycles and read it carefully. But in this case our warranty is void and SR SUNTOUR is not liable for incidental or consequential damages.**

1. Remove the existing fork and lower headset race from the bicycle.
  - Measure the length of the fork steerer tube against the length of the SR SUNTOUR steerer tube to determine whether it may need cutting to the proper length
2. In order to find out the proper length of the steering tube, you have to add up the following dimensions:
  - Head tube of the frame + stack height of the headset + stack height of the Clip on handlebar stem
3. Install the headset race firmly against the top of the fork crown. Install the fork assembly back on the bike.
4. Assemble the headset and handlebar stem on the bicycle. Adjust the headset so you feel no play or drag.
  - Complete the installation of the headset and stem according to the manufacturer's instructions.
5. Reinstall the handlebar.
6. Install the brakes as per the manufacturer's instruction, making sure to adjust the brake properly.
  - Use the fork only with V-type brakes mounted to the existing cantilever bosses. Mount the disc brake only to the tabs provided at the left lower of the forks
7. Run the brake cable from the brake lever to the brake (V-type brake or Disc brake) making sure to leave enough cable housing to allow full travel of the fork.

### Handlebar Stems:

- Please use only "Ahead-type" handlebar stems for 1 1/8" (28.6mm) steerer diameter.
- Follow the handlebar stem manufacturer's installation manual and please mind to use the proper torque for this safety item.

### Headsets:

Make sure that the headset you use matches the dimensions of your fork and frame. Refer to the instruction sheet or installation manual that comes with your headset and carefully follow its instructions.

### Tire clearance:

**Maximum tire size for the SR Suntour suspension forks is to be checked depending on the outer diameter**

**for 28" or 26" wheel size. Also, you have to check the tire width and you have to allow a minimum of 5mm between tire and the fork's lowers. Please keep in mind that the narrowest point at the lowers is usually at the height of the brake bosses - so you may have to deflate the tire in case you have to remove the wheel, depending on the tire width.**

**Be sure to check the tire diameter and width whenever you change tires. To check the tire diameter, remove the top caps/or adjuster knobs and spring stack assemblies and compress the fork completely to make sure at least 10 mm of clearance exists between the top of the tire and the bottom of the crown. Exceeding maximum tire size will cause the tire to jam against the crown when the fork is fully compressed.**

**If you want to retrofit the bike with mudguards, you have to take into account that the clearance between tire and mudguard is now changed. Please check the clearance again as described above.**

### Brakes:

The SR Suntour suspension forks are designed to be used with V-brake and Discbrake. The use of discbrake can be seen on the left side lower, where the Discbrake mounting tabs are present.

Please check the instruction manual of the brake manufacturer for technical details and dimensions.

You need to make sure that the cable housing of your brakes can move freely and does not come in contact with any part of the fork.

## MOUNTING OF THE REMOTE TRAVEL ADJUSTER AND REMOTE LOCK-OUT CONTROL

### Mounting of the remote travel adjuster control

You have the choice of two remote travel adjuster controls, depending on the drive train and shifter types you are using.

**Note: The travel adjustment cartridge is located on the left side of the fork.**

**1.)** If you use „Rapid Fire“ type of shifters you have to use the single remote travel adjuster lever included in the fork set (see photo # 1).

**a.)** Mount first the remote travel adjustment lever on the handlebar. Use a 3mm Allen key for fastening of the lever bracket (see # 2). After that, you can mount the brake lever and the shifting levers.

**b.)** Choose the right length of outer casing, in order to allow the unrestricted function of the fork.

**c.)** Turn the cable tension adjustment barrel (see # 2) two turns counter-clockwise in order to have adjustment clearance for the travel adjustment function.

**d.)** Thread the cable through the outer casing stopper at the guide pulley and push the outer casing cap firmly in the outer casing stopper (see photo # 3).

**e.)** Lead the cable around the guide pulley and thread it through the hole in the fixing bolt. The fixing bolt, washer and nut have to be placed into the hook of the cam lever. Tension the cable lightly and tighten the nut on the fixing bolt.

**f.)** Now press the lever and at the same time push on the handlebar in order to compress the fork. At the end of this movement, release the lever and then the handlebar. Check if the fork stays in that position. If not, then you have to adjust the tension of the cable. To release the fork from that position, push the lever again and pull the handlebar (see photo # 4).

### Travel adjustment setting

**a.)** If the cable tension is too high, the cam lever will be pushed all the time down. As such you will feel that the compression of the fork is too easy and the fork will extend eventually too slow. In such case, decrease the cable tension by turning the adjustment barrel (#5) clockwise (-), until the fork stops at the desired level and it will extend when you push the remote action lever again.

**b.)** If the cable tension is too low, then the fork will not stay in the preselected position after you release the lever. In order to increase the cable tension, turn the adjustment barrel counter-clockwise (+), until the fork will stay in the preselected position (see photo #5).

**c.)** In case you cannot adjust the fork using the adjustment barrel, you have to open the cable fixing nut and increase or decrease the cable tension at this point. After that, you can make the fine tuning again as described at a.) and b.).

### Air pressure adjustment

In case it is necessary to increase or decrease the air pressure in the travel adjustment cartridge, please proceed after the following steps:

**a.)** Turn the adjustment barrel fully clockwise (-) and unhook the fixing bolt unit from the cam lever (see photo #7).

**b.)** Remove the travel adjust push button. You will see now the „Schrader“ valve.

**c.)** Using a fork pump with pressure gauge, increase or decrease the air pressure in accordance with the chart displayed on the next page.

**If you have a fork with air cartridge on the other side, please use the setting of the air chart on the SR Suntour website, attached to your fork model.**

**2.)** There is an option to use the I.C.E. (Integrated Control Equipment) type of lever - model DSM-XCR60-SC - for travel adjustment and remote lock-out.

### Mounting of the lock-out control

**1.)** If you use „Rapid Fire“ type of shifters you have to use the single remote lock-out lever included in the fork set (see photo #9).

**a.)** Mount first the remote lock-out lever on the handlebar. Use a 3mm Allen key for fastening of the lever bracket (see #9). After that, you can mount the brake lever and the shifting levers.

**b.)** Choose the right length of outer casing, in order to allow the unrestricted function of the fork.

**c.)** Turn the cable tension adjustment barrel two turns counter-clockwise (#14) in order to have adjustment clearance for the lock-out adjustment function.

**d.)** Thread the cable through the outer casing stopper and through the cover cap hole and push the outer casing cap firmly in the outer casing stopper (#11).

**e.)** Tension the cable lightly and tighten the fixing screw using a slot or cross type screwdriver.

**f.)** Now push the lever to the right (see photo # 10) in order to lock the fork. Check if the fork is now locked, by pushing down the handlebar. If not, you have to adjust the tension of the cable. To unlock the fork, push the lever to the left and check if the fork is now unlocked.

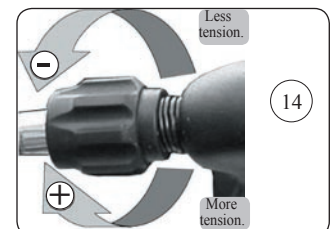
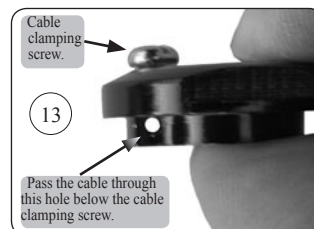
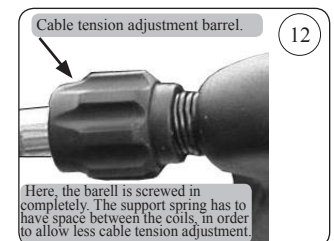
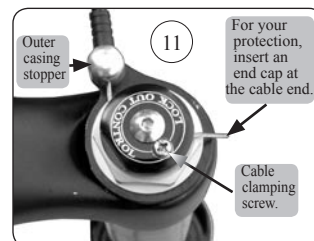
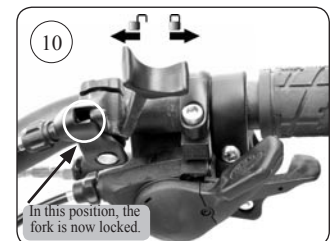
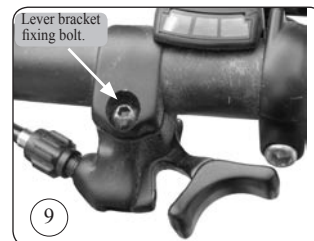
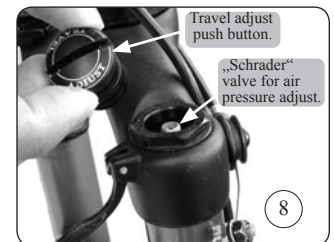
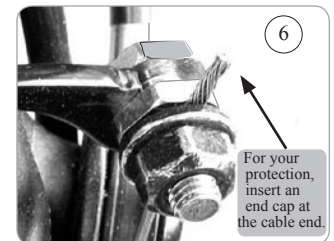
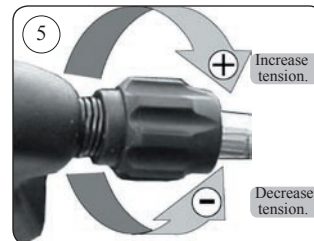
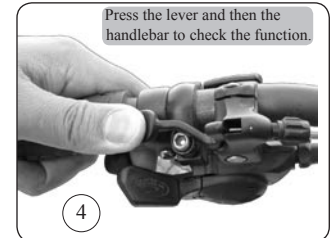
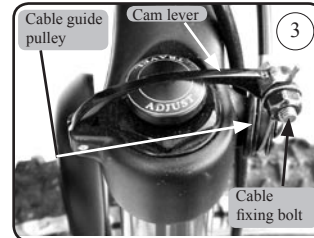
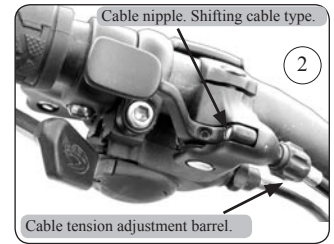
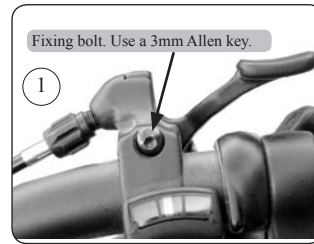
### Lock-out function setting

**a.)** If the cable tension is too high, the lock-out lever will not stay engaged and keep the fork in locked position. In such case, decrease the cable tension by turning the adjustment barrel (#14) clockwise (-), until the lever will stay engaged.

**b.)** If the cable tension is too low, then the fork will not be locked when you engage the lever. In order to increase the cable tension, turn the adjustment barrel counter-clockwise (+), until the fork will stay locked and the lever is still engaged.

**c.)** In case you cannot adjust the fork using the adjustment barrel, you have to open the cable fixing screw and increase or decrease the cable tension at this point (see #13). After that, you can make the fine tuning again as described at a.) and b.).

Don't forget to put an end cap on the cable for your protection (see #11).





**Check the fork before each ride and contact your dealer if you have any questions.**

**Check following points:**

- a) Visible damage of the fork - on upper or lower tubes, fork crown, brace, dropouts - like cracks, dents, as effects of a crash during the ride or of other causes.
- b) Tightness of the headset by pressing the braking lever of the front brake and pushing and pulling the bike in order to see if there is play.
- c) Brake pad adjustment on the rim and distance to the rim ( 1-2 mm is optimal)
- d) Brake lever travel - ideally the contact of the brake pad and rim should occur after 1/3 of lever travel range
- e) Firmness of the brake assembly - apply the brakes several times and check carefully for loose nuts, bolts, etc.
- f) Front wheel must be centred within the fork tubes. Check proper torque on wheel quick release mechanism.

**Fork performance tuning**

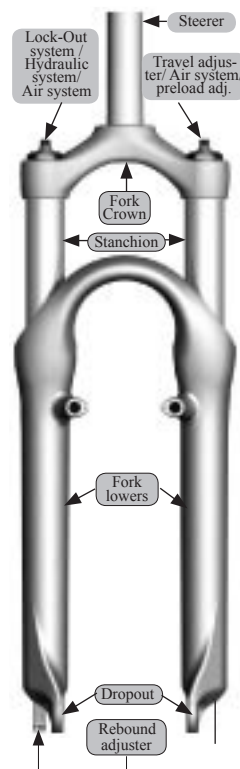
The SR Suntour suspension forks can be tuned for your particular weight, in accordance with the terrain and your personal preferences.

**Setting Sag**

Suspension forks will sag(dive in) more or less, depending on your weight and fork setting, when you mount the saddle and sit on your bike.

The proper adjustment of sag allows the front wheel to keep contact with the ground during the ride. Sag is adjusted by increasing or decreasing (depending of the fork model) - **a.) the positive air pressure / b.) the preload on the spring stacks.**

| Travel | Intended use | Sag      |
|--------|--------------|----------|
| 80 mm  | Racing       | 8-12 mm  |
| 80 mm  | XC           | 12-16 mm |
| 100 mm | Racing       | 10-14 mm |
| 100 mm | XC           | 14-18mm  |
| 130 mm | Freeride     | 20-25mm  |



To measure the amount of sag your fork is diving in, install a zip tie on the stanchion tube, at the level of the lower tube seal. Now, mount the saddle and sit on the bike in normal riding position, ride a short distance on flat ground and step off the bike. Measure the distance between the lower seal and the zip tie and you will find out the sag. In case of travel adjustment forks, set the fork to maximum travel (120mm) and check as described above.

**AIR PRESSURE CHART**

| Rider weight |     | Air pressure |                     |
|--------------|-----|--------------|---------------------|
| lb.          | kg. | psi          | kgf/cm <sup>2</sup> |
| 80           | 36  | 51           | 3,6                 |
| 100          | 45  | 64           | 4,5                 |
| 120          | 54  | 77           | 5,4                 |
| 140          | 64  | 91           | 6,4                 |
| 160          | 73  | 104          | 7,3                 |
| 180          | 82  | 117          | 8,2                 |
| 200          | 91  | 130          | 9,1                 |
| 220          | 100 | 143          | 10                  |

Max. air pressure = 180psi/12.7kg/cm<sup>2</sup>

Note: This chart is just for your reference and the values may vary depending on your riding style and terrain. For your specific suspension fork, please visit our website on: [www.srsuntour-cycling.com](http://www.srsuntour-cycling.com), where you can find under your fork's model name a detailed air pressure chart as downloadable pdf document.

**a.) Setting Sag by air pressure**

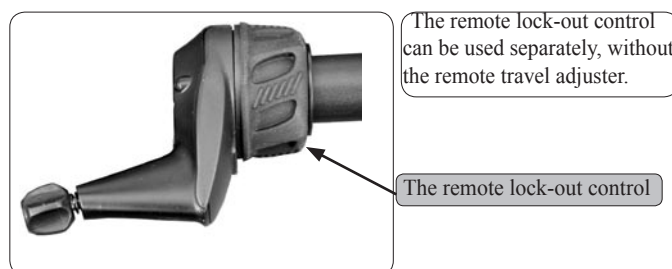
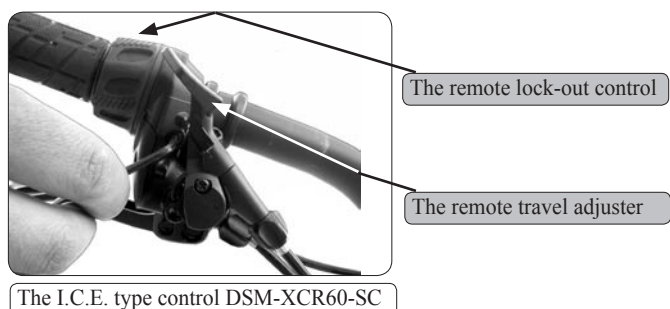
- In order to adjust the air pressure, please be sure to use the following steps (Right and left side from rider's perspective):
- 1.) unscrew by hand the cover cap on the left or right side of the fork crown.
  - In case of a travel adjustment fork, please follow the procedure described on the previous page in order to access the air valve.
  - 2.) attach the suspension fork air pump at the "Schrader" valve.
  - 3.) pump up the fork to the desired hardness level -> see chart.
  - 4.) remove the pump from the valve.
  - 5.) replace the cover cap.

**b.) Setting Sag by spring preload**

In order to adjust the Sag by spring preload, measure first - as described above - the initial Sag, using the zip tie method. After you found out the amount of Sag you have, reduce or increase it, by using the preload knob on the top of the fork crown. By turning the preload knob clockwise, you increase the preload and reduce the Sag. By turning the preload knob counter-clockwise, you reduce the preload and increase the Sag. Please adjust the Sag in accordance with your personal preferences and use the values indicated above as guidance. If you are not able to adjust the optimum Sag, you need to change the fork's springs, to harder or softer ones.

**NOTE:** Your fork's appearance may vary from the images shown in this instruction sheet. For latest information please visit our website: [WWW.SRSUNTOUR-CYCLING.COM](http://WWW.SRSUNTOUR-CYCLING.COM)

**For more information and for ordering the suitable springs, please contact you authorized local dealer or visit our website at - [WWW.SRSUNTOUR-CYCLING.COM](http://WWW.SRSUNTOUR-CYCLING.COM). - to see the list of authorized international distributors.**



## Fork features and function

### Travel adjustment

This feature allows you to adjust the travel of your fork depending on your preferences and the terrain you're riding. The travel adjustment allows you to change the way the bike handles, when you ride uphill or downhill.

**When you ride uphill**, you push the lever (which is mounted on the handlebar) and push down the handlebar.

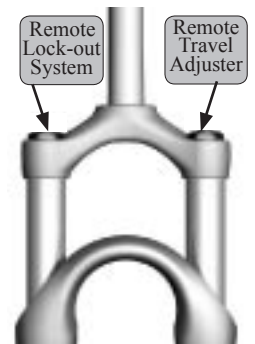
You release the lever at the desired travel level of the fork. Now you can ride uphill in a more comfortable body position.

**When you ride downhill**, you push the lever and pull the handlebar and the fork extends its travel to the maximum travel level. Now you can ride downhill in a more comfortable and safer body position.

The infinitely variable travel can be adjusted from 60-120mm (130mm - depending on the fork model) steplessly.

**Remark:** The change of the travel of the fork doesn't change the air spring rate.

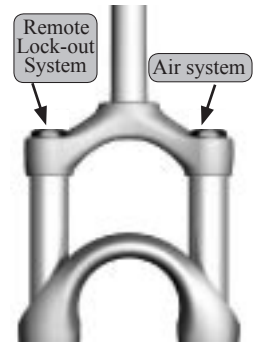
You have the same comfort at all travel levels.



### HydraLock (lock-out feature)

This feature allows you to reduce bobbing while riding uphill or sprinting.

In order to activate this function, you have either to push the "wishbone" shaped lever to the right - in case of a remote lock-out fork or to turn the lock-out knob located on the right side of the fork crown clockwise up to stop. In order to open the system for normal damping, you have to push the "wishbone" lever to the left in the case of a remote lock-out fork or turn the lock-out knob counter-clockwise. To perform both functions - lock or un-lock -> you need only one flip of your thumb in the case of the remote lock-out fork or a full turn of the lock-out knob for a standard lock-out fork. This function allows you only to have the hydraulic damping fully open or fully closed.

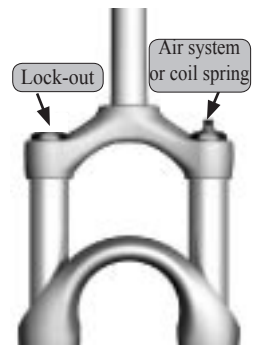


**WARNING:** Please don't forget to un-lock your system when you're riding rough terrain.  
Riding rough terrain with a locked system may damage your lock-out cartridge.

### Preload adjustment

The preload adjustment allows the user to tune the response of the suspension fork as riding conditions demand and in accordance to his weight. The more preload you have, the more thrust it takes to get the fork to first move. The preload is adjusted by turning the preload adjustment knobs located on the fork crown.

Turning the adjustment knob clockwise increases the amount of preload, while turning the knob counter-clockwise reduces the preload. Please check the chapter "Setting Sag" described before.



### Maintenance

SR SUNTOUR forks are designed to be nearly maintenance free. However, as long as moving parts are exposed to moisture and contamination, performance may be reduced. To maintain high performance, safety and long life, periodic maintenance is required.

The recommended intervals for maintenance are listed below.

Lubricants and Cleaners:

- Teflon fortified oil
- SR SUNTOUR special grease (SRS No.9170-001) / high quality Teflon fortified grease.

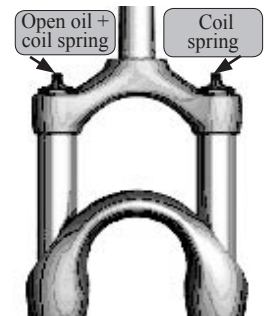
Damping oil:

- SR SUNTOUR special damping oil (SR SUNTOUR special damper oil #PSF01-033 / Viscosity 11).

### Regular Maintenance:

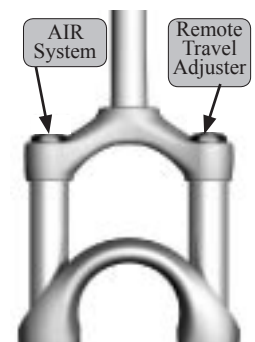
Before every ride, inspect the following parts:

- a) Front wheel and quick release for proper installation and adjustment
- b) Fork for any obvious damage (crown, brace, upper tubes, lower tubes, and dropouts)
- c) Front brake cable for proper routing
- d) Front brake pads for proper contact with the rim
- e) Front brake lever for proper adjustment
- f) Headset for proper function and adjustment
- g) Stanchion tubes for scratches. In case of deeper scratches contact your local dealer for advice.



***If you ride in extreme weather or terrain conditions, we recommend a more frequent maintenance.***

**In any case, if you feel that your fork's performance has changed or it handles differently as normal - please contact immediately your local dealer to inspect your fork.**



**We recommend the service after 50 and 100 hours of riding to be performed by a qualified bicycle mechanic. He has all necessary tools for this service and the necessary know-how.**

| MAINTENANCE   | After every ride |   |   |   |   | After 25 hours |   |   |   |   | After 50 hours |   |   |   |   | After 100 hours |   |   |   |   | After 200 hours |   |   |   |   |
|---|------------------|---|---|---|---|----------------|---|---|---|---|----------------|---|---|---|---|-----------------|---|---|---|---|-----------------|---|---|---|---|
|   | 1                | 2 | 3 | 4 | 5 | 1              | 2 | 3 | 4 | 5 | 1              | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 |
| Clean the stanchion tubes and the dustseal area                                   | ●                |   |   |   |   |                |   |   |   |   |                |   |   |   |   |                 |   |   |   |   |                 |   |   |   |   |
| Check for proper torque the main fixing bolts (10Nm)                              |                  |   |   |   |   |                | ● |   |   |   |                |   |   |   |   |                 |   |   |   |   |                 |   |   |   |   |
| Oil the dustseal area with Teflon oil   |                  |   |   |   |   |                | ● |   |   |   |                |   |   |   |   |                 |   |   |   |   |                 |   |   |   |   |
| Function check of the fork and clean and grease service of bushings at the dealer |                  |   |   |   |   |                |   |   |   | ● |                |   |   |   |   |                 |   |   |   |   |                 |   |   |   |   |
| Change oil bath and lubricate remote lock-out cap from outside with Teflon oil    |                  |   |   |   |   |                |   |   |   |   |                |   |   |   | ● |                 |   |   |   |   |                 |   |   |   |   |
| Inspection and service of the complete fork at the dealer                         |                  |   |   |   |   |                |   |   |   |   |                |   |   |   |   |                 |   |   |   |   |                 |   |   | ● |   |

## Notes on usage of the fork

### Intended use



The SR Suntour suspension forks are designed for Endurance/Freeride and moderate downhill riding (air system/hydraulic type forks) and Cross Country and All Road sports (hydraulic system/spring type forks).

**These forks are not intended to be used in downhill racing!!!**

Detailed information about the target category of your fork you can find on our website at - WWW.SRSUNTOUR-CYCLING.COM - where you can download this instruction sheet as interactive pdf. file.



**If for any reason you feel that there is something wrong with the fork, by the way it handles or by unusual topping sounds, you must immediately stop using it and you have to take it to the dealer from which it was purchased, for inspection.**

## LIMITED WARRANTY

SR SUNTOUR warrants the suspension front fork to be free from defects in materials and workmanship under normal use for a period of two years from the date of purchase. In no event shall this limited warranty apply to any defect of the suspension fork caused by: improper installation, disassembly, re-assembly, intentional breakage or damage, alterations or modifications to the suspension fork by the user or other party or any unreasonable use or abuse of the product or any use for which this product was not intended.

The obligation of this limited warranty shall be limited to repairing or replacing the suspension fork or any part for which there is a defect in materials or workmanship during the two years following the date of purchase. To validate this limited warranty the purchaser must submit this warranty card to SR SUNTOUR within 30 days after purchase of the suspension fork. Any alteration of, or tampering with the warranty card automatically terminates this limited warranty.

SR SUNTOUR makes no express or implied warranties of fitness or merchantability of any kind, except as set forth above. SR SUNTOUR's liability hereunder is expressly limited to repair or replacement of the product. Under no circumstances will SR SUNTOUR be liable for incidental or consequential damages. Some jurisdictions do not allow the exclusion or limitation of liability of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific rights and you may have other rights which vary from jurisdiction to jurisdiction.

In all places, the purchaser should contact the place of purchase for information about warranty service.

### **Suspension Fork Warranty Card:**

Date of purchase: \_\_\_\_\_ Fork model name \_\_\_\_\_ Serial number \_\_\_\_\_

Term of limited warranty: Two years from the date of purchase

**Dealer** Name: \_\_\_\_\_ Phone#: \_\_\_\_\_

Address: \_\_\_\_\_

**Purchaser** Name: \_\_\_\_\_ Phone#: \_\_\_\_\_

Address: \_\_\_\_\_

**SR Suntour website: [www.srsuntour-cycling.com](http://www.srsuntour-cycling.com)**

This warranty is void without proof of purchase.

#### SR SUNTOUR INC.

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