



One has to admit that the relentless pace of technology has changed the way we look at motorcycles today. Not so long ago to get a dirt bike to run just right, all you needed was a tank of gas, a box of jets and a strip long enough to pull top gear... Not anymore...

In our quest to explore the inner wizardry of the G 450 X we have journeyed into some brightly lit laboratories manned by really smart guys with some serious techno hardware that would baffle even the best bush mechanics. Keyboards, monitors, pumps, sensors, gas analysers and oxygen probes now divulge critical information all needed to go faster!

In Germany they have stern okes like Karl and Hans working 18 hour days with mega-fast super computers building engine and fuel management systems designed not only to win races like Romaniacs but to do it in a Euro-5 compliant, Eco-friendly low carbon footprint kind of way.

The real question is, can We make it faster? (without blowing it up!)

Looking at what was left of our modest race budget I had only one choice - call a friend.





Stephan from Hex Microsystems, owner of a G450X and possibly the most knowledgeable expert on BMW diagnostics got the call. A few weeks and a couple of hundred US dollars later, Stephan arrived back in SA after visiting his fiancé in California, packing the latest



Now to make sense of it all (and not blow it up!) we turned to Julian from Superbike Solutions in Somerset West. Julian is Master of all things EFI and, thankfully, affordable.

After fitting a suitably smooth rear tyre and strapping the fresh 450 onto the Dynojet, careful preparation and a few base runs was followed by a Leo Vince X3 race silencer installed because the probe critical for analysing exhaust emissions could not work with the standard silencer baffles. A few more runs and some tense moments while a software update was downloaded onto the PC V and then the real work begins. Careful mapping of the EFI using the PC V requires gear selection, throttle position, intake pressure, air/fuel ratios and a host of other variables to effectively fine tune an already excellent set up. Several runs later in the stiff breeze created by the monster fans in the room, the numbers start looking up. Standing next to a stationary 450 at 90% throttle in 5th gear and an estimated 140 kph you get to appreciate the workings of a championship winning German thoroughbred in MAX mode.

By now you are probably thinking "Geez is it all worth it? " the answer is most certainly, YES it is!

Huge gains of more than 30 % in power and more torque radically alter the nature of the G450X and threaten to tear the Earth a new one



FUEL INDECTION MODULE

at the first available chance... More impressive is the time needed to accelerate through the rev range safe in the knowledge that she is running sweetly at every level. Now the secret is to run taller gearing made possible by the extra power, improving both economy and top end speed. The added bonus of this proper set-up is improved fuel economy, which equals better fuel range, without compromising reliability.

We are off to the hills to test the bike and see if the healthy dose of American attitude, some careful Cape mapping and loads of fresh horses can bring out the beast of the G450X, while solving the energy crisis at the same time!