

MSD Team P17453

Weekly Update

Week 2

1/26/17 - 2/2/17

Weekly Accomplishments:

- Fixed inconsistencies with CAD drawings in Detailed Design page from MSD I
- Fixed broken BOM picture link in MSD I Detail Design Review
- Found ordered parts from MSC, valves and aluminum plates
- Retapped holes in the Amazon back pressure tank
- Updated CAD model dimensions
- Decided on using 8020 L-brackets to mount solenoid valves
- Added problems to problem tracking
 - How to mount solenoid valves
 - Relief valve not rated for our pressure needs
 - Solenoid coils don't fit on new solenoid valves
- Added threaded barb fittings to the BOM
- Prepared order from 8020
- Checked out lab across from the machine shop and looked at Signal Express program for driving the solenoid valves and collecting data
- Decided to purchase new solenoid coils and a new pressure relief valve

To do by next week:

- Submit purchases for 8020, McMaster-Carr, and MSCDirect
- Begin Machining parts(start with Valve Seat Block)
- Play with DAQ and Signal Express to figure out how to run our solenoid valves
 - Do a computer generated input test
 - Do a pressureless test opening and closing two solenoid valves
- Prepare and finalize the rest of our orders
- If parts come in, begin subsystem level assembly

Meeting Notes

1/31/17

Meeting Accomplishments:

- Discovered that the P16452 pressure relief valve is insufficient for our needs
- Decided to make L-brackets to attach the solenoid valves to the 8020 frame
- Updated bomb with necessary parts (barb fittings, 8020 pieces, etc.)
- Checked shop air gauge for pressure (= 100 psi)
- CAD model updates
- Prepared 8020 order for aluminum frame and 8020 pieces
- Added problems to problem tracking
 - How to mount solenoid valves
 - Relief valve not rated for our pressure needs
 - Solenoid coils don't fit on new solenoid valves

Meeting Notes

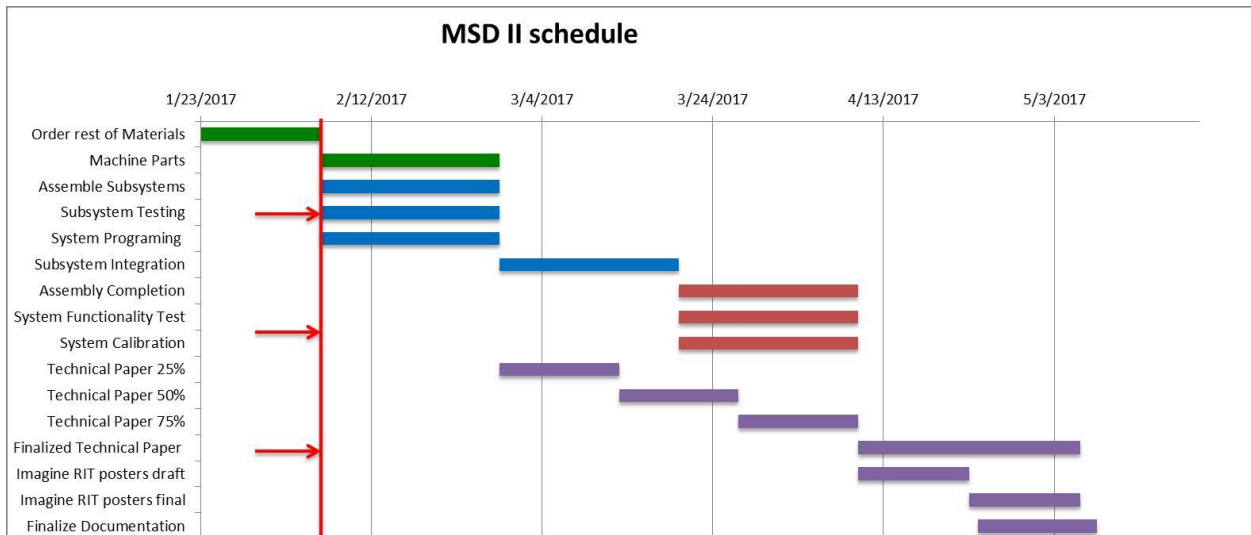
2/2/17

Meeting Accomplishments:

- Decided to purchase new solenoid coils for the new solenoid valves
- Decided to purchase new pressure relief safety valve suited for our needs
- Discussed checking with Rob in the machine shop for advice and guidance while machining parts
- Discussed how to improve Weekly Updates
- Dr. Kolodziej showed us his 2nd lab
 - Asked for swipe access
 - Showed us available DAQ
 - Showed us Signal Express program to drive solenoid valves and collect data
- Prepared order from 8020
- Swapped some components from McMaster-Carr to MSCDirect and prepared orders
- Updated BOM

	Identifying & Selecting Problem PSP 1	Analyzing Problem PSP 2	Generating Potential Solutions PSP 3	Selecting & Planning Solution PSP 4	Implementing Solution PSP 5	Evaluating Solution PSP 6
Rating	R1	R2	R3	Y4	Y5	G6
CRITICAL	Solenoid valve coils don't fit on new solenoid valves	The previous team's solenoid coils don't fit onto our valves	Drill out hole to make them fit, buy new solenoid coils	Dr. Kolodziej suggested buying new solenoid coils		
MAJOR						
ORDINARY	How to mount solenoid valves on 8020 frame	There are no mounting threads or surfaces on the valves	Zip-ties, Velcro ties, hose-clamps, L-bracket between valve and hose	L-bracket would look and work the best, relatively easy to implement		
	Relief valve not rated for our pressures	The previous existing team's relief valve is not rated high enough	Order new pressure relief valve	We will get part ____ from ____		

Problem Tracking Revision B



Gantt Chart: Team progress through week 2.