

How I built the top for my “T”

The top project started with making a decision about what style of top I wanted to put on the car. There are two basic styles, the traditional original “Model T” style (1) and the more modern “West Coast” style (2).



1



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When I was gathering parts at the start of the build I purchased a “Bow Kit” from Total Performance which was for the traditional “Model T” style top. One of the disisions I made while designing the car was to put the fuel tank under the seat. To acomplish this I set the seat 12 inches off the floor which gave me plenty of room for a custom built 12 gallon fuel tank and made the car very comfortable to sit in. The only draw back was it put the top of the windshield frame directly in the middle of my line of sight. To correct this I made a new windshield frame that was 2 inches taller then the one I had purchased from Total Performance. The reason I mentioned this is because when it came time to fabricate the top, the bows no longer fit properly. My initial thought to resolve the problem was to extend the rear bow by 3 inches. I reconfigured the bows and covered them with 2 inch wide masking tape to simulate the top material. This it made the top look too short and too tall (3). I didn’t like the way it looked so I decided to see what a “West Coast” style top would look like (4). I reconfigured the bows and covered them with 2 inch masking tape again. This was much more to my liking so the decision was made, I’d go with a “West Coast” style top.

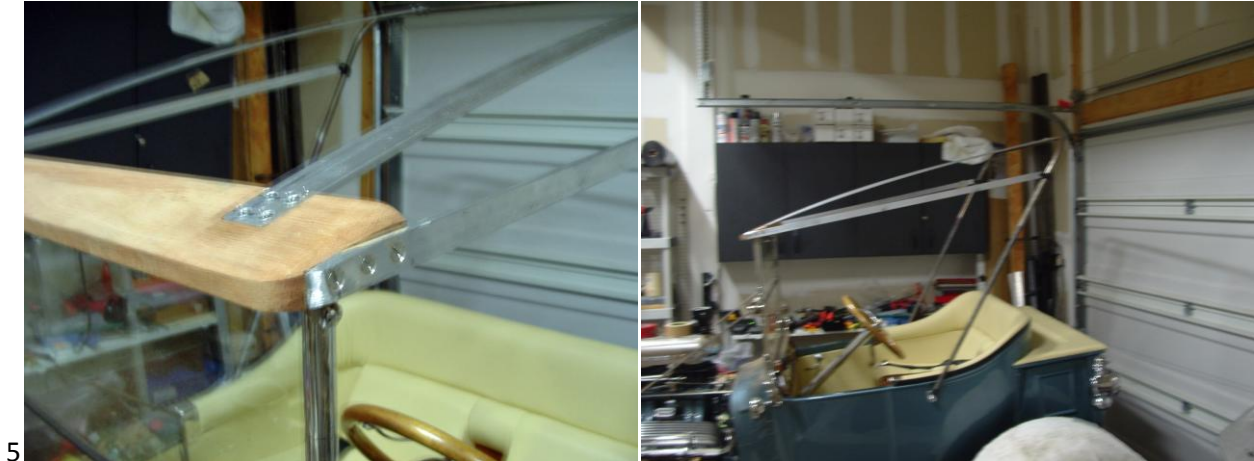


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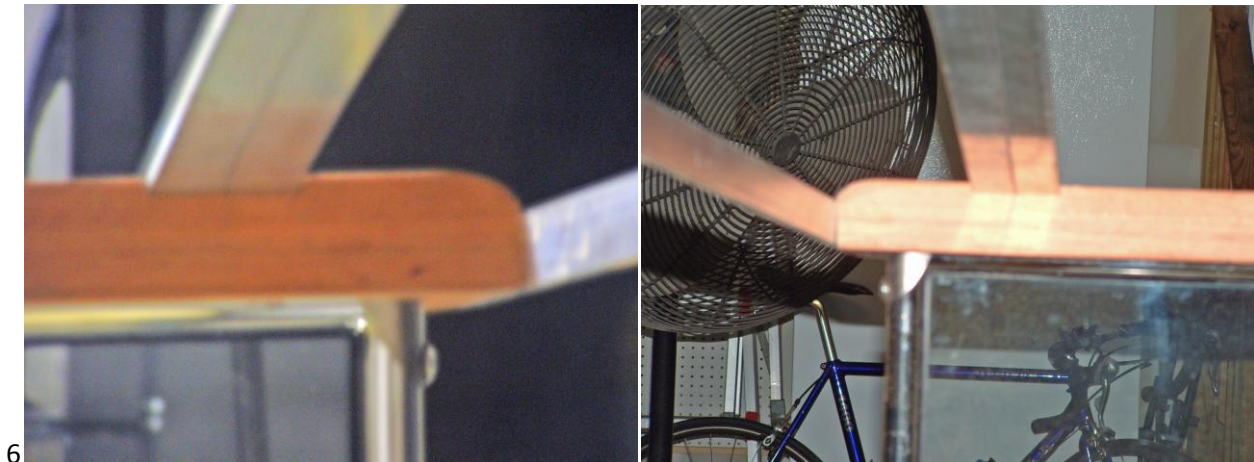


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Once I was happy with the tape lay-out, I measured everything to get the dementions for the frame. I started building the frame (5) out of 3/4 inch steel tubing and some 1 X 1/4 aluminum flat stock that I purchased from my local LOWES home improvement center. I made a new header panel (the part that goes over the windshield frame) out on mahogany because the one from Total Performance no longer had the proper angle above the windshield and I didn't like the fact that the windshield frame groove that was machined into it extended the full width of the header.



I made some simple brackets out of stainless steel to attach the header to the windshield frame (6) and used the brackets that came with the Total kit to attach the aluminum to the frame and the frame to the body.



When I redid my upholstrey I purchased enough leather to cover the top. Since I didn't want the leather to stretch I decided to make a hard shell to glue it to. To build the shell I used a product common in the construction trade called FRP (fiberglass reinforced plastic). The FRP comes in 4X9 foot sheets and is also available at LOWES. I needed to make paterns so I didn't waste materal.

The easiest way to make paterns I found was to cover the desired area with two layers of 2 inch wide masking tape. After the tape was laid in place and trimed to shape I covered the back side with waxed paper so it wouldn't stick to itself and ruin the patern (7). I used the paterns to trace the parts onto the FRP and cut them out with a pare of tin snips (8).



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After each part was made it was attached to the frame using "Gorella Glue", also from LOWES, and lots of clamps, tape and anything else I could find to hold it in place while the glue cured (9). To help form the curves in the FRP I heated it with a heat gun.



9



The shell was made in 6 pieces, two top sides panels, one front filler, one rear filler (necessary to build up the header and rear bow to the same height as the top sides so the top center would fit properly), one top center panel and one rear panel (10). All of the patterns were made using the same tape and waxed paper principle.



10



Once all the parts were glued in place and all the glue joints were cured, everything was trimmed and sanded smooth. Since any imperfections will show through to the leather, all the seams were filled with Bondo and sanded smooth as well.

The finished shell came out great, now for the hard part!

I make no claims of being an upholsterer and my sewing skills are very limited. At this point, I could have let a professional shop take over but I decided to finish it myself.

The first thing I did was stretch the leather over the shell. I looked at it from every possible angle and, being very careful to think everything out, I marked where it had to be cut (11). I made alignment marks on the top and rear panels so they would line up properly when I sewed them together. When I was sure everything was right I cut the leather, leaving it a little oversize everywhere except where the top panel met the rear panel, this cut had to be exact since the two parts were going to be sewed together. Once everything was cut, I sewed the two panels together and refit it onto the shell to make sure it still fit properly.



11

I used 3M spray trim adhesive to attach the leather to the FRP. I started by cleaning the FRP with acetone. Next, I sprayed the underside of the leather liberally with the 3M adhesive and let it dry completely. Once it had dried, I refit the leather to the shell. Working in small sections, I started gluing it in place. Pulling the leather up I would spray a small area beneath it. Once the adhesive had dried to a "tack" and I would stretch the leather while rubbing it onto the shell. I started at the seam where the top and back panels met since this seam had to be straight and the excess leather had to be laid flat. After I was happy, with the seam, I proceeded on to the top panel and did the rear panel last. I used clamps to hold everything in place while the glue dried. After the glue was dry the leather was trimmed to its final size (11).



11

For the rear windows I used 1/8th inch Lexan and 3 license plate frames(12). I cut the mounting lugs off of the frames with a hacksaw and smoothed the cuts with a file. Next I drilled a 1/8th inch hole in each corner of each frame. I cut a pieces of Lexan to fit inside each of the frames and making sure any exposed area of the Lexan were covered with masking tape, glued them into the frame with silicone sealer. After the sealer had dried I used the finished parts as templates to mark three holes onto the top shell. I covered the rear panel with masking tape in the area I was going to work. Next I located the center of the rear panel. I determined how much space I wanted to leave between the “windows” and, being careful to make sure everything was level, marked their outline on the tape. After the windows were outlined another outline was made ½ inch inside the first. This was the cutting line. I used a Dremel tool with a cut off wheel and carefully cut the window openings out of the top. Making sure everything was lined up properly, I drilled a 1/8th inch hole in the top shell in the corners of each window assembly. I used 6-32 X 1 inch button head stainless steel machine screws with lock nuts to secure the windows to the top.



12.

This winter's project is to make and install a headliner out of brown suede leather.

To be continued...