



1240 Redwood Blvd.
Phone (530) 246-8700
email: sales@risseracing.com

Redding, CA 96003
FAX (530) 246-8701
<http://www.risseracing.com>

**The following is a basic overview of the function and basic air pressure setup of the
Risse Racing Technology damper**

Proper air pressure is dependent upon rider weight, suspension design, and intended use. Cross country use typically requires sag in the range of 10-20%. Downhill use typically requires sag in the range of 30-40%. These are general guidelines only. Varying terrain may require different suspension settings. Certain suspension designs such as extremely high pivot designs and many "non-active" designs work best in most instances with little or no sag. As always rider preference is also important. If you find a setup that pleases you and doesn't fall within these guidelines, don't assume it's wrong. As long as your suspension is not bottoming harshly, which could cause damage to the damper, and it is making you happy, everything should be okay. Above all experiment to find what works the best for you. However, you can expect the best results to fall within these guidelines.

Sag can be easily measured at shaft of the shock. An o-ring or zip tie should be fitted around the shaft of the shock. If a zip tie is used it should be removed before riding the bike. The rider should then sit on the bike in a comfortable riding position while being held upright by a friend or propped in a doorway or against a wall by an elbow. A slight bounce will help make sure the suspension is settled completely. Push the o-ring all the way up against the shaft seal. When the riders weight is removed from the bike the distance between the shaft seal and the o-ring indicates the amount of sag at the shock shaft. Percent sag can be determined by the following formula:

$$\% \text{ sag} = (\text{sag at shock shaft} / \text{total shaft stroke}) \times 100$$

Total shaft stroke can be found similar to sag at the shock shaft by removing all pressure from the shock, compressing the suspension all the way, and then reinflating the shock. Total shaft stroke can now be measured between the o-ring and the shaft seal. Never pull your suspension to full extension with an unpressurized shock. Always reinflate the shock to extend the suspension.

Now that % sag is known, air pressure can be tailored to tune sag. Increase air pressure to decrease sag, or decrease air pressure to increase sag. With any air shock accurate air pressure settings are critical to proper suspension setup. Be sure to use your Acu-Fill adapter so you know your air pressure settings are accurate, and when you find the air pressure that works best for the conditions make a note of that pressure for future reference.