

Procedures for recovering beam from a trip

0.1 Contacts

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0.2 Run Conditions

After bringing the beam initially, we stay in the following safe run conditions until we understand the beam characteristics well.

Safe Conditions:

- Protection collimator with 3 mm gap is in.
- Target is in.
- SVT layers 1-3 is in retracted-position: L1 at 4.5 mm, L2 at 5.0 mm, L3 at 5.5 mm.
- SVT LV is on and bias voltage is at 60 V.
- ECal is up.
- Beam current is at least 50 nA so that BPM can read.

Beam trip will turn off SVT LV and bias voltages.

0.3 Procedures for recovering beam from a trip

1. Accelerator operations correct problem and using standard procedures bring beam down to Hall B dump through HPS. Ramp up beam current slowly.

2. Monitor beam recovery after the trip: BPMs and halo monitors.
3. Check ECal rates and hit pattern.
4. Turn on SVT LV and bias voltage to 60 V.

If above studies during the initial data taking period show that the beam recovery is benign, change the safe operating conditions.

- Increase SVT bias voltage to 200 V.
- Increase beam current incrementally to 200 nA.
- Move SVT layers 1-3 closer to the beam.