14/11/2020 - The Big Cut ! - 8h

Category: 4.3. Slider Canopy
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Hits: 1132

Today is "The Day". the day of "the 1000$ cut" or the "big cut".

Actually for European builders it's more like the 2000 euro cut because breaking this thing will cost a fortune as you not only have to buy a new one but also ship an odd and big form to Belgium again and add 33% tax and tva on top of that.

So you can imagine we are even more stressed about this than our US friends.

The big cut is the nickname for seperating the windscreen from the sliding canopy. In other words, cut the whole damned thing in halves.

Before I could do that, I had to continue where I left of yesterday. Heat the place back up to 30 degrees and cut off the side molding marks.
I don't want to go any further than that as I want to make sure that I keep enough material on the windshield side that will be cut off. I decided only to trim back to the size above the vertical square side bows of the canopy frame until after the seperation is completed.

In the image below, I started cutting the side molding marks off. As you can see I'm cutting and immediatly restoring the duct tape support strips as I pass the point.



Cut through the suport strip



and restore it underneath the cut to control the stress on the bubble.



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This cutting process is easy and it helps you to build confidence for the big cut.



When done, immediatly sand down the edges so that you remove all possible stress marks in the material. Whatever you do, do not put this aside until the next day as the bubble will cool down and stress marks may lead to unpleasant surprises in the morning. I used a thin hand-belt sander of 1 inch wide and 200 grit. Move constantly from left to right and back to avoid heat building up in the material. Too much heat can also lead to cracks. Keep moving and once it looks smooth, use sand paper to sand it down to 300 and finally 400 grit. I took it all the way to 600 for the final pieces but 400 will be enough for intermediate cuts like the one on the sides. I will have to trim them more down tomorrow anyway.



Then I reclamped the frame in the bubble. Look at the amount of clamps. Yes, that's how many you will have to buy. Get as many as you can while they are on a discounted sale.



Another shot of the gap between the front bow and the bubble. Vans reassured me the bubble will comply once the cut is done. Crossing fingers at this point. Not much you can do now as the hole in the canopy for the latch defines the position and not much you can do about this now. If I would have to redo it, I would pay more attention

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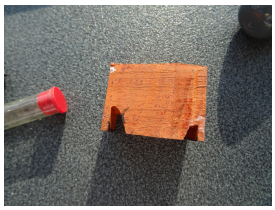
to this when defining the position for the canopy latch hole.



I took of the protecting platic from the bubble front and back and re-did the procedure I tried out yesterday. Used a wooden hardblock to define the spacing between the front of the canopy front bow and a 1/16 to 3/32 gap. Putting the sharp in the gap of the block and moving the block perpendicular along the front bow line.



Here is a shot of the hard-wood tool. The leg is 3/32 inch.



A well defined line is the result.



Next I put painters tape on the inside. Partly to protext the bubble, secondly to highlight the line.

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With the bubble turned over, you can now clearly see the line.



Last picture in one piece. As you see in the image below, I also made some wood beams with wood stops in the end to control the sliding process of the bubble. As you cut, the bubble becomes more flexible. The last thing you want to have is that the sides start moving outwards and creating stress on the cut line. Guaranteed crack coming up. So make sure the side are secured well. Don't press them inwards either. Just let them rest without in or outwards pressure.



Ready for the big cut. Sweating like crazy and shaking hands from the stress. I decided to go from passenger side to pilot side .



Here the cut is started. To keep the bubble from moving, I put duct tape strips over the freshly cut line every couple of inches. This ensures that the bubble won't tend to move by it's own weight.
You want to make sure - especially at the last couple of inches - that

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the windscreen does not tear off. As I started cutting, the stress faded away and concentration took place of fear.

An image says more than a thousand words, but a video puts you right into the moment. My girlfriend shot the entire process, here are some key moments.
You can see in the first video how nerveous I am and how it's trying to find the right angle to position yourself. Then last movie shows how the canopy stays nicely in place and there is no cut-off movement at all in the last fractions.

canopycut1lr|300|225|1 canopycut2lr|300|225|0
canopycut3lr|300|225|0 canopycut4lr|300|225|0



The next picture is taken after the full cut is completed. Again, adding duct tape every couple of inches. The windscreen did not move at all until the end of the cut.



All done, ready to seperate.



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Tada... we have two halves !



I carefully removed the sliding half and put the bubble on the cut-side. This is according to me the safest way to store the canopy for now. This is just temporarily as I will immediatly sand the edges of both sides.

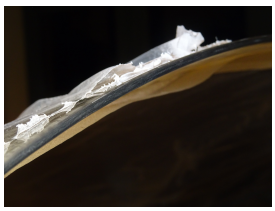


Sanding starts on the windscreen side. Same procedure as before using the hand-belt sander and 200 grit sandpaper to start. 200 grit takes away excess material fast so move left to right rapidly to get an even sanding and avoid taking away too much in one location.



After sanding to 300, 400 and 600 grit, this is what the edge looks like.





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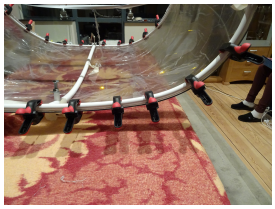
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Then I did the same on the sliding canopy half and set the windscreen safely aside.
When all was done, I put the frame back in the canopy to check the overhang in the front.



As you can see on the picture below, the gap between the frame and the bubble disappeared. The plexi nicely adjusts to the shape of the steel frame with little stress.



I will leave it for now and continue trimming the sides in the next session.



A most feared task is behind me and turned out to be a succes. I deserved a good beer !



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