



Risse Racing Technology, Inc.  
1240 Redwood Blvd.  
Redding, CA 96003  
Phone (530) 246-8700  
FAX (530) 246-8701  
email: [info@risseracing.com](mailto:info@risseracing.com)  
<http://www.risseracing.com>

## **Jupiter-7 Instructions**

Thank you for purchasing the Jupiter-7 multi adjustable damper. The following instructions will help you understand how to set up the damper on your suspension bike.

### Preload:

The preload setting determines how much “sag” the bike has. Sag is the amount the suspension compresses with the rider on the bike in their normal riding position versus the suspension when it is fully unloaded. To set the preload, sit on the bike in a normal riding position with the weight distributed as if you were riding the bike. Now measure the amount of sag at the rear axle. You may want the help of a friend at this point. Downhill riding requires more sag ( $\approx 20\%$ - $30\%$  of total travel) than cross-country riding ( $\approx 5\%$  -  $15\%$  of total travel). Adjust your preload by turning the spanner on top of the spring so that the spring is more compressed. If you have to turn the spanner more than ten turns in from full soft then you will need a different spring rate.

### Damping adjustments:

There are three damping adjusters on the Jupiter-7 damper. The red colored knob on the end of the shaft adjusts the rebound damping and the remote reservoir has two adjusters. The black knurled knob adjusts low speed compression damping, and the hexed blue adjuster controls high speed compression damping.

### Rebound:

After you have set the preload you are ready to adjust the rebound damping. Start by turning the red knob all the way inward in a clockwise direction, this is your base setting. You will make all adjustments from this point in a counter clockwise direction by counting the number of clicks out. Set it at about 10 clicks out, this will be a good to start. Now bounce on your bike and ride it around a bit. Note how quickly the shock returns. If it seems rather slow then turn the adjuster out a few more clicks and try it again. It is important that the damper is not over damped and extending too slowly. The front and rear suspension needs to be balanced. This means that when the bike goes over a bump, the front and rear suspensions compress and return at the same speed. This is very important in order to maintain the correct geometry and predictable handling of your bike. An easy way to check this is to have a friend watch you ride the bike across a parking lot or offroad area. Compress the suspensions by bouncing up and down on the bike and allowing the suspensions to move. The observer will notice if the front or rear of the bike moves at different speeds.

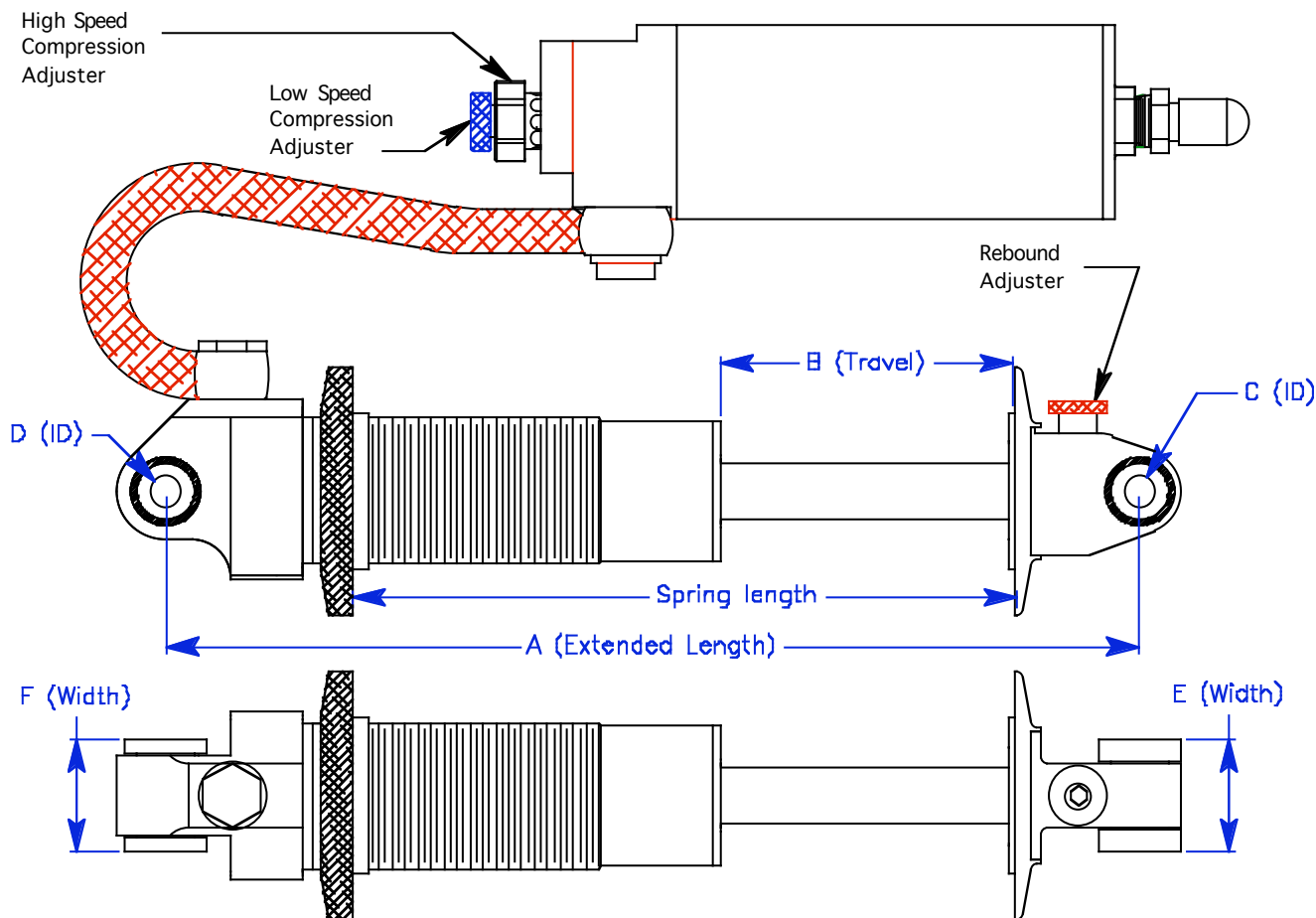
### Compression:

After you have set preload and rebound you are ready to adjust the compression damping. First adjust the high speed compression damping (use the machined wrench). The high speed damping circuit is activated during jumps and landings. Increasing the high speed damping will increase the effective spring rate of the shock. The low speed circuit activated during pedaling and cornering conditions. Increasing the low speed damping will change how the suspension reacts to pedaling, and to weight transfer during braking.

### Reservoir Pressure

The Jupiter-7 damper is pressurized with nitrogen. The stock pressure is 150 psi. The pressure can be adjusted from 75 psi up to 250 psi. Increasing the pressure will increase the progressiveness of the shock. The pressure also affects the preload. To reduce preload, reduce the pressure. To increase the preload, increase the pressure. Note, the pressure adjustment is for very fine tuning, approximately 5%. If the spring rate is too soft or too stiff, you should use a different spring rate. Also, the shock must have at least 75 psi for it to function correctly.

We recommend that you now take your bike for a ride on your favorite trail for any additional fine tuning.



**Tuning Tips:  
Symptoms and Suggestions**

- Change only one adjustment at a time, then ride the bike for evaluation and feedback
- Make notes of settings. Note how the bike suspension performed.
- Be patient, and return to your original settings as a baseline if the suspension is not functioning well.

**Harsh over bumps:**

- Go full soft on low speed compression (black knob counter clockwise)
- Decrease high speed compression (blue adjuster clockwise, one click at a time)
- Reduce spring preload
- Decrease spring rate

**Suspension packing down:**

- Increase low speed compression damping (black knob)
- Reduce rebound damping (red knob)

**Suspension too active during pedaling**

- Increase low speed compression (black knob)
- Increase rebound damping (red knob)
- Increase spring preload
- Increase spring rate
- Increase nitrogen pressure

**Suspension bottoms out on landings**

- Increase high speed compression damping (blue adjuster)
- Increase spring rate
- Increase nitrogen pressure

Remember to keep lots of notes