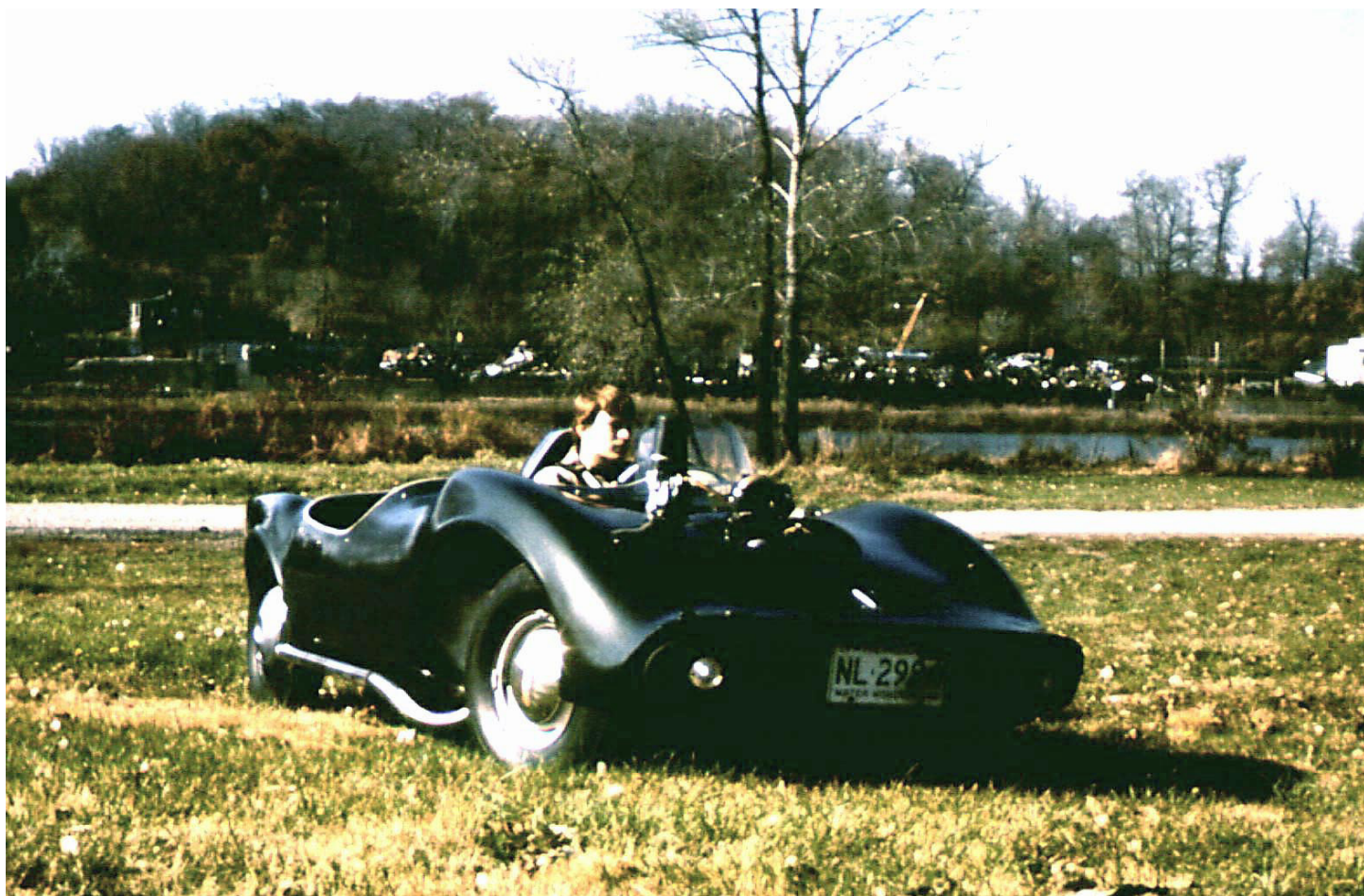
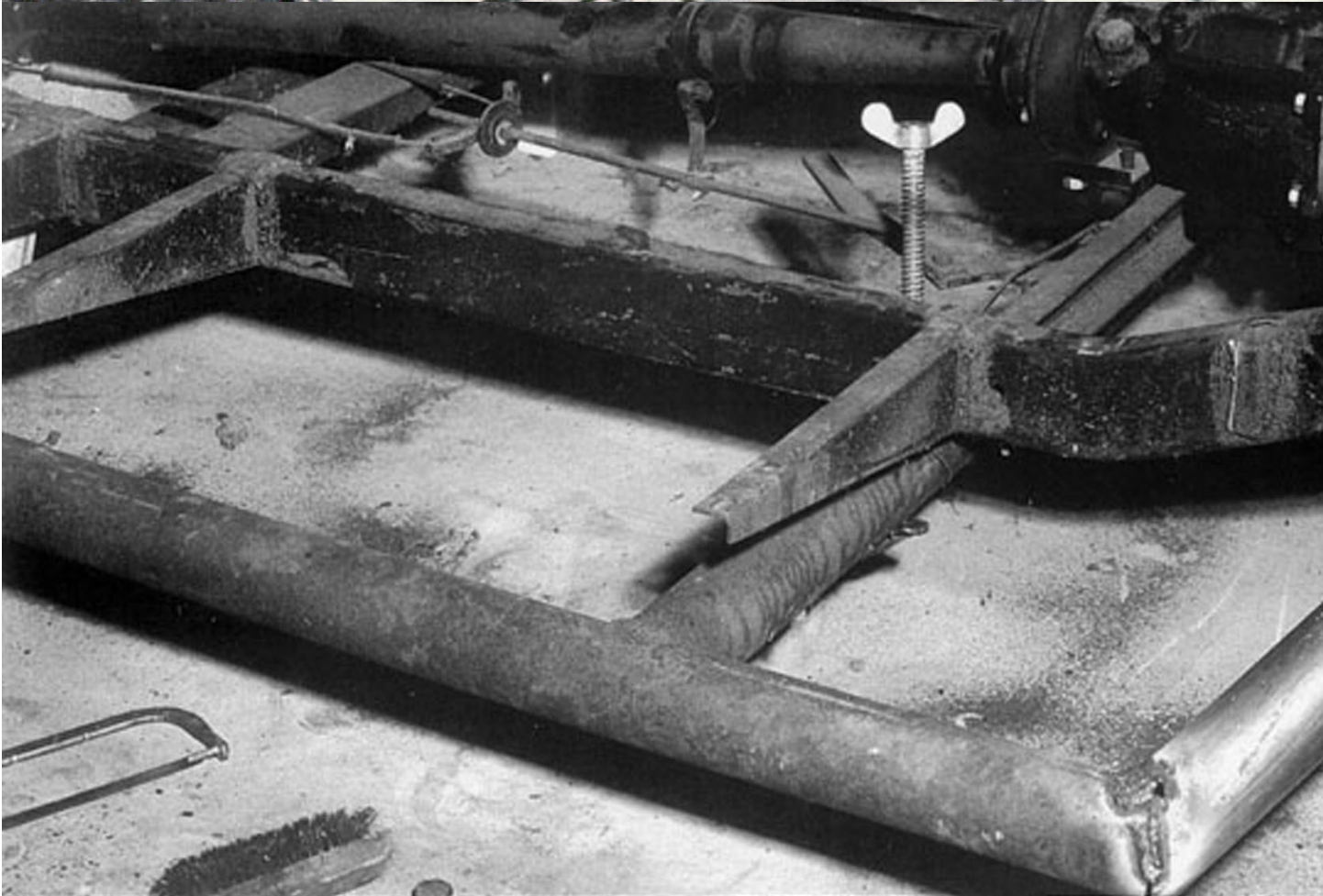
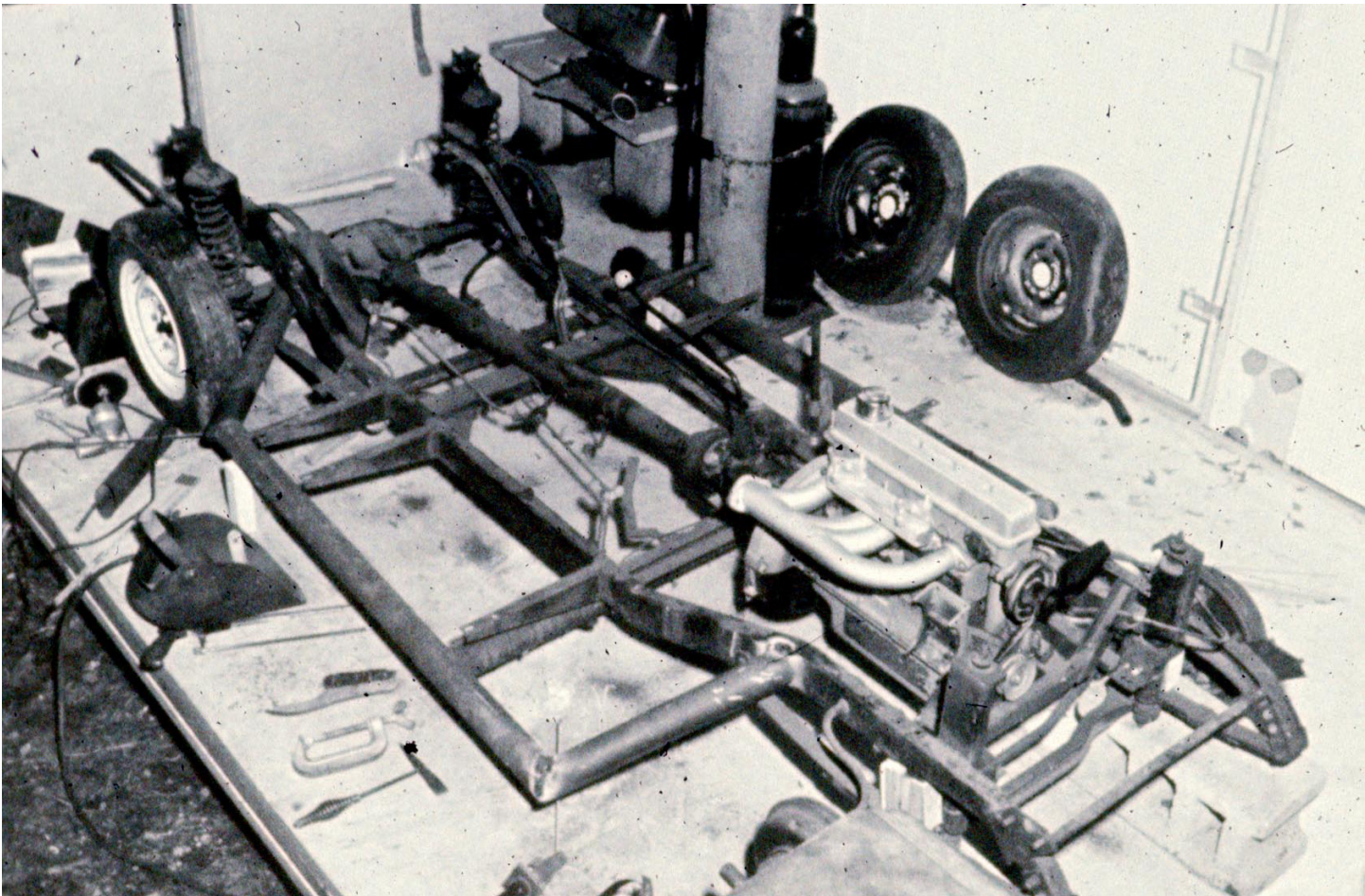
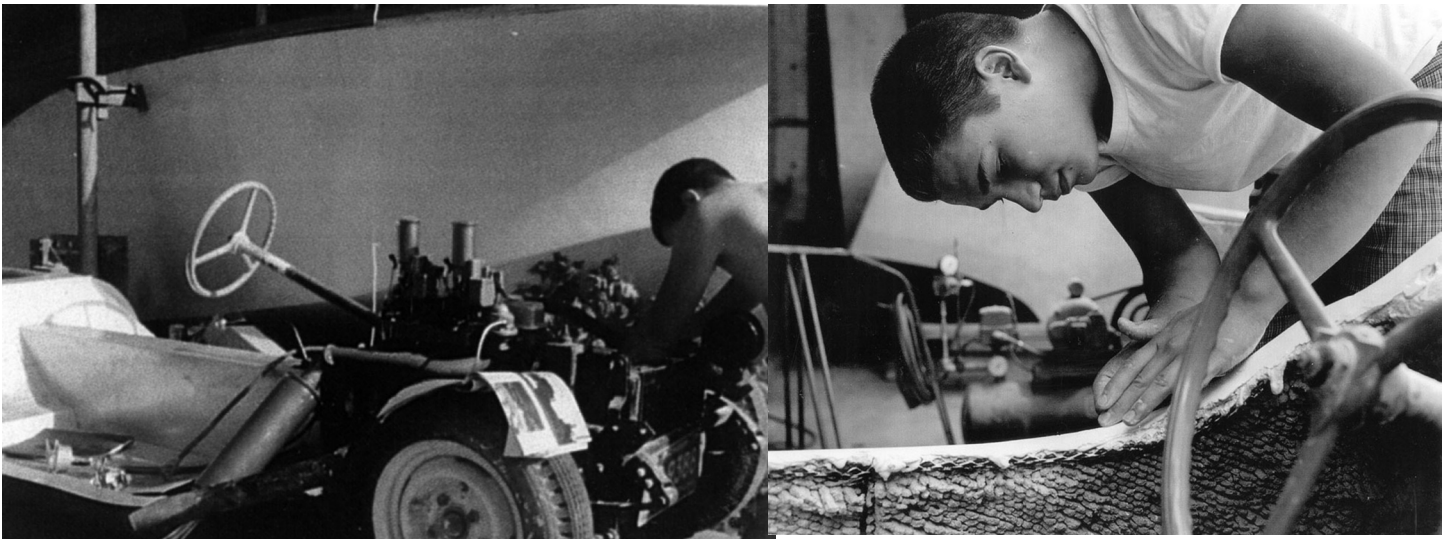


# Raising a Spider at Home







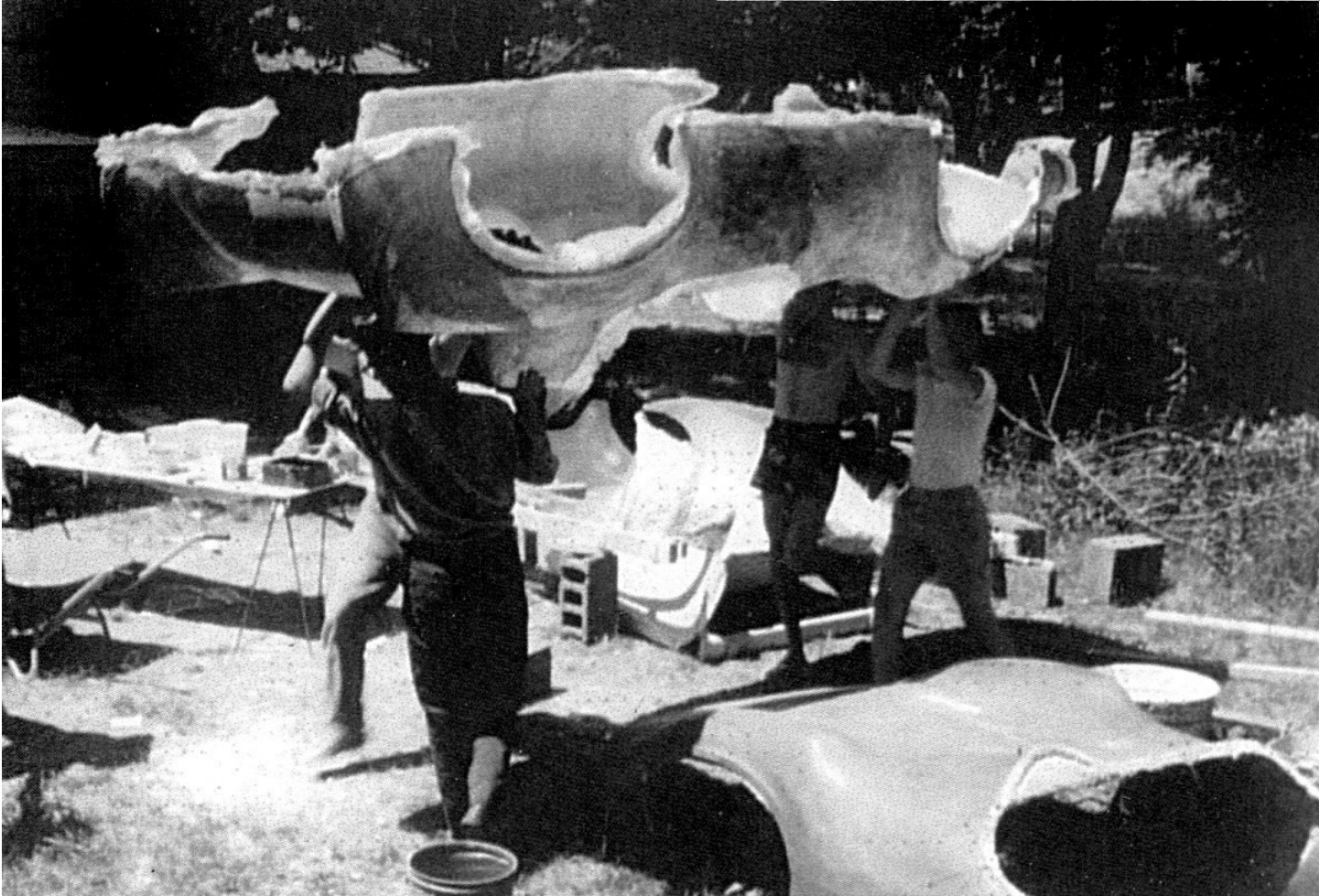
## LAHTI SPECIAL

In 1958, Michigan brothers Ahde and Aleksis Lahti approached their father with a typical teenager's request: "Can we have a car?" Their hearts were set on a Chevrolet.

"You have a car here," their dad replied. "You just need a body." The boys' father and uncle had recently abandoned their dream of building a spider (sports car). On a narrow strip of grass between the driveway and a large homemade boat rested the remnants of a Crosley Hotshot—bare frame and engine equipped with dual carburetors, Braje manifolds and finned valve cover. Both boys were eager to tackle the project but lacked mechanical experience. Aleksis was a freshman at the University of Michigan studying art, and Ahde was still in high school. "We didn't know anything about cars," Ahde recalled "I picked up what I thought was the generator and was told it was a starter." Artistic talent and ingenuity would have to compensate for their mechanical shortcomings.

The stock Hotshot had earned a reputation for cornering on two wheels—a tricky maneuver for even the most practiced of drivers. So the Lahti boys lowered the center of gravity by lengthening the chassis and pulling the engine back and down, between the rails. Next, they added one-inch aluminum spacers on each brake drum to spread the narrow tread by two inches. To keep their feet dry on wet pavement, they built a cockpit lining of sheet aluminum and supported it with steel tubing welded to the frame rails. The finished chassis rolled on stock 12-inch Crosley rims fitted with wider balloon tires.

Inspired by the new Lotus Eleven, Aleksis designed a sleek, low-slung roadster with a sloping front end and tall reverse blisters on the front fenders. After constructing a three-piece negative mould of plaster and chicken wire, the boys built the fiberglass body and shaped the firewall using bent electrical conduit topped with weather stripping. Two breather





stacks protruded through a small hood, which provided only limited access to the engine. But that was no problem-the body could be easily lifted off after removing three nuts on each side.

Nine months after they started, the Lahti boys completed their 980 pound, copper colored spider. The car was modem art on wheels with a body only two feet tall. The boys joked that they could file their fingernails dragging them on the pavement. Doors were unnecessary but getting behind the wheel required a bit of choreography-stepping over the side with the left foot, swinging the right leg over the steering wheel and sliding down into the seat. Naturally the speedster had its admirers, and some couldn't resist sitting in the driver's seat. One day as Ahde left high school, he found a curious senior girl stuck in the car with no modest way to extract herself while wearing a skirt. Ahde had to lift her out.

Initially, the Lahti Special had no windshield wiper for fear of scratching the curved Plexiglas. But driving in the rain was unlikely since the car also had no top. A simple tonneau cover kept the passenger's side closed during the winter, and that allowed a gasoline heater to throw a little warmth toward the driver.





The boys hoped their \$1,300 investment might pay for itself winning local sports car challenges. Extraneous pieces were quickly detached to lighten the load. For example the headlights were easily unplugged and removed, and they were generally found rolling around in the passenger compartment. The Crosley engine was exhausted through a straight pipe in which randomly spaced washers were strung on a rod to act as baffels. Stomping on the gas pedal often blew the washers out onto the street, leaving “unbelievable power and noise.” As Aleksis hoped, the Lahti Special was able to hug the pavement while skidding around corners, but the Crosley lugs were not up to the task. The boys nearly lost a rear wheel when excess pressure on the lugs broke the brake drum. Their hard driving also broke two crankshafts in four years, so the boys replaced the Crosley engine with an 1100 cc Fiat power plant that they rescued from a \$125 wreck.

When the boys finally decided to part with their Lahti Special, Aleksis gave it to Nick Bertoni, a friend who helped in the early design stages. It was a gesture of appreciation. Over time, subsequent owners added a second fiberglass headrest for the passenger and a Nash Metropolitan windshield was grafted to the body. Unfortunately, the once graceful Lahti Special morphed into a grotesque characture of its former self.





This is what the original Crosley Hotshot looked like in 1958. Aarre and Uolevi bought only a chassis, motor and drive train from which the Lahti brothers built their "Spider".

To the right is a photo of the Lotus 11 which inspired our design.

