February Log Book

Kennedy Car 983

Kennedy High School

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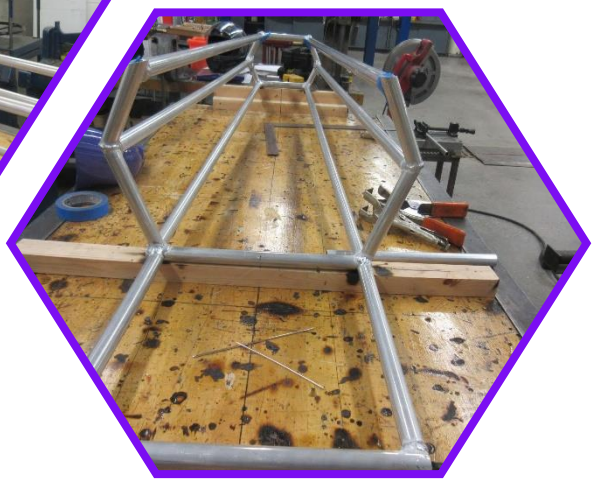
Week 1

2/2/2020 – 2/8/2020

After a lengthy planning and design process, construction of the 983 car started this week. The plan for the 983 was very up in the air at the beginning of the year. Our batteries team was the exploring the possibility of us have a lithium car this year, moving the 983 up to class three. However, due to budget restraints that was deemed impossible for this season and so the 983 would be completely rebuilt and enter class one. Due to limited space, only one car is being built or receiving major modifications on the back bench at a time and the 983 was the last one on it this year. So far, the car has its nose and belly pan framing done and construction has begun on the tail. There have been some issues getting pieces in place for welding as the shape of the 983 is something we've done before. This season's 983 is the first hexagonal car we have built. Its unique shape makes some induvial pieces of the frame, particularly the nose, very small and difficult to secure while welding. The 983's crew chief John and his assistant Conner have overcome this problem by simply taking their time and moving slower. While this isn't necessarily preferable as there are time constraints on building timeline for the car, it has made construction go smoother.

Crew Chief John getting ready to weld

The 983's frame as of 2/7/2020



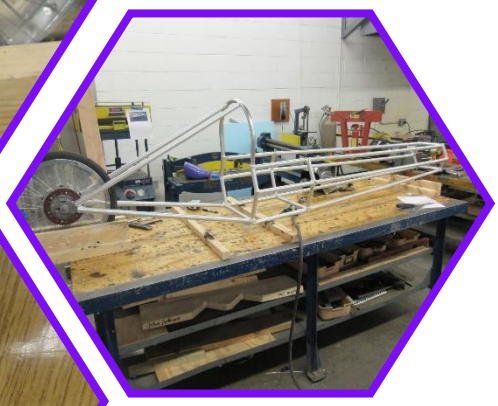
Week 2

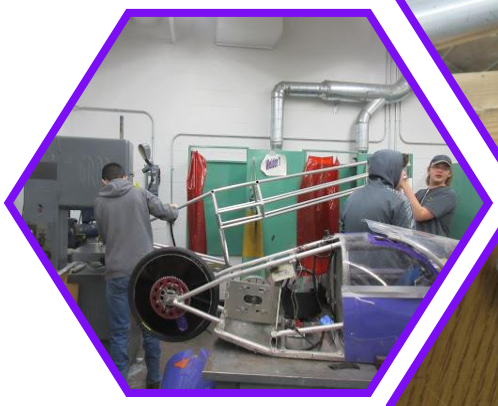
2/9/2020 – 2/15/2020

For the 983 car team, building the frame went pretty smoothly this week. John Tedesco got the hang of welding together hexagons for the main shape of the frame and has managed to finish out the frame except for the roll cage. While John has come to terms with the challenges that come with the unusual shape of his car, the documentation team is quite sick of hexagons, as they decided to theme the 983's documentation book after hexagons. John is currently fine-tuning the frame of the tail. Unfortunately, he ran into a couple of hiccups. He accidentally welded the rear wheel mount at an incorrect angle. To correct this mistake he had to pick up the entire frame of the car and use the band saw to cut off the piece, much to the amusement of the other crew chiefs. After the tail fiasco, he plans to carefully measure both himself, and his driver, Elizabeth, with helmets on within the frame to make sure the car will be tall enough for both drivers and is looking to plan the placement of the final bars of the roll cage. With the frame almost ready for wheels, it's finally starting to look like a car!

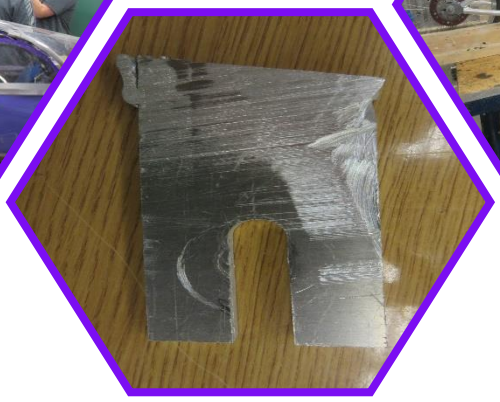
The rear wheel mount on correctly

The 983's frame as of 2/14/2020





Cutting the rear wheel mount

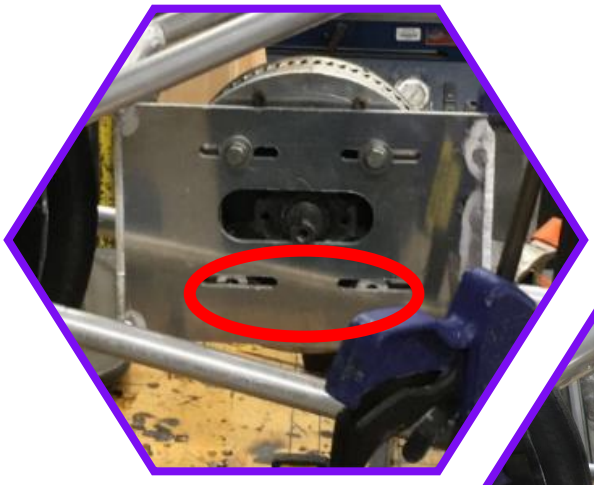


The rear wheel mount

Week 3

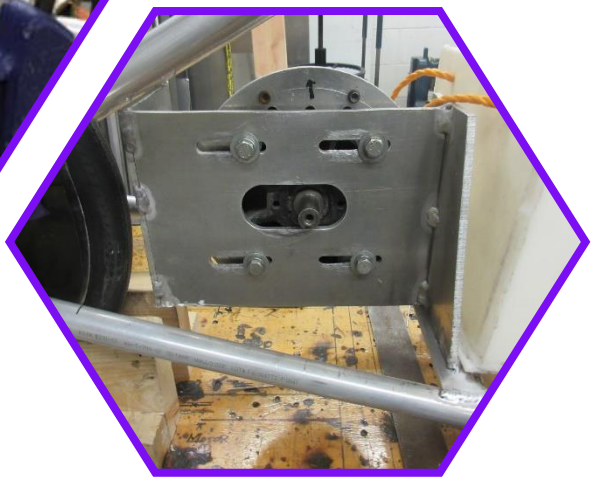
2/16/2020 – 2/22/2020

The 983 team had some trouble this week installing the motor mount. At the beginning of the week, crew chief John was very hopeful his newly built motor mount would fit perfectly. However, after welding the motor mount into the tail frame, he found that the motor mount fit too far to the left and the slits in the plate didn't match up with the hole for the bolts. This left him frustrated, as the motor mount he had built couldn't be fixed after sawing it out of the frame. Luckily, this setback wouldn't cost him too much time, as he simply cut out last year's 983 car motor mount and welded the old motor mount into the new frame. With the motor mount fitting at last, he has moved onto the building the front axle. After the front axle is completed, the car will finally have all three wheels!



The old motor that was attached to the new frame

The new motor mount that didn't fit

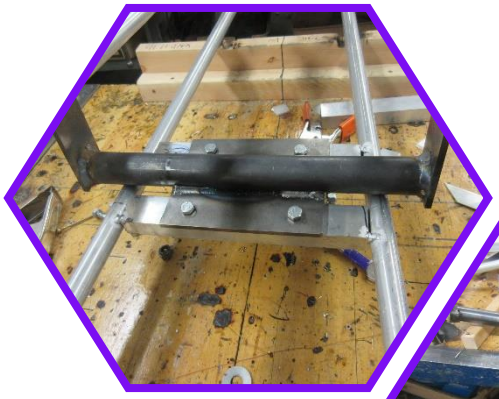


Week 4

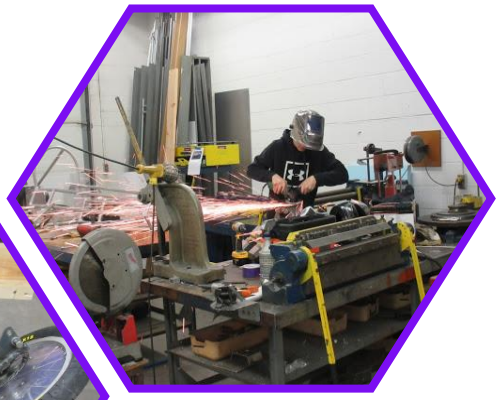
2/23/2020 – 2/29/2020

This week John and Conner worked on building the front axle. The front axle of all of our cars is made out of steel for added strength. However, steel is very hard to cut with the tools in our shop, which makes building the axel a time-consuming task. Despite modeling his axel after last year's axel, John found that some of his steel parts may be too short to hold both the pipes and the bolts that connect the axle to the tire knuckles. He hopes that adding welds to the end of the metal plates will give the metal enough length to securely hold the bolts. So far the middle section of the axle has been attached to the car. Next week's work will include attaching the left and right sections that hold the wheels. While John has been busy with the front axle, Conner has started to plan out the roll cage bars.

The middle axle section attached to the car



John cutting steel for the axle



The full axle laid out