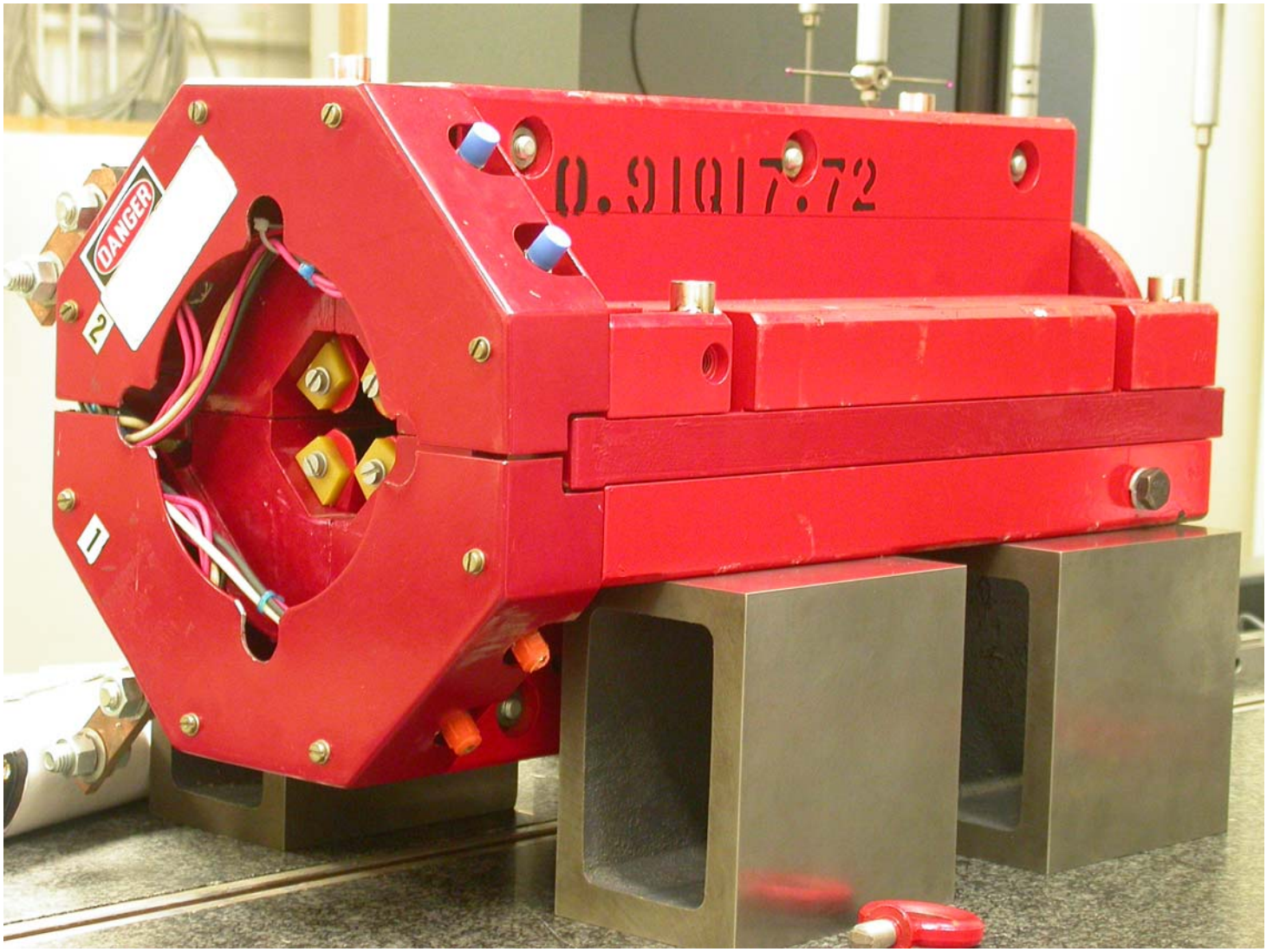


## LCLS '0.91Q17.72' LTU Quadrupole Magnet FIDUCIALIZATION REPORT



Inspector: Keith Caban  
Responsible Engineer: Carl Rago  
Date: Tuesday, January 16, 2007  
Work Order/Charge No.: 21699-1  
Serial Number: 000234  
URL of Fiducial Report: <\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS LTU QUAD\000234.pdf>

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

### Spatial Alignment

- Geometric axis of the poles of the magnet.

### Planar Alignment

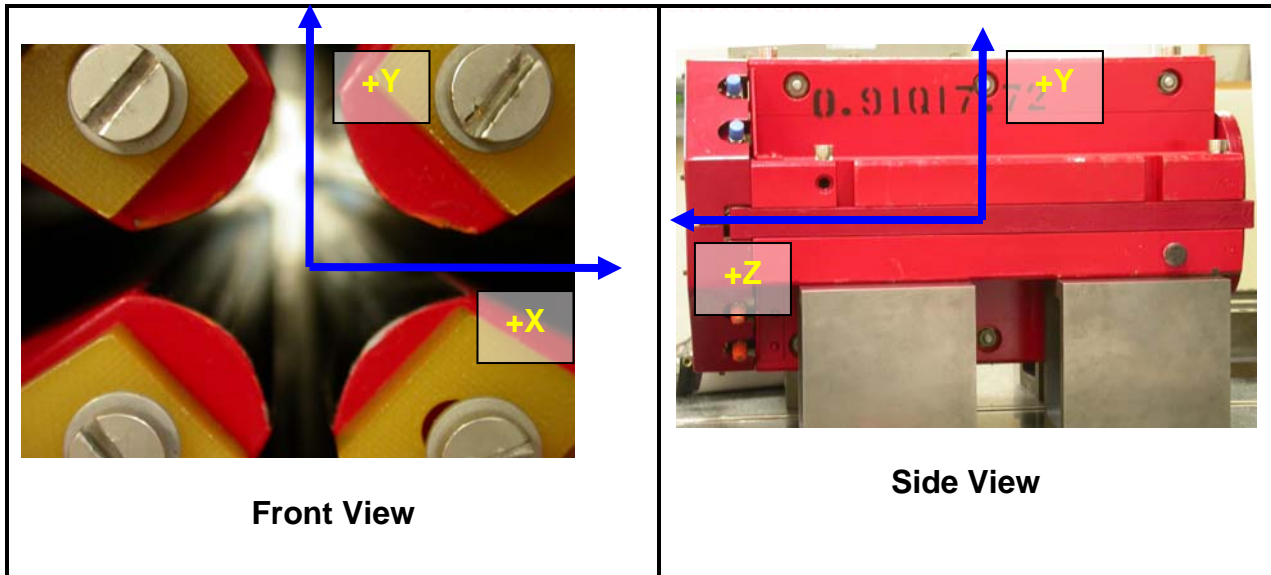
- Clocking plane where TB A,C, D, & E reside.

### “Z” Zero

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

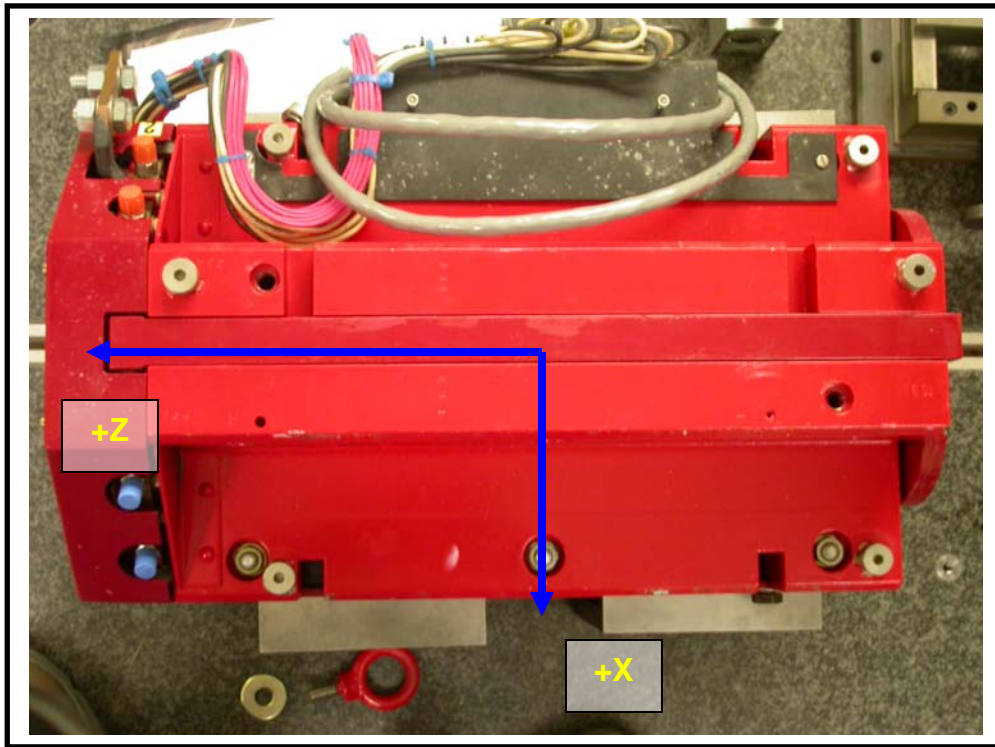
### “X” & “Y” Zero

- 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	0.00027	0.49812	5.04326	3.67831	-8.07818
TB B	0.00031	0.49801	-1.40138	7.30835	-8.08218
TB C	0.00030	0.49924	-5.00089	3.68920	-8.06771
TB D	0.00022	0.49871	-5.23833	3.68918	6.30218
TB E	0.00033	0.49870	-1.34167	7.30772	8.07319
TB F	0.00049	0.49771	5.24514	3.67669	6.28185

## Pole Distances

Pole	-Z side	+Z side	$\Delta$
A-C	0.90790	0.90630	0.00160
B-D	0.90748	0.90699	0.00049

