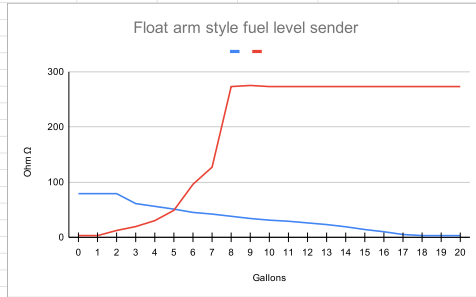
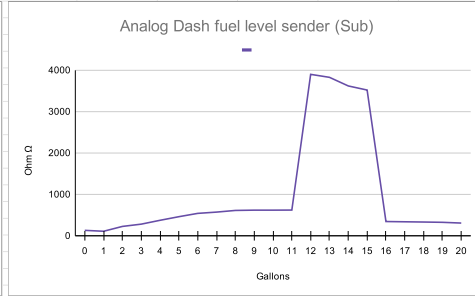
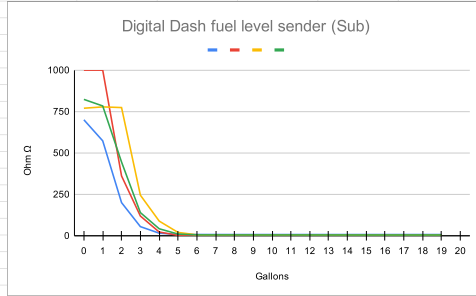
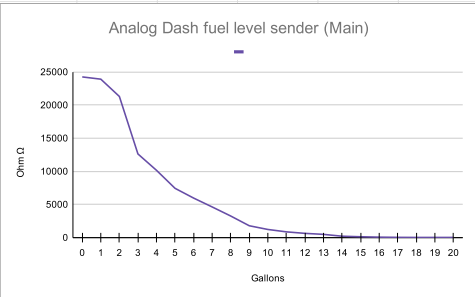
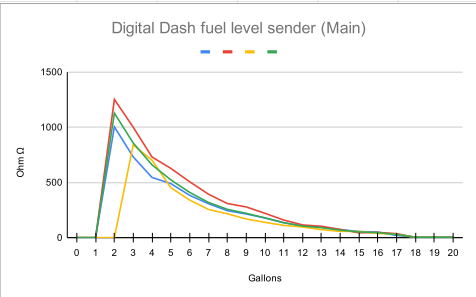


Outline:		Characterize resistance measurements relative to fluid level for multiple Fuel Level Sending units used for the Nissan Z31					
1/9/2021							
Test 1:		Add Distilled water to clean Z31 fuel tank in 1 gallon increments. Insert fuel level sender (fully seated) and take resistance measurement at both main and sub terminals.					
Note:		Repeat measurement for additional sensors. Add gallon of distilled water, repeat measurements until tank capacity (20.3gal) is reached.					
		Analog sensor #2 was found to have a ground plane that was worn through and gave erratic measurements. Analog sensor #3 was broken on the clip end and was corroded, decision was not to measure it.					
		The traces of the resistor material of the analog sensor are distinct from the traces found on the digital sensor. The float appears to be the same between the two.					
		The lever style sensor is very linear in its measurement and gave stable readings.					
Additional:		Insert Stainless ruler in opening for fuel pump and note incremental fluid height from bottom of tank.					
Fluid level from bottom of tank (pump baffle) (mm)	Main	Level (gal)	84T GLL Slide pot sensor (Ω) Digital	84 AE Slide pot sensor (Ω) Digital	86 Slide pot sensor (Ω) Digital	Avg	unk Slide pot sensor (Ω) Analog 1
							unk Slide pot sensor (Ω) Analog 2
							88T Slide pot sensor (Ω) Analog 3
		0	0	0	0	0	24260 too erratic
		27	1	0	0	0	23920
		42	2	0	1003	1252	21310
		58	3	840	731	1000	857 12630
		68	4	701	545	730	659 10160
		80	5	452	489	627	523 7440
		95	6	340	383	506	410 5970
		108	7	255	307	393	318 4630
		120	8	216	244	309	256 3260
		136	9	169	214	278	220 1790
		147	10	138	178	220	179 1230
		156	11	111	135	159	135 868
		169	12	96	104	115	105 641
		182	13	72	95	103	90 490
		195	14	57	73	74	68 212
		204	15	56	55	43	51 128
		216	16	38	50	47	45 70
		228	17	31	19	36	29 39
		240	18	2	6	1	3 26
		253	19	2	6	1	3 26
		262	20	2	6	1	3 26
Sub		Level (gal)	84T GLL Slide pot sensor (Ω) Digital	84 AE Slide pot sensor (Ω) Digital	86 Slide pot sensor (Ω) Digital	Avg	unk Slide pot sensor (Ω) Analog 1
		0	0	0	0	0.0	130
		1	770	700	1000	823.3	108
		2	778	573	1000	783.7	225
		3	774	200	361	445.0	280
		4	245	55	119	139.7	373
		5	88.5	15.4	22.4	42.1	460
		6	20	7.9	2.5	10.1	540
		7	5.5	7.5	2.4	5.1	571
		8	5.1	7.3	2.3	4.9	611
		9	5	7.2	2.3	4.8	618
		10	5	7.2	1.9	4.7	618
		11	4.5	7.2	1.9	4.5	620
		12	5.2	7.2	1.9	4.8	3898
		13	4.6	7.2	1.9	4.6	3826
		14	4.5	7.2	1.9	4.5	3618
		15	4.4	7.2	1.9	4.5	3519
		16	4.3	7.2	1.9	4.5	343
		17	4.2	7.2	1.9	4.4	337
		18	4.1	7.2	1.9	4.4	331
		19	4.1	7.2	1.9	4.4	324
		20	4.1	7.2	1.9	4.4	306
Level (gal)	Main	88 Float style sensor (Ω) (PN 25060-17P65)	Sub		88 Float style sensor (Ω) (PN 25060-17P65)		
		0	79		3.1		
		1	79		3.0		
		2	79		12.3		
		3	61		19.4		
		4	56		30.1		
		5	51		48.8		
		6	45		96.0		
		7	42		127.0		
		8	38		273.0		
		9	34		275.0		
		10	31		273.0		
		11	29		273.0		
		12	26		273.0		
		13	23		273.0		
		14	19		273.0		
		15	14		273.0		
		16	10		273.0		
		17	5		273.0		
		18	3		273.0		
		19	3		273.0		



Reference:

<https://z31performance.com/forum/z31-basics/how-to-guides-basic/14494-how-to-fix-erratic-fuel-level-reading-on-digital-dash>

<https://z31performance.com/forum/z31-repairs-forums/electronics/534330-fuel-level-sender-operation-with-digital-dash>

<https://imgur.com/a/CiV9w>

https://www.reddit.com/r/300zx/comments/kplpqi/need_to_know_where_these_plugs_go/

