

## cage rear mainstays- straight or can have bend?

Posted by pyropete125 - 30 Mar 2014 18:51

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Hi all,

I just picked up an ex-racer 924S.

[plus.google.com/photos/11772862586475626.../5801972574991177521](https://plus.google.com/photos/11772862586475626.../5801972574991177521)

I am building a cage for my 924S and for where I want to put the rear mainstays I want to put a bend in it.

I have not read a clear answer on it in the PCA rulebook. I will be putting a fuel cell in later this year and will re-do the back stays when I put the cell in. I just want to get the car together and drive it a bit at a few track days and auto-x sooner than later this season. I am making this cage based on my 24 hours of lemons 924S car we have been racing for 4 years.

I have been told yes and no by local cage builders for the bends.

I also have been told that the bottom plate furthest edge cannot be behind the back edge of the rear wheel.

there is a picture of the proposed rear bar. To make the rear bars the same and clear the stock fuel fill cover this is the way I need to make it.

I am open to ideas.

Thanks all,

Pete

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Re: cage rear mainstays- straight or can have bend?

Posted by bg993 - 31 Mar 2014 04:50

Pete,

I agree that the PCA rule book is not very clear. The PCA rules do mirror NASA (for the most part). Here is a section of the NASA rulebook:

15.6.11 Rear Braces

The main hoop should have two (2) braces extending to the rear. The braces shall be attached as near as possible to the top of the main hoop, and no more than six (6) inches below the top. The braces should not contain any bends\*. There must be at least 30 degrees between the plane of the main hoop and the plane of the rear braces. The main hoop rear braces may consist of an "X" pattern design. The main hoop braces may be mounted at the rear shock mounts or suspension pickup points (providing that the braces remain in compliance with all other sections of the CCR). They may go through any rear bulkhead(s) provided the bulkhead(s) is sealed around the cage braces. \*There may be certain exceptions allowed for cars that cannot possible meet this "no bend" requirement. One exception is listed [Ref:(15.6.11.A)]. Other exceptions may be made if all of the required bars meet the specifications for a vehicle in the next heavier weight classification and the alternative design is submitted to the NASA National Office for special allowance.

So, I would probably try and have the hoop braces straight. You should be able to put them in, and still have room to drop in a fuel cell later.

Hope this helps,

Bill

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Re: cage rear mainstays- straight or can have bend?

Posted by pyropete125 - 31 Mar 2014 05:25

Thanks so much.

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**Re: cage rear mainstays- straight or can have bend?**

Posted by Big Dog - 31 Mar 2014 20:20

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If you put the stays just above the shock mounts, you can get the 30 degree angle (you may need to lower their attachment to the main hoop slightly to make the angle but still comply with the maximum amount lower). This leaves the entire rear area open for a fuel cell later and provides, in my opinion, a better mounting point. The rear crush structure is behind the shock mounts so the stays should not be vulnerable to a rear crash.

Big Dog

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**Re: cage rear mainstays- straight or can have bend?**

Posted by pyropete125 - 01 Apr 2014 04:16

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I think I am going to cut the rear floor out and put the bars in by the shock top mounts as you suggest. I will re-cover with an aluminum panel.

I am going too put a bar in to hald the stock tank straps for now.

Thanks

Pete

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**Re: cage rear mainstays- straight or can have bend?**

Posted by Sterling Doc - 01 Apr 2014 19:09

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Pete - no can do on cutting up the floor, for roll cage attachment. If you need to put a little dent in the fuel fill cover to clear the cage, I have no problem with that.

Look here for how the Hanksville cage attaches: