



Big thanks to Shane (aka. trailpimp33) with Velocity Suspension for the following information.

1. Make sure that you have the optimal sag.

You can do this by measuring the amount of full travel that your bike has (front and rear) and then with you on the bike in your gear you want about 25% of that number in sag. For example, if you have 8" of travel then you want 2" of sag (a side note, if you are trail riding then 30% is your magic number). DO NOT take the manufactures travel numbers as golden as they are merely rounded. Some bikes have more, others less than advertised. To figure out the real travel in the back, you measure the distance from the axle to pivot, then from the pivot to the lower shock mount, and then divide those numbers. Then take that number and multiply it by the length of the shock shaft. (A 3to1 leverage ratio on a 2.5 stroke shock is 7.5" of travel).

Measuring your sag on the fork is easy, dab some grease next to the wiper, sit on the bike and then get off, measure the distance the wiper left on the lower. Rear sag you measure by picking a point on the rear fender and measuring that distance to the rear axle while on a stand. Then measure the same points while on the bike. If you have too much sag, then preload the springs a bit, if you still have too much then up the spring weight. If you have too little sag the opposite is needed.

2. Once you have proper sag then you want to move to the rebound and compression adjusters. It is important to find a baseline setting with these by using an area that you have ridden before so that you can pay attention to the settings instead of learning a new track. With rebound you want just enough that on hard landings you are not being bucked by the bike, but not so much that it does not have time to recover from successive impacts. The best way is to find some choppy section of a course or braking bumps, then ride over them at 80% of your race speed paying close attention to how the bike feels. Adjust the rebound one click at a time, and keep track of how each change felt (this will come in really handy if you race). Once it feels like the bike is absorbing the bumps in succession well but still staying flat and controlled then you have a good base line for your rebound.

Compression is a bit more difficult with compression you want it to feel plush but not like it is wallowing. You should not feel any spikes in the stroke, and the faster you are the more compression you will need. I recommend starting your compression adjusters in the middle of their adjustment range, and then try turns each direction (again keeping track by writing everything down) until you find the best setting for you.

3. Maintenance, every 30hours on the fork and 50 hours on the rear shock you should change the oil and check the seals and bushings. Just like in your motor, the oil in your suspension breaks down and needs to be changed to keep your suspension performing at its best. It is easy to do, but if you feel uncomfortable doing it then there are shops and specialists that will do it for you and inspect everything for a small fee.

