



To Overheat Or Not

By Ray Jones

Summer is coming so I would like to give a quick lesson on what to do and how to check if your bike has overheated. It is very common for customers to tell me their bike overheated. Sometimes we get caught in traffic and have no control. A couple of customers have told me the parade at wing ding their bike overheated.

First of all if the coolant stays in the system and does not overflow to the ground everything is fine. Remember that! I repeat no antifreeze on the ground no overheat. The gauge tells us the normal operating temperature above and below. It makes no difference how far over from normal the gauge is as long as antifreeze stays in the system.

Let me explain briefly how hot it has to be to overheat and how to cool them down. Most Honda motorcycles have a 1 bar cap which converts to about 15 PSI. Remember in science class how the teacher explained water boils higher under pressure? Well I didn't think you did so here it is again. The boiling point goes up around 3 degrees per pound. With a 15 PSI cap that equals around 45 degrees. Add that to water boiling at 212 degrees we have a overheat situation at around 257 degrees before it pops the cap to send coolant to the reservoir. If the fan is running it will drop the temperature about 10 degrees in 1 minute. In normal operation we are constantly sending fluid out of the radiator to the reservoir and drawing it back in the radiator from the reservoir by cooling the radiator. This is achieved by the fans or air passing over the radiator.

I spoke in general terms because altitude can affect the numbers. Water boils faster in the

mountains. A rule of thumb is 2 degrees per 1000 feet. If we lived in the mountains we need a higher pressure cap.

After a long winded explanation of your cooling system here is what you need to know letting your bike idle and the fans running will drop the temp about 10 degrees a minute give or take some. It will only drop it to normal operating temperature though. Most of the time getting up to speed will cool it down to normal operating temperature also. If you are in traffic and it never boils antifreeze on the ground it is safe to ride and I stress it has not overheated, it is running higher than normal which is normal in certain conditions. (Summer and high altitude).

Motorcycles amaze me in how little trouble we have with the cooling systems. With normal maintenance of changing coolant every couple years you should never have an issue. Keep an eye on the gauge and make sure the reservoir is full and just ride don't worry you now know how it works.

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