

CNW's 2006-07 Project GTCV

Glass Top Crown Vic

Installing the Inalfa Panorama Sunroof

At Rose City Sunroofs in Portland, Oregon



The operation begins by cutting out the original headliner.



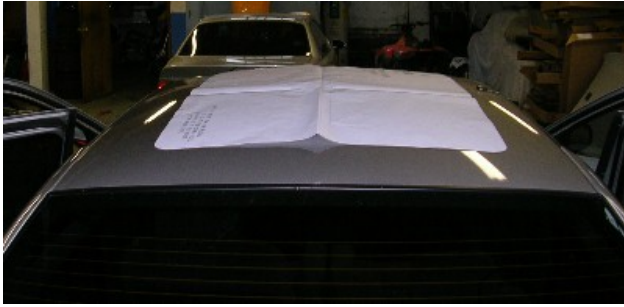
Note the bubble insulation between headliner and roof.



The CV roof has no cross members. Roof support comes from the perimeter structure.



Tracy cuts out the sunroof-frame pattern using a razor blade.



The pattern is laid on the roof to see if there is room between the perimeter roof structure for the sunroof. There is.



After checking for room, Tracy begins aligning the pattern.



He then measures from windshield and side rails to pattern to make sure the pattern is centered. (As a side note, Tracy is a stickler for having the sun visors align with the leading edge of the sunroof and not cover any portion of the glass so positioning is extremely important in his decision about the pattern's location.)



Using a grease pencil, Tracy outlines the pattern onto the roof.



The marked area to be cut.



Let the cutting begin. Tracy makes a hole in the roof which turns into a “handle” for lifting out the metal.



He then begins cutting the opening following the grease line.



The metal cutter as seen from the inside.



The opening is roughed in. (That's the ceiling of Rose City Sunroofs as seen through the new hole in the CV's top.)



A test fit. Note the distance between the corner of the sunroof frame and the CV's top. While side to side curvature is no problem, the front-to-back curve of the roof leaves a quarter inch or slightly more gap on the corners.



Tracy trims the corners of the hole to give the frame a bit of breathing room.



The sunroof module is set in place for a final fit.



After test fitting three times and adjusting the CV's roof hole, it's time to silicone seal the module.



Tracy screws in the interior framework which pulls the exterior frame closer to the CV's roof, squeezing out the silicone.



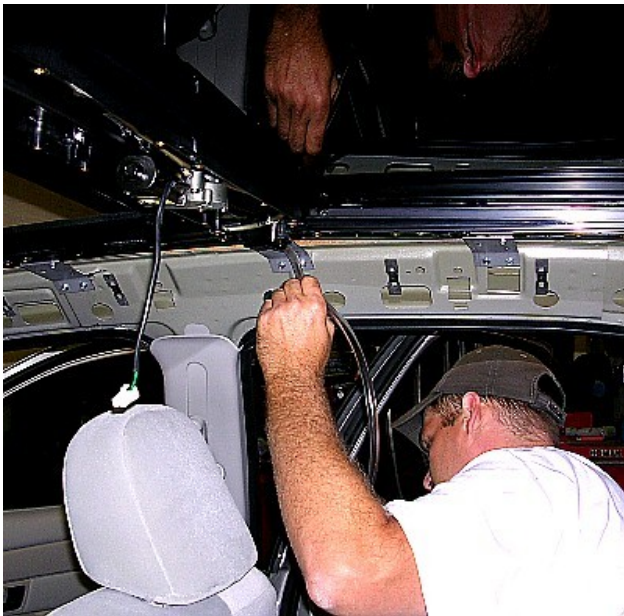
The top installed. You can still see the silicone residue on the roof which Tracy removes with a razor blade with the cardboard cover still on.



Trimmed out, silicone removed and a snug fit.



Tracy begins installing the extra braces from the sunroof module to the perimeter frame of the CV top. Each bracket not only reinforces the top, but brings the sunroof module tighter (and more water tight) to the CV roof.



The water drain is installed through the B pillar.



The water drain tube exits through a hole that already existed in the B-pillar framework.



Tracy installs the interior framework.



Using strong tape and the fuzzy side of Velcro as a wrap, Tracy assures a rattle free installation.



Sunroof wires are strung...



...And taped.



Tracy hooks the sunroof electrical connection directly to the battery. He decided to do this to assure the panorama's motor gets all the juice it needs to open the big glass panel.



Since a direct connection to the battery means the low-draw light in the sunroof's operation switch is always on, he installs a fuse block so the sunroof can be disconnected when the vehicle is left stored for long periods of time.



The front headliner frame is cleaned.



Headliner material is glued to the inside edges and corners, but not to the top (underside here) to avoid bunching or “fingerprints” when installed.



The original headliner is trimmed out so it will cover the perimeter framework in the CV roof. When asked how he knows where to cut the headliner, Tracy laughs and shrugs. “Years of experience, I guess.” And as we’ll see, the trimming was perfect.



What's left of the old headliner is screwed into place and the sunroof portion of the new headliner substructure (black) is attached. Note that the headliner material is not glued to the substructure's face, only to the edges and interior. This avoids the possibility of wrinkles today and bunching over the years as humidity and temperature changes take place. Also, if any part of the sunroof needs repairs later on, it is easier to detach the headliner and get to the rattle, leak or electrical problem.



The sunroof switch is installed.



The rear headliner frame is ready to install. Tracy sprays contact cement to the headliner. Note that the front portion has been affixed. See photo below.



He then trims out the area for the sunroof and folds the material over the interior edge and the inside of the trim panel making appropriate darts at the corners for a tight fit.



Tracy begins tucking the headliner material under the original headliner and attaches trim such as the B and C pillar interior panels, rear grab handles, etc.



More work on the headliner using what looks like a putty knife.



Tracy runs through hundreds of razor blades a week, always using a new one and discarding some that have been used only once or twice. During the installation of our CV panorama roof, he received this shipment of blades. Literally thousands of them.



Trim re-installed.



Handles and visors keep the headliner taut. Note the interior cross piece in the sunroof that hides the motor and wiring. It's the same color as the sun shades which can be closed even when the glass panel is open, blocking any wind and buffeting. The shade is mesh so some light always comes through the sunroof even when the shades are closed.



More tucking and snugging.







The finished interior looks as good or better than the original headliner. (Ignore the reflection of the light in the sunroof glass.)