

I offer this tip based on my experience with the problem of repairing and replacing the headliner upholstery on my 1934 Chrysler CY Airflow. After trying numerous veneers, tarboard, and carboard - I came upon an acceptable material that works. The material that will work in your restoration is vinyl flooring - (NOT cushion flooring) - the type that has the asbestos-like particle backing material. Cushion vinyl flooring material will not work. It is too thick and will not take a compound curve. Using numerous short time steps of work, the result is an acceptable replacement panel for the original tarboard headliners on 1934 Airflows. I hope my method will help other members who attack this restoration problem.

**MATERIALS LIST** - (1) Vinyl flooring (medium weight) Do not use material with an embossed pattern. Also, do not use cushion vinyl. (2) Plastic cement. (Roofers' cement or auto undercoating. (3) General purpose polyester resin and hardener. (4) Carpet tacks. (5) Plastic body filler. (Bondo, etc.) (6) Lightweight woven fiberglass cloth. (7) One-eighth inch thick mahogany or birch veneer plywood for the flat panels. (8) Contact cement or fabric glue for bonding of vinyl and upholstery fabric. (9) Lath wooden strips. Twelve 1 1/2" X 3/8" approximately five feet long. Tape "Saran Wrap" to end of lath strips to prevent fiberglass resin from bonding to lath as explained in step #6.

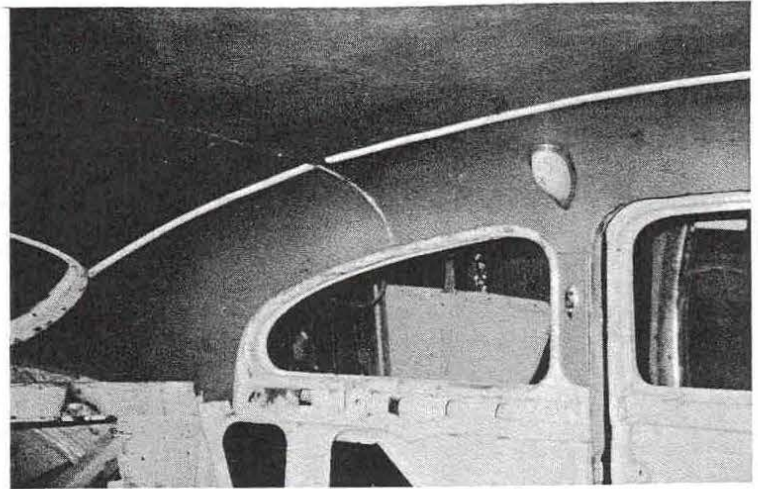
### PROCEDURE -

(Please note, the shiny side of the vinyl flooring material becomes the hidden side later.

**STEP #1...** Cut vinyl to size of selected panel. Allow extra on the perimeter for final trimming or size error(s). Note: Fibered face is toward inside of the car.

**STEP #2...** Trial fit the panel. Use carpet tacks around all edges. Add wood headers, tack strips, or shims as required. Do not hammer tacks all the way in. Tacks come out after the trial fit. Cut off extra material where you are hindered by another panel. Body panels such as the package tray will offer obstacles, also. You may use the interior window trim frames and retaining bars to confirm the outline of the cut on the perimeter of all panels. This step also aids in holding panels in place for all stages of work. Remember, you must leave extra material where possible for the final trimming.

**STEP #3...** When you are finally satisfied with the contours of the trial fit (which may need some lath braces to hold up sags or force out a small crease) draw the outlines of the window frames and the retaining bars to facilitate the cutting of the finished piece.



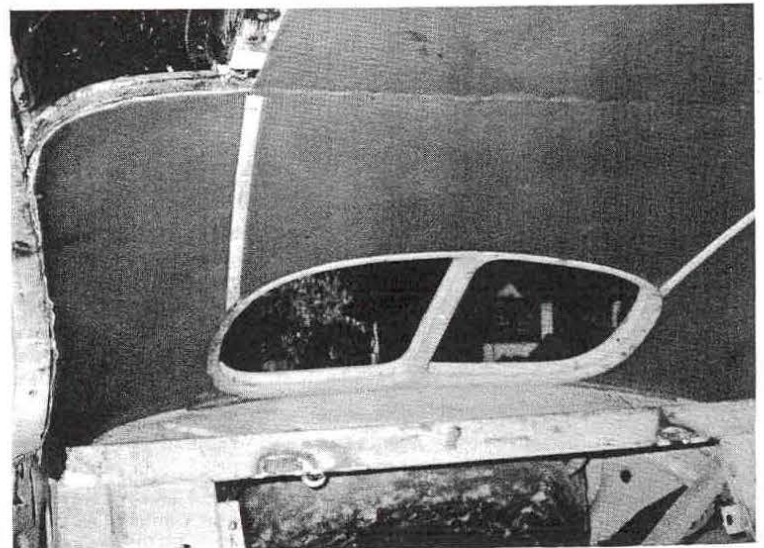
TRIAL FIT OF FORMED PANELS...  
CENTER PANEL IS 1/8" BIRCH PLYWOOD

### STEP #4...

Remove the panel and brush on plastic cement to the vinyl surface. Keep the areas that touch the headers, tack strips, or body panels uncoated and clean. The cement is very messy and can create lumps that will show through as surface defects. (Varsol or laquer thinner will clean things up.) Apply a 3/16" coat - one layer or more - one layer after step four and another after step five or six if panel is limp and wavy.

### STEP #5...

After the cement is applied you should not delay more than one day to refit the panel. Brace the panel as necessary to maintain the curves and contours as you did in step two. Leave the bracing in place and check for sags daily for about one week. Add braces if necessary. Repeat with other panels as time permits.



TRIAL FIT OF FORMED PANELS  
WITH WINDOW FRAME & RETAINING BARS SHOWN

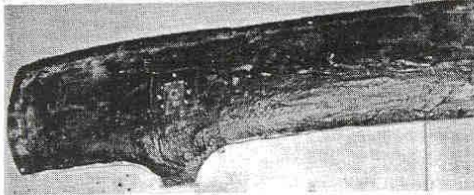


STEP #6...

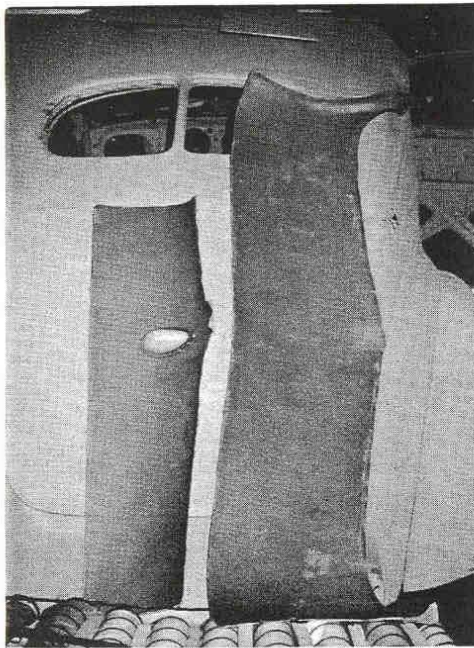
Fiberglas resin can now be applied to the fiber surface that will become the upholstery faced side. You may do this while waiting for the roof cement to set up firmer. Several coats will be needed. As subsequent coats set up, have an eye for areas that require reinforcement of sagging spots. The panel will continue to stiffen, but remains reasonably flexible during this phase. Limited surface sanding is now possible. Surface irregularities or creases can be filled or faired in with plastic body filler. Sand the hardened body filler to a feather edge with 100/150 grit paper.

STEP #7...

I suggest applying the fiberglas cloth while the panel is in position; however, if the panel is stiff enough, you may elect to do it on a bench. To apply it overhead you must apply the resin and then immediately place the fiberglas cloth in place no later than when the resin becomes tacky to the touch. Smooth out the cloth and trim the edges. Additional resin may now be applied. Window frames should be removed for this step. Also, be sure to clear the glass cloth from around the tack heads so they can be removed! If you leave them in place, they can be ground off later from the reverse side. When the fiberglas cloth is smooth, coat with more resin. Two separate coats are best. Allow at least eight hours for resin to harden.



REVERSE SIDE OF DOOR HEADER PANEL SHOWING BLACK PLASTIC CEMENT



FRONT HEADER & DOOR HEADER READY FOR TRIAL FIT

STEP #8...

Trim panels to suit the outlines of the mouldings while the panel remains in place. Use a linoleum knife and jig saw as necessary. Drill needed holes for wiper control valves, etc.

STEP #9...

Remove panel and judge for stiffness. If panel is too limp - repeat step seven. I like to place the panel in position. You may elect to work at a bench. The large front panel may very well need this step for added stiffness.

STEP #10...

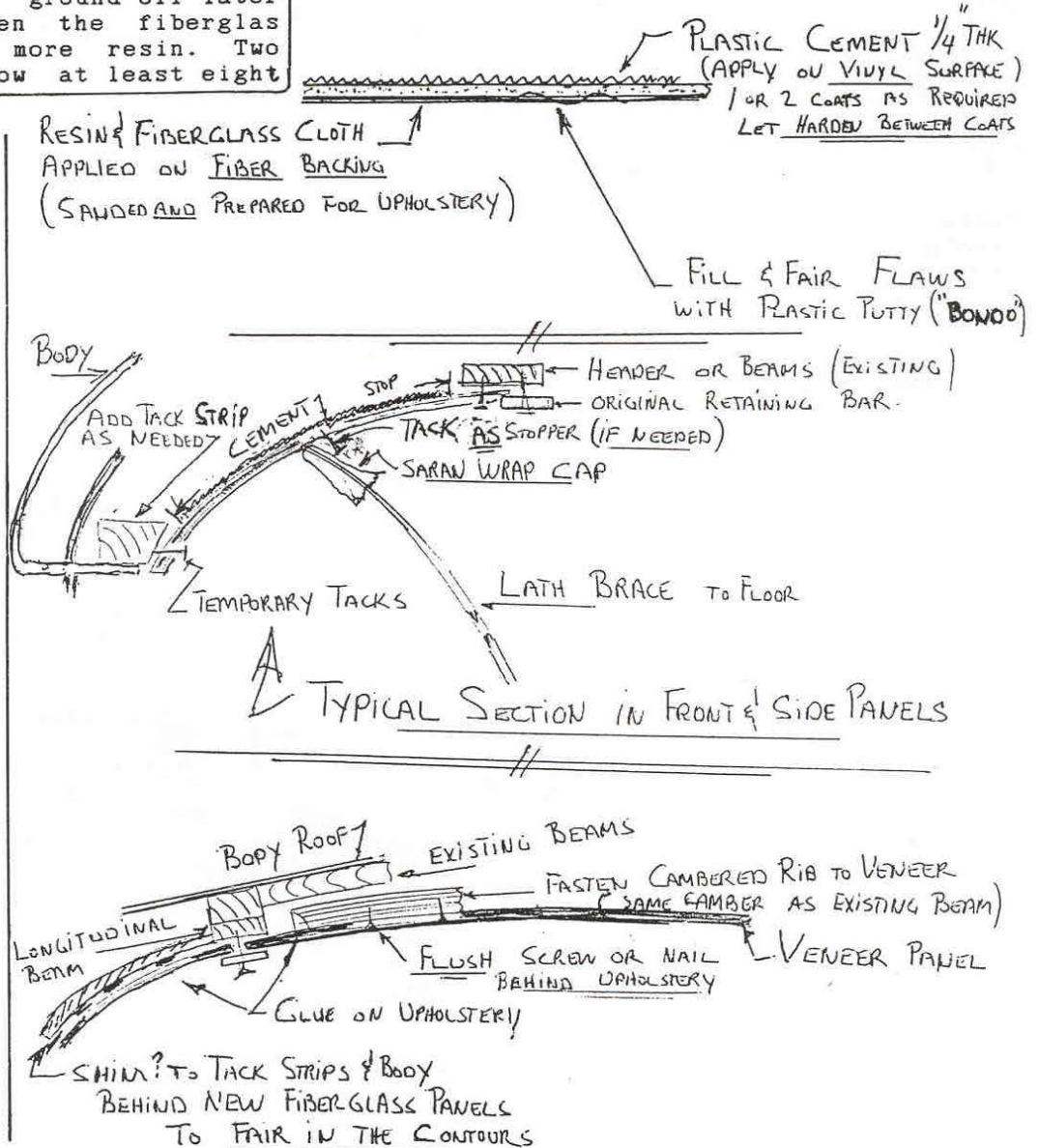
Sand the surface and wipe off the resin film with acetone. Test the surface for glue adhesion.

STEP #11...

Apply glue and fabric desired. Install panels for final fit.

CONTINUED ON NEXT PAGE...

MATERIAL & COATINGS





HEADLINERS . . . from page five

STEP #12...

Large mid panels can be formed from 1/8" plywood veneer. Add small beams to aid in maintaining curve of cambered roof or glue to existing roof beams. Fabric is easily glued to this surface.

I wonder if anyone in "Airflow heaven" can ever let me know what upholstery fabric is available to simulate the original oil cloth? I may use poly-vinyl in a camel beige color or chintz cloth coated with varnish as I've been told the factory did. If anyone is interested I have a very good mohair fabric that is close in texture and color to the original material in the CY and in some DeSotos.

This is the solution I have used to replace missing headliner panels in my '34 CY Airflow Chrysler Coupe. The method is workable for a sedan also. If your original panels are in poor condition they should accept this "new surface" assuming they are stiff enough. I intend to salvage deteriorated door panels by coating them with resin, glass cloth and veneer.

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