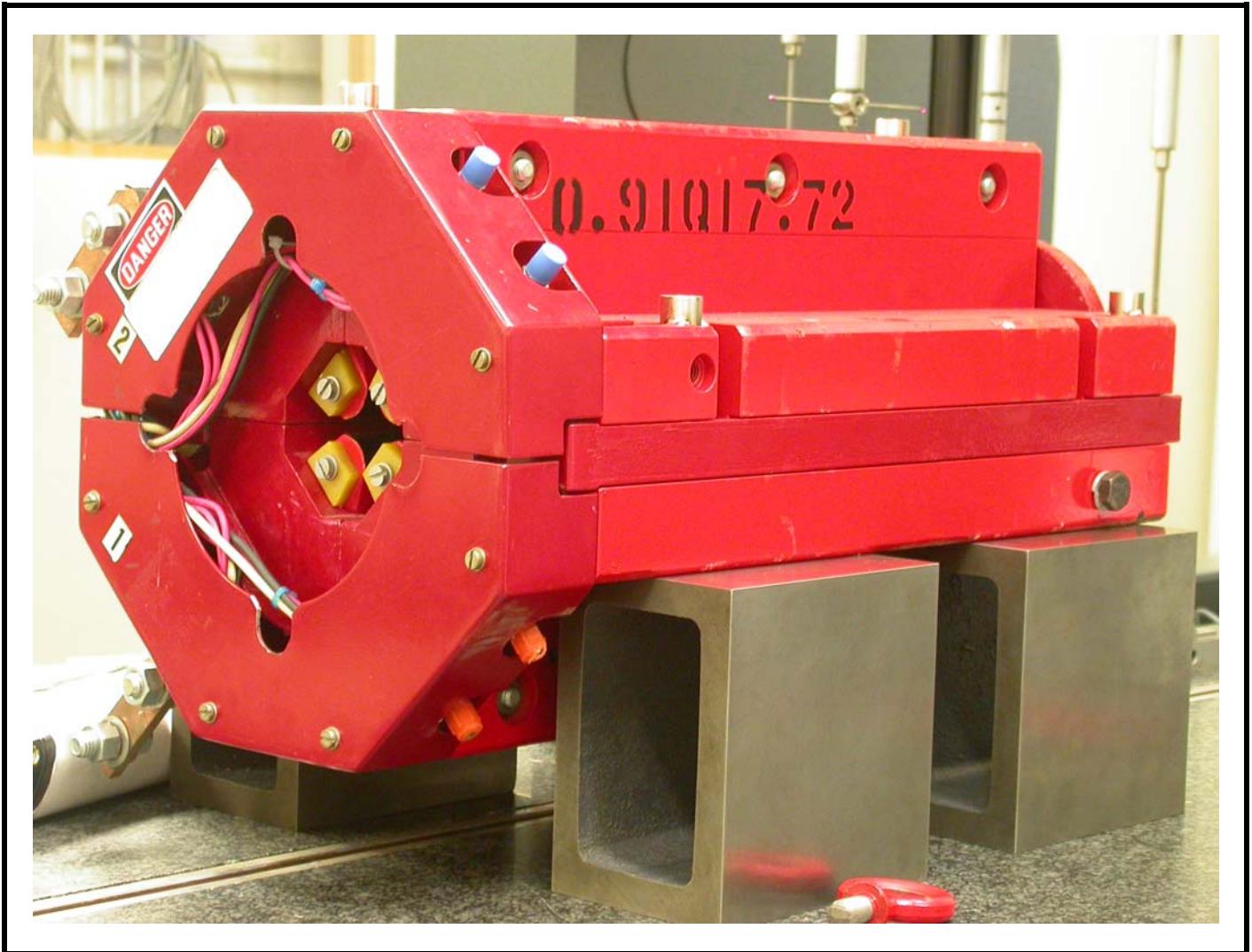


## LCLS '0.91Q17.72' LTU Quadrupole Magnet FIDUCIALIZATION REPORT



Inspector: Keith Caban  
Responsible Engineer: Carl Rago  
Date: Monday, February 27, 2007  
Work Order/Charge No.: 21699-1  
Serial Number: 000306  
URL of Fiducial Report: <\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS LTU QUAD\000306.pdf>

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

### Spatial Alignment

- Geometric axis of the poles of the magnet.

### Planar Alignment

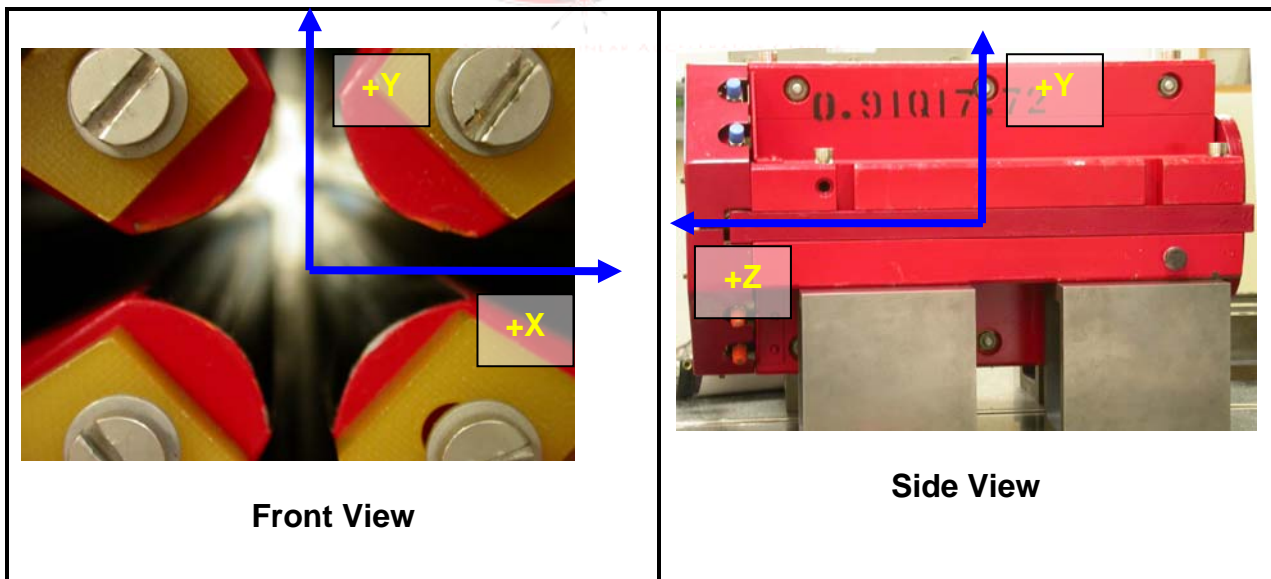
- Clocking plane where TB A,C, D, & E reside.

### “Z” Zero

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

### “X” & “Y” Zero

- Geometric axis of the poles of the magnet.

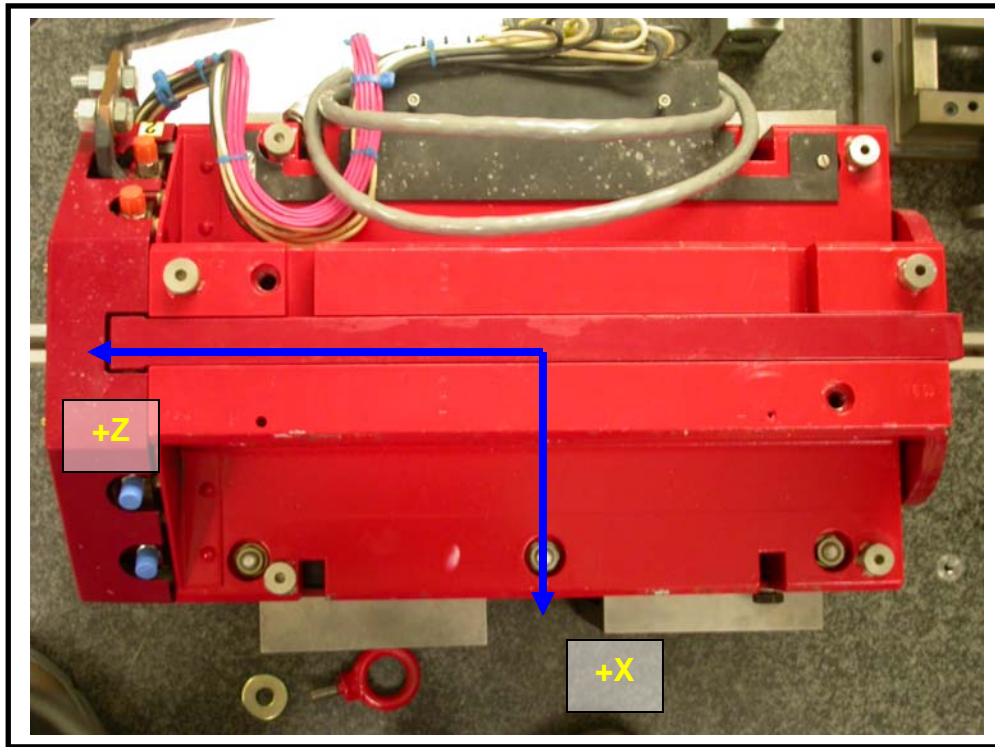


Front View

Side View

## Tooling Ball Measurements/Locations

Top of magnet; view from “+Y”



Tooling Ball	FORM	DIAMETER	X	Y	Z
TB A	0.00010	0.49742	5.06074	3.67454	-8.03187
TB B	0.00044	0.49725	-1.31956	7.30870	-8.02764
TB C	0.00022	0.49751	-4.94951	3.69015	-8.02944
TB D	0.00017	0.49767	-5.24465	3.69162	6.30054
TB E	0.00026	0.49917	-1.30606	7.30512	8.04773
TB F	0.00007	0.49922	5.26192	3.67317	6.30941

## Pole Distances

Pole	-Z side	+Z side	$\Delta$
A-C	0.90758	0.90711	0.00057
B-D	0.90779	0.90862	0.00083

