



BLUE DIPOLE - ECHO 7 EXP. (3D4 MAGNET) FIDUCIALIZATION REPORT



Inspector: Keith Caban
Customer: Dieter Walz
Date: Monday, July 20, 2009
Work Order/Charge No.: 09-3008
Serial Number: #4
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-4.pdf>

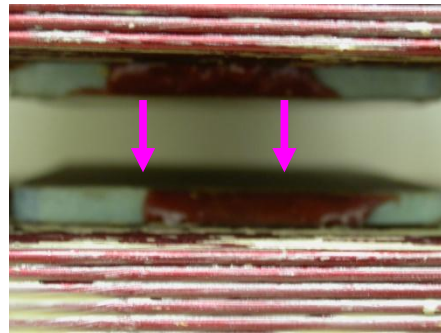
Part Set-up – Coordinate System Set-up

Planar Alignment

- Plane along bottom pole plane.

Spatial Alignment

- Plane of +Z face of magnet

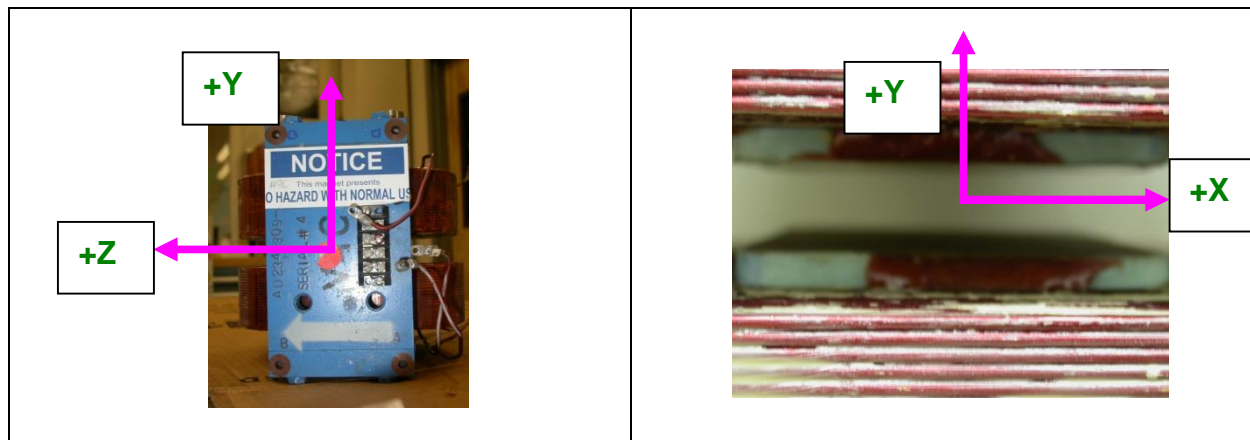
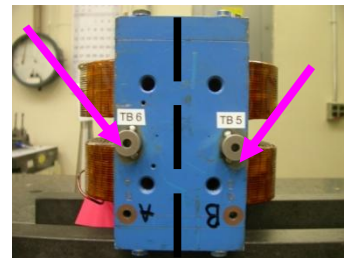


“Z” Zero

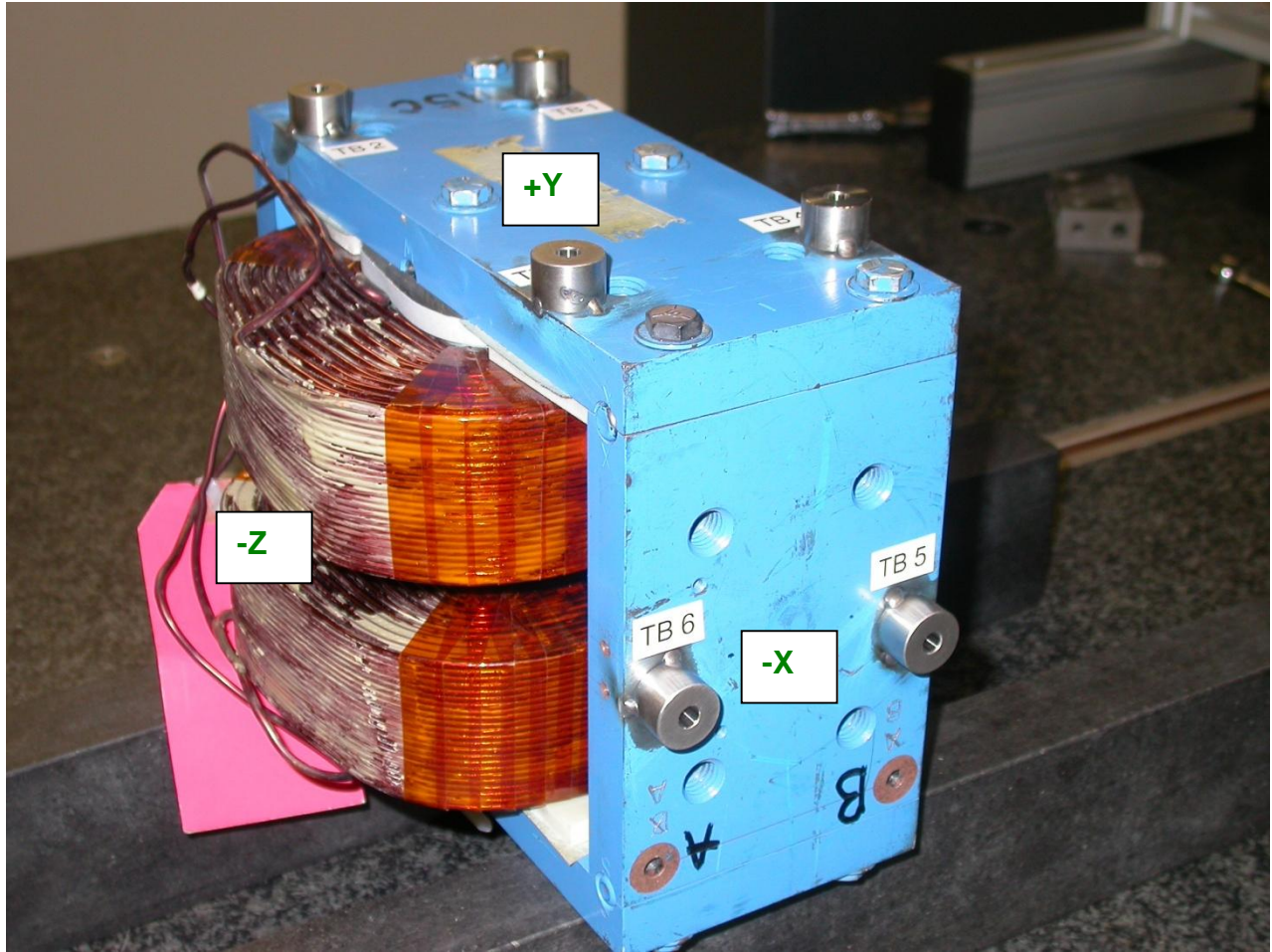
- Mid-Plane of the magnet. (see dashed planar alignment above)

“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	0.00040	0.25046	3.48652	5.02925	1.63371	0.00038
TB 2	0.00034	0.25044	3.47357	5.02923	-1.60505	0.00037
TB 3	0.00023	0.25047	-3.51175	5.02701	-1.62813	0.00040
TB 4	0.00022	0.25057	-3.50771	5.02701	1.65017	0.00015
TB 5	0.00026	0.25045	-6.26583	0.00721	1.64715	0.00044
TB 6	0.00028	0.25044	-6.26892	0.00109	-1.61752	0.00034

Pole Tip Distance/Gaps (at location X, Z)

Station	Gap Distance	X	Z
1	0.60022	-1.125	-1.375
2	0.60044	1.125	-1.375
3	0.60041	0.000	0.000
4	0.60112	-1.125	1.375
5	0.60099	1.125	1.375
Avg. Gap	0.60064	-	-