

MOTORCYCLE CLIMATE CONTROL ROCKS!



BY PAUL PELLAND
COVER PHOTO BY TOBIE STEVENS

A flash mob of English, Italian and German riders danced towards me. It was my first time being invited to give a presentation at the Northeast European Motorcycle Rally in Maine and I was sure it would be my last. These BMW, Ducati, Aprilia, Triumph and Moto Guzzi owners gathered around my Yamaha, gawking at my temperature-controlled cooling and heating system and wanting to know more about it. Although I did not design it nor do I have a financial stake in the company, I proudly tout the benefits of the CTC-100 where ever I go, much like the father of a newborn baby *before he sees the paternity test results.*

For over a year, I had been Columbus out to discover the new world. I was the lab mouse trying to beat the maze. I was Vince, the crash test dummy, surviving a myriad of experiments. "Test the hell out it. Give it all you've got, I want to make sure it holds up. Put it through the wringer, Paul," urged John Sims, CEO of Core Temperature Controls.

John essentially wanted me to do whatever it took to find any weak spots, loosely defined as the point at which the CTC 100 would fail. I tested the unit's durability in every way. Even though it was just a prototype and not supposed to be waterproof, I forgot to cover it, repeatedly, during multiple downpours. I fumbled and dropped the unit, I ran it dry and I ripped the hose barbs out from the temporary plastic housing when I fell over in the mud, and yet it still pumped cold water keeping me cool. I left it out on the bike during freezing temperatures before adding the coolant like I was instructed, and ice formed in the lines. As soon as it thawed, it started right up and kept me toasty through the winter.

Product testing is hard work, but I was no quitter. When I finally broke it and called Jon Sims the inventor, he wasn't as excited as I thought he'd be.

"I did it this time John, I got it to stop working!"

"You broke it, Paul?"

"Yes sir, real good. It's freaking awesome, it's spewing out green coolant like a squished bug."

"Did you drop it?" He asked. »





“Sure, lots of times but that’s not why it stopped working. This time *I actually drove my bike over it*”.

“You realize that was my last working prototype?” He questioned.

“Uh, no, I didn’t. Can you build me another one?”

“Not sure, we are so close to production,” Jon said, “I really don’t have any more hand built circuit boards, and it doesn’t make sense to build one from scratch again at this point.”

A poetic verse, well suited for a country western song.

I hung up the phone and sobbed uncontrollably like a 2014 R1200RT owner. The summer season was just around the corner, and after spending 12,000 miles using a device capable of cooling me off or warming me up to any temperature wanted, I just couldn’t ride without it. I had also just received the Ves-kimo vest and was looking forward to testing it.

I rode down to Virginia to see if there was any way to fix my bleeding prototype. The diagnosis was terminal. I had successfully accomplished what I had been tasked to do, yet I felt so horribly hurt inside. I couldn’t bring myself to stay for the cremation.

A few weeks later, on a very hot June afternoon, my Triumph-riding doctor and I rode to a speaking engagement in Springfield, Massachusetts. We hit an hour of stopped traffic, and by the time we reached our destination, I was unable to complete full sentences or walk without my left leg giving way. Multiple Sclerosis fatigue and heat-induced cognitive symptoms were fully recognized by my doctor, who after busting my chops, immediately herded me into the air conditioned hotel and sat me down in the lobby. I struggled with remembering how to remove my gear or where to store it on the bike. It only took 15 minutes to reclaim the working parts of my brain and laugh at his earlier attempt at humor, but we spent a lot longer worrying about the next time. My medically trained friend was serious when he stressed how staying cool while riding for me

was not a gimmick, it clearly is life or death.

I decided I needed to build my own system. I scoured Al Gore’s invention for the answer, instructions to make my own cooling system. I ordered hundreds of dollars worth of thermo techno gizmos from China, took stock in Home Depot and waited for the slow boat to reach New Hampshire. Over the course of two weeks and about 60 hours, I attempted to make my own personal cooling system. It was a test of math and solder, watts and heat paste, amps and blown fuses, dead batteries and burned out TEC plates. I left more wet spots across the house than a new puppy. I knew I would not have any ability to regulate the temperature like my long lost prototype, but I thought I could at least create something to allow me to ride cooler through the July and August heat. I finally got it wired and pumping fluids and it did actually work, *in a placebo sort of way*.

A week after building my redneck room temperature-izer, I received some great news. Production was in full swing. I was being sent a pre-production CTC 100, identical in almost every aspect to the final production models.

Being able to ride comfortably in any temperature from 0 to 120 degrees while wearing leather or full riding gear greatly increases safety, endurance and the hours, days and months we can ride our motorcycles. I’m guessing by the crowds it draws everywhere I go, the CTC-100 will soon be as ubiquitous as Garmin and Russell are to the long-distance riding community. The CTC-100 may be one of those products we eventually wonder how we ever rode without (I would have named it Sliced Bread II). Maybe it will be an option on the next Gold Wing.

I have my CTC-100 back and if the production unit works like the prototype, I can rock and roll regardless of the ambient temperature. With apologies to AC/DC, I can now travel the *Highway to Hell* comfortably and be *Back in Black*, full leathers if I wish, and even before Labor Day!

THE CTC-100

AS WE REPORTED in the Winter 2013 issue, the CTC-100 is in a league of its own. It is a self-contained, portable, and maintenance-free heating and cooling unit. Using a digital controller, the temperature can be precisely set between 50° F and 118° F. Temperature is maintained through the use of thermoelectric (TEC) plates that act like a solid-state heat pump. Also called the Peltier effect, a heat flux in the junction between two different types of materials is achieved where one side is hot and the other side is cool. Riders can then precisely control the TEC plate's heating and cooling through a digital control unit that can be mounted on the handlebars, tankbag, or on the dash.

The CTC-100, which can be mounted virtually anywhere on any bike, is connected to an outlet or directly to the battery or fuse block and using quick-disconnects, the shirt/vest, controller and power leads can be easily unplugged from the device in seconds.

The obvious advantage of the CTC-100 is reduced fatigue since the body doesn't have to use precious energy to heat or cool itself. Hot or cold fluid is evenly distributed through a shirt with tubes that is worn next to the skin or the Veskimo cooling vest.

It is compact, efficient, portable, self-sustaining, and most importantly, affordable. CEO John Sims is offering IBA members a 10% lifetime discount. The discount price for the CTC-100 will be \$629 with shirt option and \$729 with the Veskimo, plus shipping and handling.

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ILLUSTRATION BY MIKE CHOI

Left: One of the major benefits of using thermoelectric (TEC) plates is that the CTC-100 only uses seven amps.