DCA318 Lead End
Extra Kapton

TS-SSC 91-228
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Magnet Name	Average Interior Diameter - nom. (mils)	Extra Layers of 5 mil kapton	Hydraulic Pressure (psi)	Pi-tape Deflection (mils)
DCA313	-10±3	0	7100	2
DCA314	-6±4	1	9520	4
DCA315	-9±1	1	9092	5
DCA316	-8±4	1	8200	5
DCA317	-1±3	3	???	???
DCA318	-2±4			

The second column of the table shows the average interior diameter (with the nominal value subtracted) of the lead end clamp insulators shimmed tightly inside the return end clamp cylinder, measured with a telescoping micrometer[1] The average has been performed over measurements between quadrant pairs I-III and II-IV at axial positions 1/4", 1", and 2" from the collared coil end of the end clamp cylinder.

The DCA318 inner diameter is consistent with the nominal value, or 8 - 9 mils larger than that of DCA315 and DCA316. Therefore, we should add two layers of 5 mil kapton in addition to the single layer added for DCA316 and DCA316. I therefore recommend that **3 layers of 5 mil kapton** be added to the inner insulator surfaces of DCA318 to insure adequate preload.

[1]Traveller 0102-ES-298290 Rev E., Step 1.14.