Purpose: In Stereotactic treatment of cranial lesions multiple non-coplanar beams or arcs are frequently used which can give rise to collision problem and consequently render a treatment plan undeliverable. In SBRT treatments for very large patients the same issue can also happen even if the treatment plan doesn't involve couch kick. We propose a easy-to-use, patient plan specific method to determine whether a certain plan will have collision problem and the parametric changes needed to avoid it. **Method and Materials:** Treatment couch dimension and relative position to immobilization device was measured, as well as the Novalis gantry head dimension and its clearance from the isocenter. A program was written to calculate, for a given gantry, couch, and collimator angle, the coordinates of the four corners of the front surface of the gantry head in the patient CT coordination system. Thus the collision can be checked by simply looking up the corresponding CT slice images with the treatment couch added. The projection of gantry head front surface on all slices are calculated and checked to assure that there's no collision with the couch or patient body. **Results:** We tested several cases of different disease sites and techniques and the method proposed here can detect the potential collision problem and also offer the advice regarding how much change needs to be made. **Conclusion:** The method proposed here can be easily implemented to provide institution customized, patient specific collision check for external beam radiation therapy plans, saving the trouble of manually checking for collision. Furthermore, it can be implemented with matlab or integrated with iPlan software to automatically check the collision and find correct setup way to avoid collision in SBRT cases.