SUTER RACING

BTL SuterClutch
Setup Recommendations for MX Teams

January 2020

Standard testing procedure

A good-level MX rider prefers a faster clutch reaction for the start, corner exit, or whenever he needs to give an extra kick to the bike. To receive an effective amount of engine brake, we use a BTL spring between 850N and 1100N. The standard setup always comes with the 1100N diskspring, and it's recommendable for new teams to start testing with this setup. If the rider likes to have a more aggressive and faster clutch re-action for corner entry/exit, you can adjust this behavior by using a harder mainspring.

Mind the Gap!

The so-called "gap setup" is always at about 1 mm (+0.2/-0.4). If the gap is below the tolerance at the start of a race, there is a risk that the clutch disc will wear out considerably and that the gap will go towards 0 during the race. This causes the clutch to slip under acceleration = DNF. To run the gap above the tolerance also makes no sense, as the reaction time of the BTL system is too slow. For this reason, always check the plate package thickness when maintaining the clutch. We recommend using OEM plate packages.

With a little testing, each rider can tailor his SuterClutch to his riding style and will succeed in achieving faster lap times. Each rider has to find his own Clutch/BTL Set up, a compromise between smooth corner entry and enough engine brake for jump takeoffs, as well as a controllable bite for holeshots or corner exit.

> ## Summary
>
> - Always start with standard setup (1100N BTL spring),
>   then change to the next lower/higher spring value
> - Softer spring = less engine brake
> - Increase the mainspring size to get a more aggressive clutch
> - Using OEM plate packages recommended

Technical contact and training

For all technical issues, please contact clutch@suter-industries.ch.
New teams have the opportunity to receive a free technical training at Suter Industries in Turbenthal.