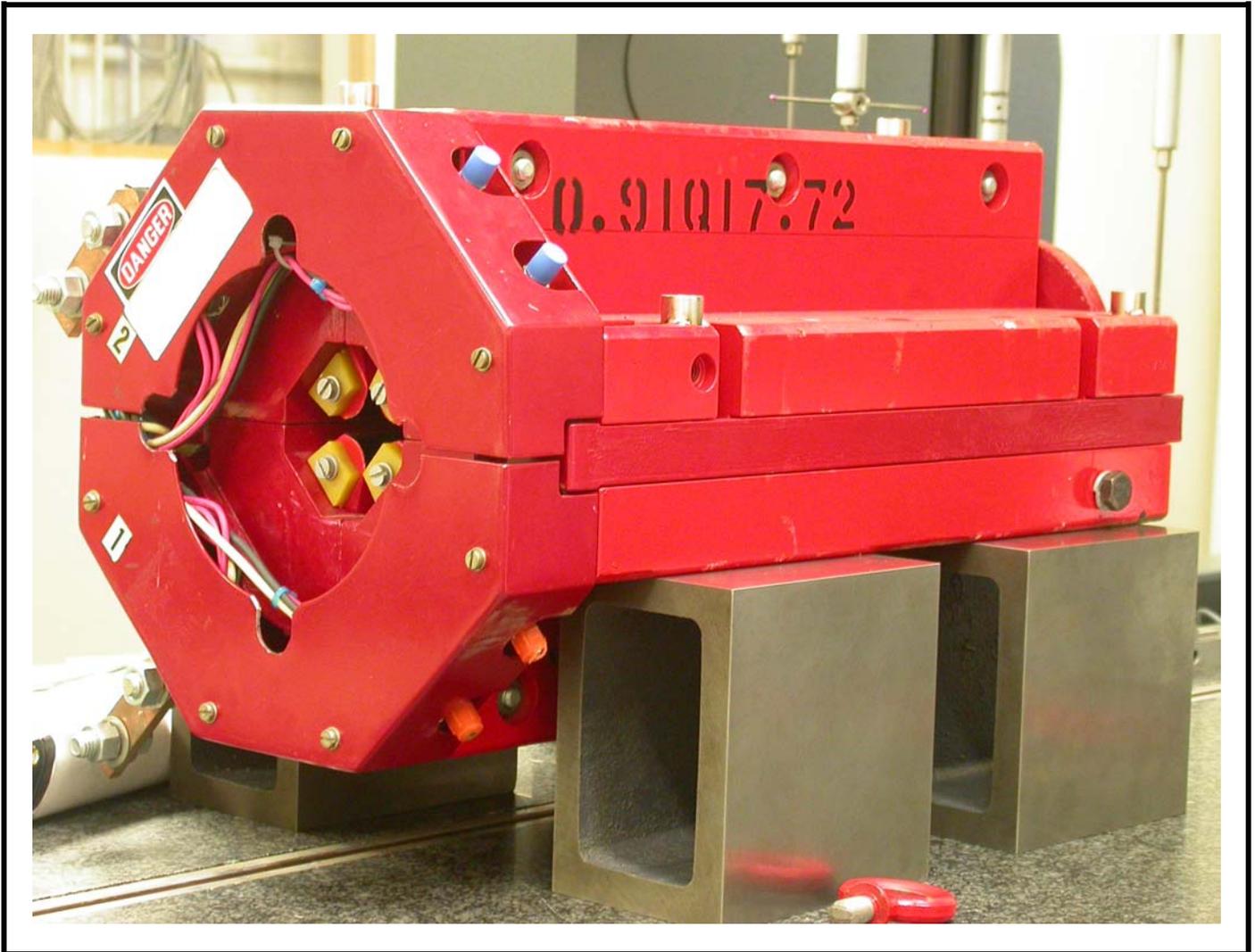


## LCLS '0.91Q17.72' LTU Quadrupole Magnet FIDUCIALIZATION REPORT



Inspector: Keith Caban  
Responsible Engineer: Carl Rago  
Date: Wednesday, February 28, 2007  
Work Order/Charge No.: 21699-1  
Serial Number: 000314  
URL of Fiducial Report: <\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS LTU QUAD\000314.pdf>

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

### Spatial Alignment

- Geometric axis of the poles of the magnet.

### Planar Alignment

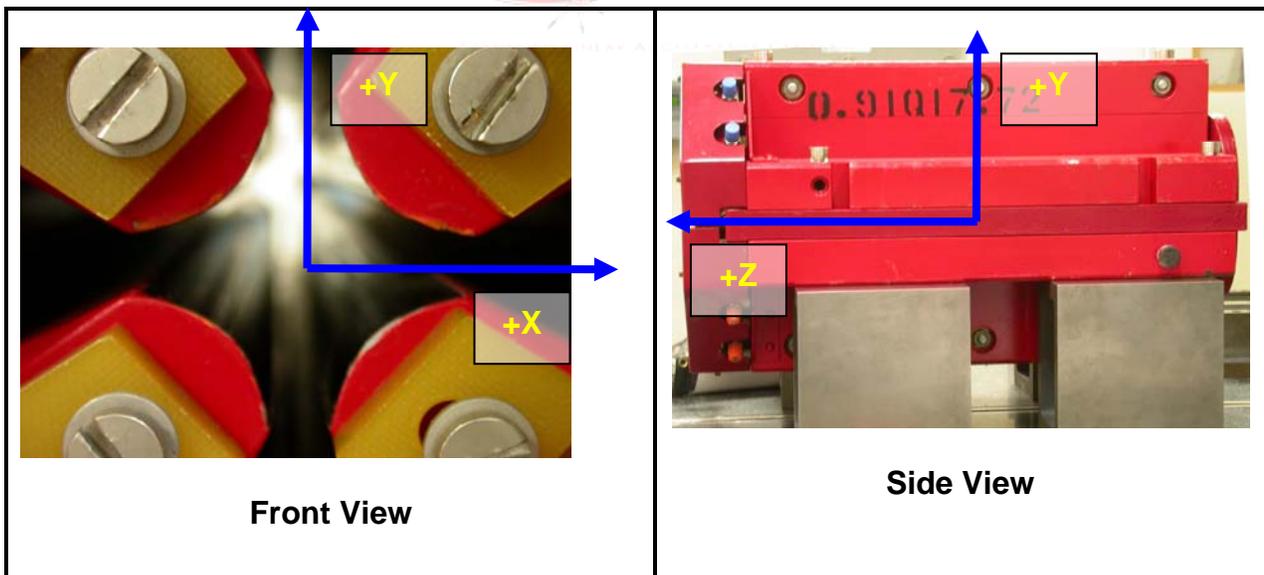
- Clocking plane where TB A,C, D, & E reside.

### “Z” Zero

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

### “X” & “Y” Zero

- Geometric axis of the poles of the magnet.

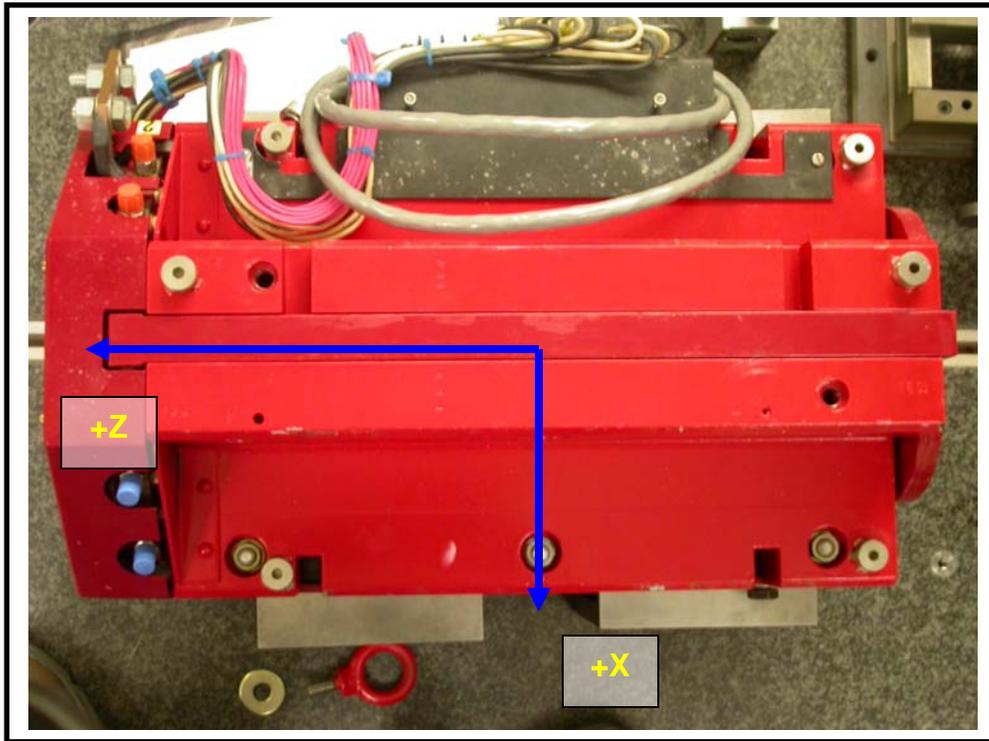


Front View

Side View

## Tooling Ball Measurements/Locations

Top of magnet; view from "+Y"



Tooling Ball	FORM	DIAMETER	X	Y	Z
TB A	0.00019	0.49742	5.05497	3.71420	-8.09705
TB B	0.00035	0.49833	-1.45509	7.31688	-8.05082
TB C	0.00009	0.49973	-5.04517	3.69186	-8.05783
TB D	0.00052	0.49808	-5.30611	3.69181	6.27965
TB E	0.00003	0.49996	-1.43912	7.31738	8.06021
TB F	0.00004	0.49837	5.30018	3.71439	6.30034

## Pole Distances

Pole	-Z side	+Z side	$\Delta$
A-C	0.90711	0.90685	0.00026
B-D	0.90693	0.90614	0.00079

