



Opposite page, inset: Bird emblem was revised for the all-new '58s. Main picture: Last-minute production woes delayed the arrival of the '58 convertible. Here are two of them in a contemporary Ford press shot. This page, left and upper left: "Squarebird" styling was as innovative as its engineering. Large bumper/grille would be mimicked on the 1958 standard Ford and the blind-quarter roof would be widely copied. Upper right: A '58 in action on the Dearborn test track. Handling was competent but far from agile.

engineer in charge of the aborted retractable hardtop once envisioned for the 1956 Continental Mark II.

The "Squarebird" broke new ground for Ford in employing unit construction, though the monocoque principle had been around for many years. In this instance, necessity was the mother of innovation. Engineers determined early on that the conventional body-on-frame approach would make it next to impossible to realize Boyer's ground-hugging body design and provide the interior space deemed necessary. But there was a snag: higher production costs. Fortunately, unit construction had also been ordained for the 1958 Lincoln and Continental Mark III, the largest unitized cars ever attempted. Lincoln-Mercury had broken ground in 1955 for a new factory at Wixom, Michigan to build these cars, and it was decided that the four-seat T-Bird

would be built there alongside them. This made sense, because all were low-volume luxury models, yet accounted for enough volume between them to keep one plant busy—and for Lincoln-Mercury to amortize its costs that much sooner. The move also made unit construction economically feasible for all three, since these models' lower volume would have made the expense of purpose-designed separate frames far higher than for a high-volume car like the standard Ford.

Despite the new T-Bird's fairly revolutionary nature, Ford Division was allotted only \$50 million for the entire project: \$5 million for styling and body/chassis/engine engineering and \$45 million for tooling. In a way, this was curious, because the '58 was *not* required to use as many off-the-shelf parts as the 1955-57 two-seat models. To smooth operations at Wixom,

management decided to farm out T-Bird body construction to Budd, which had built the two-seat bodies. Meantime, development of a companion convertible model was handed to Wettlaufer Engineering. A few problems cropped up in getting the car's structure exactly right, but they were solved in rapid-fire order. Consider this anecdote from Bob Hennessy, made to author Langworth and found in CONSUMER GUIDE<sup>®</sup> magazine's *Great Cars from Ford*: "We started in figuring the movement of the rear suspension [and found that] the car wasn't wide enough. We would be rubbing the sides of the wheel housing... Since we were about two-thirds into engineering with die models in progress, we literally split the drawing down the centerline of the car and spread it apart."

In a February 1958 article, *Motor Trend* magazine outlined the key