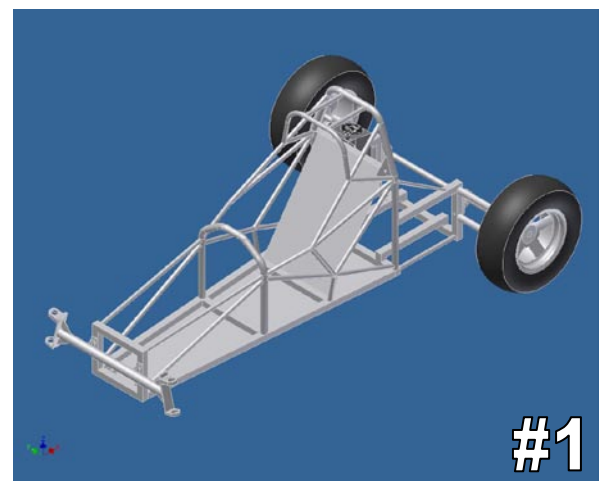


1<sup>st</sup> Semester Update  
Team NAPA



From left to right: Hayden McDonald, Jordan Walsh, Eric Simon, Taylor Schoenborn, Josh Voigt, Sam DeVillers.



The first half of the 2009-2010 school year is at an end. Team NAPA has been very productive this semester. At the start of the year we based our design of the standard formula high school chassis (see picture #1). The first thing we did while waiting for the steel to get in was make the modifications to the engine so that we would be able to acquire variable rpm. Once the steel arrived, we got straight to work on the chassis assembly. We started off with a few mistakes with the front square, but after our second attempt we got it right and began to move on with the chassis. Over the next couple of weeks we finished the chassis with the installation of the halo bars. The halo bar took us a few tries but we got the bars to fit perfectly in the end. We then cut the steel floor out at NWTC with the water jet, and then stitch welded it to the bottom of the chassis (see picture #2)

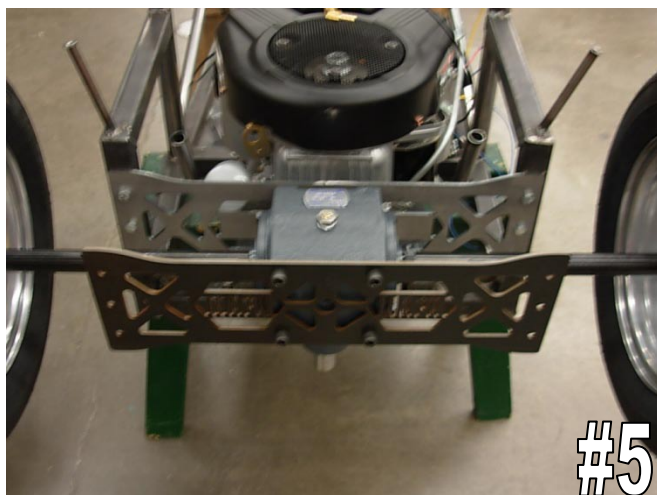




We then laid up the fiberglass body at Fiberglass Solutions, with the help of Mr. Glowacki (Thanks again). After getting the body back to the workshop, we began to cut and sand the pieces to fit the chassis. We also cut the steel for the back in and welded the pieces to the back end of the chassis. With the body cut and sanded, we then attached the body to the chassis (see picture #3). We then constructed and installed the front axle. After the front axle was completed, the team began to assemble the front wheels and install them to the axle. The front of

the car is now on rubber. With the wheels installed, we were able to finish installing the steering system.

The team fully installed the pedal system into the chassis (see picture #4). We used  $\frac{3}{4}$ " round tubing with a 90 degree bends to create the pedals which would be efficient for accelerating and braking as well as being comfortable for the driver. We drilled four small holes into the base of the gas pedal to allow us to adjust the throttle cable movement. We mounted the master cylinder, which was done by a plate welded to the chassis and to the front axle. The front end is now done with the installation of our brake rotors which were drilled by Renco Machine. Our motor is installed and slides to allow chain adjustment. The exhaust is currently being put together and installed to the engine. We installed the gear box plates and gear box to the rear of the chassis. This was done by six bolts mounted to the chassis which allows the rear axle assembly to be removed easily (see picture #5). With this assembled we were able to get the full car on rubber (see picture #6).



Thanks again to our sponsor NAPA Auto Parts. Without your generous contribution, we would be unable to partake in this enjoyable and educational class. We would also like to thank Briggs & Stratton for the donation of the engine, Hub City Inc, Renco Machine, NewTech Metals, and NWTC for cutting various parts for us, and Fiberglass Solutions for allowing us to use their facility, experience, and supplies for laying up the body.

Thanks again,  
Team NAPA