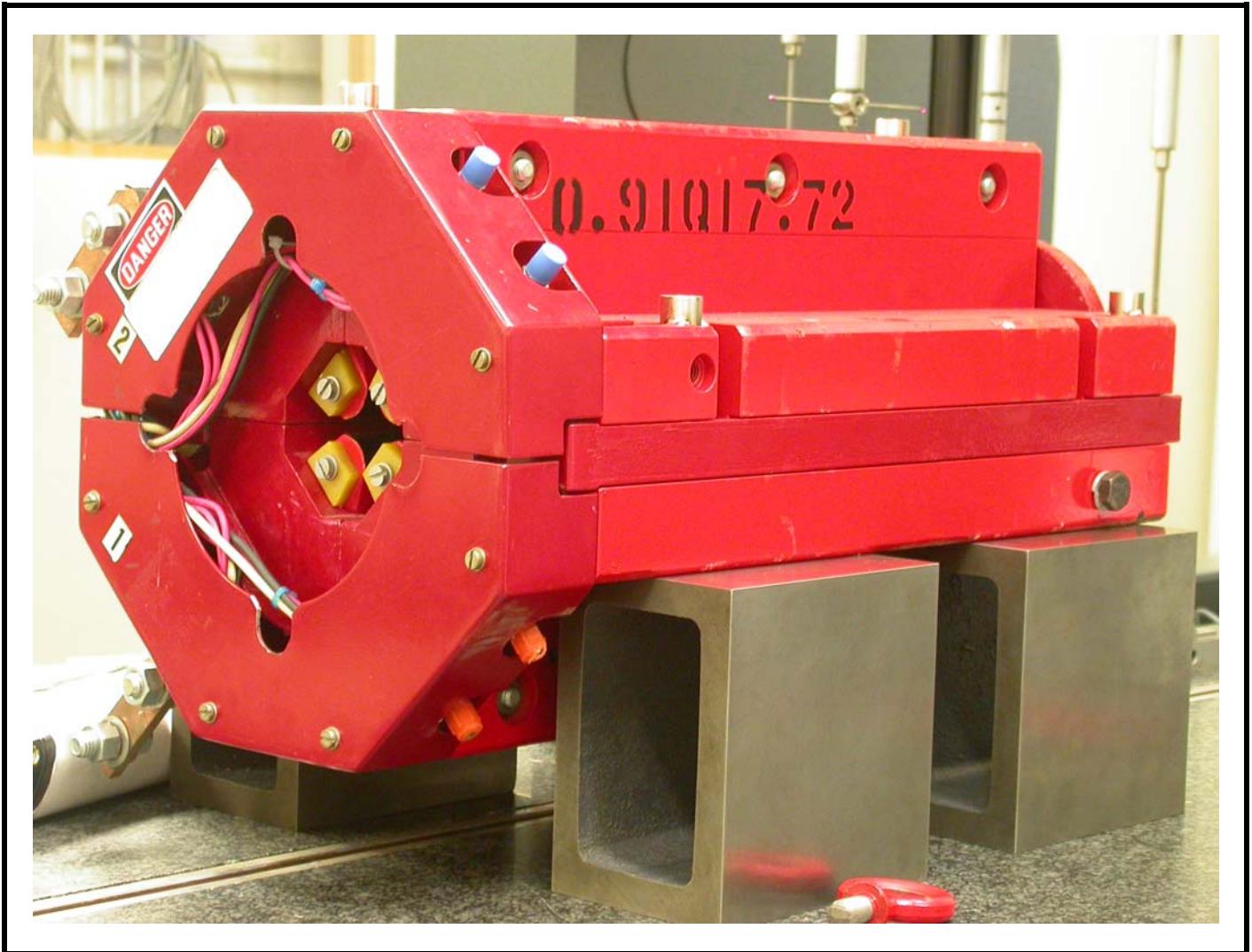


## LCLS '0.91Q17.72' LTU Quadrupole Magnet FIDUCIALIZATION REPORT



Inspector: Keith Caban  
Responsible Engineer: Carl Rago  
Date: Thursday, March 01, 2007  
Work Order/Charge No.: 21699-1  
Serial Number: 000316  
URL of Fiducial Report: <\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS LTU QUAD\000316.pdf>

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

### Spatial Alignment

- Geometric axis of the poles of the magnet.

### Planar Alignment

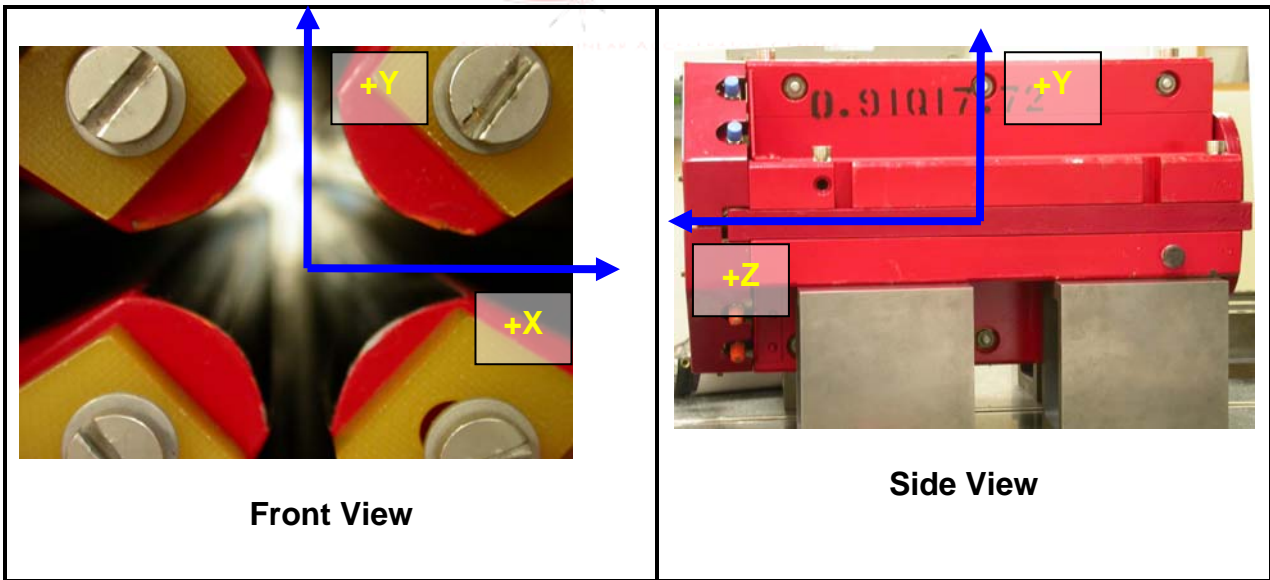
- Clocking plane where TB A,C, D, & E reside.

### “Z” Zero

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

### “X” & “Y” Zero

- Geometric axis of the poles of the magnet.

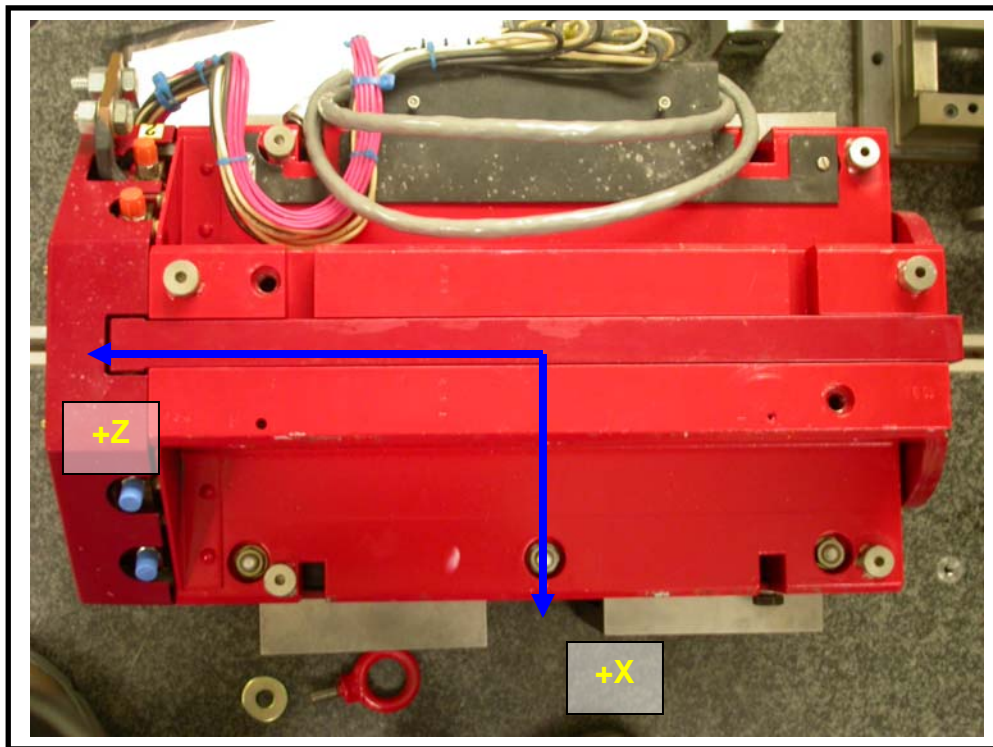


Front View

Side View

## Tooling Ball Measurements/Locations

Top of magnet; view from “+Y”



Tooling Ball	FORM	DIAMETER	X	Y	Z
TB A	0.00050	0.49690	5.00770	3.70930	-8.07092
TB B	0.00013	0.49760	-1.36319	7.32516	-7.96878
TB C	0.00034	0.49723	-4.97299	3.70126	-8.06870
TB D	0.00009	0.49723	-4.97299	3.70126	6.27280
TB E	0.00020	0.49807	-1.33486	7.32735	8.01484
TB F	0.00012	0.49955	5.24907	3.70696	6.29137

## Pole Distances

Pole	-Z side	+Z side	$\Delta$
A-C	0.90680	0.90691	0.00011
B-D	0.90707	0.90734	0.00027

