

## STAR Trigger Central Trigger Barrel Tray Removal and Replacement Procedure

Leo Greiner, Geary Eppley  
June 28, 1999

The STAR Trigger CTB Trays each contain two scintillator slats with one photomultiplier tube and base per slat. If a tray needs to be replaced or repaired the following procedure should be used. We do have functional spare trays at BNL ready for use. It is recommended that these good trays be simply swapped for the malfunctioning tray and the malfunctioning tray be fixed at a STAR lab by qualified people. This procedure is written for this approach.

Before swapping trays have a tested good tray in position near the STAR detector to replace the malfunctioning tray.

### Removal of tray:

1. Turn the HV off on the entire CTB via software control.
2. Turn off the HV mainframe power switch in rack 1B4 and post warning sign.
3. Set up ladders and / or rigging or man-lifts appropriate to the safe removal of the tray. This will depend on the location of the tray that needs replacing. All personnel involved should have the appropriate training for the task.
4. Remove the 6 cables ( 2 x HV, 2 x Signal and 2 x LED pulser) from the connectors on the end of the tray.
5. Remove the ground wire from the tray body.
6. Carefully slide the tray out keeping it parallel to the track on the TPC.
7. Remove the tray and carefully lower it to the ground.

### Installation of tray:

1. If needed, install a positioning tray stop on the good tray.
2. Carefully raise the good tray into position such that it is parallel to its track on the TPC.
3. Carefully slide the tray in keeping it parallel to the track on the TPC.
4. Re-attach the ground wire from the tray body.
5. Re-connect the 6 cables ( 2 x HV, 2 x Signal and 2 x LED pulser) to the correct connectors on the end of the tray.
6. Remove the ladders / rigging or manlifts.
7. Remove the sign and turn on the HV mainframe in rack 1B4.
8. Turn the HV on and test the tray.