

## **Title: Team 603B's Powerhouse Bot**

**Team Members: Odin, Ethan, Nick, Brady**

**Team Number: 603B**

**Team Location: Belmont, NH**

Greetings esteemed judges,

Team 603B presents our astounding creation – a robot that embodies innovation, efficiency, and demonstrates our amazing teamwork. Our robot integrates an 8-motor drive system, a dual Power Take-Off (PTO) transmission, a passive intake and a high-tier vertical bar lift with a puncher mechanism through a meticulously crafted design.

Our robot design, showcased in the photograph, captures the front of our ratchet-controlled intake and our low center of gravity. At the bottom, our drive transmission features a piston-driven axle that effortlessly shifts between gear ratios, ensuring optimal performance in various scenarios. Moving higher in the image, our lift/puncher transmission takes center stage, crucially managing 44 volts of power among four motors and toggling between the puncher mechanism and a sophisticated 6-bar lift at the rear of our robot.

Thank you for considering our submission.

Sincerely,

Team 603B