CABLINE®-CA IIP PLUS

Part No. Plug : 8****-**0B-##, Receptacle : 20790-0**E-0##

Test Report

Product Specification no. PRS-2908

2	T26088	2026/10/28	K.Hashimoto	M.Muro	H.Ikari
1	T25039	2025/4/28	Y.Miyazaki	M.Muro	H.Ikari
0	T24076	2024/11/13	S.Shigekoshi	M.Muro	T.Masunaga
Rev.	ECN	Date	Prepared by	Checked by	Approved by

1. Purpose

To evaluate the performance of CABLINE-CA IIP PLUSConnector in accordance with PRS-2908.

2. Specimen

(1) CABLINE-CA IIP PLUS PLUG ASS'Y （Part No. 8****-**0B-##）
(2) CABLINE-CA II PLUS RECEPTACLE ASS'Y （Part No. 20790-060E-0##）

3. Test Sequence

All the evaluations were performed in accordance with Table 1. Test Sequence.

4. Result

See Table 1 to 2-2, Graph 1 to 18. For the details of the testing conditions and requirements, see PRS-2908.
The “n” in the tables show the number of measurement points.

5. Conclusion

All the specimens met the requirements of PRS-2908.

Table.1 Test Sequence and Sample Quantity

Test Item	Group									
	A	B	C	D	E	F	G	H	I	J
Contact resistance	2,6		1,3,5	1,5	1,3	1,5	1,5	1,3	1,3	
Insulation resistance				2,6		2,6	2,6			
Dielectric withstanding voltage				3,7		3,7	3,7			
Temperature rising										1
Mating force	1,5									
Unmating force	3,7									
Durability	4									
Cable retention force	8									
Connector Lock		1								
Vibration			2							
Shock			4							
Thermal shock				4						
High temperature life					2					
Humidity (Steady State)						4				
Humidity (Cycling)							4			
Saltwater spray								2		
H_2S gas									2	
Specimen quantity.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.

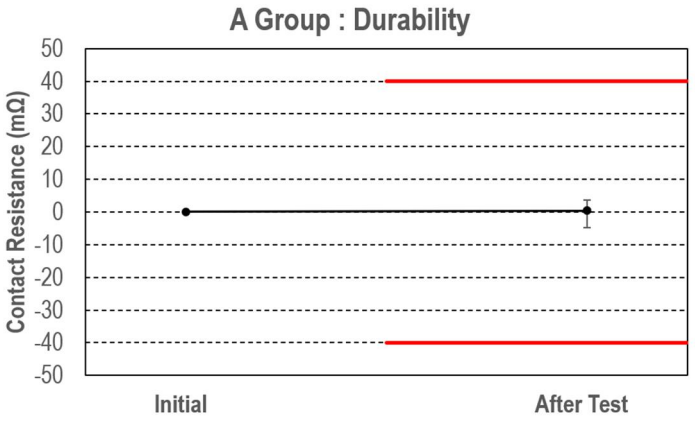
※Numbers indicate test sequences

Table.2-1 Test result

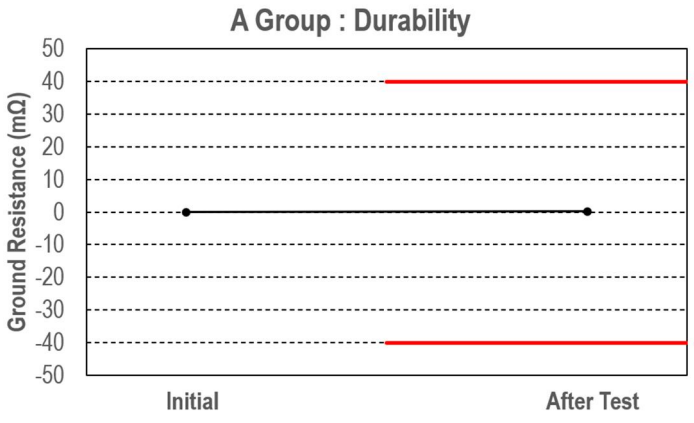
Test Item	Contents of Measurement			Specifications	Set	n	Data					Judge
							AVG.	MAX.	MIN.	s	AVG.±3s	
A Group Durability	Contact Resistance (mΩ)		Initial	AWG#38 380mΩ MAX.	5	205	313.776	331.39	294.31	7.577	336.507	Pass
			After Test	AWG#38 ΔR=40mΩ MAX.			0.381	3.67	-4.73	1.825	5.856	Pass
	GND Resistance (mΩ)		Initial	50mΩ MAX.	5	5	8.056	8.94	7.58	0.633	9.955	Pass
			After Test	ΔR=40mΩ MAX.			0.210	0.46	0.06	0.168	0.714	Pass
	60P	Mating Force (N)	Initial	40.00N MAX.	5	5	13.476	15.35	11.93	1.247	17.217	Pass
			After Test				8.594	9.10	7.75	0.503	10.103	Pass
		Unmating Force (N)	Initial	2.00N MIN.	5	5	5.838	6.12	5.29	0.334	4.836	Pass
			After Test				4.974	5.23	4.72	0.239	4.257	Pass
		Cable Retention Froce		29.40N MIN	5	5	161.50N MIN.					Pass
B Group Connector Lock			Initial	The lock does not damage and cancel.	5	5	No Abnormality					Pass
C Group Vibration ↓ Shock	Contact Resistance (mΩ)		Initial	AWG#38 380mΩ MAX.	5	205	311.137	330.99	295.52	9.001	338.140	Pass
			After Vibration	AWG#38 ΔR=40mΩ MAX.			-1.100	2.51	-4.69	1.304	2.812	Pass
			After Shock	AWG#38 ΔR=40mΩ MAX.			-0.054	4.94	-4.39	1.938	5.760	Pass
	GND Resistance (mΩ)		Initial	50mΩ MAX.	5	5	8.234	8.66	7.90	0.339	9.251	Pass
			After Vibration	ΔR=40mΩ MAX.			-0.058	0.27	-0.28	0.215	0.587	Pass
			After Shock	ΔR=40mΩ MAX.			0.108	0.48	-0.25	0.278	0.942	Pass
	Electrical discontinuity		During Vibration	1μsec. MAX.	5	5	No Electrical discontinuity					Pass
			During Shock				No Electrical discontinuity					Pass
	Appearance		After Vibration	No Abnormality adversely affecting the performance shall occur.	5	5	No Abnormality					Pass
			After Shock				No Abnormality					Pass
D Group Thermal Shock	Contact Resistance (mΩ)		Initial	AWG#38 380mΩ MAX.	5	205	309.096	330.00	291.36	7.677	332.127	Pass
			After Test	AWG#38 ΔR=40mΩ MAX.			3.351	8.28	-1.86	1.805	8.766	Pass
	GND Resistance (mΩ)		Initial	50mΩ MAX.	5	5	8.086	8.34	7.85	0.178	8.620	Pass
			After Test	ΔR=40mΩ MAX.			0.016	0.18	-0.21	0.158	0.490	Pass
E Group High temperature life	Contact Resistance (mΩ)		Initial	AWG#38 380mΩ MAX.	5	205	312.197	333.44	294.14	9.351	340.250	Pass
			After Test	AWG#38 ΔR=40mΩ MAX.			1.903	6.23	-2.17	1.471	6.316	Pass
	GND Resistance (mΩ)		Initial	50mΩ MAX.	5	5	8.296	8.91	8.02	0.363	9.385	Pass
			After Test	ΔR=40mΩ MAX.			0.082	0.42	-0.54	0.373	1.201	Pass

Table.2-2 Test result

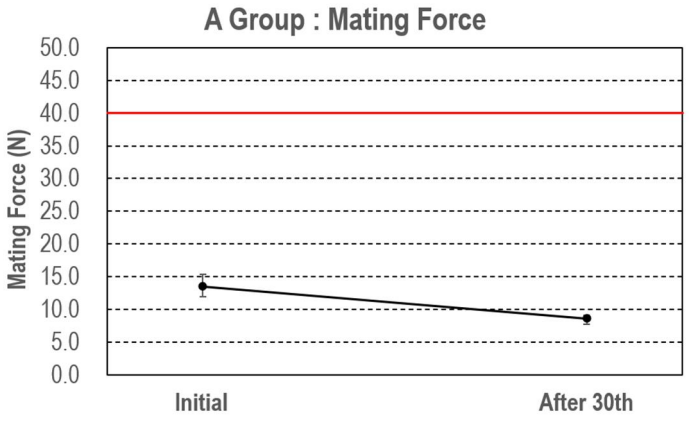
Test Item	Contents of Measurement		Specifications	Set	n	Data					Judge
						AVG.	MAX.	MIN.	s	AVG.±3s	
F Group Humidity (Steady state)	Contact Resistance (mΩ)	Initial	AWG#38 380mΩ MAX.	5	205	310.259	326.40	292.59	6.293	329.138	Pass
		After Test	AWG#38 ΔR=40mΩ MAX.			1.090	3.41	-2.38	1.161	4.573	Pass
	GND Resistance (mΩ)	Initial	50mΩ MAX.	5	5	7.444	7.51	7.38	0.054	7.606	Pass
		After Test	ΔR=40mΩ MAX.			0.220	0.40	0.05	0.140	0.640	Pass
	Insulation Resistance (MΩ)	Initial	1000MΩ MIN.	5	5	1.05×10^{6}MΩ MIN.					Pass
		After Test	500MΩ MIN.			1.55×10^{4} MΩ MIN.					Pass
	D. W. Voltage	Initial	No creeping discharge, flashover, or insulator breakdown shall occur.	5	5	No Abnormality					Pass
		After Test				No Abnormality					Pass
G Group Humidity (Cycling)	Contact Resistance (mΩ)	Initial	AWG#38 380mΩ MAX.	5	205	308.924	327.77	291.71	7.274	330.746	Pass
		After Test	AWG#38 ΔR=40mΩ MAX.			4.723	9.56	-0.77	1.996	10.711	Pass
	GND Resistance (mΩ)	Initial	50mΩ MAX.	5	5	8.200	8.45	7.85	0.250	8.950	Pass
		After Test	ΔR=40mΩ MAX.			-0.080	0.37	-0.31	0.310	0.850	Pass
	Insulation Resistance (MΩ)	Initial	1000MΩ MIN.	5	5	1.38×10^{6}MΩ MIN.					Pass
		After Test	500MΩ MIN.			2.65×10^{3}MΩ MIN.					Pass
	D. W. Voltage	Initial	No creeping discharge, flashover, or insulator breakdown shall occur.	5	5	No Abnormality					Pass
		After Test				No Abnormality					Pass
H Group Salt water spray	Contact Resistance (mΩ)	Initial	AWG#38 380mΩ MAX.	5	205	310.021	327.89	285.47	8.621	335.884	Pass
		After Test	AWG#38 ΔR=40mΩ MAX.			3.653	8.05	-0.77	2.142	10.079	Pass
	GND Resistance (mΩ)	Initial	50mΩ MAX.	5	5	8.008	8.08	7.96	0.051	8.161	Pass
		After Test	ΔR=40mΩ MAX.			0.044	0.23	-0.02	0.105	0.359	Pass
I Group H_2S gas	Contact Resistance (mΩ)	Initial	AWG#38 380mΩ MAX.	5	205	315.046	335.55	297.74	8.877	341.677	Pass
		After Test	AWG#38 ΔR=40mΩ MAX.			0.542	4.85	-2.39	1.490	5.012	Pass
	GND Resistance (mΩ)	Initial	50mΩ MAX.	5	5	7.418	7.93	7.13	0.312	8.354	Pass
		After Test	ΔR=40mΩ MAX.			1.502	1.69	1.13	0.230	2.192	Pass
	Appearance	After Test	No Abnormality adversely affecting the performance	5	5	No Abnormality					Pass
J Group Temperature Rising	AWG#38 0.4A/Contact		ΔT=30℃ MAX.	5	5	ΔT=23.57℃MAX.					Pass



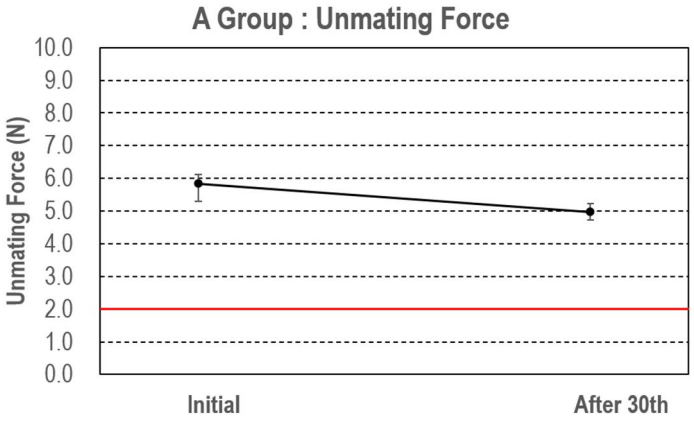
Graph.1



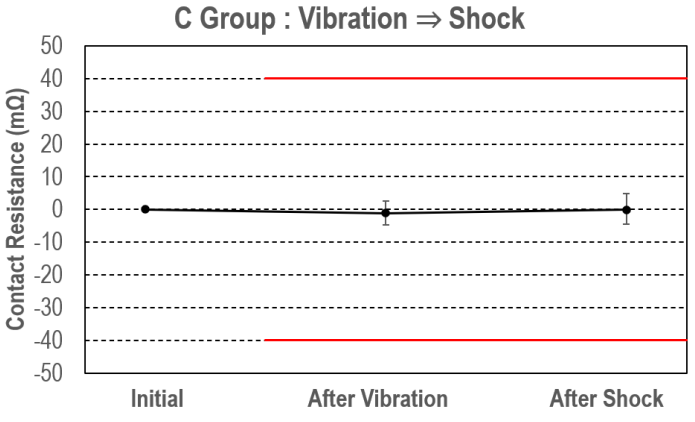
Graph.2



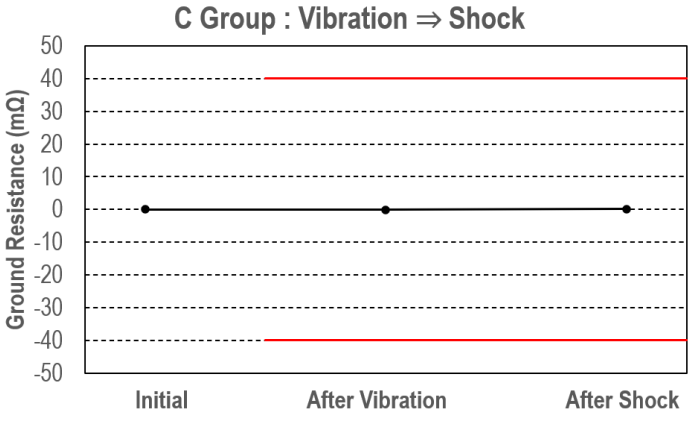
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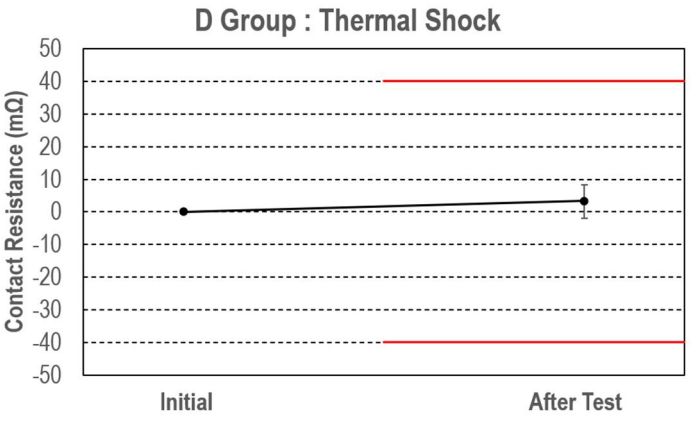
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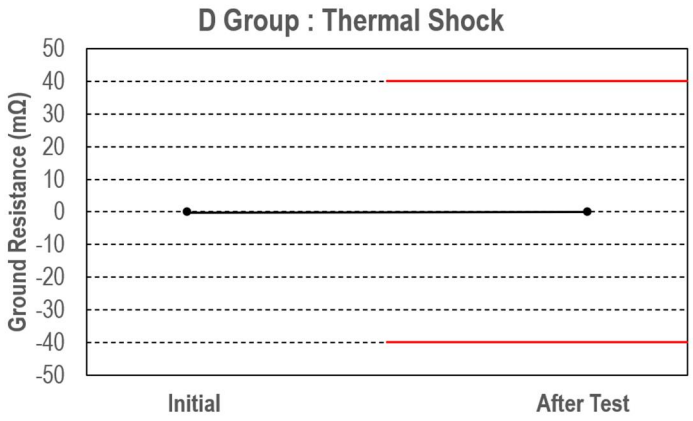
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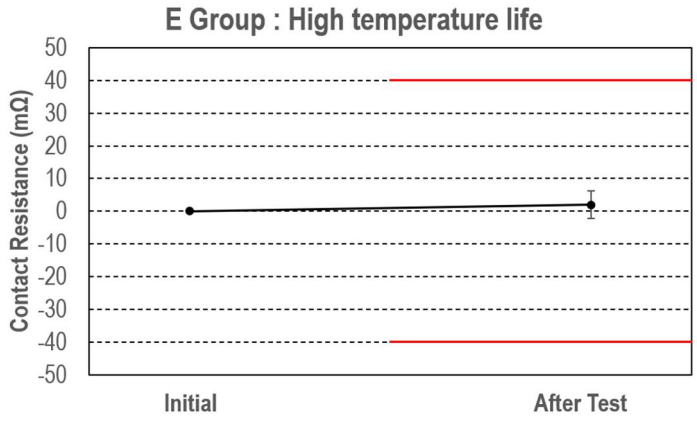
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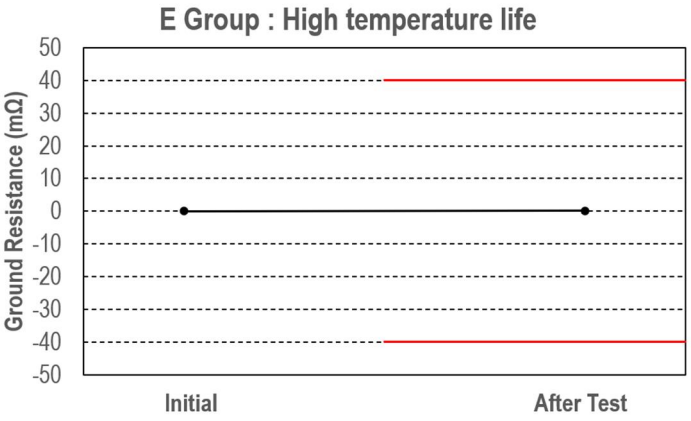
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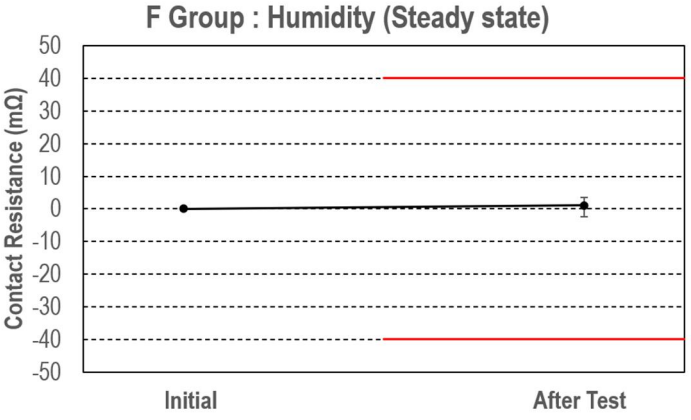
Graph.8



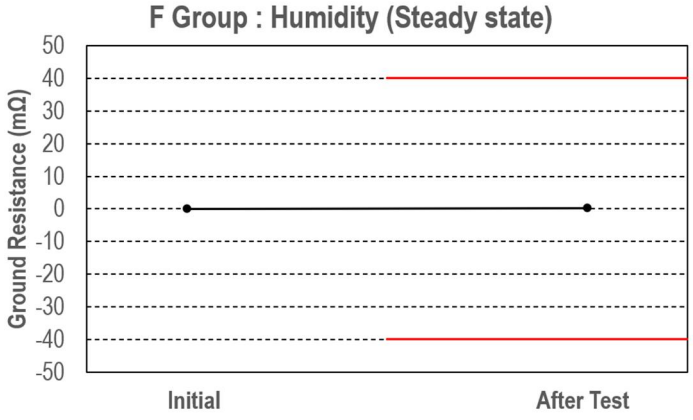
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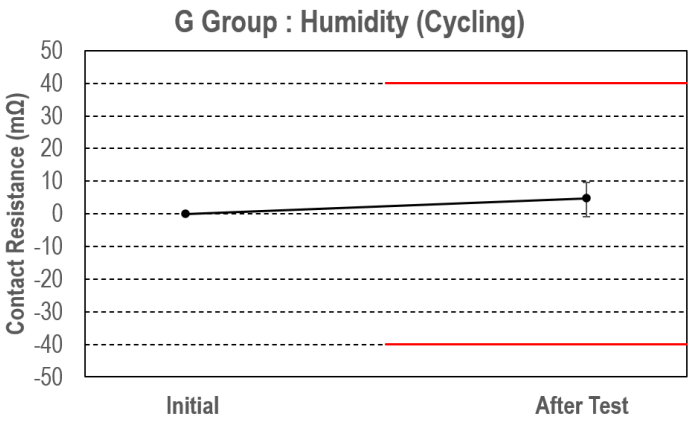
Graph.10



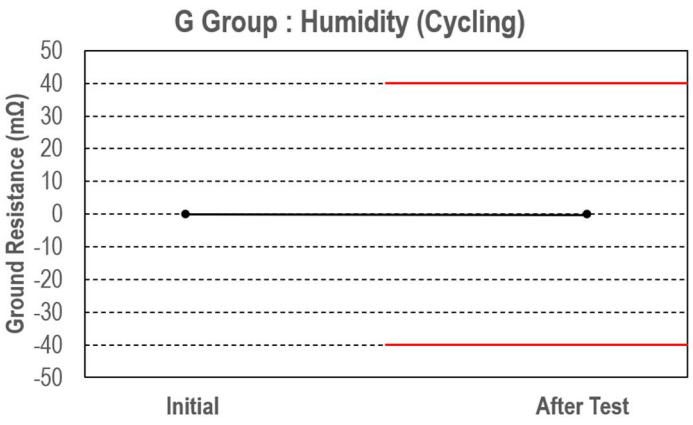
Graph.11



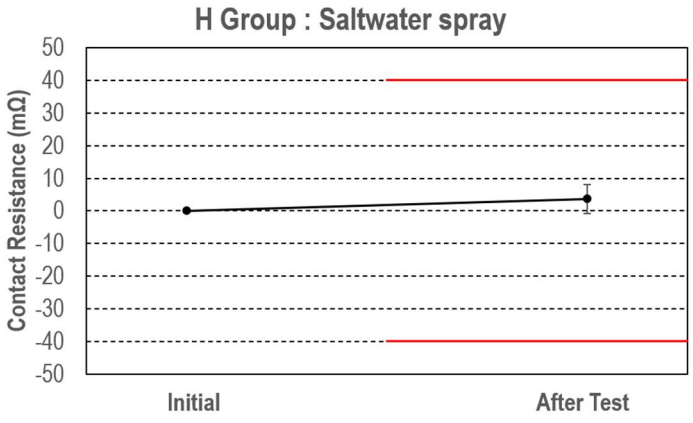
Graph.12



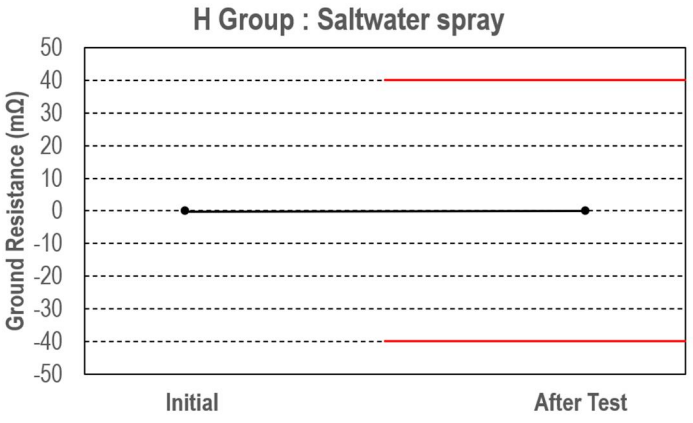
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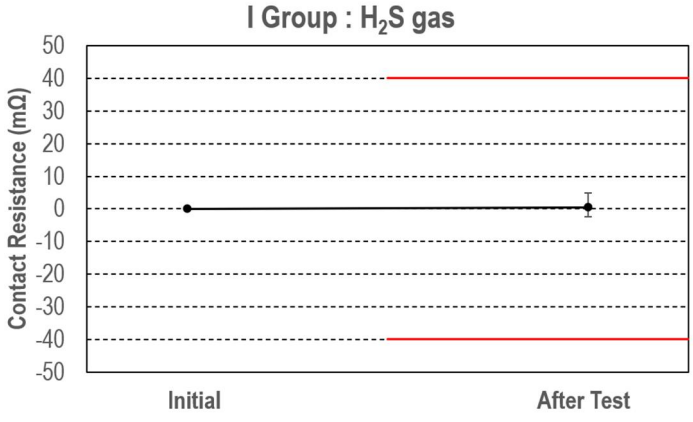
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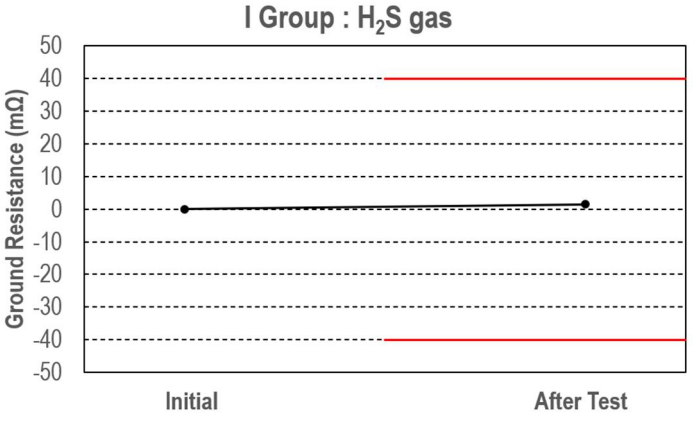
Graph.15



Graph.16



Graph.17



Graph.18