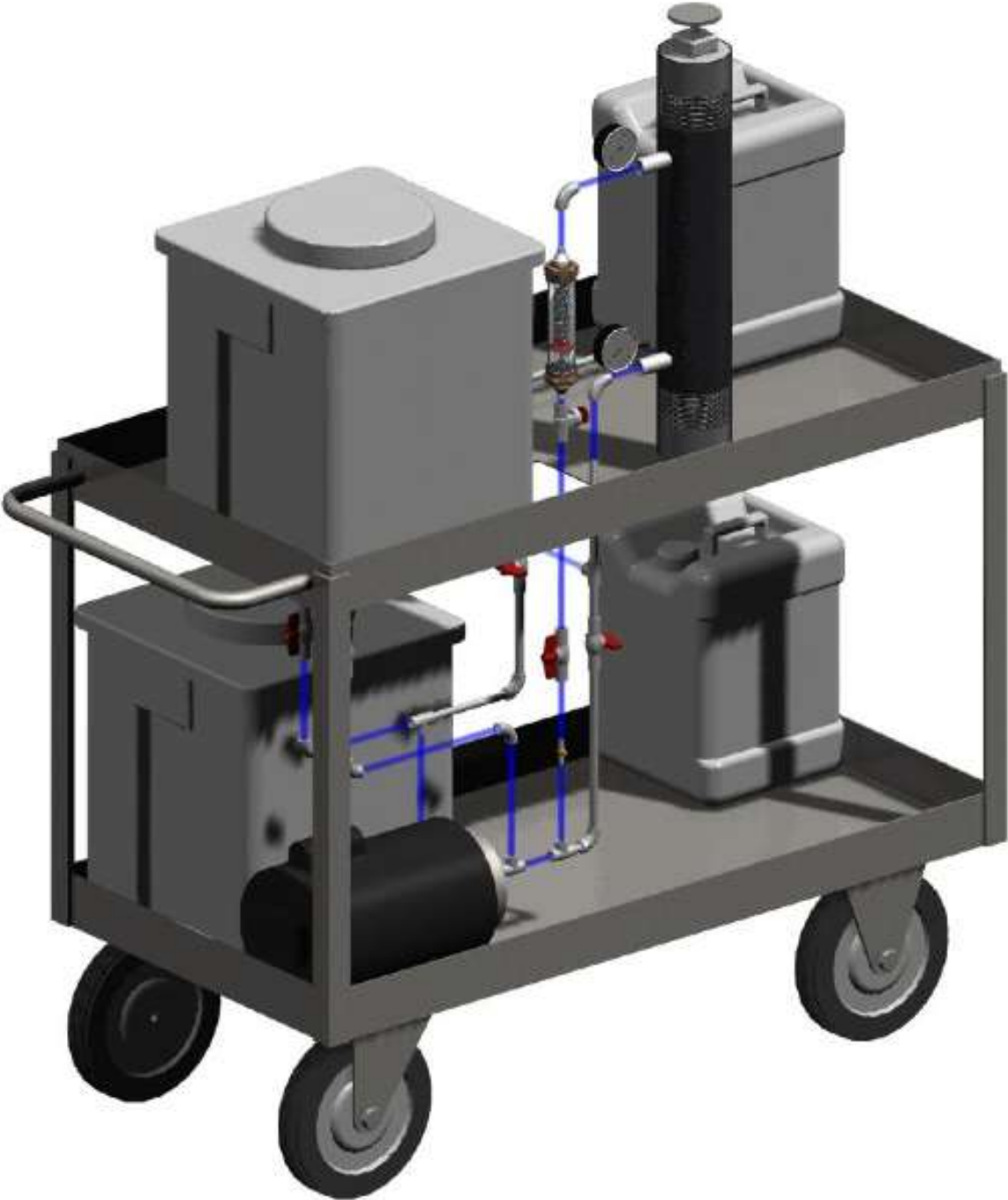


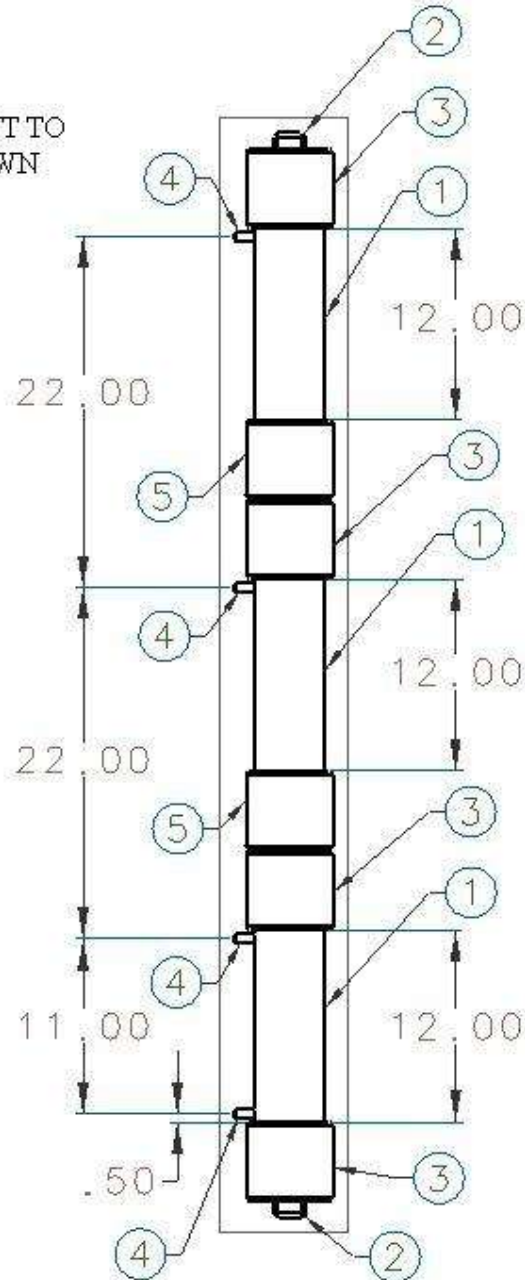
# Manufacturing Plan





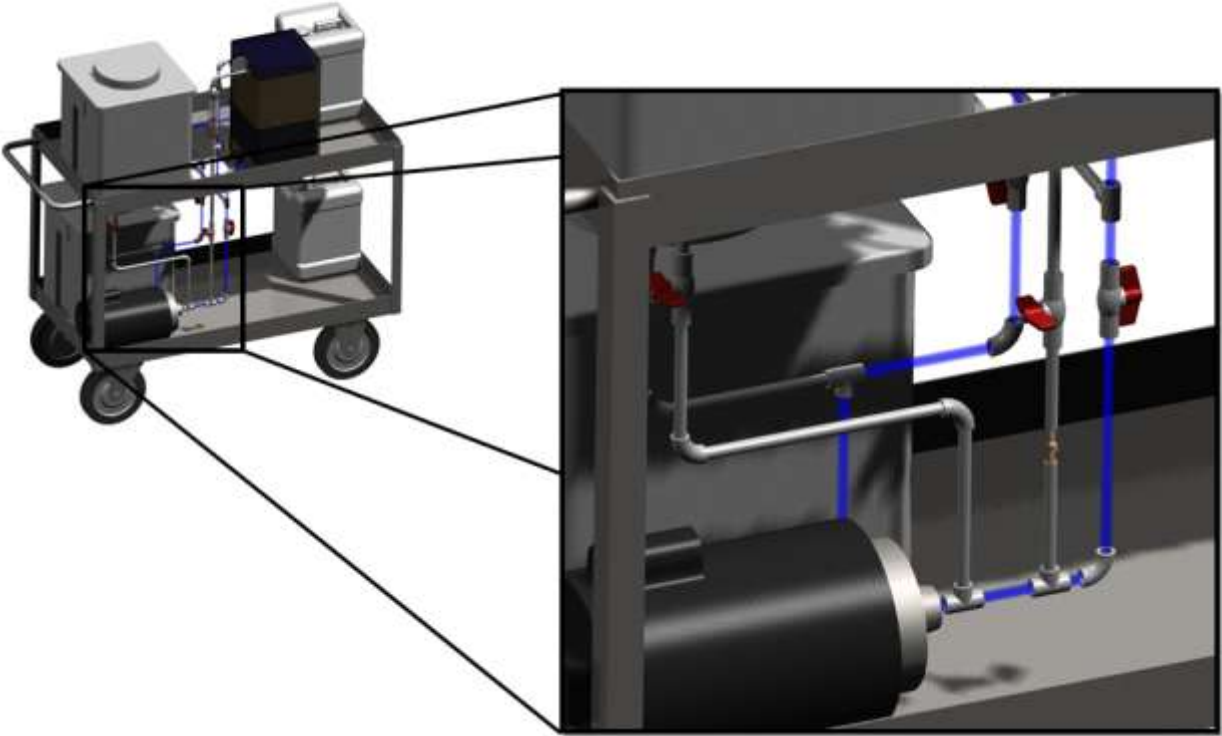
NOTES:

100 ITEM 1 IS TO BE CUT TO DIMENSIONS SHOWN

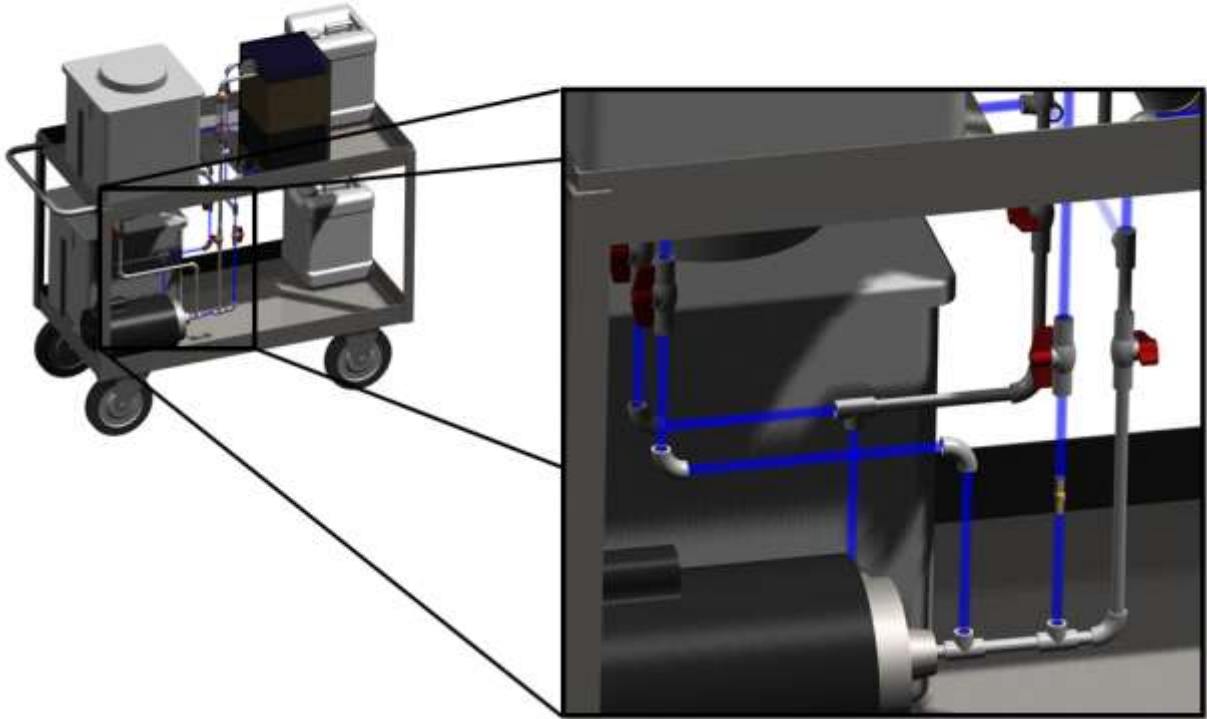


5	2	4596K863	MALE 4" ADAPTER	MCMaster
4	4	4882K24	STANDARD NIPPLE 1/2" THREAD	MCMaster
3	4	4880K88	FEMALE 4" ADAPTER	MCMaster
2	2	2389K81	PLUG 4" PIPE THREAD	MCMaster
1	1	4740K52	4 IN PVC PIPE 4 FT LG	MCMaster
ITEM	QTY	PART NUMBER	DESCRIPTION	VENDOR

# BACKWASH FLOW PATH



# FILTER FLOW PATH



### Variable Compression Filter

Date Ordered	Date Received	ITEM	QTY	PART NUMBER	DESCRIPTION	VENDOR	COST/UNIT	
		14	1	49035K33	CLEAR PVC PIPE 4" DIA X 4' LG	MCMASTER	\$104.45	
		15	2	4882K24	STANDARD NIPPLE 1/2" THREAD	MCMASTER	\$0.76	
		16	2	2389K81	PLUG 4" PIPE THREAD	MCMASTER	\$3.36	
		17	2	4880K88	FEMALE 4" ADAPTER	MCMASTER	\$4.53	
		18	1	9352K12	UHMWPE ROD 4"DIA 6"LG	MCMASTER	\$16.66	
		19	2	4464T278	O-RING 4.125 DIA X 1/8 W	MCMASTER	\$11.01	
		20	1	98804A487	1/4-20 ROD X 12" LG	MCMASTER	\$2.41	
		21	1	2454K15	FOUR ARM KNOB	MCMASTER	\$2.94	
		22	1	TBD	COMPRESSION SPRING	MCMASTER	TBD	
<b>TOTAL COST</b>							<b>\$363</b>	
<b>ACTUAL COST</b>							<b>\$58</b>	

Donated by John Wellin

Comes in packs of 10

Comes in packs of 10

### Simple PVC Filter

Filter Bill of Materials						
ITEM	QTY	PART NUMBER	DESCRIPTION	VENDOR	COST/UNIT	TOTAL COST
45	1	4740K52	4IN PVC PIPE 4FT LG	MCMASTER	\$181.78	\$181.78
46	2	2389K81	PLUG 4" PIPE THREAD	MCMASTER	\$3.36	\$6.72
47	4	4880K88	FEMALE 4" ADAPTER	MCMASTER	\$4.53	\$18.12
48	2	429-005HC	1/2 in. PVC Slip x Slip Coupling	HOME DEPOT	\$0.25	\$0.50
49	2	4596K863	MALE 4" ADAPTER	MCMASTER	\$23.26	\$46.52
50	2	107-633HN	1/2 in. PVC Solvent-Weld Ball Valve	HOME DEPOT	\$2.68	\$5.36
51	1	77027002863	Silicone glue	HOME DEPOT	\$3.89	\$3.89
52			Screen mesh > 40 mesh	MCMASTER		\$0.00
53			Screen mesh # mesh	MCMASTER		
54			Screen mesh # mesh	MCMASTER		
55	1	NONE	SAND FOR POOL FILTERS - 50 LB BAG	NONE	\$0.00	\$0.00
56	1	N/A	CLEAN WATER FOR THE WORLD FILTER AND ASSY	TEAM P11412	\$40.00	\$40.00
<b>Total Cost</b>						<b>\$303</b>
<b>Actual Cost</b>						<b>\$121</b>

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Approximate cost:

Total cost (before donated parts)

\$2,091

Actual cost

\$881

Test Stand Bill of Materials						
ITEM	QTY	PART NUMBER	DESCRIPTION	VENDOR	COST/UNIT	TOTAL COST
1	2	4135T61	RECTANGULAR PAIL 5 GAL	MCMASTER	\$15.37	\$30.74
2	2	40015T59	RECTANGULAR PAIL 11 GAL	MCMASTER	\$29.16	\$58.32
3	1	---	REEFLO TARPON PUMP	REEFLO	\$449.00	\$449.00
4	1	FL-50S	FLOWMETER 0-5 GPM	OMEGA	\$150.00	\$150.00
5	10	V8VP4083B	1/2" PVC BALL VALVE	HOME DEPOT	\$2.71	\$27.10
6	1	5022K151	PRESSURE REGULATOR 0-5 PSI 1/4"	MCMASTER	\$184.99	\$184.99
7	1	9762K31	1/2" PVC GATE VALVE	MCMASTER	\$7.55	\$7.55
8	2	4026K28	0-10 PSI PRESSURE GAUGE 1/4 NPT	MCMASTER	\$55.54	\$111.08
9	30	5233K68	CLEAR FLEXIBLE PVC 1/2 IN TUBE	MCMASTER	\$0.90/FT	\$27.00
10	21	5011T161	WORM-DRIVE HOSE CLAMP	MCMASTER	\$10.02/10	\$30.06
11	7	36895K121	THROUGH-WALL PVC 1/2 FITTING	MCMASTER	\$14.23	\$99.61
12	1	22041T43	STEEL CART W/ HIGH LIPS	MCMASTER	\$322.32	\$322.32
13	4	436-015HC	1-1/2 in. PVC MIPT x Slip Male Adapter	HOME DEPOT	\$0.92	\$3.68
14	8	164-133HC	1/2 in. PVC FPT x FPT Union	HOME DEPOT	\$2.44	\$19.52
15	1	164-137HC	1-1/2 in. PVC Pressure FPT x FPT Union	HOME DEPOT	\$6.47	\$6.47
16	2	22015	1/2 in. x 2 ft. PVC Sch. 40 Pipe	HOME DEPOT	\$0.94	\$1.88
17	17	4882K24	STANDARD NIPPLE 1/2" THREAD	MCMASTER	\$0.76	\$12.92
18	20	54306	1/2 in. x 1/2 in. Barb x MIP Insert Adapter	HOME DEPOT	\$0.83	\$16.60
19	1	406-015HC	1-1/2 in. PVC 90-Degree Slip X Slip Elbow	HOME DEPOT	\$1.21	\$1.21
20	9	406-005HC	1/2 in. PVC Slip x Slip Elbow	HOME DEPOT	\$0.25	\$2.25
21	1	401-015HC	1-1/2 in. PVC Slip x Slip x Slip Tee	HOME DEPOT	\$1.56	\$1.56
22	5	401-005HC	1/2 in. PVC Slip x Slip x Slip Tee	HOME DEPOT	\$0.30	\$1.50
23	3	402-005HC	1/2 in. PVC Slip x Slip x FIPT Tee	HOME DEPOT	\$0.51	\$1.53
24	11	436-005HC	1/2 in. MIPT x Slip Male Adapter	HOME DEPOT	\$0.31	\$3.41
25	2	438-209HC	1-1/2 in. x 1/2 in. PVC SPG x FPT Bushing	HOME DEPOT	\$1.26	\$2.52
26	7	435-005HC	1/2 in. PVC Slip x FIPT Female Adapter	HOME DEPOT	\$0.44	\$3.08
27	1	C436-101	3/4 in. x 1/2 in. PVC MIPT x Slip Adapter	HOME DEPOT	\$0.54	\$0.54
28	1	430-007HC	3/4 in. PVC FIPT x FIPT Coupling	HOME DEPOT	\$0.73	\$0.73
29	3	439-101HC	3/4 in. x 1/2 in. PVC SPG x FPT Bushing	HOME DEPOT	\$0.71	\$2.13
30	3	407-005HC	1/2 in. PVC 90-Degree Slip x FPT Elbow	HOME DEPOT	\$0.36	\$1.08
31	1	126819	1/2" PVC Pressure Sch 40 Elbow	LOWES	\$0.81	\$0.81
32	2	A-827	1/2 in. x 1/4 in. Brass MPT x FPT Hex Bushing	HOME DEPOT	\$2.80	\$5.60
33	2	439-101HC	3/4 in. x 1/2 in. PVC SPG x FPT Bushing	HOME DEPOT	\$0.71	\$1.42
34	1	915319	Standard pine 2x4	HOME DEPOT	\$1.97	\$1.97
35	1	05GLHD2	Homer Bucket 5-Gallon Orange Homer Bucket	HOME DEPOT	\$2.54	\$2.54
36	1	5GLD	5-Gal. Homer Leakproof Lid	HOME DEPOT	\$0.98	\$0.98
37	8	17733	1/2 in. x 520 in. White PTFE Tape	HOME DEPOT	\$1.18	\$9.44
38	1	RS0-01461-0LC	Leviton 15 amp Toggle Light Switch	HOME DEPOT	\$3.99	\$3.99
39	1	773201	Buchanan Yellow Wire Connectors (6 pack)	HOME DEPOT	\$1.69	\$1.69
40	1	ET60FR	3/4 in. X 60 Ft. Flame Retardant Electrical Tape	HOME DEPOT	\$0.59	\$0.59
41	1	34481150732	Switch Box	HOME DEPOT	\$0.72	\$0.72
42	1	51411205119	Romex Connector	HOME DEPOT	\$1.54	\$1.54
43	1	34481150527	Switch Cover	HOME DEPOT	\$0.54	\$0.54
44	1	AW62632	9 ft. 14/3 Power Tool Replacement Cord	HOME DEPOT	\$12.97	\$12.97
					<b>Total Cost</b>	\$1,625
					<b>Actual Cost</b>	\$702

Loaned by John Wellin until June

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