

Design of the L0-L1 Cooling System for Run2B.

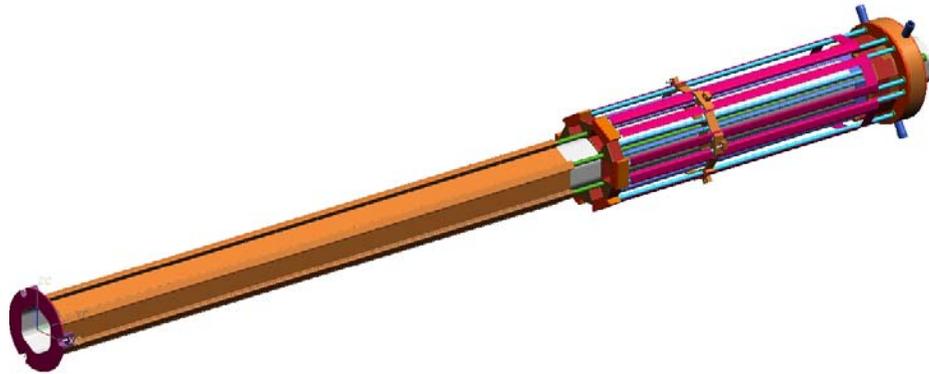
Colin Daly
Dept. of Mechanical Engineering



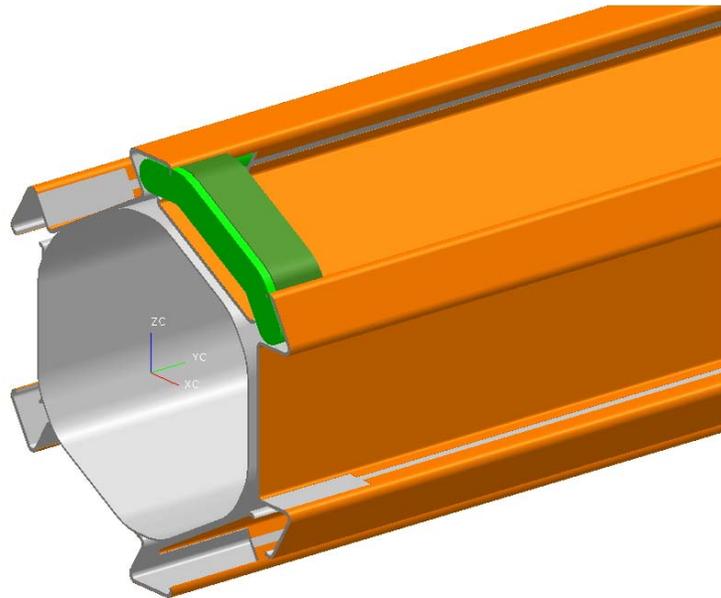
Bill Kuykendall, Joshua Wang
Dept. of Physics

University of Washington

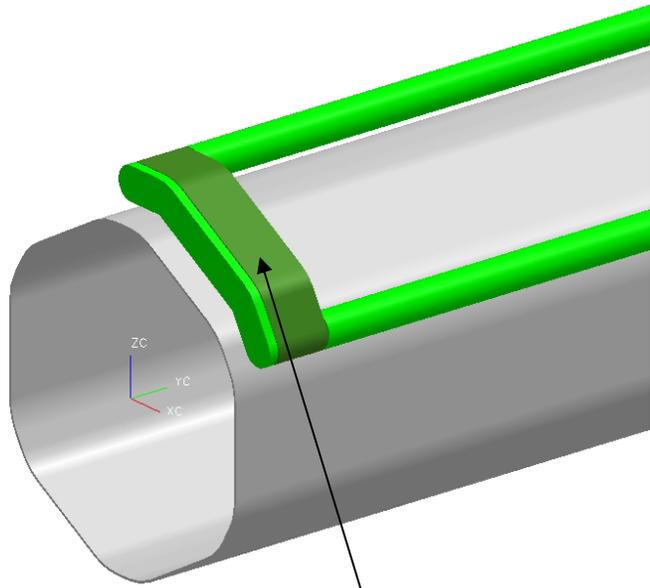
February 6, 2003



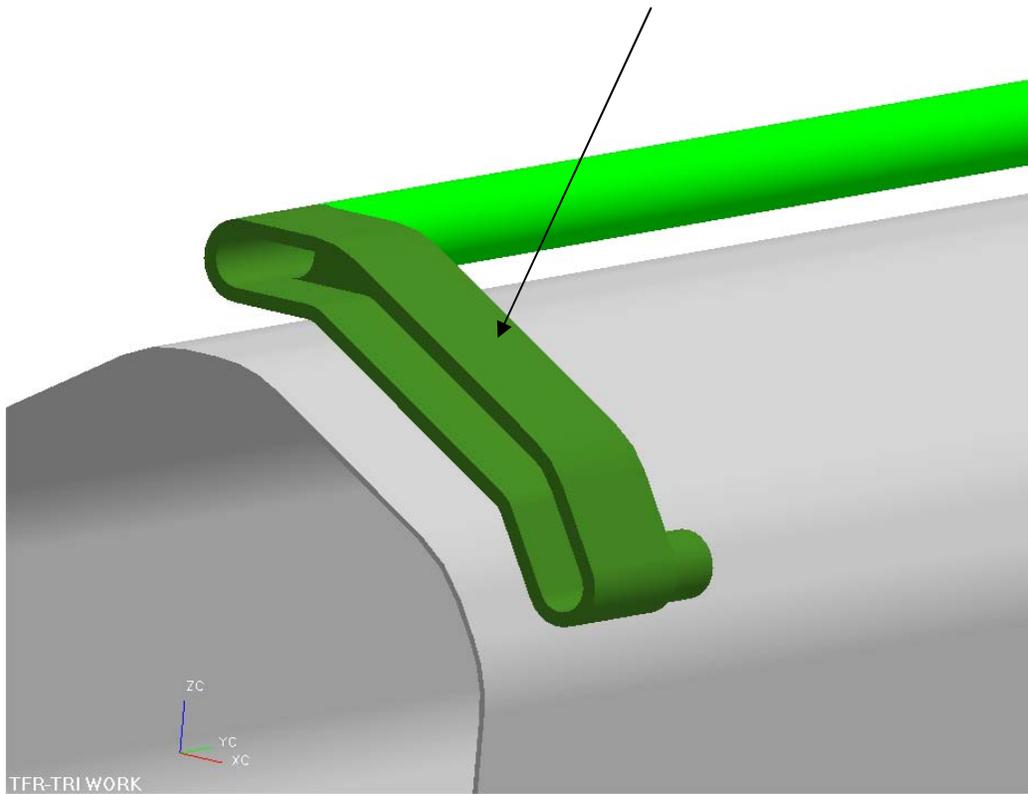
L0 structure complete with cooling system for the silicon and L0A hybrids.



L0 silicon cooling turnaround at $Z=0$

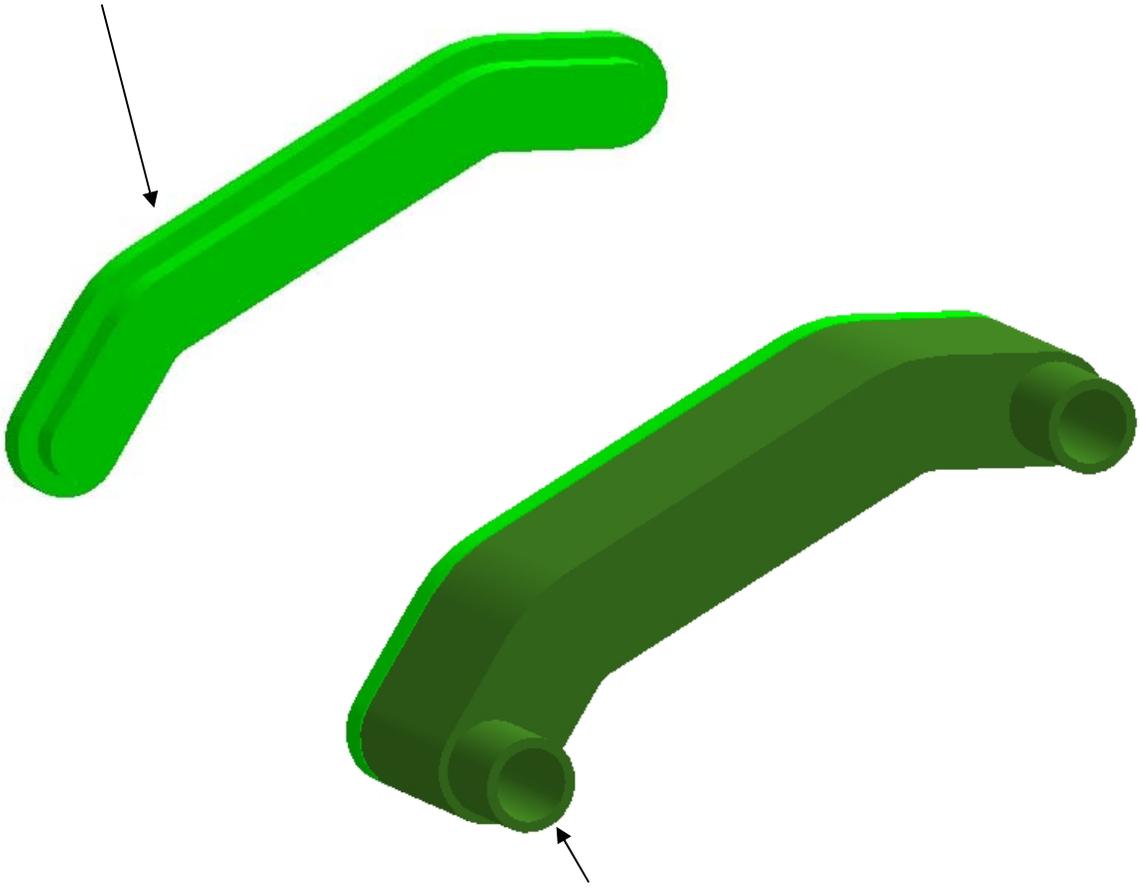


L0 cooling turnaround connector



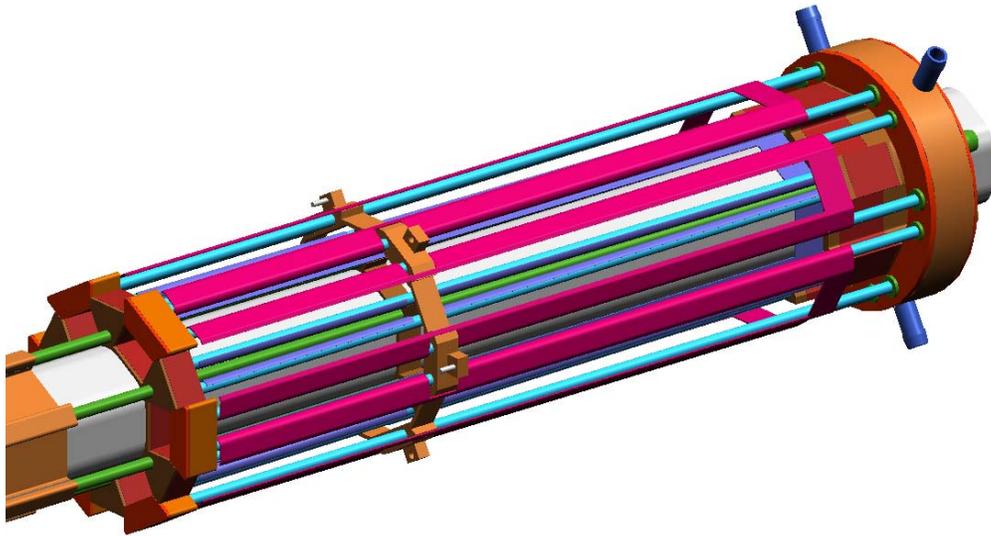
L0 silicon cooling turnaround at $Z=0$

End cap – note step to give large glue area

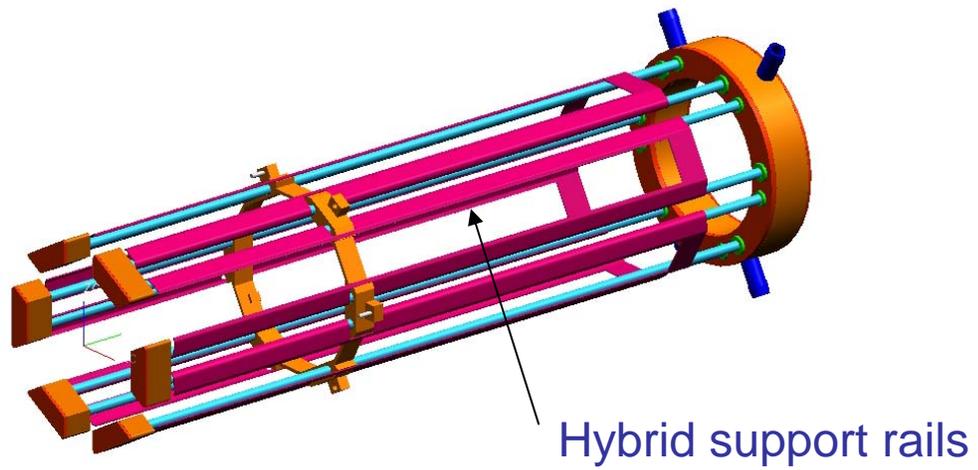


Cooling tube fits over this boss to give large glue area.

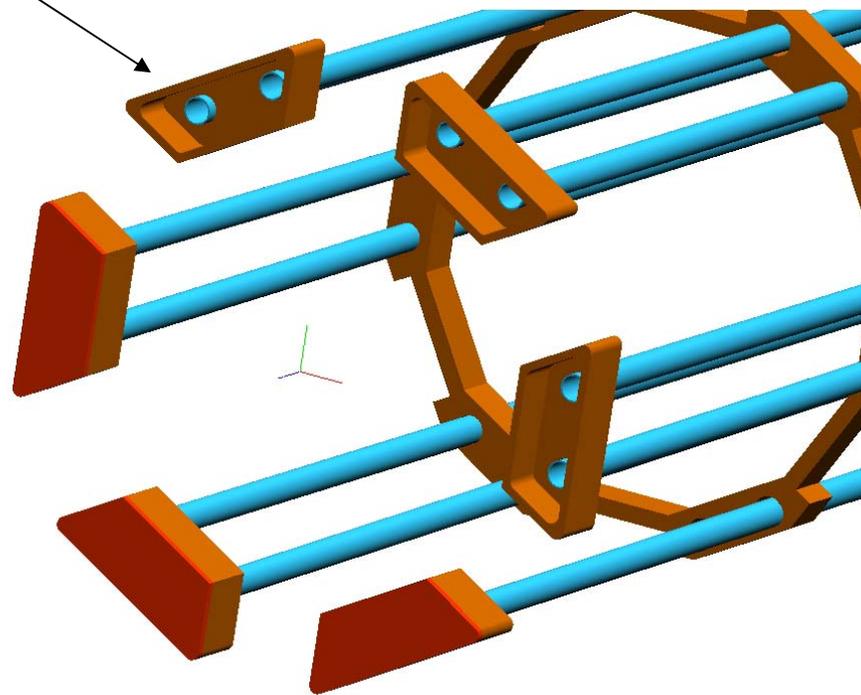
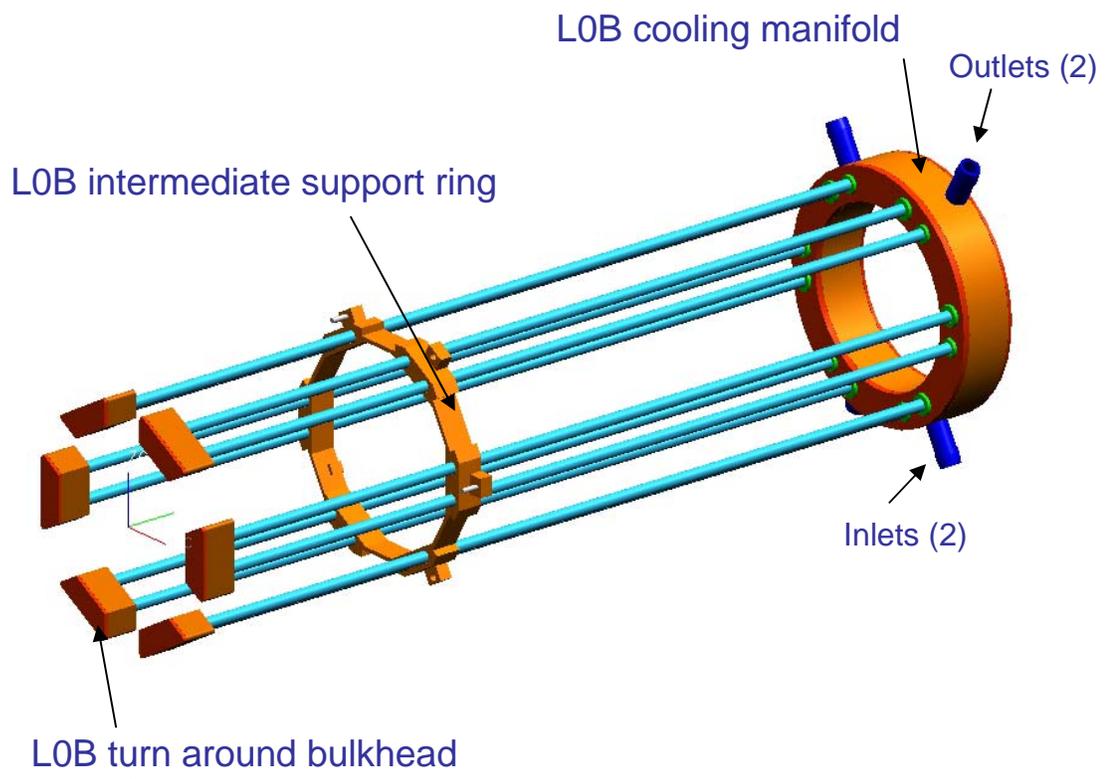
L0 silicon cooling turnaround at $Z=0$



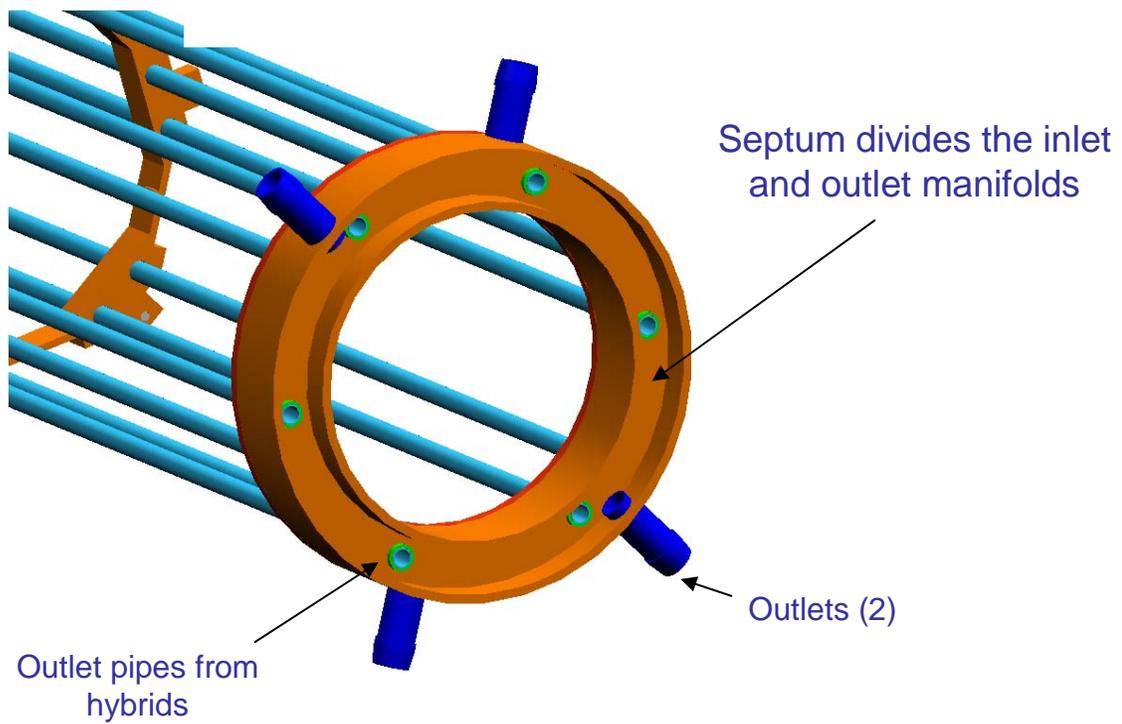
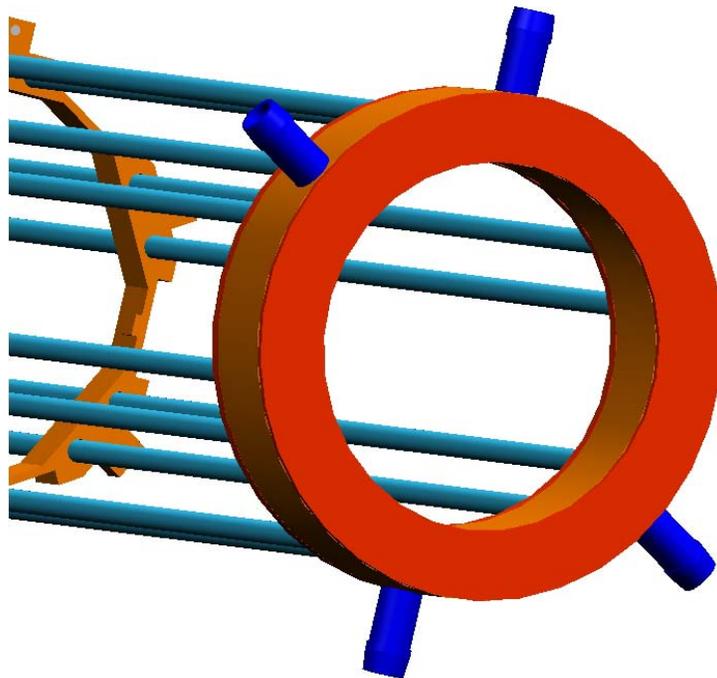
Cooling system for the L0 hybrids.



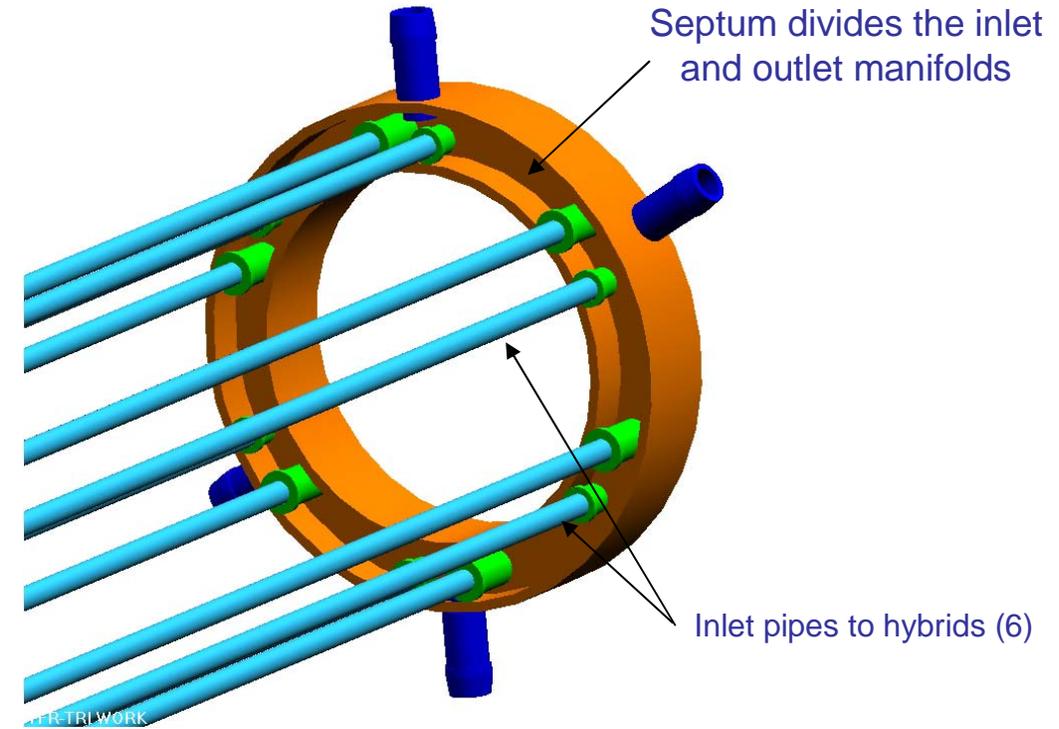
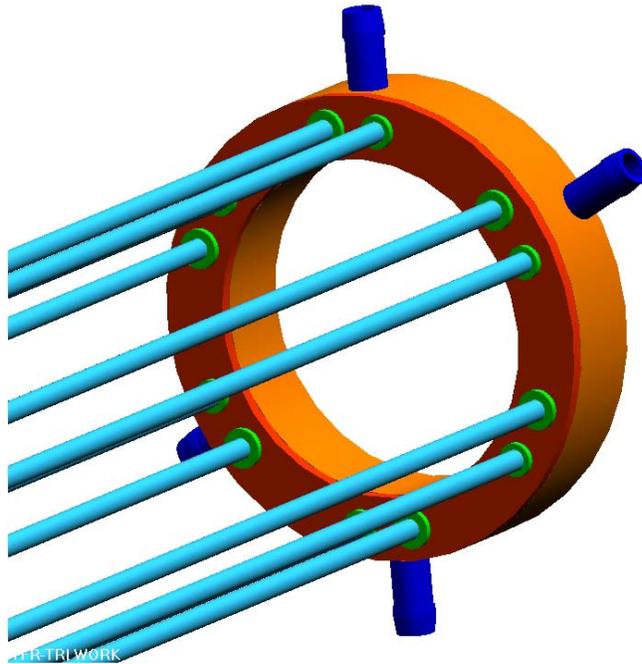
Cooling system for the L0b hybrids.



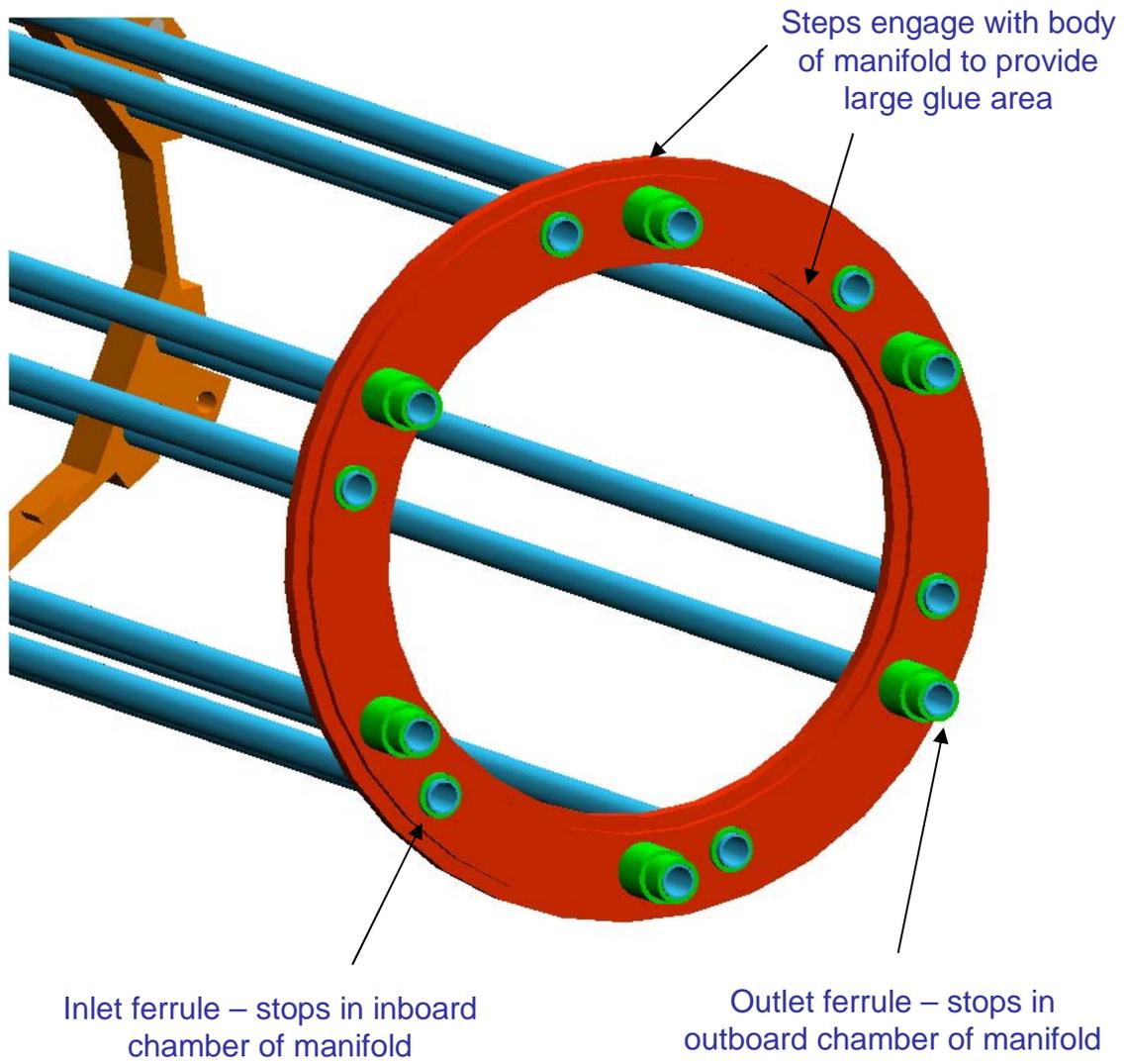
L0B hybrid cooling system



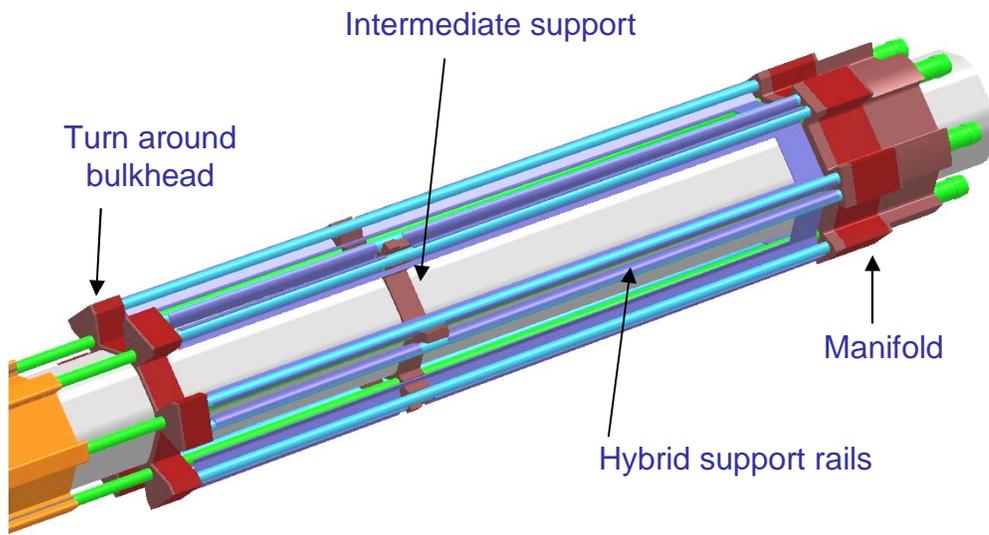
L0B cooling manifold



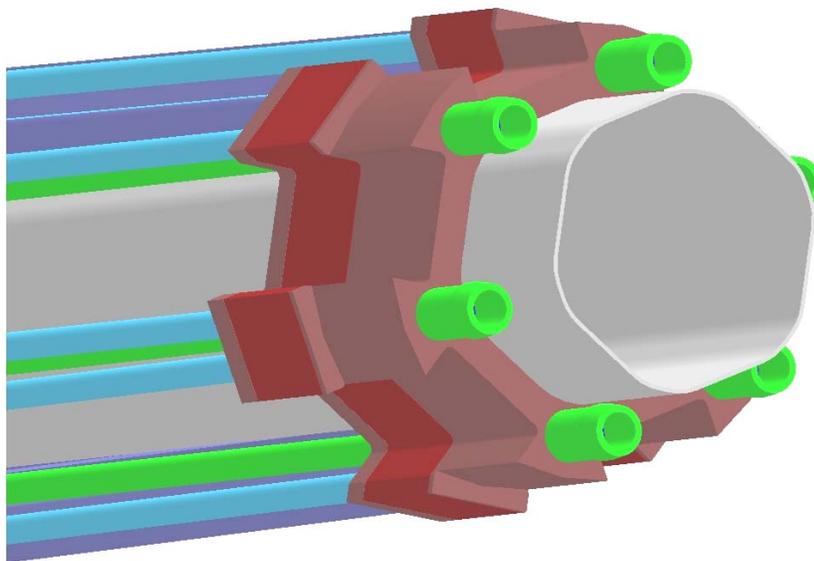
L0B cooling manifold



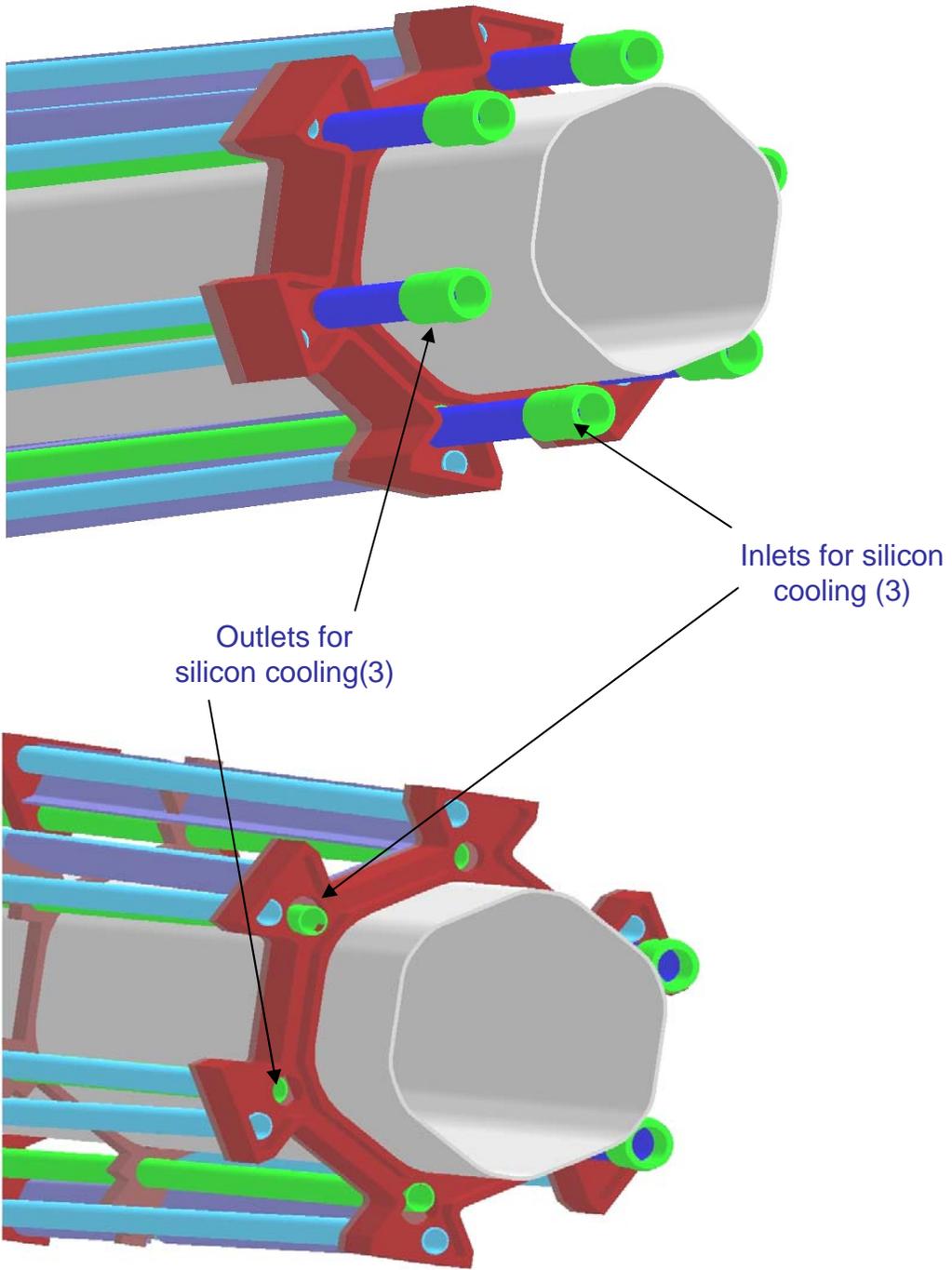
End cap of L0b cooling manifold



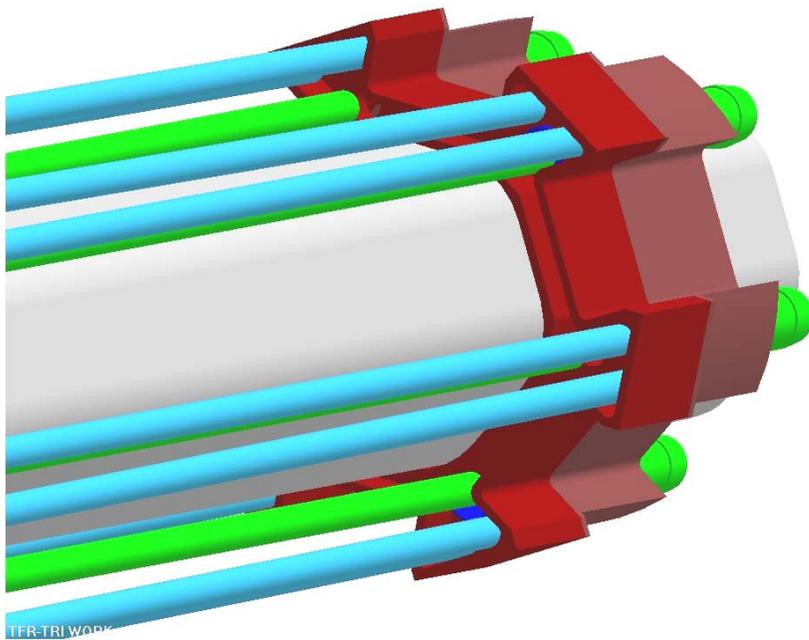
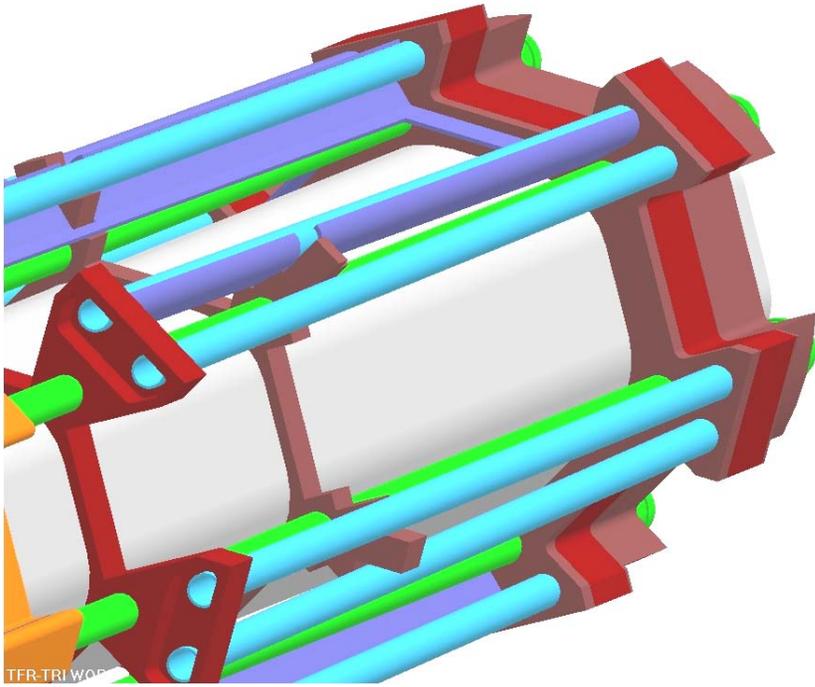
L0a hybrid cooling assembly



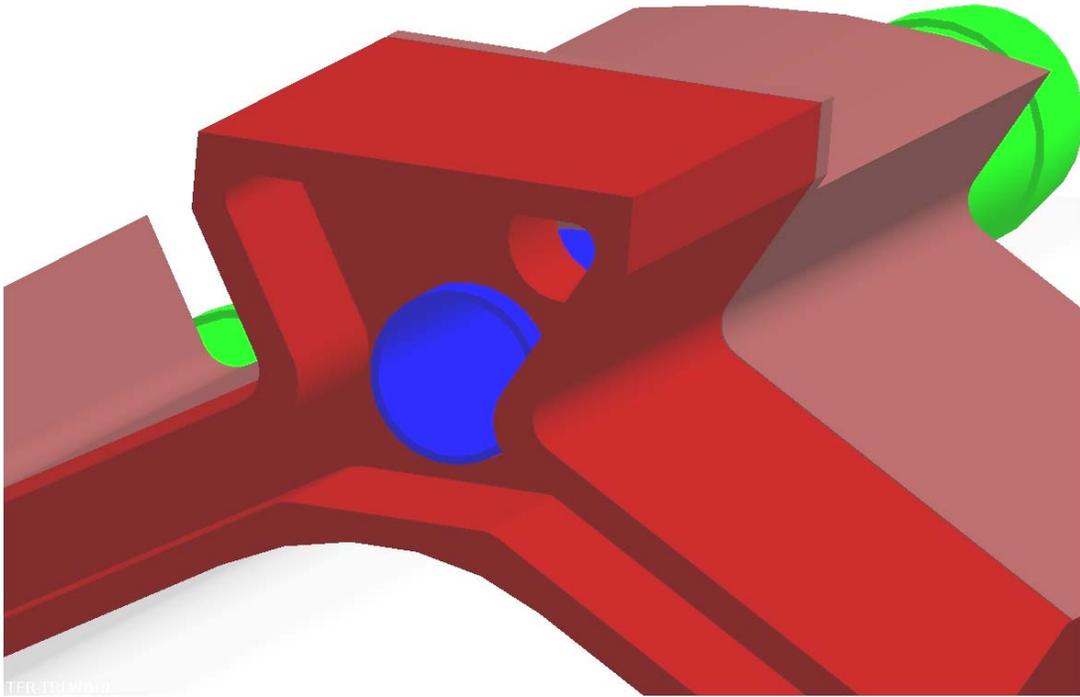
L0a cooling manifold



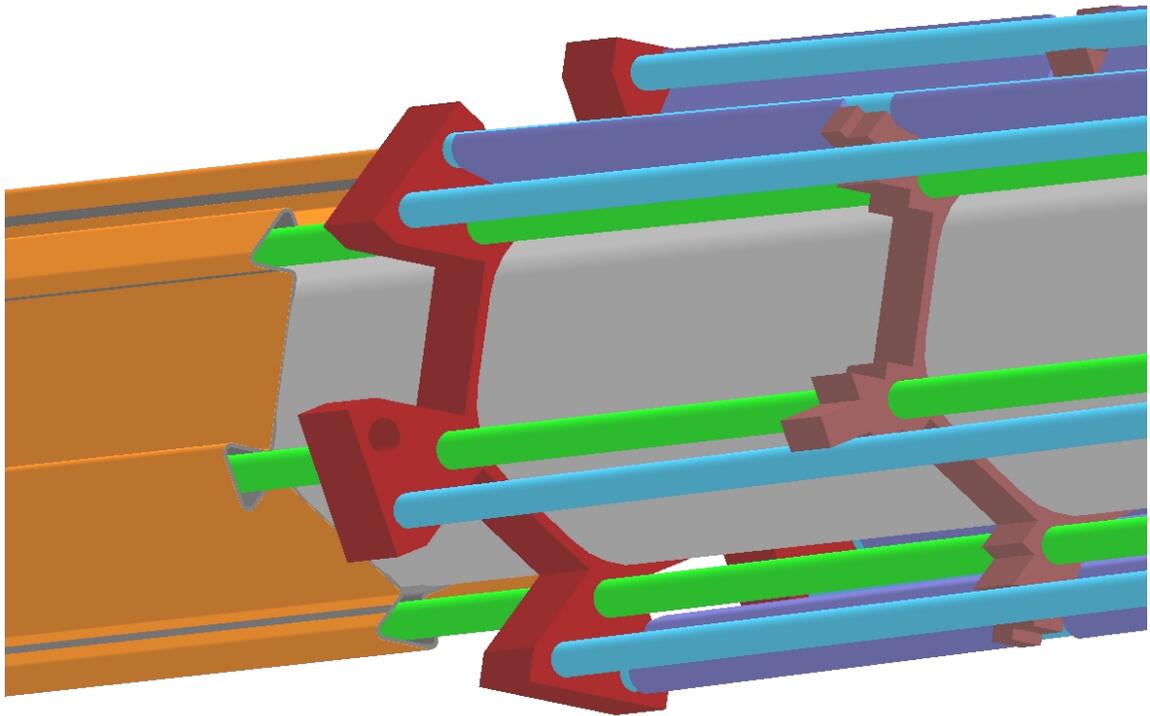
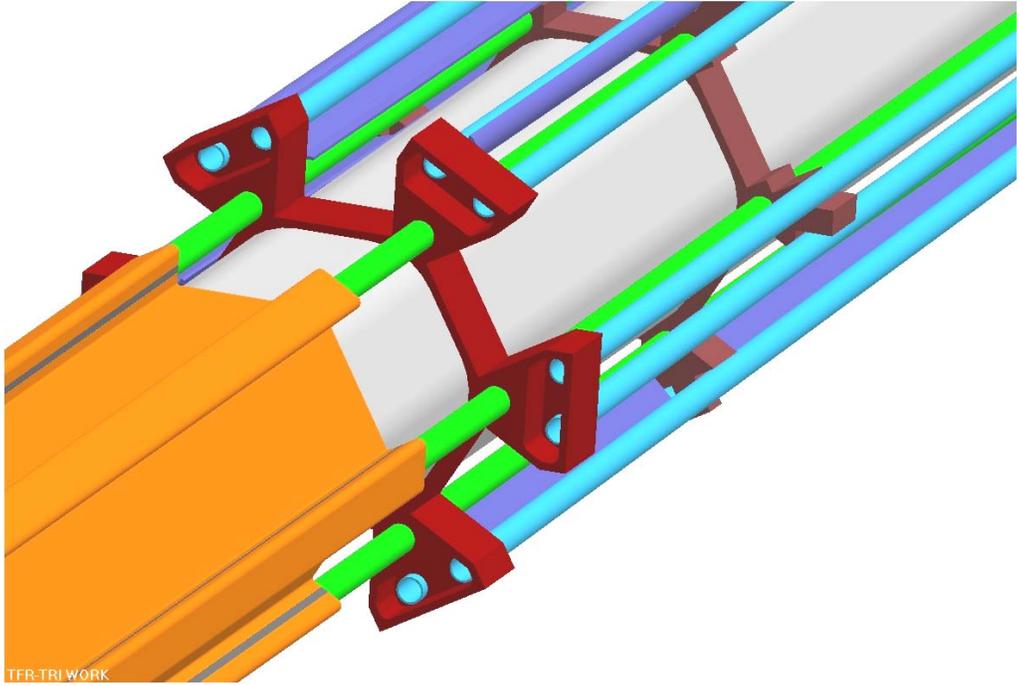
L0a cooling manifold

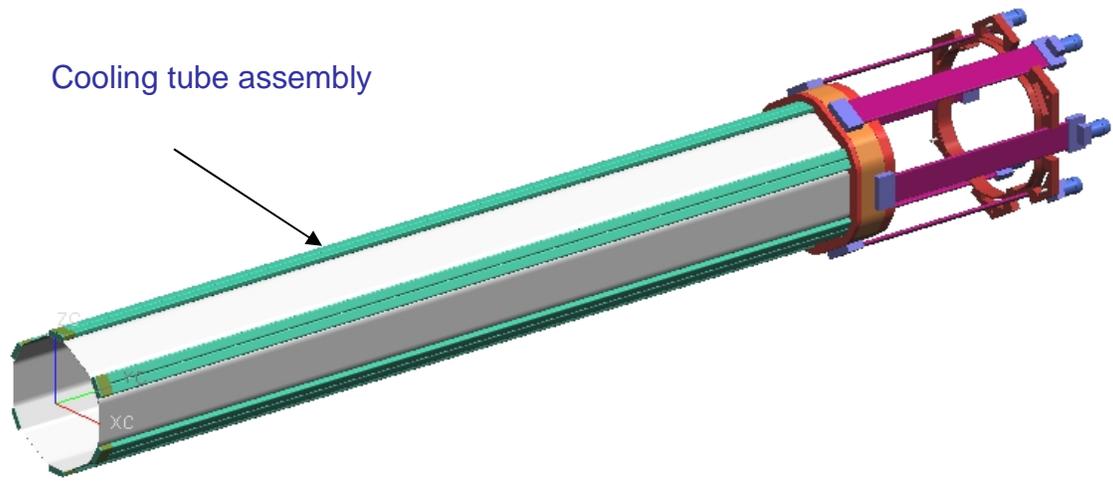


L0a cooling manifold

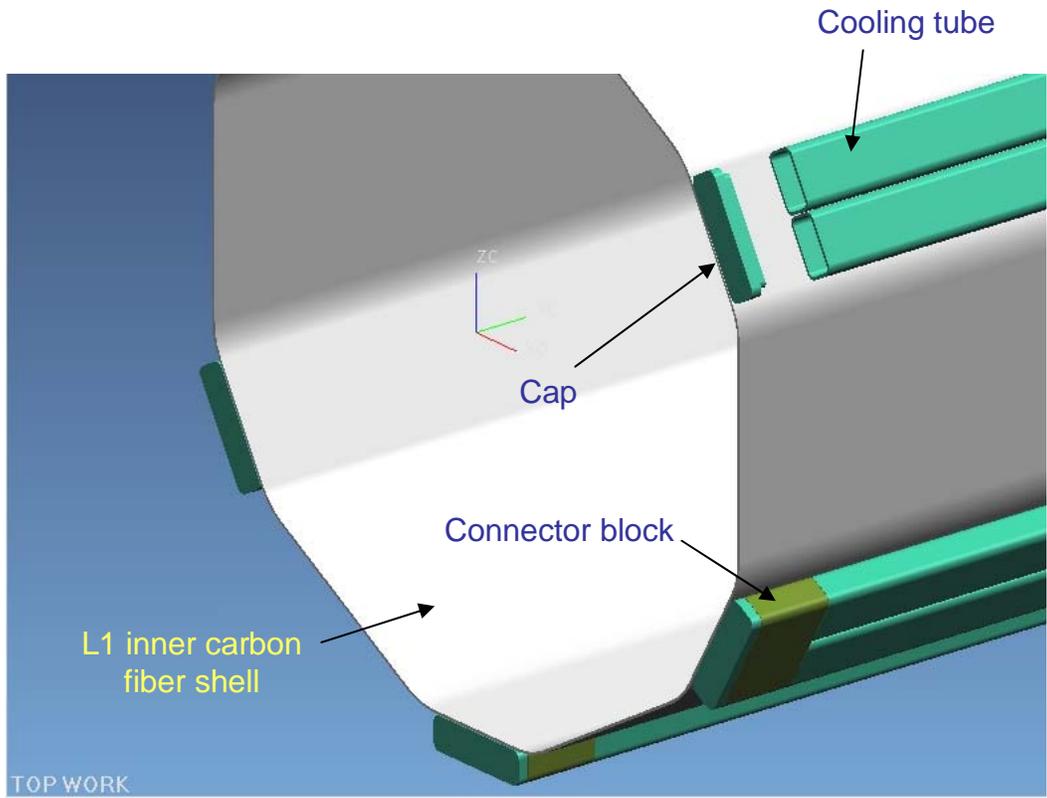


L0a cooling manifold

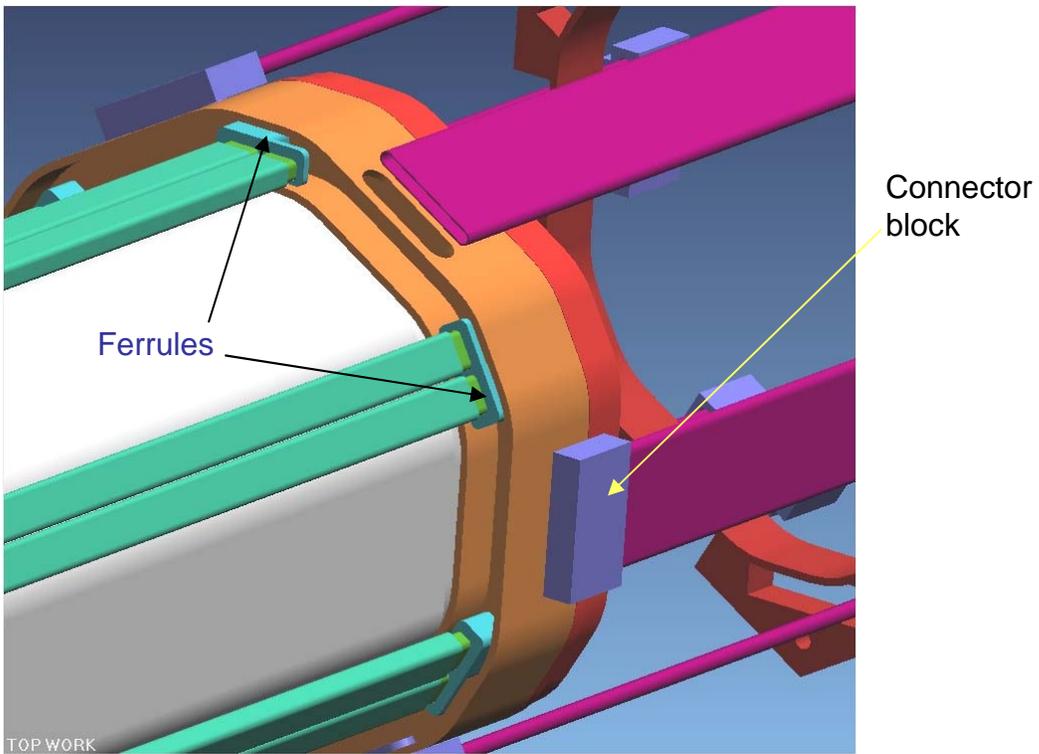
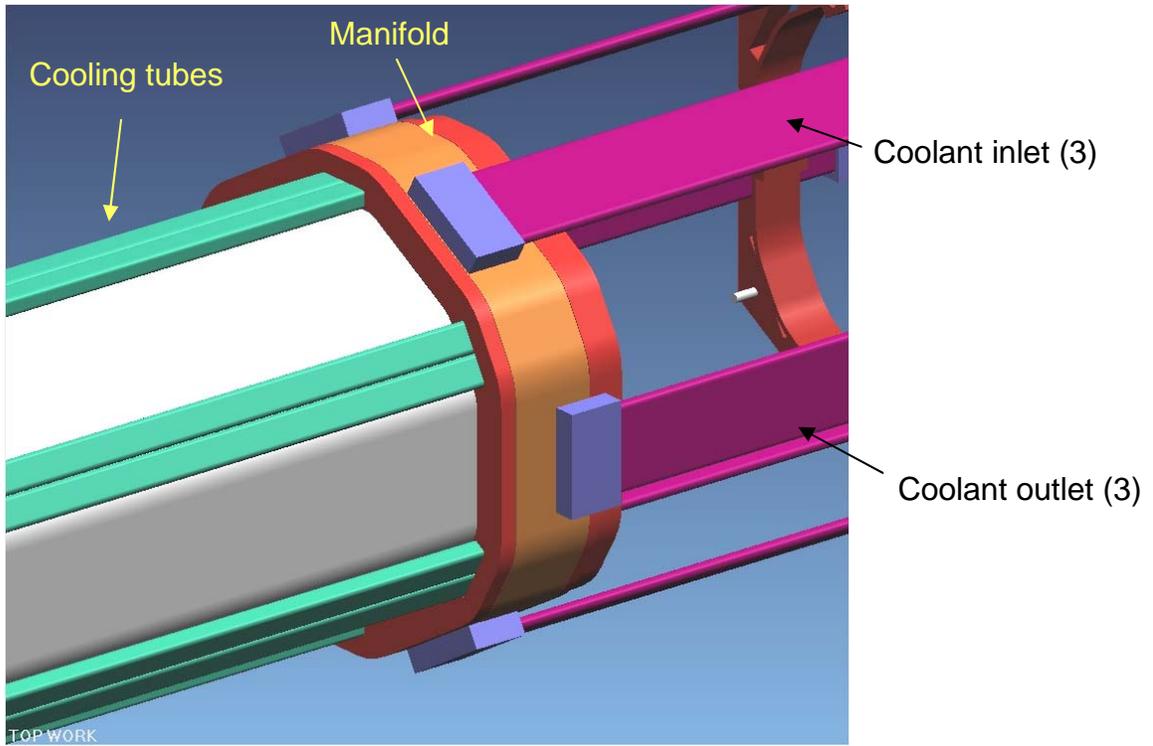




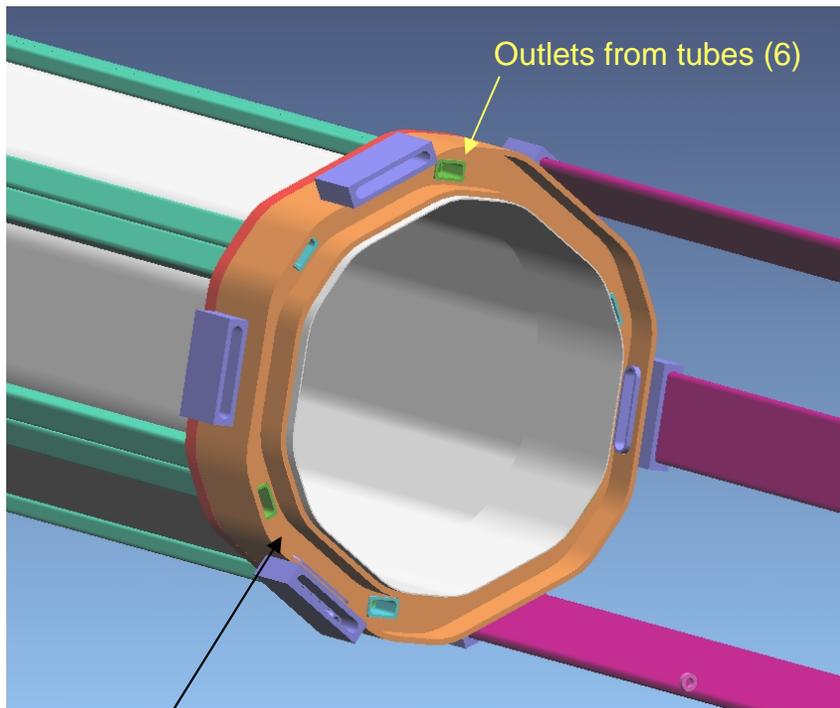
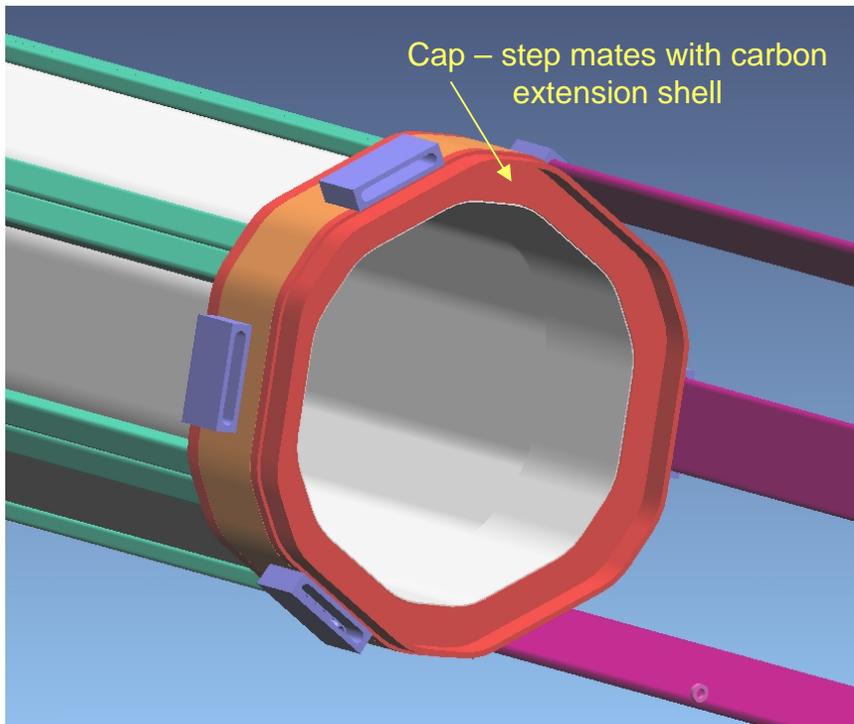
L1 cooling assembly



L1 cooling tube turn around

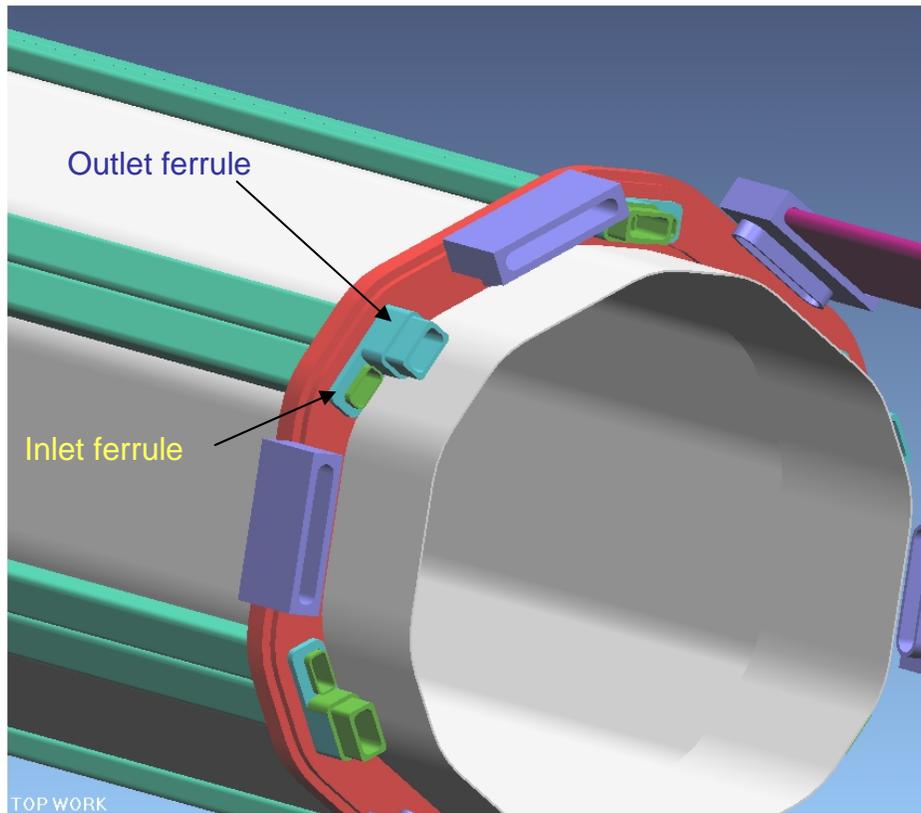


L1 cooling manifold

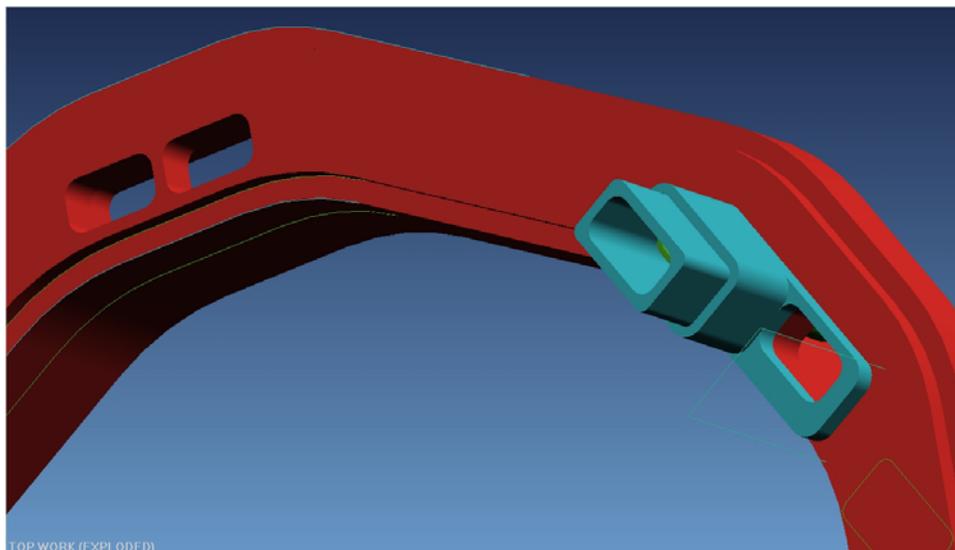


Septum divides the inlet and outlet manifolds

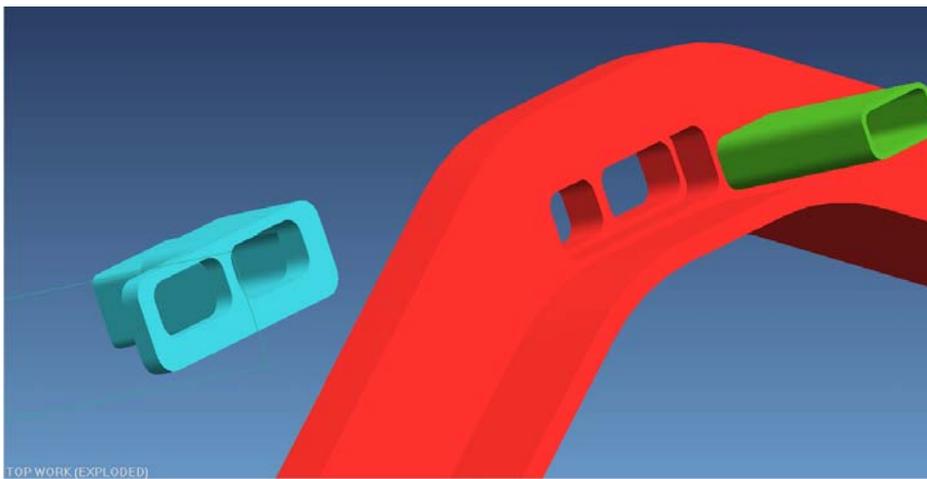
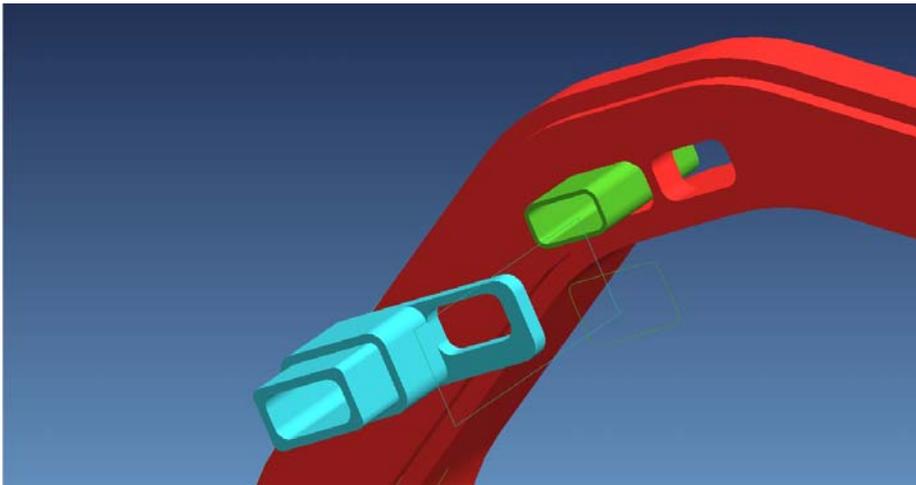
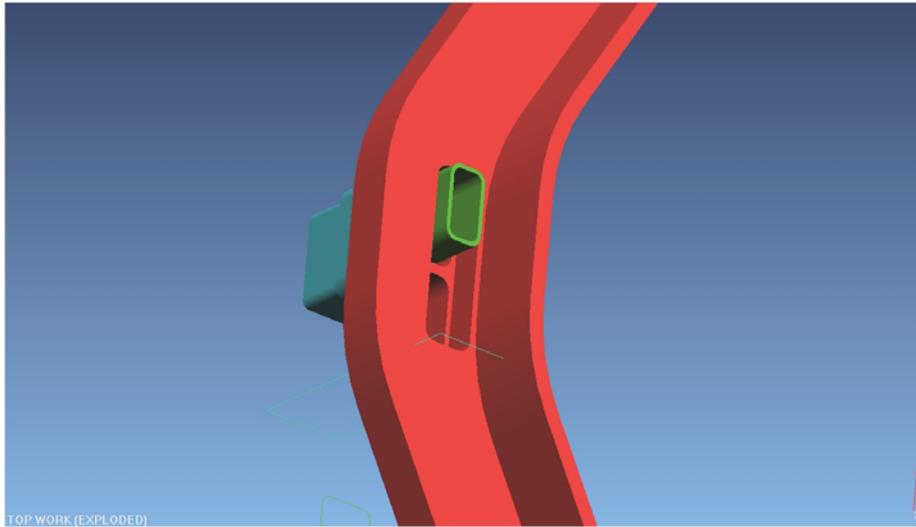
L1 cooling manifold



L1 cooling manifold cap



Detail of ferrule used to connect L1 Cooling Tubes



Detail of ferrule used to connect L1 Cooling Tubes