

Service and set-up instructions for „Wilbers“ shock

Thank you for deciding on a “Wilbers” shock. You bought a high-tech product that needs some explanations but don’t worry, it is not as difficult as it may seem.

Your shock has a few set-up possibilities that you can do different things with. We would like to explain what those settings are and how each will affect your bike.

Your shock has been assembled at the factory based on your personal data, which included your riding weight, riding style, road or race use, weight of possible passenger and/or luggage, with side-car or with trailer. The shock has been built specifically for you and the set-up can furthermore be fine tuned by you for your personal “feel”.

Changes of the standard settings should always be made at operating temperature; otherwise the damping characteristic can change due to the cold and sick hydraulic oil.

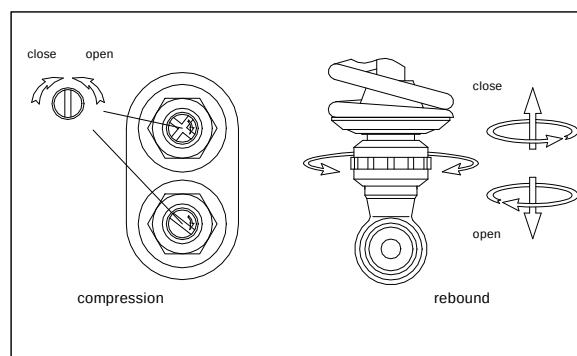
We recommend writing down the current settings before any change.

A standard shock has the following base setting range:

Rebound	12 – 14 clicks	Total range: 0-22 clicks
Compression/low speed	12 – 14 clicks	Total range: 0-22 clicks
Compression/high speed	12 – 14 clicks	Total range: 0-22 clicks
Preload adjustment	has been set by us according to rider and bike weight	

For additional loads the preload adjustment can be changed with the attached hook wrench/C-spanner or the optional hydraulic pre-load adjuster. If you do not have a hydraulic pre-load adjuster it can be easily retrofitted for almost all types of bikes.

The rebound damping controls the return speed of the spring to its original position after being compressed (red/aluminium adjustment ring at bottom of shock). The clicks for the rebound damping can be felt and heard. By turning to the right (clockwise, like tightening a screw) you increase damping. Turning the screw to the left reduces damping.



Compression damping controls the spring compression when you hit a bump, a pot hole, or when the bike is squatting down under hard acceleration. The adjustment screws for it are found on all shocks with a reservoir, either hose mounted or piggyback.

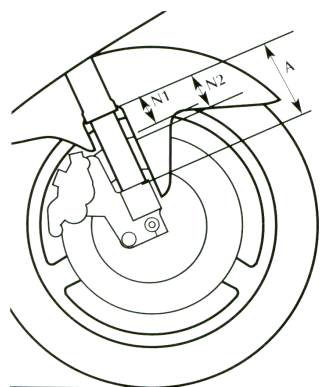
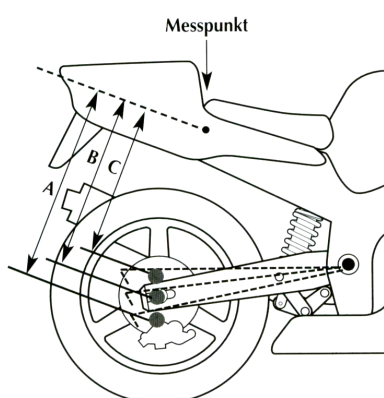
1. Compression/low speed (blue or “+” recessed slotted screw)
2. Compression/high speed (red or “-“ recessed slotted screw)

Compression damping works in the low speed range of up to 0,5m/sec (20”/sec.) and in the high speed range from 0,5 to 4,5m/sec. (20” to 15 ft/sec.) compression speed.

Splitting the compression damping into these two ranges increases safety, function and comfort immeasurably. Fine-tuning the factory settings should be done under the following conditions:

1. Write down standard setting and every change you make.
2. Always do the identical changes on twin shocks.
3. Changes could be carried out in increments of 1 – 2 clicks.
4. When testing the bike always drive the same course.
5. Pay attention to changes, take a note and do further adjustments if necessary.
6. The low and high-speed compression settings should not differ more than 5 clicks from each other.
7. If you have lost track of where you are, you can always go back to the standard factory setting and start again.

Preload adjustment and sag should be correct from the factory; however, they can be checked and adjusted as followed:



Lift up the bike with the center stand or hydraulic jack, so that either the rear or front wheel, depending on which part of the bike you are working on, are off the ground.

Measure distance "A" at either front or rear

Rear: between axle and a fixed point at the seat

Front: for USD forks as shown in the sketch

for regular forks between upper edge of fork legs and lower triple clamp.

Take the bike off the stand, so that both wheels are on the ground, and press down on either the fork or the seat a few times as deep as possible. Then measure again between the same points.

The distance is "B". Subtract "B" from "A" the result is the static sag ("N1"). You should get the following results in % of the total maximum suspension (wheel) travel.

Front		Rear	
Road setting	race setting	Road setting	Race setting
approx.25-30%	approx.20-25%	approx.10-15%	approx. 5-10%

With off-road bikes add approx. 5 %

Now get seated on your bike in the usual way (hands on the levers and feet on the pegs). Press down the seat or the fork a few times and assure that the bike is balanced and in an upright position. Your leg should only have loose ground contact, just enough to keep it vertical. Somebody helping you has to measure at the same points as before. This measurement is "C", which again has to be subtracted from "A". The result is the dynamic sag ("N2") The dynamic sag should be approx. 1/3 of the total wheel travel depending on the use of the bike. The race setting is approx. 1/4 of the maximum wheel travel.

We wish you a safe and enjoyable ride!