TO: DISTRIBUTION
FROM: C NEUMEYER
SUBJECT: REVISED DESIGN FOR OH GROUND PLANE CONNECTOR

Reference:

[1] 13-010220-CLN-01, "New Design for OH Ground Plane Connector"

The new design for the OH ground plane connector proposed in reference [1] cannot be implemented due to a lack of availability of the Tecknit parts within the required time frame. Therefore this memo describes a revised design. It is basically the same as the prior proposed design except that the conductive elastomer strips are replaced by flexible braid, and the worm-gear hose clamp is of a special type which has a "constant torque" spring feature. Design is depicted in Figure 1.

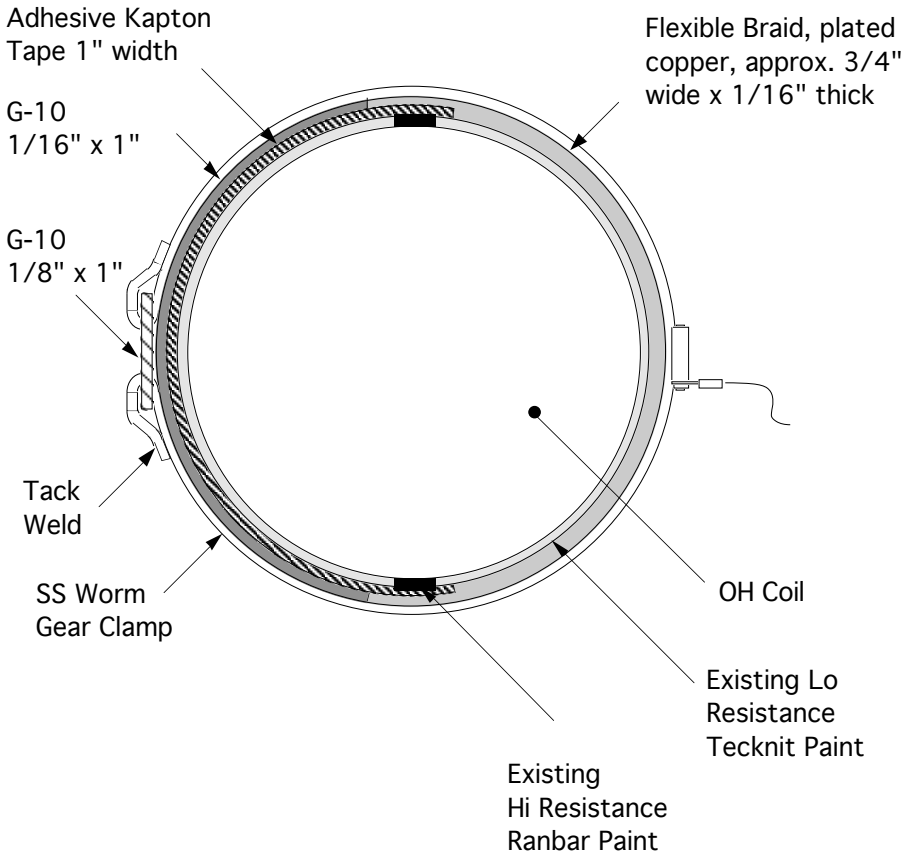

Figure 1 – Revised OH Ground Plane Connector

A description, from the inside working outwards, is as follows:

1) Adhesive Kapton tape, 1" width, is applied over approximately 200° of the circumference, covering one of the regions of the existing low resistance Tecknit paint and the two bands of high resistance Ranbar paint.
2) A flexibile braid, plated copper, approx. 3/4" wide x 1/16" thick, is applied covering one of the regions of the existing low resistance Tecknit paint and part of the Kapton tape applied in step 1), over approximately 200° of the circumference.
3) A 1/16" thick G-10 spacer is applied over the remaining 160° of the circumference, and secured via an all stainless steel worm gear hose clamp, which has been modified to include a toroidal break by cutting the banding and bending tabs back, securing through a slotted piece of 1/8" x 1" G-10, and tack welding to hold in place.
4) A wire pigtail is attached via a lug under the screw head of the hose clamp.
5) A total of four such connectors are required, two on top to service the two ground plane halves, and two on the bottom.

The connector is described below. Due to the fact that it is not available (unless specially ordered) to go over the 12" diameter of the OH coil, it will have to be modified by tack welding additional lengths of stainless steel banding to the supplied clamp.

It is highly recommended that a prototype clamping be set up and tried before attempting an installation on the OH coil.

Breeze Clamp Products – 100 Aero-Seal Drive – Saltsburg, Pennsylvania 15681 USA

Phone: (724) 639-3571 – Fax: (724) 639-3020

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Stock Numbers	Effective Diameter			
	Min.		Max.	
	In.	mm.	In.	mm.
AERO-SEAL construction for use on small diameter applications-torque rated 30-70 in./lbs.				
CT-9410	9/16	14	1-1/16	27
CT-9412	11/16	17	1-1/4	32
CT-9416	13/16	21	1-1/2	38
CT-9420	13/16	21	1-3/4	44
CT-9424	1-1/16	27	2	51
CT-9428	1-5/16	33	2-1/4	57
CT-9432	1-9/16	40	2-1/2	64
CT-9436	1-13/16	46	2-3/4	70
CT-9440	2-1/16	52	3	76
CT-9444	2-5/16	59	3-1/4	83
Heavy-duty construction for use on large diameter applications-torque rated 50-125 in./lbs.				
CT-200L	1-1/4	32	2-1/8	54
CT-250L	1-3/4	45	2-5/8	67
CT-300L	2-1/4	57	3-1/8	79
CT-350L	2-3/4	70	3-5/8	92
CT-400L	3-1/4	83	4-1/8	105
CT-450L	3-3/4	95	4-5/8	118
CT-500L	4-1/4	108	5-1/8	130
CT-550L	4-3/4	121	5-5/8	143
CT-600L	5-1/4	133	6-1/8	156
CT-650L	5-3/4	146	6-5/8	168
CT-700L	6-1/4	159	7-1/8	181
CT-750L	6-3/4	172	7-5/8	194
CT-800L	7-1/4	184	8-1/8	206
CT-850L	7-3/4	197	8-5/8	219
CT-900L	8-1/4	210	9-1/8	232

cc:

J Chrzanowski
L Dudek
T Meighan
M Ono
S Ramakrishnan
A Von Halle
M Williams

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