

CRIMSON RACING NEWSLETTER

September 2015

Greetings from Crimson Racing!

Now that September has begun, all of us here on The University of Alabama campus have settled back into the routine of classes, work, extracurriculars, and of course, cheering on the Crimson Tide. Our first game against Wisconsin in Texas should be a great start to the season, and while we here at Crimson Racing love supporting the best football team in the NCAA, we are equally excited for the beginning of our own season. This past month, we completed many of our design plans, allowing us to transition into the fabrication stage of our process. As time proved to be an issue for the team in last year's competition season, one of the goals we outlined for this year was to begin manufacturing as early as possible, so moving quickly through the design phase is a crucial step.

Upright, Spindle, and Exhaust Designs

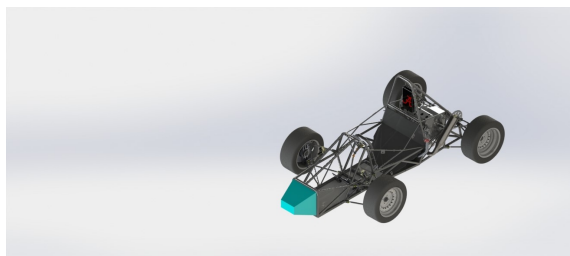
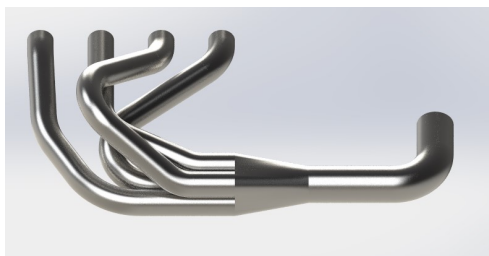
We plan on sending off our uprights and spindles for machining soon, as we only have a few finishing touches left on each. This year, we will include a one piece spindle in the rear. While this causes us to go to a larger bearing, we have still managed to save weight with the new design.

We have already completed this year's exhaust design using Ricardo WAVE and VECTIS software, and the tubes have been sent off for CNC bending. This process will be completed by our newest Gold Sponsor, Brown and Miller, who have also graciously offered to donate materials to us from their website, BRMS Wired.

Electronic Throttle and Assembly

Last year, the rules changed to allow for teams to use electronic throttle. Our team jumped at the opportunity to be one of the first to utilize the new element. Unfortunately, the team ran into some issues, and we were unable to implement it in last year's competition car. This year, we are building on last year's design and getting an earlier start to the project to eliminate the risk of finding more last minute errors. We also plan on using a revision process to catch any mistakes, and we have already completed the first revision of the boards. The team will send the layout of the printed circuit boards off for manufacturing in the next two weeks. We will then begin testing and working on the motor control algorithm.

As we have mentioned previously, time management is key for us this year, and we have employed multiple measures that we hope will allow us to stay ahead. One of these measures has been to create an assembly of the whole car. The assembly will help us when it comes time to assemble the car, as it will reduce the likelihood of overlooking fit issues. As you can see in the picture below, we have a lot of the car drawn, and plan to continue adding parts as we design them in hopes that in the end, we will have a full model of the car.



Looking Forward

The Crimson Racing Team eagerly looks forward to all that this season has in store for us. At Get On Board Day, we met with many students who expressed genuine interest in the car, our team, and how they can get involved this year. We invite anyone interested in joining us to send us an email, or stop by our office in Hardaway Hall. Watching how much our members grow and learn each year is truly incredible, and we can't wait to hear all the great ideas they have for this year's car. We could not continue to improve year after year without their amazing dedication, just as we would not even have the opportunity to do so without our generous sponsors. Once again, thank you for supporting us here at Crimson Racing; we're excited to share our progress with you in the months to come.

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