

LCLS-II-HE Fiducialization Report SXRSS C-MAGNET ASSY



Inspector : K. Caban
Engineer :S. Anderson
Drawing No. : DSG-000063372 R00
Barcode # : 4593
Mfg. S/N : SN 03

Coordinate System Setup

Spatial Alignment

Constructed using the Midplane of Upper (+Y) and Lower (-Y) Pole with the Midplane of the 2 Poles sets Y Zero and the Y+ Direction points towards the Tooling Balls/Terminal Strip.

Planar Alignment

Constructed using the Upstream (-Z) and Downstream (+Z) Ends of the poles. The Midplane from both ends sets Z Zero and +Z points towards TB 3/4 Side.

Coordinate Origins

X Origin - Symetry Plane between side poles planes (planes parallel to the Coils)

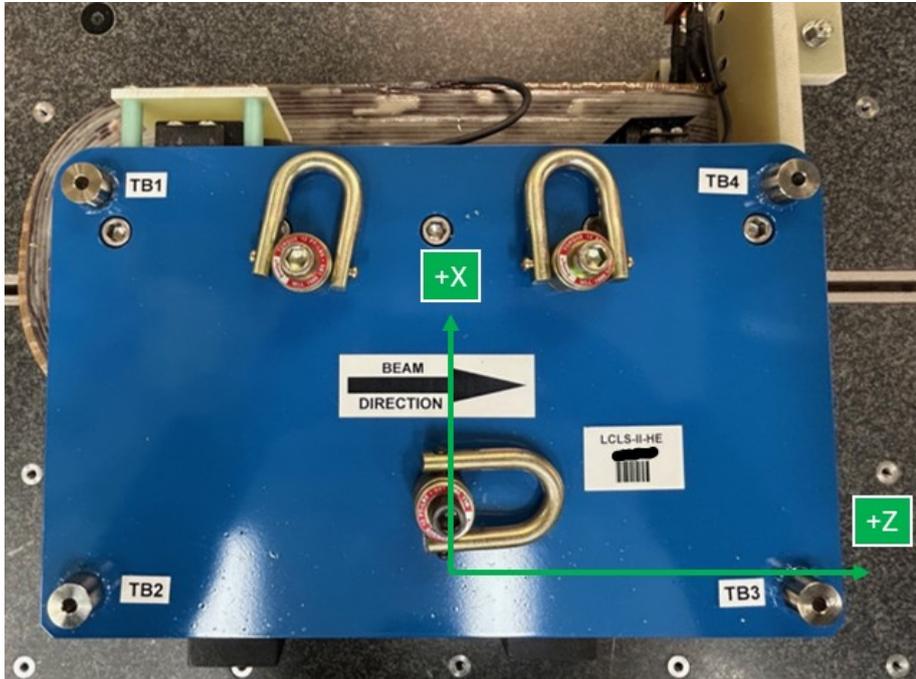
Y Origin - Symetry Plane between the Poles

Z Origin - Symmetry plane between Up Stream and Down Stream end surfaces

Barcode # : 4593

MFG S/N: SN 03

Tooling Ball Locations



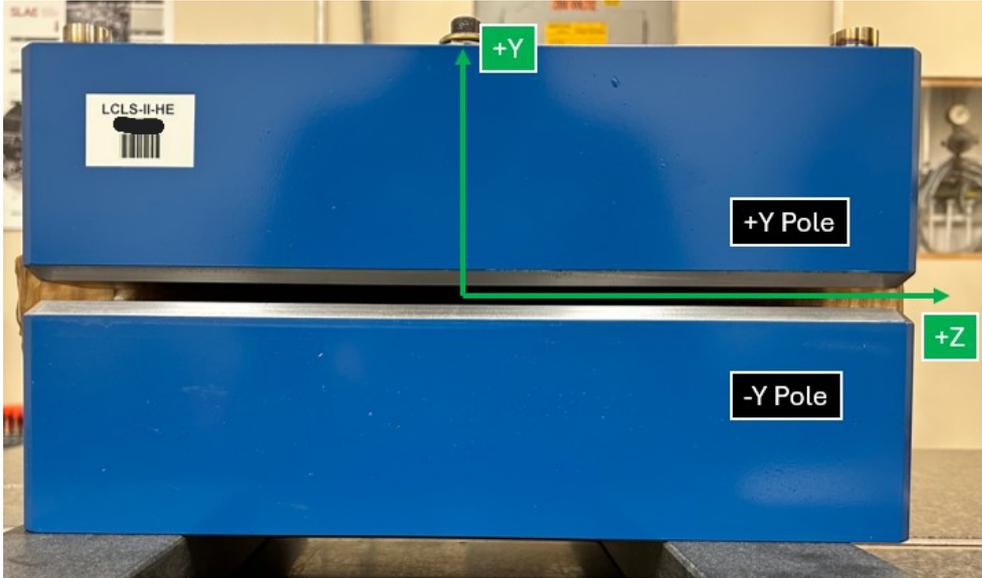
| Tooling Ball | X Coord. | Y Coord. | Z Coord. |
|--------------|----------|----------|----------|
| TB 1 | 6.9408 | 5.4039 | -6.3674 |
| TB 2 | -0.4210 | 5.4027 | -6.3659 |
| TB 3 | -0.4272 | 5.4030 | 6.3682 |
| TB 4 | 6.9413 | 5.4036 | 6.3729 |
| TB A | 6.9411 | 4.7164 | -6.3677 |
| TB B | -0.4216 | 4.7152 | -6.3664 |
| TB C | -0.4267 | 4.7155 | 6.3685 |
| TB D | 6.9408 | 4.7161 | 6.3728 |

Tooling Ball Locations (1-4) are 1 inch above Tooling Ball Plane
 Tooling Ball Locations (A-D) are 5/16 inch above Tooling Ball Plane
 Dimensions in Inch

Barcode # : 4593

Mfg. S/N : SN 03

Pole Gap Measurements, Flatness & Parallelism



| | -Y Pole Fltns | +Y Pole Fltns | Pole Parallel | Avg. Gap | Min. Gap | Max. Gap |
|-----------|---------------|---------------|---------------|----------|----------|----------|
| POLE DATA | 0.0002 | 0.0002 | 0.0003 | 0.3158 | 0.3156 | 0.3161 |

Dimensions in Inch

Barcode # : 4593
MFG S/N: SN 03