

VAE Golden Wrench Award

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My name is Colton Poulin, I'm 17 years old. I am a Junior at Burlington High School. When I was in the 5th grade my brother, Connor, started a landscaping business that I would help him operate. Hard manual labor fulfilled most of my hours apart from school work, sleep, and sports. Even though the hard work persisted the money wasn't rolling in. However, we didn't mind, we didn't work for the love of money we worked for the love of being outside and learning how the world worked. I remember the first time I rebuilt engine. The winter of my 6th-grade year my neighbor had an old 2 stroke leaf blower that he had given to us to mess around with. Having not ran in years my brother and I were hellbent on getting it to run again. Our grandmother had given us our late grandfather's Craftsman tool chest, filled with assortments of Snap-on ratchets, wrenches, sockets sets, and other miscellaneous tools. Which to be honest I would have never taken if I knew how much they were worth. Cost aside we had tools and an old book on small engine repair that we found on our grandfather's bookshelf. We studied that book like the Bible, we learned every name and every procedure for taking things off. Then in our basement, we began to disassemble the little engine. By the time we took it all apart we had learned a lot about how the engine worked and how it was able to run, but when we really learned was during the 3 months it took us to reassemble the engine with all the unmarked bolts that we had thrown into a big bag. After countless hours of trying to remap which bolts went where we had finally put it back together and we were ready to see if it would run. It was a magical moment to pull the string and listen to the engine startup for the first time, an unbelievable sense of accomplishment. It was what made me fall in love with engines. Just as VAE founder Roderick Charles Rice had fallin in love with cars, by rebuilding a model T. Since then I have done a lot with engines from fixing 4-stroke riding lawn mower engines to replacing

truck engines. This is just some of the accomplishments in my life. Others include being the captain of the BHS hockey team as well as volunteering as a firefighter at Malletts Bay Fire Department, which is one of my biggest accomplishments so far in my life. I've been on the fire department for just under a year, and I spend a lot of time there, we have training every Tuesday night for about 4 hours, as well as any emergency calls I go on. My goals after high school are to go to college for fire science and electrical engineering, I hope to become a full-time firefighter and when I'm not on shift to have a job as an electrical engineer.

I think that my interest in electrical engineering will become an advantage in the automotive field. With advancements in the modern car, many things rely on electronics. Taking a look back 25 years in the automotive industry we can see how cars have evolved over time. We can see that even in the past 25 years the automobile has taken significant revisions and modifications in the electrical field. If we look back in time at older automobiles we see that they weren't much more complicated than a modern-day ATV with just an engine that was self ran as far as computers and different sensors go. The only real electrical components they had in them were the lights and the radio, even a lot of the gauges were controlled by cables. This use of cables and lack of electrical parts created many problems, such as having to design cars around the instruments that would be in the dashboard, a cable can only be manipulated so much before it no longer operates correctly. The engineering of using electricity to do such jobs was revolutionary, replacing many cables with variable resistors and adding things to make the automobile safer, such as airbags. But the engineering, as we see today, didn't just stop at the ability to get rid of cables, it was able to keep making things more advanced. The invention of different engine components allowed the engine get better gas mileage, as well as make the

engine last longer by incorporating variable valve timing and knock sensors. Today the automotive industry has built on that, adding cameras and systems that make it both safer and easier to operate. At the same time, however, the way in which cars are being fixed and the procedures are becoming more difficult. Which is why my interest in electrical engineering might open up doors to many different job opportunities. When was the last time a manufacturer made something that didn't break or have malfunctions? I would venture to say never. It's because of this that there will be good job opportunities in this field. Electrical systems in automobiles are only going to get more complicated and venture away from the average shop trainee from fixing it. The more advanced problems are going to need a specialist to diagnose the problem and come to a conclusion to fix it. This is only an example of what has happened to technology in the last 25-30 years, but technology is becoming more advanced by the second and in 5 years we could be looking at a completely different automobile. So I'm definitely including the job possibility of working in a garage in my 5-year plan.

For this essay, I was asked to describe myself using three words, I would say that I'm a hard worker, diligent, and intuitive. However, I would say that the best trait of mine is the fact that I can use my skills and knowledge to put things together and figure out how things work and how to make sense of what types of problems are facing me. I believe I should be selected for the Golden Wrench Award because I represent what VAE stands for, I have a love for engines and automobiles. My accomplishments and volunteering are among the same as Rodericks and what VAE was created upon, fellowship and helpfulness.