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EDITION



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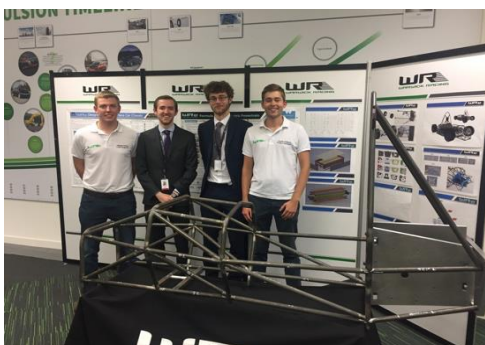
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AN INTRODUCTORY WORD

We've now reached half way through the first term and the new members are settling into their sub-teams. The extra-curricular team have been making progress on the research and design for next years IC car and the Electric team have been busy in the workshop pushing forward the build of the chassis and the Electric powertrain system. The team continue its outreach with more University open days and our Business team have been busy documenting their work so far with a new video on our YouTube channel. The IC powertrain team were helping out the Engineering department over the last fortnight with first year engine rebuild labs, passing on their knowledge about engines.

After a brilliant two weeks we have some exciting events coming up, kicking off with our first Speaker Series talk of the year, this Wednesday, from our sponsors DCA, an award-winning product design consultancy firm. There is a lot more coming up so read on to find out more.

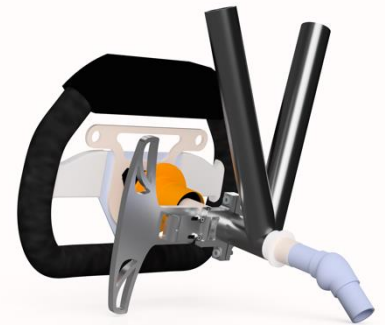
-Disha Naik, Project Manager



WARWICK RACING TECHNICAL UPDATE

MANUFACTURING

Great progress for the Manufacturing team; the design for the brake over travel switch mount has been finalised and manufacture is due to start next week. The design for the paddle clutch has also been completed; a report on the manufacturing process for this part and its related costs is currently being drawn up in order to have a clear overview before manufacturing begins. The last component that has been worked on is the pit jack; two possible designs for it have been created. The teams working on them are now working on the final versions of their projects, attempting to optimise cost and performance.



New steering column mounted clutch paddle

TESTING

The Testing Team's primary focus so far has been to design and manufacture a pit trolley for the car and it's nearly done! After a creative design process the pit trolley is now approaching its final stages. The idea was conceived last year, with design starting during the third term. The trolley is designed as a portable workbench for use at competition and test days, with space to store most tools/equipment required on the day. This can be anything from basic tools such as spanners to fire extinguishers. There is a rack which has capacity for a full spare set of wheels, which we can use to store extra 'slicks' as spares or also to hold a set of wet tyres for bad weather conditions. There are two lockable draws which are used to store valuable test equipment. A vice is mounted on the workbench as well to make on the go repairs easier to perform. To top it off there is an on-board compressor and jumpstart module, so we can easily check and top up tyre pressures. The aluminium frame has been professionally welded in-house, all carpentry work has been done and the components are now ready to be assembled. We're currently finalising the side panel designs, and making them ready for manufacture. When these are completed, it's a case of assembling everything, giving it a final polish and it's good to go!



WR Pit Trolley

WARWICK RACING ELECTRIC TECHNICAL UPDATE

POWERTRAIN

In the last two weeks we have allocated roles to each of our team members. These are:

- Gosia - Battery + team leader
- Sama - VSC Controller + Electric circuit
- Ollie - Thermal system
- Alex - VSC Controller
- Bilal - Thermal system + Budget
- Vidya - Electric circuit
- Evan - Health and safety and chassis integration

We are currently working on the manufacture of the battery pack with the help of WMG and the AMPLiFI project. We are also starting to source/purchase all the components needed for the LV circuit and the TS circuit.

CHASSIS

In the two weeks since the last update, team members have been allocated to different areas of the car we have chosen to prioritize. The focus for each team member at this point in the project is as follows:

- Mithelen - Anti-roll bar system + costings
- Adam - Health & Safety Rep + Admin
- James - Rear bulkhead & motor mounting
- Max - Brake system
- Methusan - Front & rear uprights
- Daniel R - Pedal box + Team leader
- Daniel J - Front hoop support & rear cross bar

After submitting our brief this week, our attention turns to the upcoming genesis training for week 7, which will involve the optimisation of some of our initial designs.

MOTOR INTEGRATION INTO CHASSIS

This week, members of the Powertrain and Chassis teams met in the pits to mount the motor and inverter to the current rear bulkhead and mountings. Our aim was to test if the current design would fit the motor and inverter as it was meant to, as well as highlight any potential problems. Any issues could then be addressed in the re-designing of the affected parts.



UPCOMING EVENTS

SPEAKER SERIES: DCA DESIGN INTERNATIONAL

Warwick Racing's first speaker event will take place on Wednesday 8th November, featuring a guest speaker from DCA Design International, an award-winning product design consultancy firm. Some of the projects that they have worked on range from the Stanley knife to the Eurotunnel shuttle. This will be a great opportunity to learn about the company and the kind of work they do, and whether this is could be a potential career path for some. The event will conclude with a Q&A session.



LOTUS F1

Martin Ogilvie, an ex-Lotus Chief Engineer will pay us a visit on the 13th and 14th of November. We aim to provide an insight into Martin's extensive involvement in Lotus F1 and learn more about the fast-paced motorsport industry from the inside. Martin worked at Lotus between 1976-1988, he famously worked on the Lotus 72 and latterly was chief designer until the late 1980's. It is a great honour to be welcoming him to Warwick Racing, and a great opportunity for the engineers of tomorrow to learn from such an amazing career in motorsport.



UPCOMING SPEAKERS

Warwick Racing is now organizing another speaker event with GRM Consulting, and a site visit event with Sarginsons, which will provide us with the opportunity to observe engineers in their area of expertise. Remember to keep up to date with all of our events by joining our mailing list and following us on social media!



CROWDFUNDING THANK YOU'S

We'd also like to say a special, heartfelt thank you to the following people for having already donated generously to our campaign:

- Robert Brodie
- Matt Hill
- Jan Cumming
- James Steward
- Shafiul Alam
- Andrea Crowley
- Kat Carter



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