

February Log Book

Kennedy Car 984



Kennedy High School

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Avery Walton, Grade 10, Assistant Crew Chief

Kaleigh Martin, Grade 11, Driver and Documentation Lead

Elizabeth Severson, Grade 11, Documentation

Week 1

2/2/2020 – 2/8/2020

This week's focus has been on adjusting the car to account for the change in 984's weight system. The 984 used to have two sets of weights, one under the lower part of the seat and one under the battery box. However, this contributed to the 984's issues with the center of balance and static stability which lead to the car frequently spinning out. All weights are now under the upper part of seat, which mean the seat needs to be raised, and the seat being raised means the roll bars need to be raised to make room for the driver. This has caused some issues with crew chief Jakob's overall idea for the car as the weights were changed at our advisor's insistence, not because Jakob wanted them to be. With that section of the car being significantly taller, they are some concerns for what that does to the aerodynamics of the car. The team is currently waiting for the aerodynamics team to run their tests on the new design, so the full impact is known and what realistic changes could help.



The new weights and the seat

Measuring out the new roll bars



Week 2

2/9/2020 – 2/15/2020

This week Jakob has gracefully stepped into his role as supervisor over his assistant crew chief and his mechanical engineers. He has guided his crew of three while they replaced two segments of the belly pan. Jakob hopes that a better fitting belly pan will help to decrease the drag the car experiences, as well as keep his driver dry and safe during inclement weather. He has also wired up his car's potentiometer and hopes to be able to install the rest of the 984's controls, which includes the multimeter and kill switch, over the coming weeks. A multimeter is a device used to measure our batteries' volts and the kill switch is a safety device that controls whether the car is receiving any electricity from the batteries. The telemetry lead, Brian Stubblefield, is optimistic that the new multimeters will arrive at the shop within the week. Once the multimeters arrive the telemetry team, along with the crew chief, can finish wiring the car.



Assistant crew chief Mathew along with mechanical engineers Avery and Anthony, putting on the belly panels

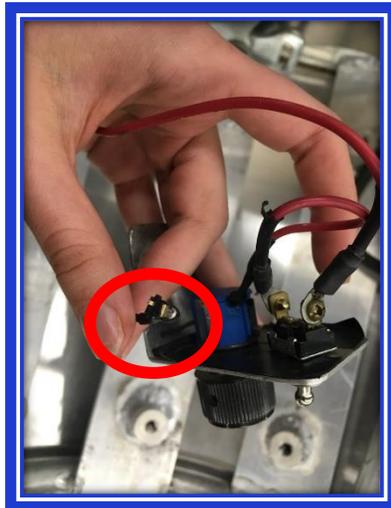
The 984's frame as of 2/14/20



Week 3

2/16/2020 – 2/22/2020

This week has been a bit of a disaster for the 984 car team. One of the major problems with having a first-year crew chief is the lack of knowledge which is only often learned through experience. Jakob has had a steep learning curve, as he is attempting to learn how to wire a car from scratch. While the program does have many people experienced in wiring, namely our battery lead, Noah, and the 983's second year crew chief, John, they are simply too busy to teach Jakob. Luckily, telemetry lead Brian Stubblefield came to Jakob's rescue, helping wire in the telemetry controls and the motor controller. As much of a help as Brian has been, he has broken the 984's potentiometer, which an important control that helps regulate the speed of the car. Hopefully, we can find a replacement, as these controllers are a difficult find. Additionally, while finishing up the final welds on the roll cage, one of the brake lines sprang a leak. Despite the multitude of setbacks, the 984 is finally completely wired.



The broken potentiometer



The cracked brake line



Our advisor Barry welding the roll

Week 4

2/23/2020 – 2/29/2020

Jakob is thankful for the relatively uneventful week for the 984 car team. This week's focus has been on finishing installing the padding on the frame. With all hands on deck, including the telemetry team, the car is completely padded up. Now the team is working on cutting out and installing the body panels. Jakob hopes to be able to fix the broken brake line within the next week or so, while the telemetry team wants to start installing their multimeters on the car as soon as possible. With most of last week's fiasco behind the team, Jakob is hopeful the 984 will make it to race day without too many more mishaps



Mathew and telemetry lead Brian fitting body panels

The 984 as of 2/28/20

