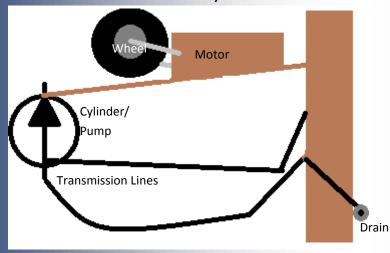
## PNEUMATIC SYSTEMS:

## THE NEW TEXAS GIANT

By: Natalie Rowland and Caroline Ward



\*All of the pictures and schematic shown were either taken or made by myself and my partner, without any copying from the internet or other sources.

## Purpose and Steps of Our System

In this system, the basic purpose is to raise the wheel seen in the picture in order to prevent a coaster cart from gliding too quickly into its loading dock. This system eases the cart back into the dock.

Step 1: Air flows through the lines into the cylinder.

Step 2: As the cylinder inflates, the bar on top of it, holding the motor and wheel, are raised into position.

Step 3: The motor is cued from another line to begin turning, and the roller coaster cart slides across it as it passes.

Step 4: Once the cart is passed, the motor is then cued to stop its rotations of the wheel, and the wheel stops with it.

Step 5: The cylinder is drained of air, lowering the bar again to the inactive position as it waits for it's next cue.

## **Aspects of This System:**

- The cylinder becomes inflated, holding it's position
- Lifts the bar holding motor
- Motor turns wheel at a moderate speed
- Wheels move coaster cart forward
- Wheel stops once the cart has passed

