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Balloon Inflation Action - Mission Possible MK2

Ward Melville HS Science Olympiad - Team A - 2017-2018

balloonTiny.ino

Purpose: Turns on a motor when the input is recieved. Turns it off when a switch is hit.

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// Definitions for microcontroller pin numbers

const int MOT_PIN_A = 0;

const int MOT_PIN_B = 1;

const int SWITCH_PIN = 2;

const int IN_PIN = 3;

void setup() {

 // Set the microcontroller pins as either inputs or outputs

 pinMode(SWITCH_PIN, INPUT);

 pinMode(IN_PIN, INPUT);

 pinMode(MOT_PIN_A, OUTPUT);

 pinMode(MOT_PIN_B, OUTPUT);

 // Lock the motor in place (connect the leads, essentially)

 digitalWrite(MOT_PIN_A, LOW);

 digitalWrite(MOT_PIN_B, LOW);

}

void loop() {

 if(digitalRead(SWITCH_PIN)) { // If the limit switch is pressed...

 // Turn the motor off (coast)

 delay(50);

 digitalWrite(MOT_PIN_A, LOW);

 digitalWrite(MOT_PIN_B, LOW);

 }

 else if(digitalRead(IN_PIN)) {

```
digitalWrite(MOT_PIN_A, LOW);  
digitalWrite(MOT_PIN_B, HIGH);  
}  
}
```