Ohio University NFPA Vehicle Challenge

Start Recruiting Hard Working Team Members to Represent Ohio University!

Form a Team!

- **President:** Grant Schroeder
- **Vice President:** Matt Brown
- **Treasurer:** Garrett Royal
- **Secretaries:** Kris Aponte & Katie Kutschbach
- **Events Coordinator:** Drew Snyder
- **Team Members:** David Douglas & Eric Buckner
- **Faculty:** Dr. You & Chase Saylor

Create a Schedule!

(And try our best to stick to it)

NFPA Schedule:

CP1: (End of October) Start program, attend meetings, brainstorm beginning ideas

CP2: (Middle of November) Check in with industry mentor and reach out to OU faculty

CP3: (End of November) Complete rough designs of bike

CP4: (Middle of December) Purchase parts and materials that we need

Winter Break

CP5: (End of January) Build the bike with all components

CP6: (Middle of February) Test the bike out

Testing and Modifying the bike

CP7: (End of March) Complete final Bike

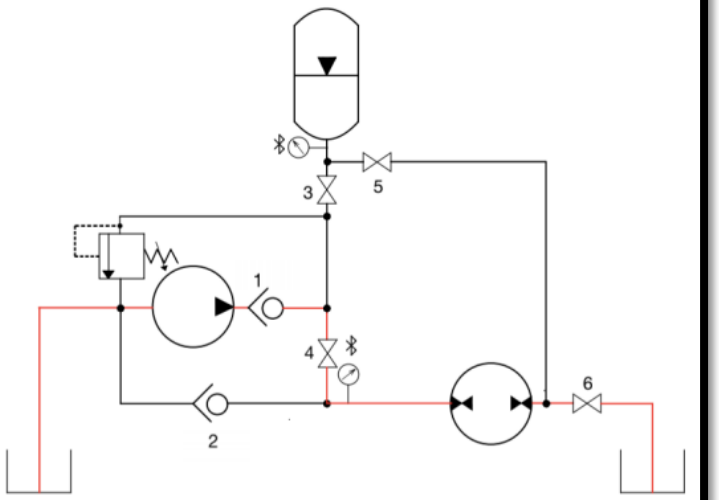
March 31st – Complete bike

Middle of April – Competition Iowa/ Colorado!

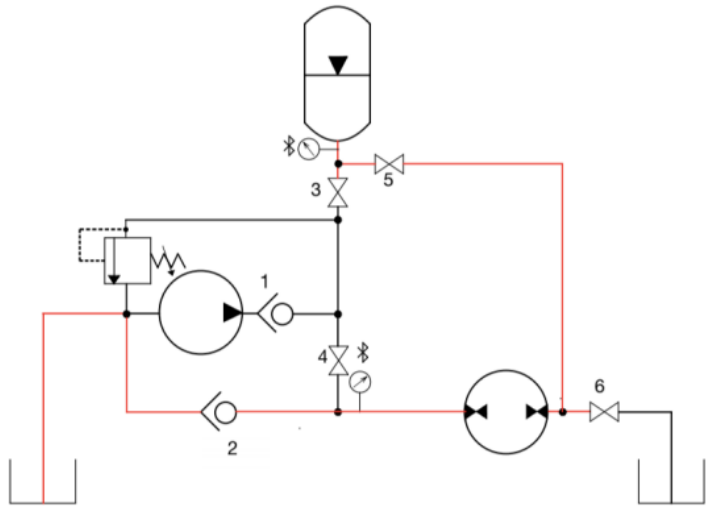
Purchase the Bicycle Frame!

Work on the Bicycle in Lab!

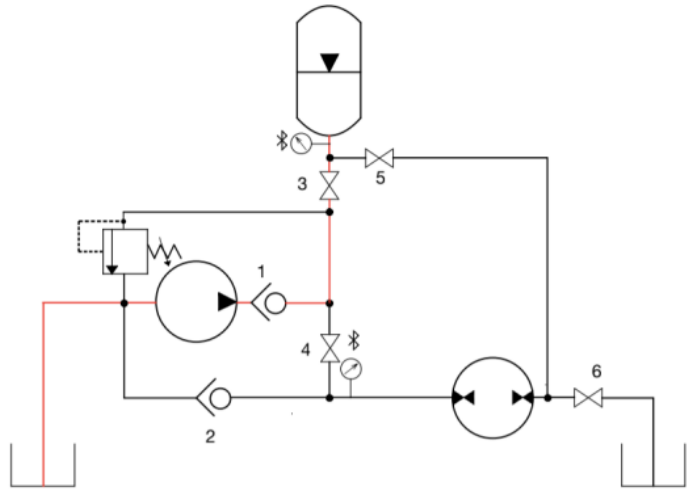
Pedaling



Regenerative Braking



Charging Accumulator



Determine Schematics!

Complete Calculations and Finally Order the Parts!

NFPA ORDER CALCULATIONS

P = (T * 2pi) / DIS

P = 245.22 * 6.28 / 0.513

P = 1540 / 0.513

P = 3000 psi

DEL = (DIS * SP) / 231

DEL = 0.513 * 30 / 231

DEL = 0.067 gal/min

Order Date	12/28/2021	
Name	Garrett Royal	
Department	ETM	
email Address	gr735817@ohio.edu	
Phone Number	5134448778	
University	Ohio University	
Ship to Address	Stocker Center Lab #106	
City	Athens	
State	Ohio	
Zip	45701	
Ship to the attention of:	Dr. You	
Eaton Value:	$466.00	$3000 max combined value
Danfoss Value:	$632.00	
SunSource/Other Value:	$839.00	$1000 max
Total Value:	$1,937.00	$4000 max total value

Getting prepared to go back to Ohio University and work on the bicycle!

Thank You for Listening!

Any Questions?