



Formula Student Weekly Brief

13/02/2023

Week 4 Progress Report

University of Leicester Racing

The Final Goodbye to LR01

Over the past 2 weeks, the team has made a lot of progress! Last week we paid a visit to our title sponsor of last year, KS Composites. The team received a detailed tour of the facilities and had a chance to speak with some of the staff. We also had the opportunity to show our sponsors, the car which was made possible through their support. We have really enjoyed working with KS Composites and look forward to carrying on our relationship.

Following the visit, LR01 was stripped down with leaving just the engine and rear suspension in for the time being. As the parts were removed from the car, they were also weighed and the parts directory updated to reflect this. The focus of the team is now building up LR02, with the team putting in a big shift for manufacturing in the coming week. The team also took part in the University offer holder day where we spoke with prospective engineering students and showcased some of our work such as our parts and drawings.

Chassis & Ergonomics

- Seat rails have been welded in place
- Firewall development underway – several members creating designs to select most suitable one
- Steering rack and column – underdoing development, looking to save about 1.5kg
- 3D printed seat blocks fit nicely – minor changes, amended drawings are in the progress
- Looking into outsourcing manufacture of pedal box base plate

Suspension

- Preparing parts for manufacturing in house
- Alignment rig design revised to a simpler design
- MATLAB model of $\frac{1}{4}$ car suspension is completed – working towards $\frac{1}{2}$ car model
- Rear Upper endplate drawings are completed
- Some members working on the cost report

Aerodynamics and Bodywork

- Preparing for manufacture of side panels in the coming week
- Looking into carbon layup of air intake
- CFD for diffuser in initial stages

Powertrain

- Radiator research continuing to determine most suitable radiator
- Db killer preliminary design to be tested this week – final design to be confirmed following this
- Identified method to measure crankcase pressure for test day
- Received parts from RAMAIR

Control Systems

- Researching into other ECUs
- Looking into transferring telemetry system
- Telemetry demos to show the team nearing completion

Test Operations

- Putting together items needed for test day and competition equipment
- Working on confirming insurance for testing and competition
- Potentiometer mounts are being revised

Business

- Conducted interviews for business recruitment this week
- New iteration of the website is in the works
- Researching potential wind tunnel/testing facilities

CAD & Integration

- Seat and tyre have been modelled for the updated LR02 master model

Wellbeing

- Conducted interviews with upper management to discuss team feedback and implementation
- Beta testing of risk assessment tool
- Preparing reports for upper management to help inform and transform leadership

Thank you for all your hard work and support.

Monica Peeris

“The greater the difficulty, the more the glory in surmounting it.”

