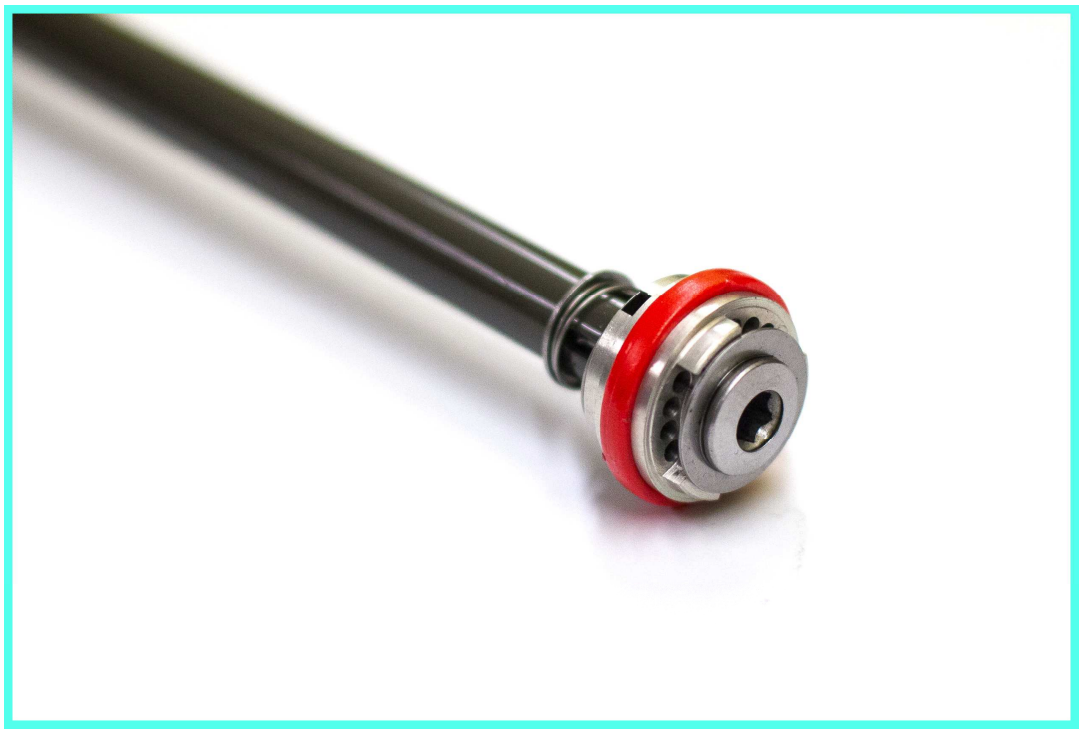
Rebound damping for FOX CTD Evolution forks

Rebound damping works against the spring to resist the wheel's downward movement after a bump. For example in the shock, it keeps the rear spring from jamming the seat into your butt, and in the forks, keeps the front springs from pushing the bars into your face. The suspension can be fine tuned, for best work at every rider's weight and for every discipline he/she choose to rider.



The primal damping works linear and oil flows only through one regulated orifice (hole).
Too little damping and your fork comes up too fast and produces haphazard and uncomfortable ride over even the smallest rocks and bumps.
Too much damping and your fork doesn't react enough fast – it keeps your wheel from returning to its „normal" position in time for a next bump. After a series of bumps the suspension gets „stuck in a squat" with maybe a centimeter or two of travel. Also known as packing up.

A damping invented by Suspension Clinic adapts itself to the pressure when coming up to its full travel.
While full compression - it makes returning to full travel faster than at the beginning of the travel. Thanks to this system it doesn't come to spring preloading and your fork is working and reacting more sensitive on quick consecutive shocks.

Martin Brenner – Suspension Clinic, Športové Námestie 893, 900 55 Lozorno

- **Beginning stroke rebound**

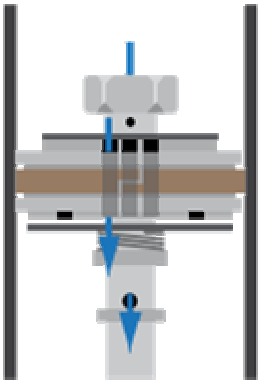
Also known as Low Speed Rebound - happens at the beginning of the stroke when there is low spring pressure. It works in the first 25 percent of the travel. With a fine tuning you can adjust the speed at which comes your fork back to its full travel after absorbing small strokes.

- **Ending stroke rebound**

Also known as high speed rebound – is used to bypass LSR and help a fork/shock return back to full travel fast enough to not pack up. Because the only force a rebound damper faces is the force of the spring pushing the fork/shock back to full travel, HSR generally happens deeper into the travel due to (higher spring pressure – 25 to 100% of full travel).

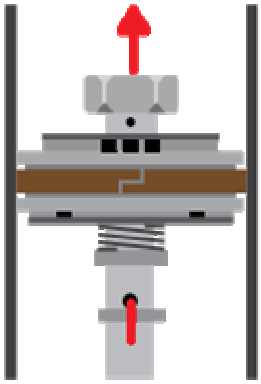
How it works:

A



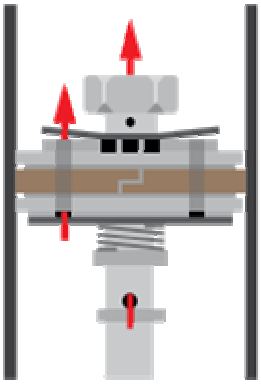
compression

B



rebound
(linear)

C



rebound
(two-stage rebound)

- A – While compression - the oil is under pressure and flows through shaft and piston, which causes opening of the check valve.
- B – The primal (linear) version –while rebound the oil flows only through one orifice (hole).
- C – During the rebound cycle, the rebound check valve shuts. Oil flows through the piston and the shaft and simultaneously is pressing on the shims which bend over and oil flows beside them.