Ticket #922

Ticket Status: Closed Name: Philip Piper

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Create Date: 05/30/2015 2:27 pm **Phone:** (713) 501-2744

Field of Mechanical Engir

Study: Mechanical Engineering

Subject: 0-Not Registered

05/30/2015 2:27 pm Philip Piper

Hi Formula Hybrid Support, this is Bulldogs Racing with a question about the firewall rules. In the attached PDF there is an image of the side impact structure of our chassis. Note that between the main portion of the firewall (what Percy is sitting upon), the main hoop, and the side impact structure, there is a triangular firewall extension piece. In the triangular openings below the upper extension piece there are tabs for mounting two more of these firewall extensions.

Are these extensions to the firewall required by any of the firewall rules? From what I can tell they are not because we are not using sidepods, and the major structure of the firewall follows T4.5.5. Note that all elements of T4.5.1 will be mounted behind the driver, so T4.5.6 and T4.5.7 wouldn't apply to this firewall, at least to my current understanding of the rules.

Philip Piper

Firewall Question 053015.pdf(215.4 kb)

06/07/2015 10:51 am

Philip,

You are correct that as all your parts that need to be "behind" the firewall are rearward of it, you need to comply with T4.5.5. As such, you should not need those triangular extensions.

However, we will be looking for you to seal the firewall behind Percy to the outer skin of the car, especially at the sides and at the bottom of the seat. This is not easy with a tube frame car as the firewall is on the inside of the tubes and the car's skin is usually on the outside of the tubes. Those triangular pieces may help with the sealing and they may also help provide structure and support to the "firewall"/seat back. From you picture, it appears it is going to need some additional support.

Michael Royce.

06/09/2015 10:15 pm Philip Piper

Sounds good. We are thinking of adding a tube in the middle of the firewall to support it and the seat back which will rest latter on top of the former. Additionally we will be sure to seal the firewall to the car's skin, likely by bolting the skin directly onto tabs that stick out from the sides of the firewall (rather than trying to seal to the space frame with those triangular extensions).

Thanks again!

Phil

06/10/2015 9:00 am

Ticket closed.

MJR

Please Wait!

Please wait... it will take a second!