

CRIMSON RACING NEWSLETTER

March 2018

Greetings from Crimson Racing! As the temperatures have steadily increased in Tuscaloosa, so has our team's workload. We have had a busy month of machining, assembling, completing various tasks around the shop, and doing as much as possible to meet deadlines and prepare for competition in May. As always, we would like to thank our sponsors for their continued generosity and support. Roll Tide!



Above: Members of our team stand in front of Hardaway Hall with Crystal Parker and Katelyn West of Denso after their Feb. 19 visit to see our shop and interact with members on campus.

Below: New members Meredith Parks and Thomas Mozingo prepare the pedal assembly for installation into CR18.



What a busy month! Between assembling and wiring here are some updates on our progress:

The electrical team has been hard at work wiring the CR18 almost daily. They have made strides on completing the coil and injector harnesses, begun the harnesses for the sensors for the wheels, and started the PE3 harness. Additionally, they've identified an issue with CR17's fuel pressure sensor during troubleshooting, but this is to be put on hold for repairs until after the CR18 has made it further along.

3D printing has been an integral part and major focus of our work within the past few weeks. Thanks to our access to 3D printing on campus and help from Prototyping Solutions in Birmingham, we have been able to lay up a variety of parts - including the intake manifold - and have been successful in wiring many components in the car, finalizing the coolant loop, and confirming that the newly made shifting system is operational. 3D printing is also being utilized to start prepping the headrest and the steering rack cover.

Team members have also been able to flow bench the new exhaust assembly in order to refine our 1D engine simulation models. The current system flows better than the previous year's, and this will hopefully mean improvement in power. In addition, we received three air filters from K & N, and the cooling system has been assembled.

Some more miscellaneous updates, in short: Final touches were made on the nose and bodywork to prepare them for painting, and the body was dropped off for paint at the very end of the month. The steering column has been placed in the car, the steering rack is currently being machined, and steel pushrods have been made for chassis torsion testing. Moving forward, the carbon fiber oil pan and air restrictors are expected to be laid up within the coming weeks.

Aside from the work in the shop, we welcomed visits from both Austal USA and Denso this month, and were happy to open our shop to them for conversation and updates on our progress. We continued to host several workshops for new members in the past few weeks as well. These meetings' topics have included SolidWorks modeling, programs used to track race statistics, and how to use Microsoft Excel in a formula context. In the shop, new members have also learned how to use a variety of specific machines and tools. Crimson Racing is looking forward to both the near future and the years ahead, meeting upcoming deadlines for the CR18 but also ensuring training for our new members.

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