

EnerTrac Newsletter-3

7/31/09

So; we're back from the Mid Ohio race track and thrilled to say we were a part of history. The first group of electric motorcycles on the AMA race track.

EnerTrac wants to thank the TTXGP – Egrandprix organization for inviting us to be part of this momentous event.

Now for the real questions: How did we do on the track?

Enertrac used its test mule, the converted Lifan 200 that you all have seen over the last few months and we were honored to have Jeremiah Johnson; Jay 64 ride for us, man is he one awesome person (more on Jay later).



The bike or I should say the MHM-602 motor really proved itself on the track, with peak speeds of 80 MPH. It inspired statement from people within the industry and other teams such as; "I never saw a hub motor do that!" or my favorite statement, "That's a hub motor on steroids!" EnerTrac ran every track session with no electrical failures or heating problems.

The Lifan being our test bike was not purpose built for racing; in fact, we built it as an example of what our customer could expect from the 600 series product. It is a model for

customers to use in their builds and to inspire people to imagine the possibilities for the use of the 600 series hub motor, not a racing bike per se.

With six weeks notice, we looked at the bike and asked, “What can we do to get more speed out of the bike?”

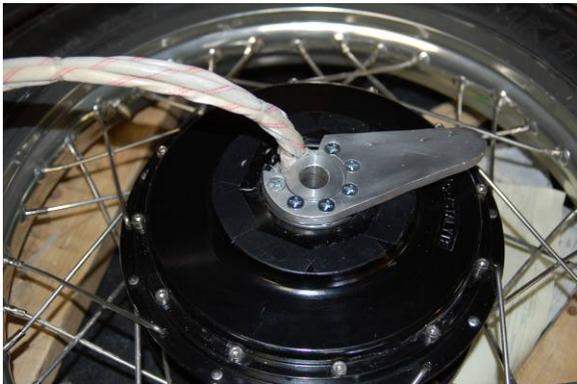
First: I ordered a more powerful controller from Kelly, a 400 amp peak 250 amp continuous unit.

Second: I rewired the battery pack with heavier wire to minimize voltage drops under high load.

Third: I added two more cells for a total of 34 Thundersky cells in series.

Fourth: We added torque arms on both sides of the axle to prevent any twisting motion due to the massive torque the motor could put out.

The results were interesting; the limiting factor was our batteries. 40AH Thundersky cells just don't cut it at loads above 5C. At 6C they were being pulled down to about 2.3 volts so 250 amps was our true max, which means we wasted our money on a 400 amp controller, but it gave us a real safety margin for the controller, and as such we had no heating problem with the Kelly controller at all.



This is a picture of the torque arm on the wire side.

Dual torque arms will now be an option.



The results of this work; is a Hub Motor Motorcycle the likes of which have never been seen before.

It blew away the Zero-S on the track even though the Zero-S was 100 pound lighter.

The most important outcome of Enertrac going to the race was the validation and independent testing of the 600 series motor. There was just an overwhelming surprise at

the power of the 600 series motor. We gave 100's of people the chance to test ride the bike, from industry experts to every day riders.

For a independent review see

<http://www.schultzengineering.us/chap4.htm>

<http://www.plugbike.com/2009/07/31/enertrac-corporation-electric-hub-motor/#more-433>

One last thing I have to add; Jeremiah Johnson; Jay 64 as he is known on the Endless – Sphere forum was amazing, Not only is he a great rider but he was a huge help in sharing his knowledge of racing and motorcycles in general. Jay even got the fork rebuilt with new spring at the track, amazing person. Not only does he know most all there is to know about motorcycles and racing he has a good understanding on how to market a product and gave me great pointers on selling. I enjoyed talking with Jay and I can only hope we work together on projects in the future. If anyone needs a rider, he's the man but I have first dibs on him.

We are getting close to seeing production quantities in our warehouse. I have received and approved the first production unit and we are now about 3 to 4 weeks away from shipping product to our customers.



Best
Mark
EnerTrac Corp.