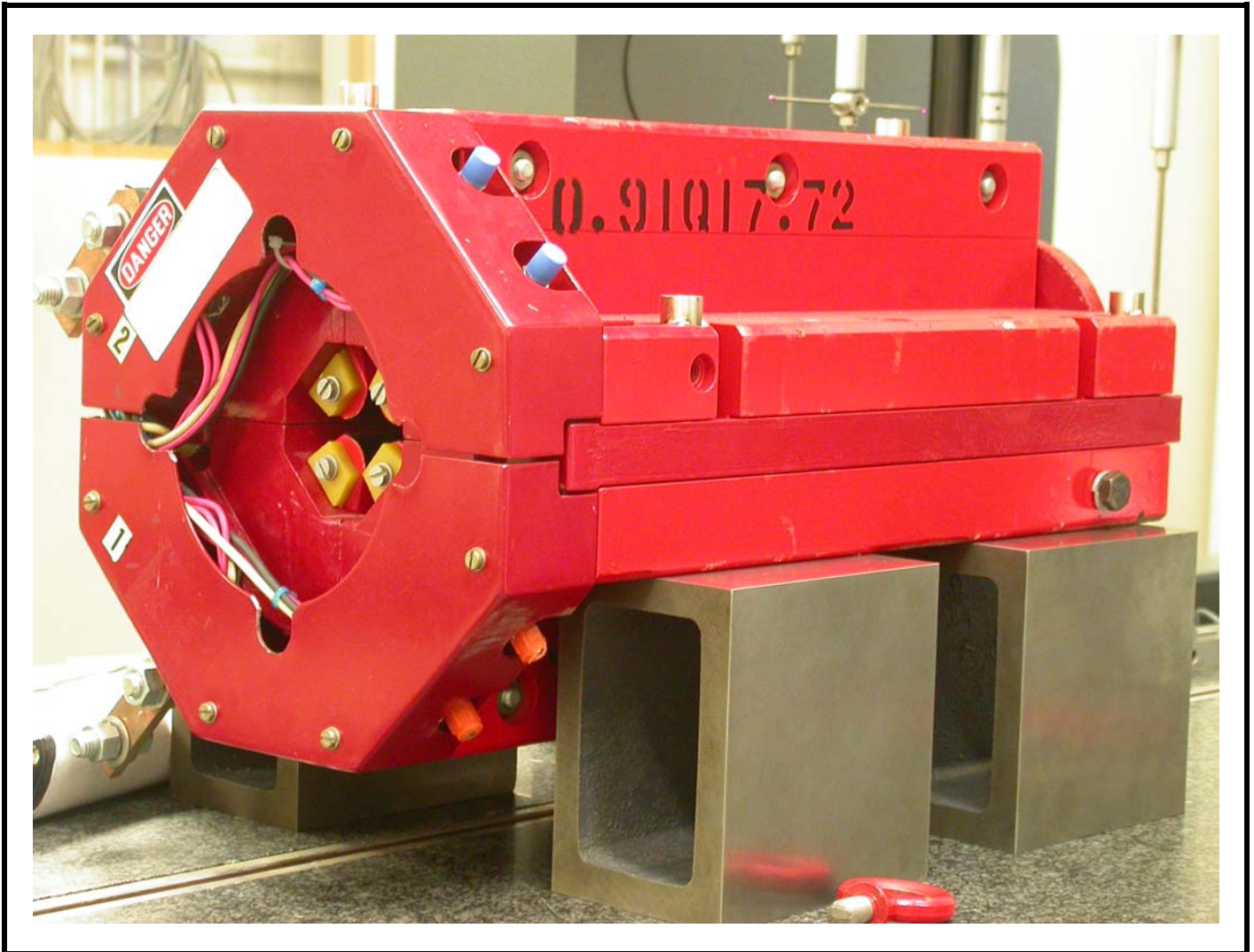


## LCLS '0.91Q17.72' LTU Quadrupole Magnet FIDUCIALIZATION REPORT



Inspector: Keith Caban  
Responsible Engineer: Carl Rago  
Date: Wednesday, February 21, 2007  
Work Order/Charge No.: 21699-1  
Serial Number: 000269  
URL of Fiducial Report: <\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS LTU QUAD\000269.pdf>

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

### Spatial Alignment

- Geometric axis of the poles of the magnet.

### Planar Alignment

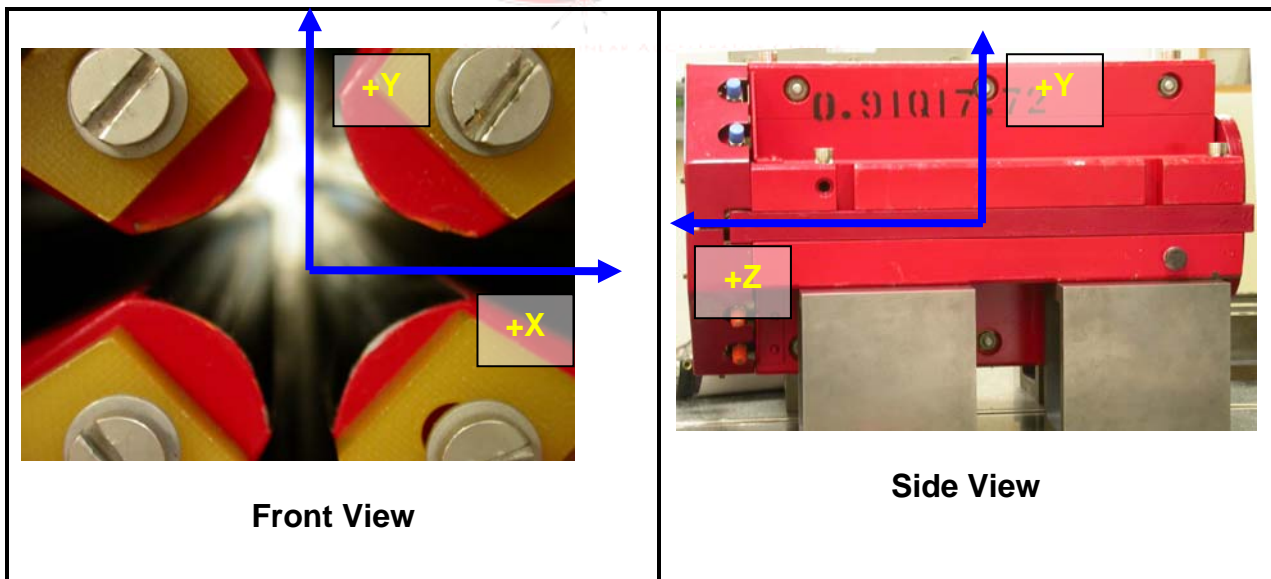
- Clocking plane where TB A,C, D, & E reside.

### “Z” Zero

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

### “X” & “Y” Zero

- Geometric axis of the poles of the magnet.

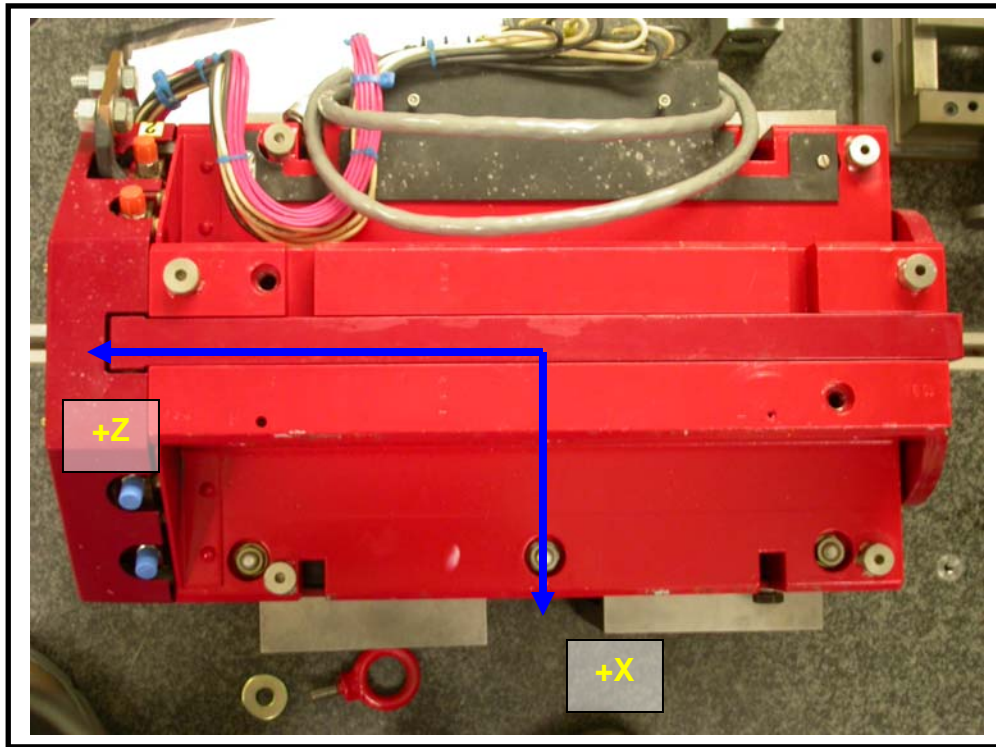


Front View

Side View

## Tooling Ball Measurements/Locations

Top of magnet; view from "+Y"



Tooling Ball	FORM	DIAMETER	X	Y	Z
TB A	0.00039	0.49690	5.04055	3.69963	-8.04079
TB B	0.00008	0.49794	-1.40055	7.31459	-8.04370
TB C	0.00008	0.49935	-5.02864	3.70890	-8.04076
TB D	0.00046	0.49692	-5.28813	3.70528	6.29310
TB E	0.00024	0.49831	-1.40888	7.30934	8.05351
TB F	0.00021	0.49806	5.28575	3.69809	6.29598

## Pole Distances

Pole	-Z side	+Z side	$\Delta$
A-C	0.90917	0.90490	0.00427
B-D	0.90980	0.90557	0.00423

