

	A	B	C	D	E	F
1	Component	Part#	Description	# of units	Cost per unit	Total Cost
2	PR1 and PR2	McMaster 1888k1	0-15 psi low pressure regulator	2	\$94.00	\$188.00
3	PI1 to PI4	McMaster 3846k99	0-15 psi gauge	4	\$18.13	\$72.52
4	PT1 to PT4	626-07-GH-P1-E4-S1	0-15 psig transducer	4	\$135.00	\$540.00
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6	Manifold 1	McMaster 5975k19	1/2 NPT to 6 of 3/8 NPT out (1/2 tube)	1	\$33.06	\$33.06
7	Panel 1	GUESTIMATE	Holds manifold 1, PR1, PI1-2, PT1-2	1	\$100.00	\$100.00
8	Manifold 2	McMaster 5975k15	3/8 npt to 5 of 1/4 npt out (FWD)	2	\$23.95	\$47.90
9	Panel 2	GUESTIMATE	Holds manifold 2, FMV/FT, needle valves	1	\$250.00	\$250.00
10	Manifold 3	McMaster 5975k36	1/2 npt to 3 of 3/8 npt (2nd and 3rd)	4	\$29.28	\$117.12
11	Panel 3	GUESTIMATE	Holds manifold 3	1	\$100.00	\$100.00
12	Manifold 4	McMaster 5975k12	3/8 npt into 4 of 1/4 npt out	12	\$21.20	\$254.40
13	Panel 4	GUESTIMATE	Holds Manifold 4, FMV and FT	12	\$150.00	\$1,800.00
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15	FMV5 to 10	Dwyer RMA-13-ssv	For the larger volume GEMs	6	\$48.00	\$288.00
16	FMV1 to 4, FMV11 to 50	Dwyer RMA-12-ssv	GEMs	44	\$48.00	\$2,112.00
17	1/8 npt to 1/4" push loc	McMaster 5779k108	For FMV connections	120	\$3.16	\$379.20
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19	FT1 to 4, FT11 to 50	Honeywell Zephyr	0-400 sccm flow transducer	44	\$91.66	\$4,033.04
20	FT5 to 10	Honeywell Zephyr	0-750 sccm flow transducer	6	\$95.36	\$572.16
21						\$0.00
22	1/4" push lok, bulkhead	McMaster 5779k677	line to GEMs, 17/32" dia hole	58	\$5.45	\$316.10
23	1/4 npt to 1/2" comp	B-810-1-4	PR1 in and out	2	\$13.00	\$26.00
24	1/4 npt to 1/4 push lok	McMaster 5779k108	For gauges and transducers	64	\$3.16	\$202.24
25	1/2" npt plug	McMaster 4464k564	1/2" npt plug	12	\$2.70	\$32.40
26	1/4 FNPT union	4464k352	gauge and transducer connections	4	\$3.83	\$15.32
27	1/4 fnpt tee	4464k48	gauge and transducer connections	2	\$7.80	\$15.60
28	1/4 push lok Tee	5779k34	gauge and transducer connections	2	\$4.88	\$9.76
29	3/8 npt to 1/2 push lok	McMaster 5779k121	for 1/2" tubing runs	36	\$7.80	\$280.80
30	3/8 npt plug	McMaster 4464k563	for unused 3/8 npt openings	16	\$2.00	\$32.00
31	1/4" push lok union	McMaster 5779k14	for flow transducer connections	120	\$3.20	\$384.00
32	1/2 npt to 1/2 push loc	McMaster 5779k122	1/2" npt to 1/2" push lock	12	\$8.20	\$98.40
33	1/4" push lok caps	McMaster 5779k473	push lok cap for tubing	24	\$2.18	\$52.32
34	1/4" push lok plugs	McMaster 5779k54	push lok plug for fitting	24	\$1.18	\$28.32
35	1/2" push lok 90 deg					
36	1/4" tubing		guestimate of 40 ft per line	2400	\$0.48	\$1,152.00
37	Tygon 1/4"	1/4" OD x 3/16 ID tygon	guestimate of 0.5 ft per line	25	\$0.98	\$24.50
38	1/2" tubing		guestimate of 40 ft per line	200	\$1.61	\$322.00
39	Panel supports			15	\$50.00	\$750.00
40	misc			1	\$1,500.00	\$1,500.00
41	labels			1	\$450.00	\$450.00
42	Readback cables and electronics					\$5,000.00
43						
44			FMV System Estimate			\$11,973.96
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46			FMV plus FT System Estimate			\$21,579.16