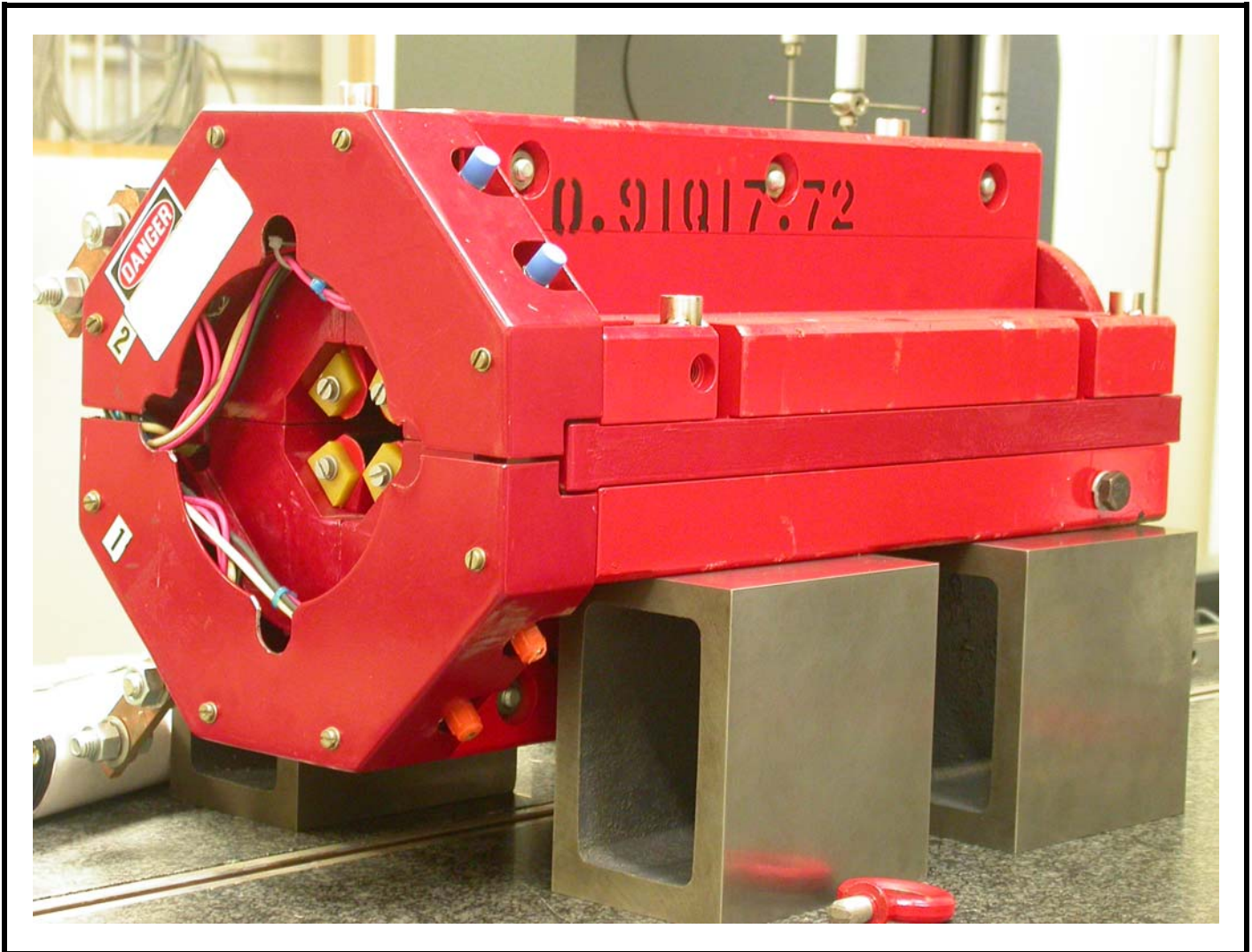


## LCLS '0.91Q17.72' LTU Quadrupole Magnet FIDUCIALIZATION REPORT



Inspector: Keith Caban  
Responsible Engineer: Carl Rago  
Date: Wednesday, January 24, 2007  
Work Order/Charge No.: 21699-1  
Serial Number: 000321  
URL of Fiducial Report: <\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS LTU QUAD\000321.pdf>

## Part Set-up – Coordinate System Set-up

### Spatial Alignment

- Geometric axis of the poles of the magnet.

### Planar Alignment

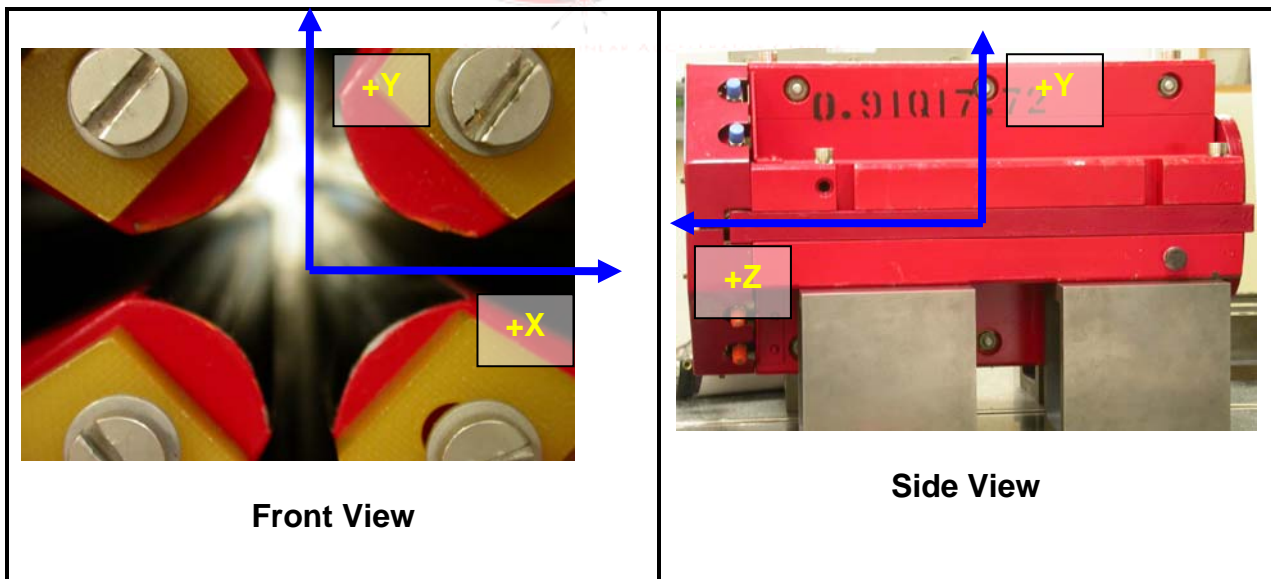
- Clocking plane where TB A,C, D, & E reside.

### “Z” Zero

- Mid-plane of the magnet (pole planes on each end).

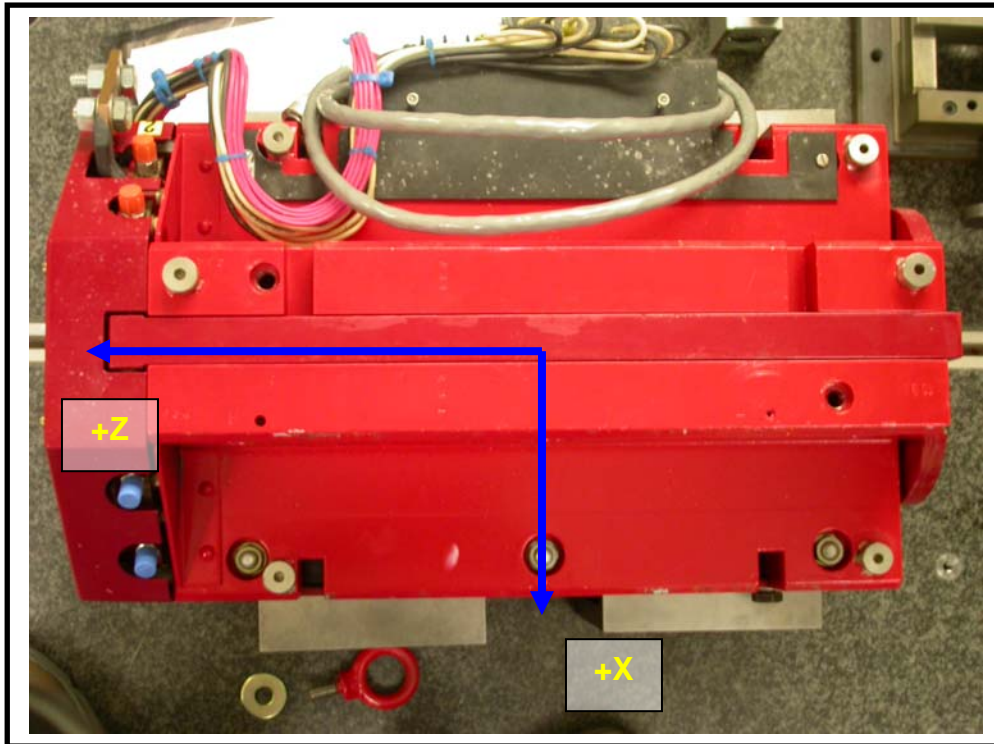
### “X” & “Y” Zero

- Geometric axis of the poles of the magnet.



## Tooling Ball Measurements/Locations

Top of magnet; view from “+Y”



Tooling Ball	FORM	DIAMETER	X	Y	Z
TB A	0.00051	0.49706	5.03647	3.69596	-8.07881
TB B	0.00023	0.49907	-1.40185	7.32100	-8.05235
TB C	0.00020	0.49844	-5.04503	3.70345	-8.06914
TB D	0.00022	0.49878	-5.26404	3.70419	6.28658
TB E	0.00022	0.49952	-1.41821	7.32164	8.04612
TB F	0.00049	0.49882	5.29018	3.69593	6.31721

**Pole Distances**

Pole	-Z side	+Z side	$\Delta$
A-C	0.90593	0.90627	0.00034
B-D	0.90615	0.90590	0.00025

