Warrior Racing WR at the 2017 Spring SAE Workshop

Members of our team participated in the spring Electirc, Hybrid, and Formula SAE workshop held at Lawrence Technological university on February 18th. The workshop was a great chance for team members to get tips and tricks on how to succeed at the upcoming competitions, this was especially useful for our 1st year members who have yet to attend a competition. The workshop also featured presentations by Wayne State alumni Dave Chegash, Adam Niner, Sanket Sirpotdar and Kristina

Vujic on topics ranging from the cost event to engine calibration. We are very proud to have these alumni represent our university at these events! The team also had a chance to network with many of the other students from other teams that attended the event, and network with the presenters from the event. One connection we made was with Tim Esser from a Formula Student team out of Germany, Tim was kind enough to visit our shop the following week and talk with our powertrain team about cooling system design.





Issue 29 February 2017 Chief Editor Justin Bekker Contributors: Kristina Vujic, Adam Niner

Impact Attenuator Testing

The impact attenuator is fixed to the front of all FSAE vehicles to absorb impact during a front end collision. For the past two seasons our team has used the SAE standard attenuator. This season in order to save weight and get a better understand-

ing of our vehicle for the design event, our team decided to test a non-standard impact attenuator. We selected the aluminum honeycomb structure manufactured by Plascore. In order to test and validate any non-standard attenuator all teams have to perform a physical or quasi-static test on the attenuator they are planning on using along with a model of the front bulkhead of the frame. An initial test was setup with Dr. Begeman of the Wayne State Biomedical engineering department on their impact sled. While this test was useful unfortunately a design flaw in our mounting of the IA meant that it was a failed test. Chassis director Richard Le Page was key in setting up another test this time with local company MGA, which tests many of the impact structures for Formula SAE

teams in the area. Richard and a few other team members worked throughout the week to manufacture the test structure. We are happy to report that our 2nd test was successful and we will be using the impact attenuator made by Plascore this season! We would also like to thank Kettering University Formula SAE team for lending us a spare impact attenuator so we could perform the test within a week!



WR at WSU Basketball

Warrior Racing was honored to be invited to showcase our car at the Wayne State women's basketball game ear-

lier this month. Members of our team were also recognized for our accomplishments the past season with RWX during halftime of the game. Our team would like to thank Kaithlin Fettes from the WSU

Athletics department for inviting us to be recognized. We are proud to be part of Wayne State, could not be happier to work with our fellow Warriors!





Warrior Racing Events

RW11 Unveil May 6th Time/Location TBD Kart2Kart Fundraiser May 7th 1:30 PM

Sponsor Updates



http://smithprecisionproducts.com/

Welcome Smith Precision Products! SPP sponsored us with titanium hardware for suspension components, helping us lose weight in the vehicle so we can meet our target goal of 420 lbs for RW11! We look forward to using their hardware for years to come, thank you Steve for the awesome donation!







http://www.airtechintl.com/

Thank you Airtech! Airtech has provided our team with vacuum bagging and composite tooling materials for working with carbon fiber. We will need these products to get RW11 to our target goal of 420 lbs.



Sponsor Updates



http://www.metalmite.com/

Thank you Metalmite for machining our suspension components for this season. Metalmite has supported our team for the past 3 seasons, and our road warriors would not be able to run without them.







https://beverlin.com/

We would like to welcome back Beverlin Specialty Tube to Warrior Racing! Beverlin supplied our team with baffled tubing for our muffler. This baffled tubing is sure to keep RW11 quiet at the noise test!





https://www.madeindetroit.com/

Thank you Made In Detroit (Official Brand Clothing) for creating these cool team jackets for us. Just like our cars, these jackets are built Detroit Tough, ready to take on everyday challenges !!!







https://www.ngksparkplugs.com/

NGK spark plugs and NTK Oxygen Sensors have arrived! Our powertrain team is putting the sparkplugs and sensors to work as we work on tuning RW11



Sponsor Updates



http://samcosport.com/

Our cooling goodies are in! Thank you <u>SamcoSport</u> for ensuring our ride stays cool while we are out on the track!!!







https://www.rockwestcomposites.com/

A super shout out and thank you to <u>Rock West</u> <u>Composites</u> for providing this vacuum pump for our team with a huge discount. Please make sure you stop by their website at <u>https://</u><u>www.rockwestcomposites.com/</u> for all your carbon needs. Warrior Racing 2016-2017 Sponsors

Our team's success is made possible through the generous donations and support from the following companies. Without them our team would not have the resources needed to provide invaluable hands on experience and to manufacture our formula cars. From all members of our team, thank you Warrior Racing sponsors!

Detroit Legacy





