



# **BONDS Week 10 Newsletter**

3.3.24- 3.16.24

## Introduction

Welcome to the tenth week of the BONDS Status Report for the 2024 season! In this entry, you will see what BONDS Robotics accomplished in the tenth week of our official season for this season's 2024 FRC competition, Crescendo!

This is the last full week before our first regional competition, and the students have been working hard to finish the robot and prepare for the competition. This week, the drive team worked closely with the programming team to assist with autonomous complications and remove any programming errors in the code. The team also hosted its first parent and student competition meeting, where the mentors and a couple of BONDS representatives discussed expectations and rules about both competitions. After the meeting, the students ran a practice match for the parents to see their accomplishments in the past nine weeks. We are ecstatic and thrilled about next week's competition as we approach closer every day.

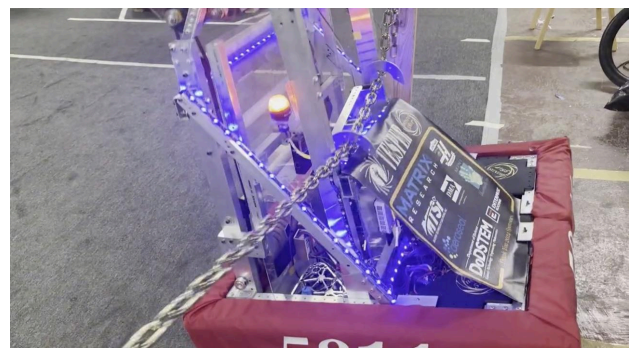


## Build

This week's build team finalized the robot's climber, which is now fully finished.

**Banner truss-** Last year, we noticed the truss holding our team banner could not hold our pit banner. A group of students and mentors began building a new truss that would efficiently hold the banner up. The pit banner has our team name, robot name, and numerous sponsors who helped us during the season. We value the banner because it showcases our team. We used wood and metal connecting pieces to complete the banner.

**Climber-** With the climber being delayed earlier in the week, we had a chance to mount the climber and get the climber installed. We had an issue mounting the climber; however, we made a custom bracket to extend one of the climber pieces and create more mounting space. We then installed the climber and tested it after the climber was completed.



After we installed the climber, an additional complication occurred. The center of mass was marginally off from the climber's hook. The team discussed alternative options and ultimately resolved to make a new hook that was much wider and closer to the center of gravity. We built and tested the climber in a couple

of hours. Although we can currently climb on the left side of the chain, our climber is much more consistent than before, and we can climb with other robots to receive ranking points.



## Drive team

The drive team worked diligently to practice faster cycle times for competition. They practiced one to two hours this week with an extra practice session outside standard practice time. We focused on driver input adjustments and amp scoring practice to help us become a more capable robot and an asset to our alliance. The drive team was able to drive cleaner and faster with more practice. We could also practice climbing and consistently line up and climb well. The driver and operator excelled in pace and tempo. The driving coach communicated well and established a clear objective for each match, calculating the time and speed to and from the source and the amp.



## Pit Binders

The build, business, and marketing started the pit binders at the beginning of the week. Pit binders are either technical, marketing, or financial documents about the field of area. Most teams showcase at competitions to the judges. This is how awards are given to teams who exemplify outstanding success in the field area. We had four students work on pit binders, and they did an excellent job explaining each component of the robot, outreach events, and financial status. We hope to win awards at both competitions!

## Closing Words

We want to give a big thank you to all of our sponsors! Our team can compete because of your support, and none of this would be possible without our sponsor's help. BONDS will continue improving and learning STEM skills and values this season. To see our season's progress, please follow us on Instagram, YouTube, TikTok, Twitter, and our official website for weekly newsletters.