

**T**HE DAYTONA COBRA project is a good example of the design theory that form follows function. In this case, the functions are three long-distance events — Daytona (13 hours), Sebring (12 hours), and Le Mans (24 hours) — all of which the Shelby-American crew plans to enter.

For these distances and at the projected speeds needed for a competitive car (175-200 mph), it was apparent that aerodynamics, driver comfort, and chassis strength would be the prime considerations in the overall design. With the first car of the proposed four-car entry in the test-driving stage, it looks as if the design goals have all been met.

Chief designer Pete Brock worked closely with aerodynamicists from Ford's Aeronautics Division to map out the coupe's final shape. Once this was done, a wooden buck was built right on a Cobra chassis and sent out to California Metal Shaping of Los Angeles, where the aluminum body panels were formed. While this phase was being carried out, Shelby's chief engineer, Phil Remington, had his crew hard at work building the redesigned chassis. The added framework supporting the body panels also forms a roll cage for maximum driver protection.

Competition director Ken Miles worked out the environmental factors affecting the driver — seat positioning and location of controls. In final form, the seat and pedals will be fully adjustable to fit any driver.

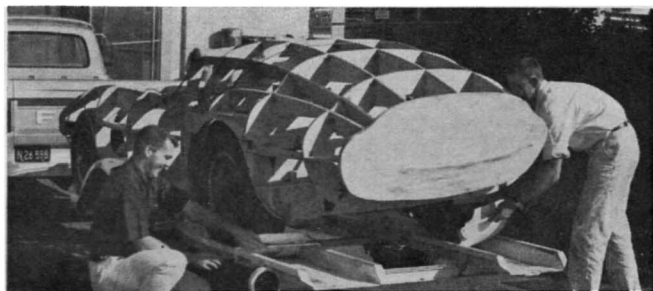
Interior aerodynamics of the car were also carefully studied to help in the cooling of the engine, brakes, and driver. For example, cooling air for the brakes will be forced through special scoops built into the rear quarter windows.

Simplicity was the keynote during construction, and the car's designed to be built as cleanly and simply as possible. It's American and it's a Cobra. The first tests were completed at Riverside, and the coupe was found to be exceptionally clean in its handling, very stable at high speeds under crosswind loading. Overall weight of the coupe is a bare 15 pounds more than the Cobra roadster.

/MT

# COBRA DAYTONA COUPE

*Shelby-American Enterprises build a new coupe to compete in long-distance sports car events*



*With roadster body stripped off Cobra, wooden formers serve as basis for the aluminum panels. Designer Brock kneels at left.*

**COUPE WAS STILL UNDER CONSTRUCTION AS MAGAZINE WENT TO PRESS. CAR WILL MAKE ITS DEBUT AT DAYTONA, AND FOUR WILL BE BUILT.**

