

# CRIMSON RACING NEWSLETTER

December 2015

## Greetings from Crimson Racing!

Another semester is in the books for us at the University of Alabama. After a week of studying for finals, students and professors alike are excited for a break from classes. During the break, students return to their homes to celebrate the holiday season with their families. However, this year, many of us will be heading back a little early to cheer on the Crimson Tide as our football team takes on Michigan State in the Cotton Bowl on New Years Eve. Though we here at Crimson Racing are very excited about watching the Tide in the playoffs, we're also focused on preparing ourselves for our own upcoming competition in May.

## Engine and Suspension

We have been able to rebuild the engine we plan on using for this year's car, which includes high compression pistons, custom ground cams, and set of valves that have been lapped. Before leaving for break, we will also set up the engine dyno. Our electrical team has already succeeded in getting the physical aspect of the electronic throttle working, and their next step includes working on the programming. After that, we will be able to get it onto the dyno engine or the old car's engine, which will allow us to test it more rigorously before putting it onto the new car.

Our suspension team's tasks are nearly completed. Even with a few delays on parts, we expect everything to be done on time. After completing the A-arms, front spindle, and a few more parts, we will have a rolling chassis.

## Frame and Driving Practice

We received SES approval this month, allowing us to add four tubes we needed approved. After increasing the wall thickness on three of these tubes, we finished the structural part of the frame. The frame team has now focused its attention on steering and suspension in hopes of fully completing the frame before leaving. Over the break, we plan on having the frame powder coated.

This month, we also had the opportunity to practice driving in the Sipsey Valley High School parking lot twice. Both times, we set up cones to practice skid pad and acceleration. The first day, after four hours of driving, we fried a diode on the ECU. Luckily, we were able to fix the car and get it running again by the next weekend. We then drove another four hours and broke a weather pack pin. Though this problem could have been easily solved, we did not have any extras with us, which taught us a valuable lesson about arriving prepared. During our second drive day, we were also able to drive the kart that our freshman team build last year. These second year members did some testing of their own, and with only a few minors problems, the kart ran all day. Overall, the driving practice allowed us to collect some valuable data and spot some weak points on the car, which we will be able to fix before the competition.



## Looking Forward

As always, thank you all for your support. The Crimson Racing team could not continue to make these achievements without your help, and we are all so grateful for this opportunity. If you have any questions, comments, or suggestions as we get closer to competition season, feel free to contact us; we'd love to hear from you! Enjoy the holidays, and we look forward to sharing our progress with you in the new year.

The University of Alabama  
Attn: Crimson Racing - Formula SAE  
245 7th Ave.  
359 H.M. Comer  
Tuscaloosa, AL 35487  
Email: [alabamafsae@gmail.com](mailto:alabamafsae@gmail.com)

Website: <http://fsae.eng.ua.edu/>  
Twitter: <https://twitter.com/alabamafsae>  
Instagram: [@crimsonracingua](https://www.instagram.com/crimsonracingua)

