

RST

REAR SHOCK MONO OWNER'S MANUAL



MONO DPU / R
TRUNNION / STANDARD

XC1800-301



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Congratulations

Thank you for choosing the RST rear shock for your bike, this manual will help you set up your shock for the best possible performance. We're sure that when you learn more about how to adjust your rear shock accurately, your riding experience will be visibly improved and every ride will become more enjoyable. So please take the time to read and learn about your RST MONO rear shock.

In addition, this manual contains important information on the safety of operation and maintenance of the rear shock. In order to ensure that your RST rear shock is functioning properly, we recommend that you have it installed and repaired by a professional bike mechanic, and we also ask that you follow our recommendations to make your riding experience more fun and avoid any troubles.

Important - Safety Information

1. Keep your bike and your rear shock in optimal operating condition.
2. Before riding the bike, please wear protective safety gear, including clothing, glasses and helmet.
3. Before riding the bike, make sure the brakes are properly installed and tuned. Please practice your braking technique in non-emergency situations. Use the brakes carefully and understand its functionalities. Hard braking or improper use of the front brakes can cause tripping and falling. If the brakes are not tuned and installed or used improperly, the rider could suffer serious or fatal injuries.
4. The rear shock on your bike is designed for solo riding in or similar to off-road riding.
5. If the rear shock is ever leaking oil or makes unusual noises, stop riding and have the rear shock checked by a qualified professional bicycle mechanic. A damaged or non-functional rear shock could lose control while riding and result in serious or fatal injuries.
6. If your rear shock cannot be returned to its original length, do not attempt to disassemble your rear shock by yourself. Please contact RST USA (sales@risseracing.com) if you are in the United States, or your local distributor or wholesaler in other parts of the world (for contact information of distributors or wholesalers in each region, please refer to the RST website : www.rstsuspension.com)
7. Please only use the original RST components. The use of non-standard spare parts will void the warranty and may cause the structural failure of the product, which could lose control while riding and result in serious or fatal injuries.

General Maintenance

In order for your rear shock to maintain its performance, remain safe, and to last longer, regular maintenance is necessary. If your riding environment and style is more intense, please have your rear shock checked up more frequently. Please refer to the following maintenance procedures.

(Note: For any service that requires disassembly of the rear shock, please have a trained and qualified professional bicycle mechanic use appropriate tools to assist you. For relevant service information and operating procedures, please refer to the RST website : www.rstsuspension.com or contact your local RST distributor or wholesaler.)

Warning

If your rear shock cannot be returned to its original length, do not attempt to disassemble your rear shock by yourself, as it can result in serious or fatal injuries.

Rear shock maintenance guide

Item	Frequency
Clean the exterior of the shock	After each ride
Check air pressure and SAG settings	Before each ride
Check the torque of the bolts	Before each ride
Clean and lubricate inside of the air sleeve	Every 25HR
Seal of the air sleeve and Schrader Air Valve replacement	Every 50HR
Oil and damping components replacement	Every 100HR or per year

Rear Shock Installation

Warning

It is extremely dangerous if the rear shock is not installed correctly, and could result in serious or fatal injuries.

It is very important that your RST rear shock is properly installed by a qualified professional cycling mechanic. Consult your bicycle manufacturer for information regarding the operation of the rear shock.

RST MONO Rear Shock Installation Instructions

The RST MONO rear shock can be installed and adjusted according to the rider's weight, riding style and riding terrain. When you're tuning your rear shock, change only one setting at a time and remember to keep record so you can better understand how each setting affects your ride.

At this stage, follow these 3 steps for the setting and adjustments :

1. Measure and set SAG.
2. Adjust the rebound damping.
3. Lock out function.

Measure and set SAG

The SAG is the value of the shock's suspension travel change when the rider sits on the bicycle saddle without exerting any force. The setting of the SAG value helps to maintain the friction of the tire on rough terrain.

The air shock has an O-ring on the tube. Please use the O-ring measurement method to measure the SAG.

O-ring measurement method

1. Push the O-ring close to the air sleeve without a rider sitting on the bike.
2. Sit on the bike in a normal riding position. RST recommends that it is best to wear your usual riding gear and equipment, then lean against the wall to maintain balance.
3. Slowly get off the bike, and be careful not to compress the shock repeatedly. Measure the length from the edge of the air sleeve to the position of the O-ring to obtain the SAG.



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Generally, RST recommends that the optimal SAG is between 18% and 40% of the shock travel. For example, for a 230/65 shock, the SAG value should fall between 12-26mm.

Note : You can adjust the air pressure with an air pump to find a suitable SAG.

(Increasing air pressure will result in less compression during the ride, which means you will feel that the rear shock is stiffer, while reducing air pressure will increase compression and feels softer.)

If you still do not know how to set the SAG, please refer to the following SAG setting instructions.

SAG value setting

1. Turn the lock out lever (blue lever) to OPEN. (RLC ONLY)
2. Open the valve cap and press the Schrader valve to release the air pressure to 100PSI.
3. Compress the rear shock repeatedly 5-10 times to balance the air pressure in the positive and negative air chambers, and compress at least 10mm of travel each time.
4. Charging the air chamber and confirm that the air pressure value is suitable for your body weight (please refer to RST official website).

※Note : Your bike may require a different air pressure setting based on the brand and model.

For example : frame designs with low leverage ratios require only a small amount of air pressure to find the right SAG.

※Important : The air pressure value should not exceed 300PSI.

5. Compress the rear shock repeatedly about 5 times to balance the air pressure in the positive and negative air chambers, and compress at least 10mm of travel each time.
6. Refer to the O-ring measurement method above to confirm the position of the O-ring.
7. Please refer to your bicycle manual for the recommended SAG setting.
8. Make sure the air valve cap is closed tightly.

Rider weight(kg)	Recommended pressure(psi)
60 ↓	105 ~ 135
60 ~ 70	135 ~ 155
70 ~ 80	155 ~ 175
80 ~ 90	175 ~ 195
90 ~ 100	195 ~ 215
100 ↑	215 +
Maximum pressure is 300 psi	

Note:

Above numbers are reference only. Correct air pressure must be adjusted by individual rider while checking the sag.

Adjust Rebound Damping

1. Turn the rebound adjustment knob in the "+" direction to increase the rebound damping; turn it in the opposite direction to decrease the rebound damping

Lockout Function (DPU ONLY)

The RST RLC rear shock has 3 settings, which are operated by the locking knob. The 3 functions are "OPEN", "PEDAL" and "LOCKOUT":

1. OPEN—Set the lock out lever to the open position to activate the rear shock's maximum shock action, providing the best comfort in intense riding conditions.
2. PEDAL—reduces the force absorbed by the rear shock when pedaling.
3. LOCKOUT —When riding uphill, set the lock out lever to lockout position to reduce power loss. When you are riding over rough terrain, make sure you have it turned on to OPEN, this will ensure you get the best comfort and control, while avoiding damage to the rear shock from internal oil pressure.

Warning

Vigorous riding in LOCKOUT mode may result in loss of control and serious injury.

Warranty

If any RST rear shock absorber is found to be defective due to faults in the manufacture or material, the manufacturer will decide whether to repair or replace it free of charge, while user will need to pay for postage, within 1 year of purchase or less than 2 years after the date of manufacture (whichever comes first). Warranty period in the US is 12 months, anywhere else will be subject to local regulations.

The warranty does not apply to rear shocks that have been mis installed or misused, including breakage, bending, or any other damage caused by the user, due to improper installation, repair, or any other excessive, inappropriate usage of the product. This warranty does not cover the peeling or color fading of its exterior paint. Any modification made by the user will void the warranty, and RST shall not be held legally responsible for the damage caused beyond the warranty of other parts, while RST reserves the right to replace products of the same value (either free or with charges). This product does not prevent the risks of injuries in jumping, stunt riding, slope jumping and other similar practices. Under such conditions of use, injuries of the rider, damage on the product and other consequential losses are not covered by the warranty.

If product warranty is required for any reason, please return the rear shock to the place of purchase. Dealers in the US should contact RST US Customer Service. Consumers in other countries should contact their local distributors, wholesalers or RST European headquarters.

Customer Service

If you still have problems with the product after referring to the manual, please check the RST website : www.rstsuspension.com for more information. Contacts for distributors and wholesalers can also be found on the website.