

Open Issues

Problems on parts and components (INFN-Pisa)

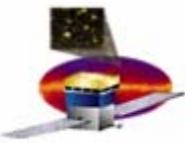
1. Difficulties to install the sidewall due to not perfect alignment between trays reference holes, thermal boss and structural side treaded holes.
2. Some trays thread-holes were found to be partially closed by glue.
3. Dark box over tower assembly jig installation not safe.

Problems on parts and components (SLAC)

1. N° 8 Studs not installed on the tower (see NCR-104).
2. Some modification to Cones Installation Plan required.
3. Tie down strap (LAT-DS-02090) have wrong fixing holes (see NCR-109).
4. Connector mount: screw final torque too high (NCR/FM/INFN/PI/116).
5. Tower need grounding (probably on Base Plate).
6. Top Bracket Nest: wrong screws and not OK for Vacuum environment (NCR/FM/INFN/PI/117)

Electrical Tests

1. LPT Electrical test performed instead of CPT (see NCR-104):
 - this was done to save time and leave the tower to the alignment team as soon as possible, given the team constraints from their travel schedule. A CPT is going on.
2. Connector savers on TEM side do not remain attached.
3. Cable 3: after bending and installation no GTRC could be read from any layer - further investigation is going on to locate the problem.

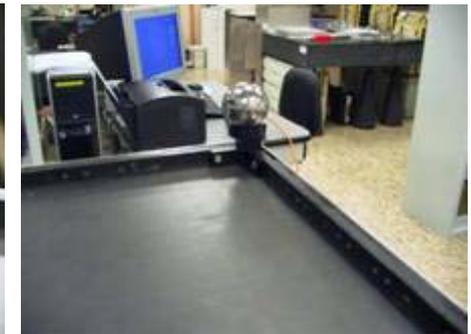
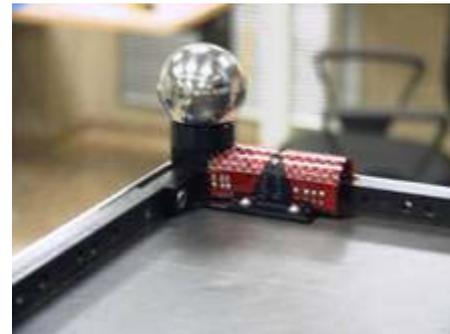


Open Issues – Cables Assembly/Bending

1. Cables on Cable Holding Plate are twisted (figures 1 and 2). Concerns about this configuration during vibe tests.
2. Modification of Cactus Arm bending tool required.
3. New bending tool necessary for last arms of C-2 and C-3 cables.
4. Difficulties to install the bi-adhesive under cables because of excessive peeling.
5. Improve assembling of Top Bracket and Cables Top Bending (figures 3 and 4):
 - Tape needs to be placed over the gaps between the closeouts on the top tray and the sidewalls to prevent object falling.
 - Care needs to be taken to push the cables all the way against the clip when placing the mid screw.
 - After pushing the cable down there was no more interference and the third screw could be installed (figure 4).
 - The holes -X-Y corner bracket didn't match up with the holes in the top tray.
 - Use adhesive tape to attempt to hold the cables to the brackets doesn't appear to be necessary or helpful.
6. Top Bending cables clip difficult to fix (see NCR-118).
7. Cable clip internal side should have kapton and all the edges should be rounded.
8. See list of critical issues and suggestions of September 9th (word file attached).

Tower Zero Assembly Activities

Top Bending and installation of Top Tooling Ball



Tower Zero CMM measurements confirm that the Tower is well done:

Tower offset from BCS to TCS

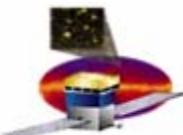
134 microns

Tower top corner max. shift

288 microns

Tower bottom corner max. shift

212 microns



Tower Zero Assembly Activities

Cable Holding Plate assembling before Tower Turn Over

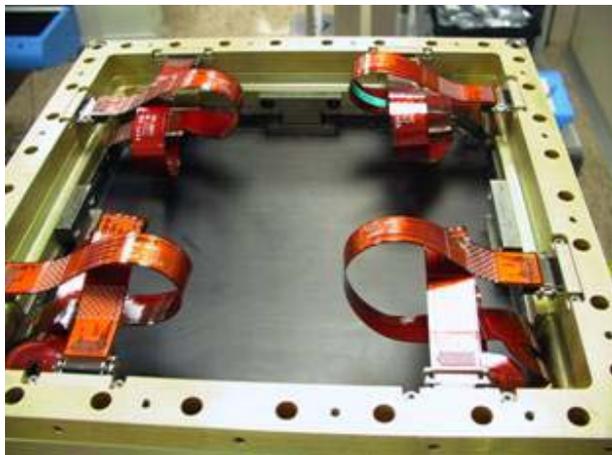


Figure 1



Figure 2

Top Cables Bending

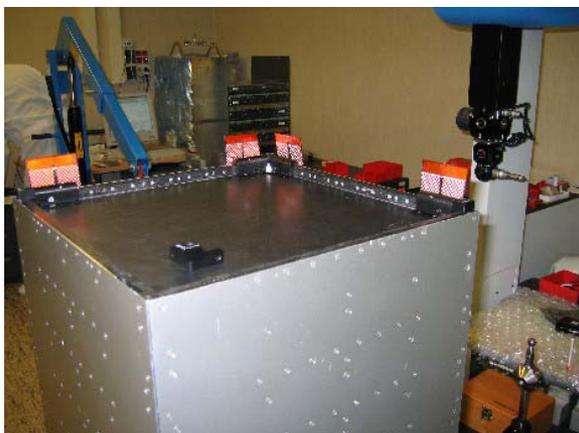


Figure 3



Figure 4