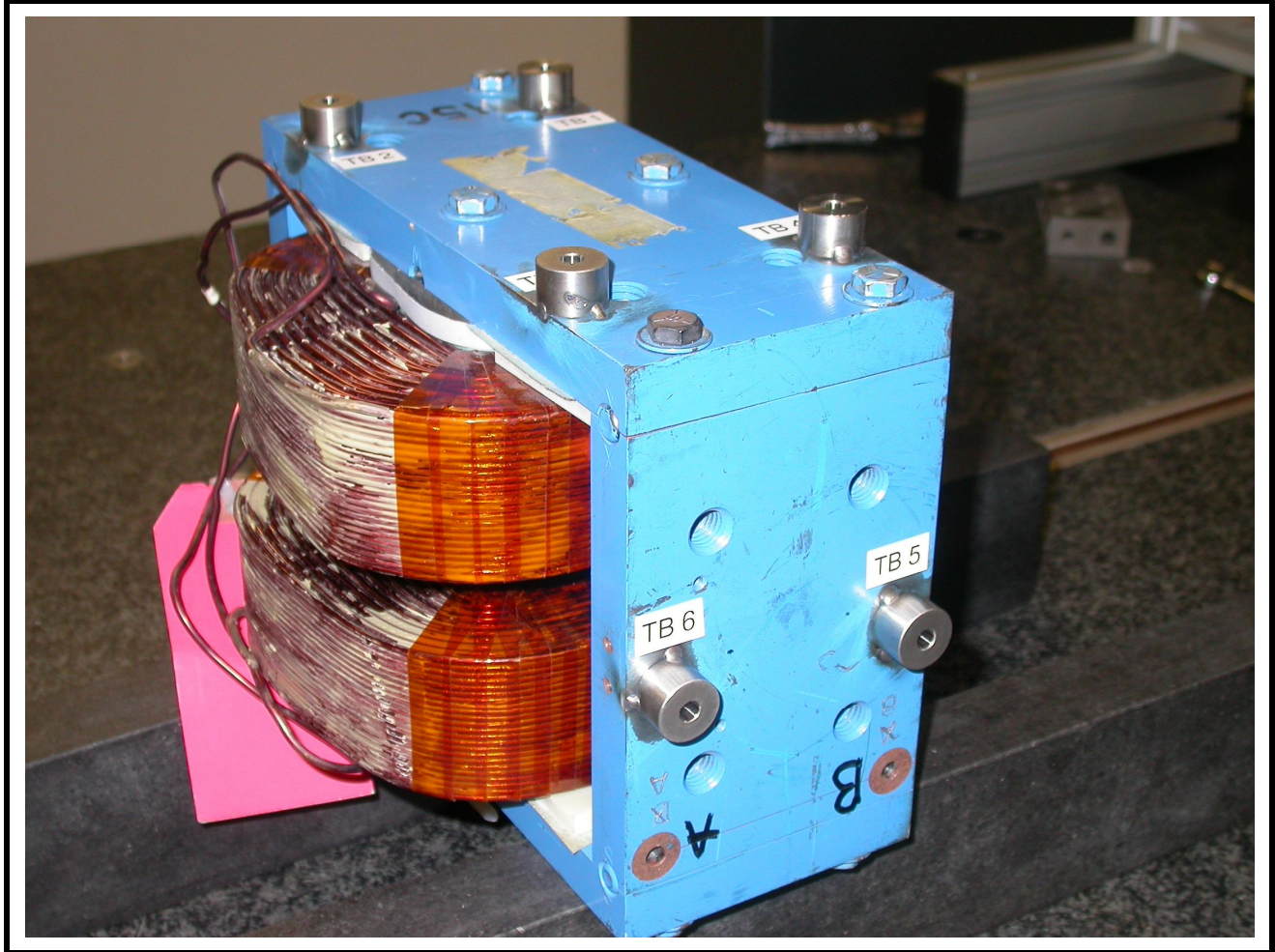




BLUE DIPOLE – FFTB STEERING MAGNET FIDUCIALIZATION REPORT

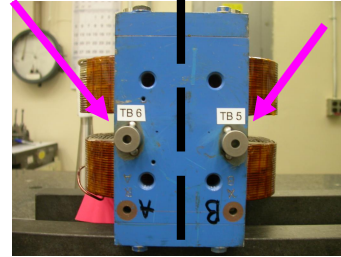


Inspector: Keith Caban
Customer: Dieter Walz
Date: Tuesday, July 07, 2009
Work Order/Charge No.: 09-3008
Serial Number: #5
Stamped Drwg #: AD-234-309-91
URL of Fiducial Report: <\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\BLUE-DIPOLE FFTB STEERING MAGNET\AD-234-309-91 SN-5.pdf>

Part Set-up – Coordinate System Set-up

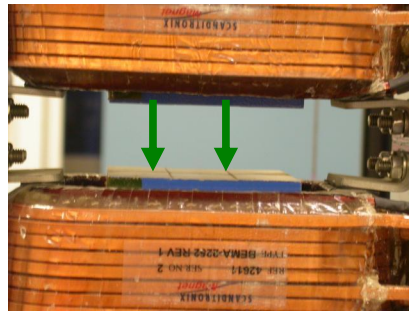
Planar Alignment

- Mid-Plane of the magnet



Spatial Alignment

- Plane along the bottom plane.

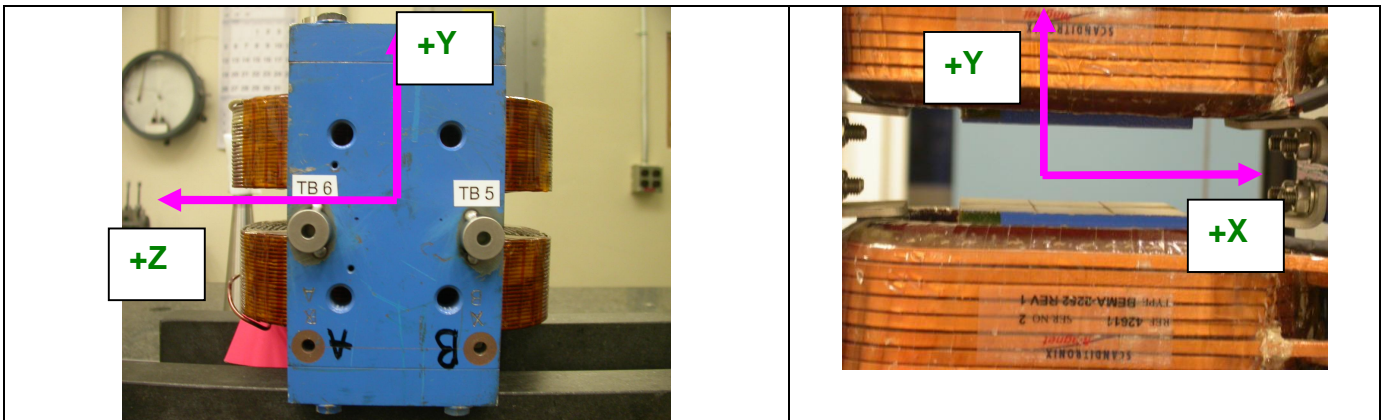


“Z” Zero

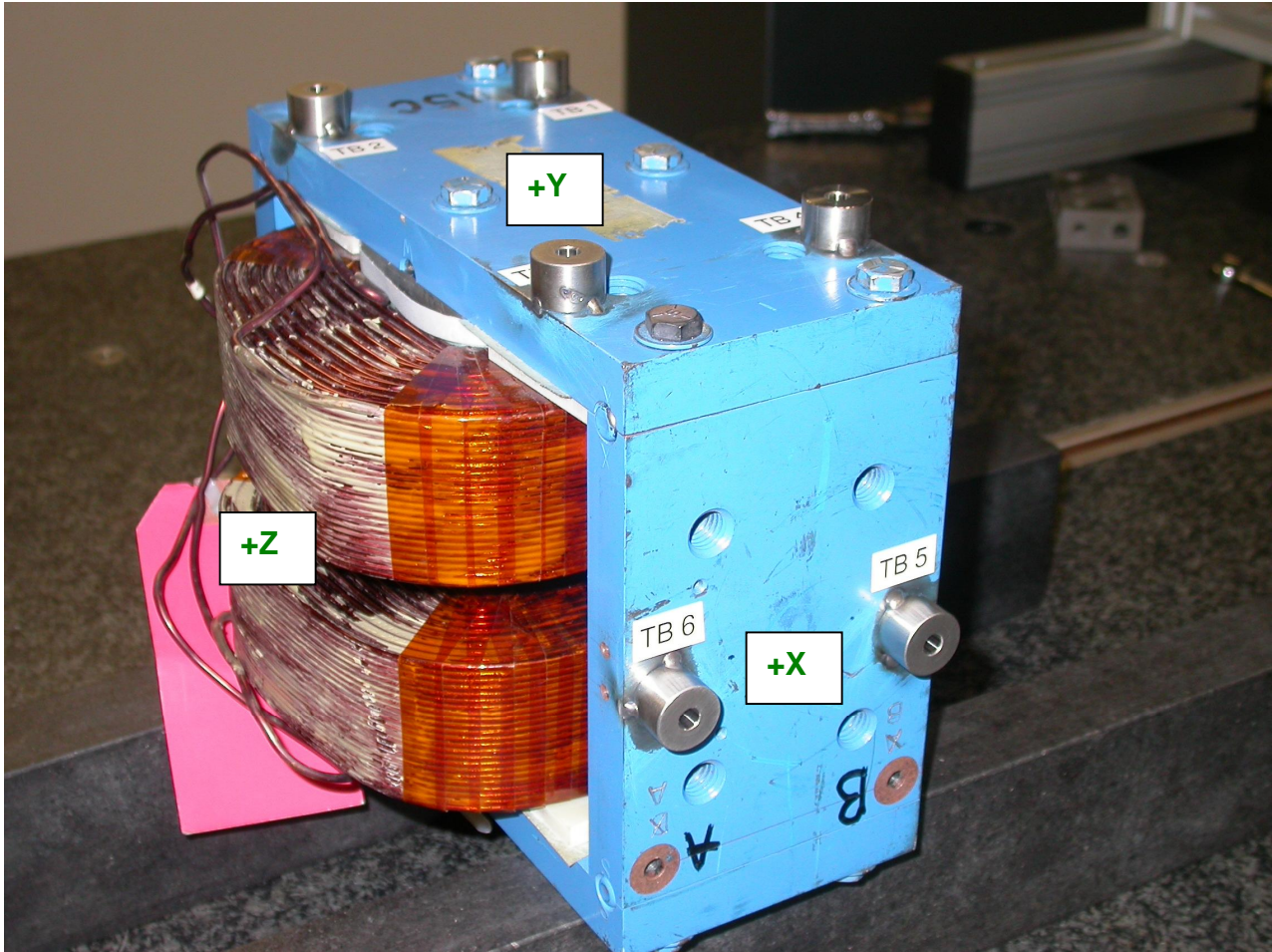
- Mid-Plane of the magnet. (see dashed planar alignment above)

“X” & “Y” Zero

- X zero is created by the symmetry point of the outer ends of the magnet where TB 5 & 6 are and opposite where the terminal strip is located.
- Symmetry plane of the pole planes
 - This creates Y- zero



Tooling Ball Measurements/Locations



Projected cylinder into 1" offset plane

Tooling Ball	FORM	n	X	Y	Z	b
TB 1	0.00037	0.25049	-3.36279	5.03236	-1.54171	0.00024
TB 2	0.00049	0.25038	-3.37093	5.03166	1.56614	0.00040
TB 3	0.00034	0.25041	3.11059	5.03376	1.66220	0.00030
TB 4	0.00020	0.25049	3.06211	5.03393	-1.63390	0.00031
TB 5	0.00017	0.25044	6.29631	-0.31174	-1.57890	0.00037
TB 6	0.00021	0.25046	6.29829	-0.22891	1.50684	0.00022

Pole Gaps

MIN POLE GAP	MAX POLE GAP	LOWER POLE C	UPPER POLE C
0.59780	0.60059	0.00069	0.00145

**** SEE ATTACHED DIPOLE FLATNESS PLOTS