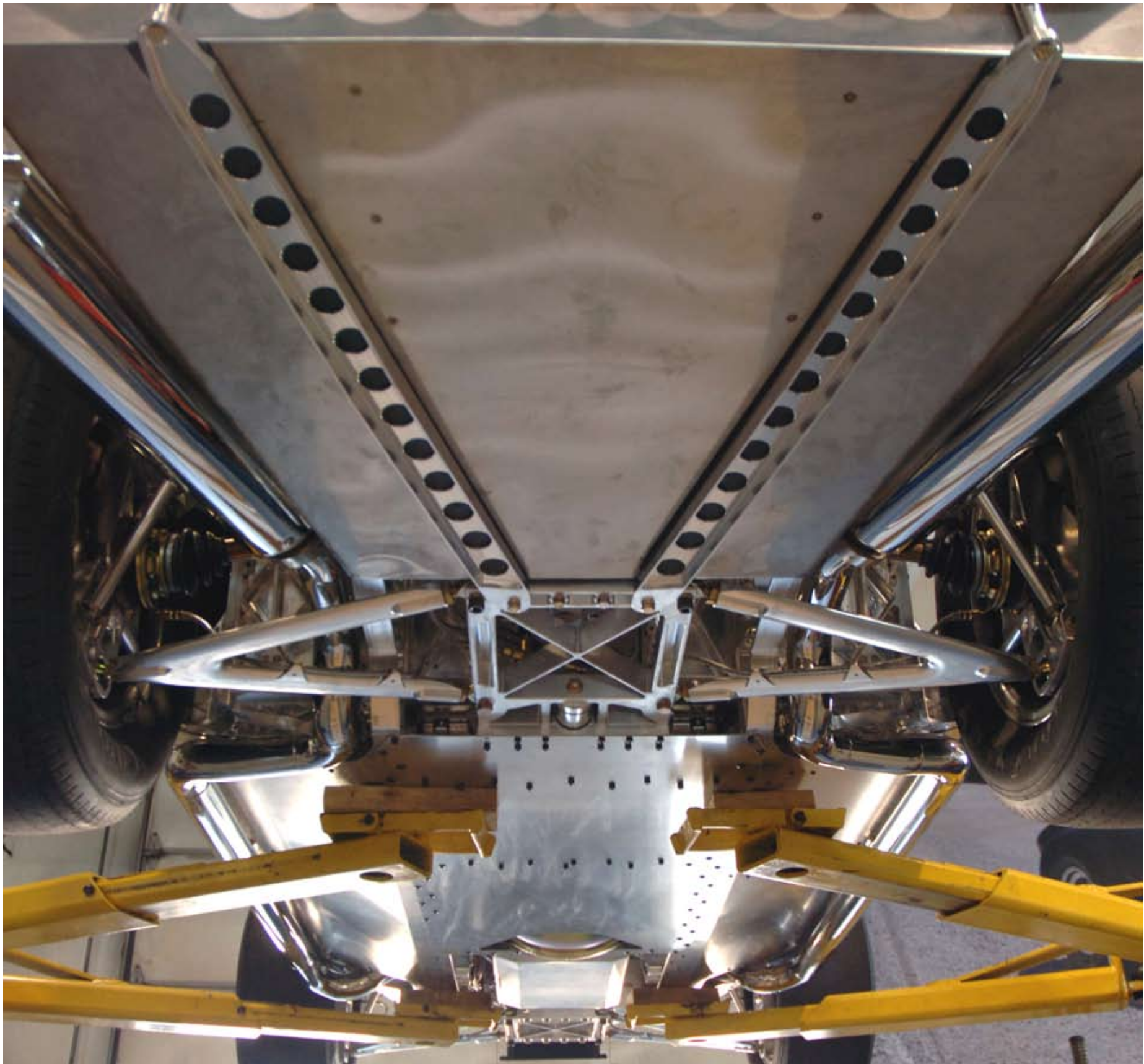


UNDERCARRIAGE

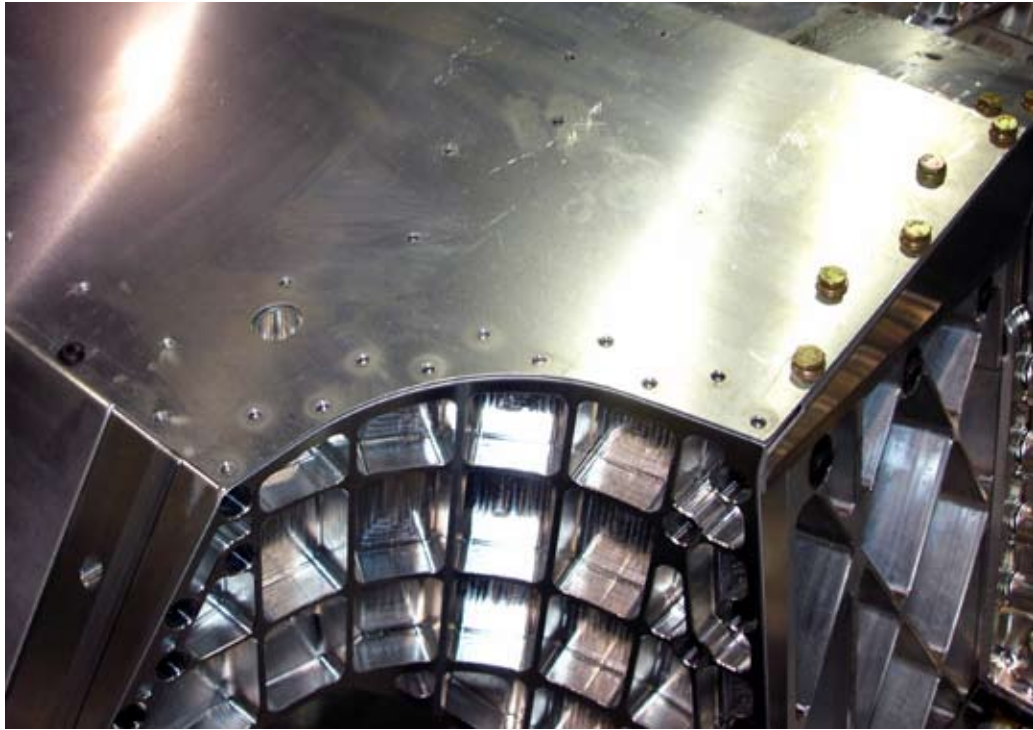
Opportunity is missed by most people because it is dressed in overalls and looks like work.

Thomas Edison

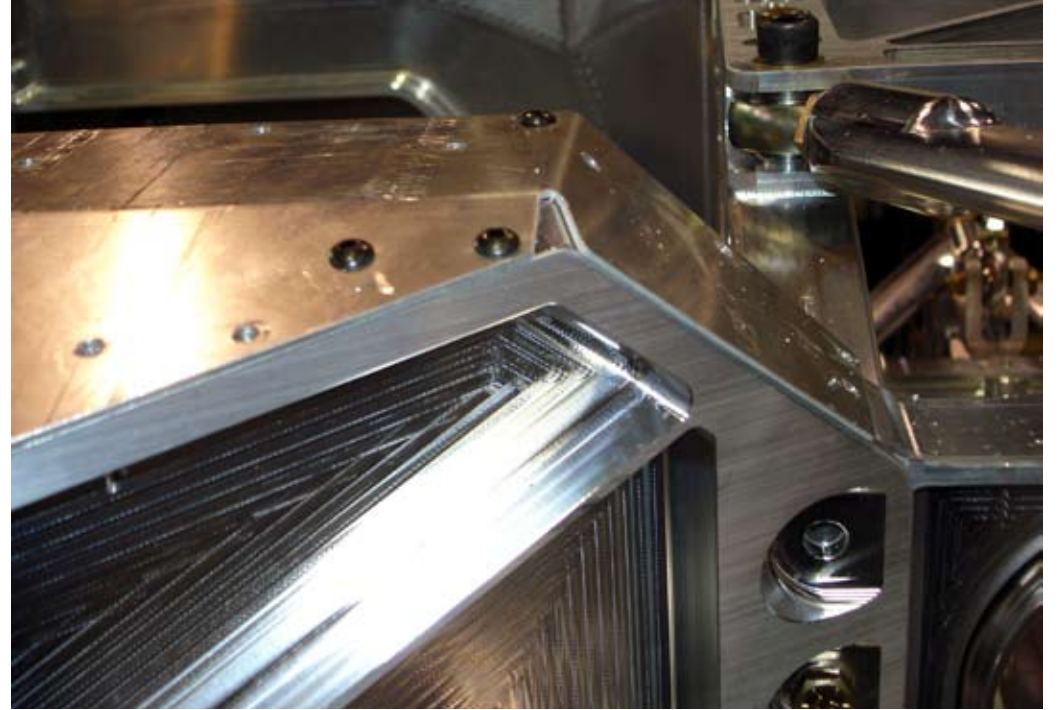


We designed the chassis similar to the construction of an airplane, with longerons and a stressed skin. The main chassis rails on the car are analogous to the longerons in the wings of an airplane. The floorpans, under body trays, and belly

pan are analogous to the stressed outer skin of a wing. Everything—including bolt holes—was laid out in CAD, and the sheet metal was cut with our water jet. We used steel bolts in the above prototype chassis. In Larry's car we used stainless steel bolts.



The edges of the sheet metal line up exactly with the machined parts. Many holes had to line up on several different parts—all at different angles after being bent in a press brake. The chassis is upside-down (on a rotisserie) in these two pictures.

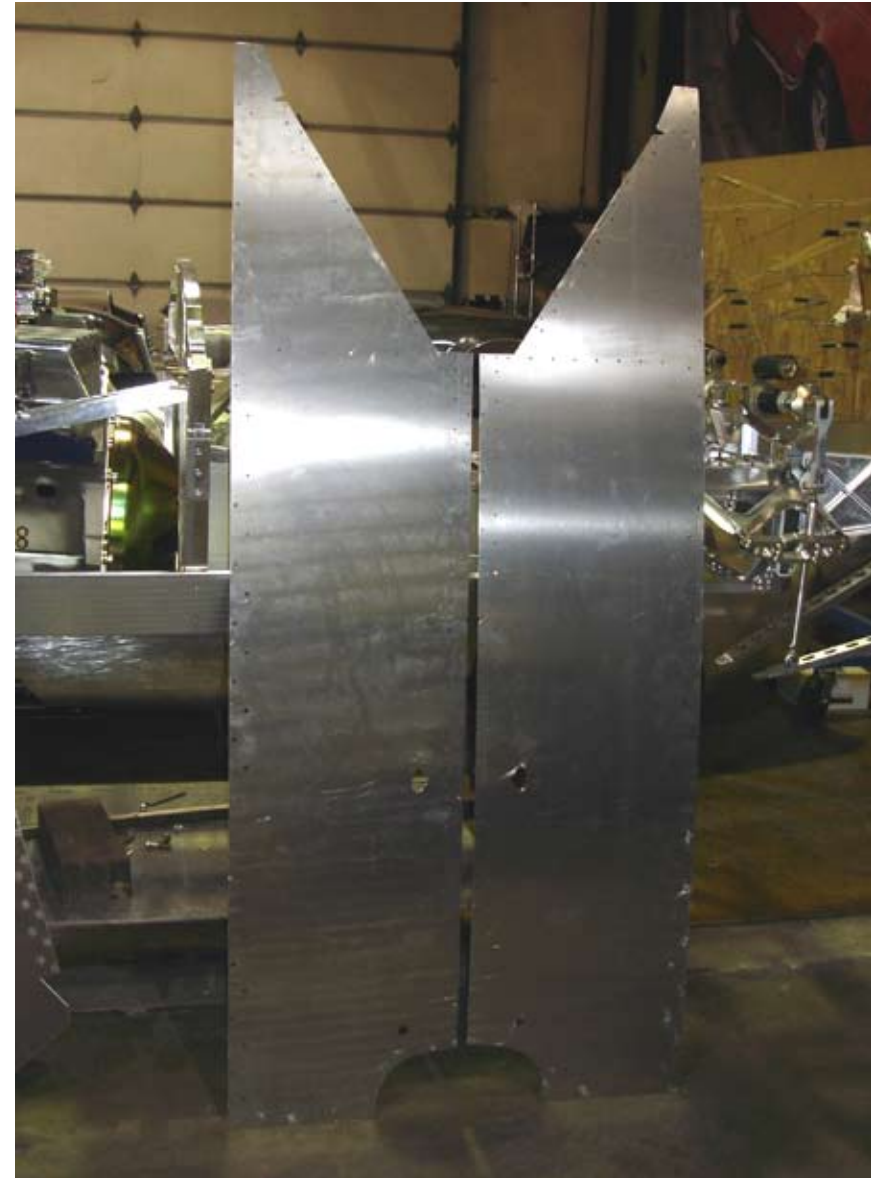


Every hole and edge in the entire car (a few thousand) was deburred on both sides—by hand if necessary.





The belly pan has 87 holes that tie together 9 individual parts.



The under chassis pans provide a great amount of stiffness to the chassis as well.



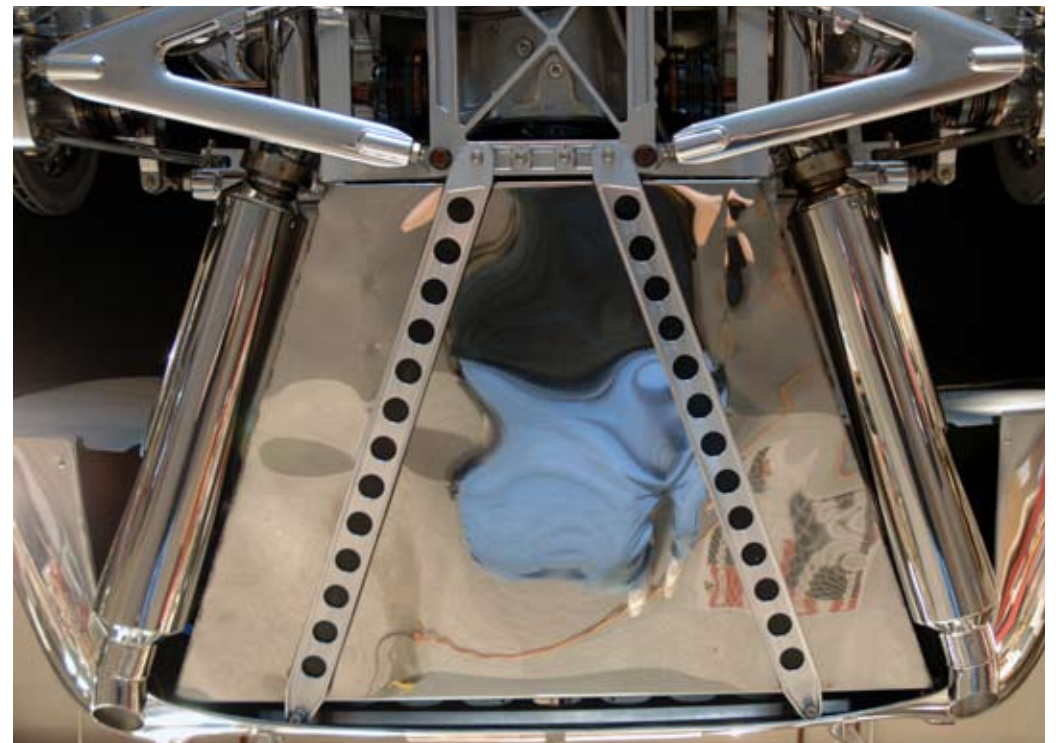
The floor of the trunk ties the entire trunk area together.



Above: A view of the final chassis during construction with no belly pans on the car. The chassis is upside-down (on a rotisserie) in this picture.



The side belly pan bolts all the way down the bottom of the rocker. The bolt holes are staggered to reduce the bending moment on the bolts, thus loading the bolts in almost pure tension and shear. The belly pans tie the rear suspension box and main frame rails all the way to the front of the footboxes.



The gas tank is made from stainless steel to prevent rust as condensation forms in the tank over time. We made the gas tank fill up as much of the rear under carriage as possible to minimize turbulence under the car and to act as a diffuser.



Above: I took this picture on a creeper looking up as the car was on our lift. The main reason for the dramatically improved stiffness of the chassis over an original Cobra is because we stressed both the floor and belly pans. We used button-head bolts to make the entire underside of the chassis as smooth as possible, thus reducing aerodynamic drag. The belly pans were polished to a mirror finish. The center belly pan looks grey and textured because it is reflecting the grey Race Deck diamond plate texturing of the shop floor.

