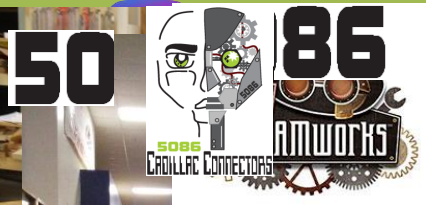
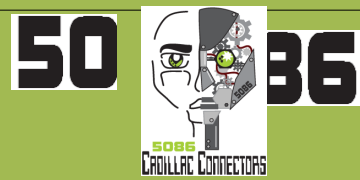


Cadillac Connectors Robotics 5086 | February 11, 2017

# ROBO TIMES



each team memorable. Each button has a unique design from that team to make them



Leesch, and Christian Croskey work



## It's the Final Countdown

***"Inspire(ing) young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership."***

CADILLAC- Even though it might sound as loud as a rock concert in here, no, we did not have *Europe* performing in our Robotics room. However, the sound of the drill press, jig saw, and knowledge being passed from mentor to our students sounds much sweeter than classic rock music.

With one week left to go, time is crunching down to complete our robot on time. "Stop Build Day" is Tuesday, February 21st. By midnight on Tuesday, all teams must stop work on the robot and seal it in a large bag and tag it. Main work on the robot must be done by this time. Until competition, the robot may be out for very short periods of time for propaganda use, but leftover time with the robot is extremely limited. 6 hours is the max that the robot may be out between "Stop Build Day" and competition. In these 6 hours teams may practice driving and make any small adjustments to the bot that may arise. This setup gives all teams a fair advantage in robot creation in that they all work under the same time period. While this time is crunched, our team is well underway to being ready for our FIRST competition at Kettering on March 2-4, (see Calendar for details).

### Mechanical

Our mechanical team has created huge steam towards our robot creation. Progress this week includes the assembly of our chassis, addition of mecanum wheels, a sweeper, and shooter. The Chassis is a large C-shape, metal structure that holds together the robot with all of its components. It's the framework of the robot. 4 Mecanum wheels have been attached to the bottom of the chassis to allow the robot all ranges of motion. Structure-wise, a Mecanum wheel is a conventional wheel with a series of rollers attached around

can maneuver the robot in a variety of motion (check out our Facebook page for a full video).

Additionally, a vacuum-like sweeper was added to sweep up the fuel, and a pneumatic tire added to fire them. To sweep up balls, our team attached a 'sweeper' that spins around and sucks up balls, much like a vacuum. This ball gets transferred into a short pathway that leads to a small pneumatic tire that shoots the ball out. A pneumatic tire is a tire with a pressurized, air-filled inner core. In addition to accumulating gears and climbing a rope, points during competition are earned by shooting balls into goals. 3 high goals gives 1 point and one kPa of power. while it takes 9 low goals to

