

Special Report— 1961 T-BIRD

by John Lawlor

THE NEW THUNDERBIRD is bound to be one of the year's most talked-about cars. Already, in the few weeks since its first showing, its advanced styling has become a subject of controversy. People seem to like it very much or not at all; few express an opinion in between the two extremes.

But looks are only a part of the car's story for '61. Its changes in engineering are just as extensive as those in appearance.

Late last summer, I was lucky enough to visit Dearborn and drive the new Thunderbird. Because the particular car was a prototype, I didn't want to push it too hard and, because the public announcement date was still a couple of months away, I wasn't allowed to take it outside the test track. So I couldn't form any final conclusions about its performance and roadability; those will have to await a full-scale road test.

But I was able to check its new features first-hand, finding out what they are and how they work.

And there are lots of them. Body and chassis components are completely different from those used last year while the power train has been modified so extensively it's the next best thing to new.

The one aspect of design that remains the same is the overall concept. The new Thunderbird is exactly the same kind of car as the '58 through '60 models. It would've been foolish to change; in its concept is the very key to the car's success.

Ever since the first two-seater appeared six years ago, the Thunderbird has been unique. Ford originally called it a personal car and introduced a new idea to the motoring public. From '55 through '57, the two-seater combined the convenience of relatively small dimensions with the performance, comfort and prestige of a full-sized convertible.

Most of all, it emphasized dramatic styling. The '57 model, especially, has become a minor classic. Today, it's one of the most admired cars of its vintage.

Then, in '58, the Thunderbird idea was amplified into a completely new design for four passengers. It was larger, though still not the size of an ordinary Ford, and placed a new stress on distinction and luxury. The interior layout was particularly unusual, featuring four individual seats divided down the middle by a console above the drive-shaft.

MOTOR TREND saw the car as a portent of the future and



THOUGH ALL NEW IN DESIGN, THE LATEST THUNDERBIRD RETAINS THE GENERAL CONCEPT OF THE '58 THROUGH '60 FOUR-SEAT MODELS.

There's been a big change
in the Thunderbird for 1961.
This test analysis tells
how it compares with
its popular predecessors

presented its Car of the Year Award to "Ford Division for the overall concept of the 1958 Thunderbird — a car that combines safety with performance and comfort with compactness." Through '59 and '60, the four-seater continued without any basic changes, gaining each year in prestige and popularity.

Thus, the '61 Thunderbird is heir to quite a tradition. When I saw it for the first time, I was anxious to see how well it measured up to its forebears.

The design of the body is the basis of the car's distinction; not just in styling but in overall size and arrangement. So, before I actually drove the car, I examined it carefully.

In size, the new model is virtually the same as the '60. Its 113-inch wheelbase and 52.5-inch height are identical with last year's figures while the 205-inch length is three-tenths-of-an-inch shorter and the 75.9-inch width is 1.1 inches less.

The body is now of dual-unitized construction, consisting of separate front and rear sections welded together at the cowl. Although this is primarily for manufacturing ease, it has the theoretical advantage of providing greater rigidity. Two compact structures are stronger than a single, larger unit.

Probably the one biggest improvement in body engineering

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is easier entry and exit. The windshield dogleg has been eliminated, not only removing the obstacle itself but allowing the front edge of the door opening to be reshaped and placed further forward. As a result, front seat foot clearance and overall door opening have been increased three inches.

Overhead clearance has also been improved by curved door glass, which arches slightly into the roof.

To simplify driver entry and exit in particular, the steering wheel and column swing approximately 10.5 inches to the right. The movement is guided and supported by a curved channel under the dash and pivots on a flexible coupling below the steering gear housing ahead of the cowl.

Placing the gear selector in PARK unlocks the column and placing it in any driving range, which cannot be done with the wheel swung aside, locks it back in the straight-ahead position. Thus, the wheel must be in its proper place before the car can be driven.

To judge the improvement for myself, I stepped in and out of '57 and '60 Thunderbirds before I tried the new model. The difference is truly remarkable. For such a low car, access to the passenger compartment is now exceptionally good.

In fact, the added clearance is so good that I don't see the necessity of the swinging wheel. It takes a bit of effort

to unlock the column and swing it aside and, with the increased distance between the seat and door jamb, the driver has little difficulty getting his legs in or out when the wheel is in driving position. I suspect many owners will ignore the feature, once the novelty wears off.

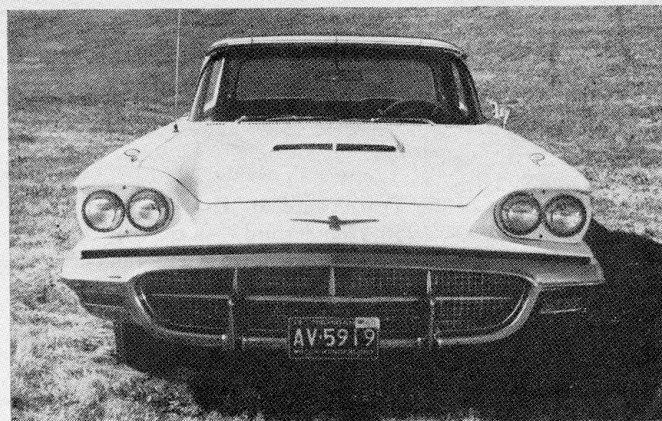
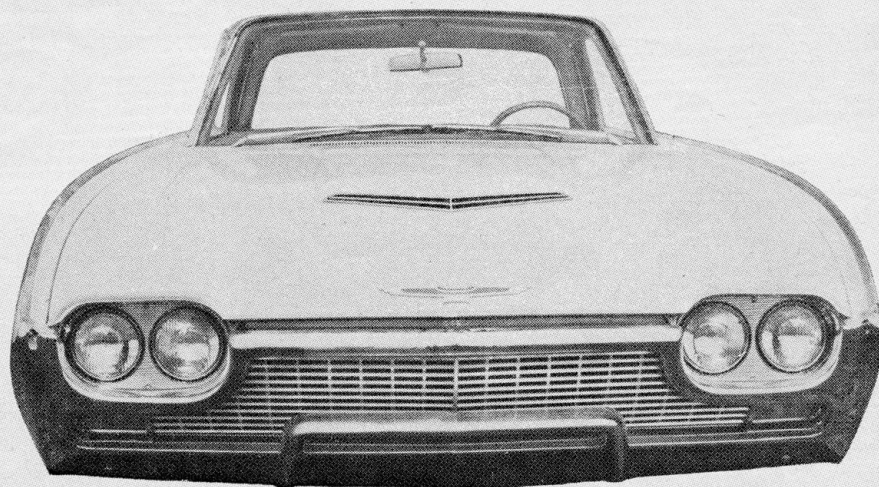
Other interior changes are minor but add up to greater comfort and convenience. The individual seats have been redesigned with heavier foam rubber padding and have greater shoulder- and hip-room. The console separating the compartment has been reduced in size about 25 per cent and now houses the cigar lighter, ash trays and a small glove box. The radio speaker and window controls, previously located in the console, have been moved to conventional positions.

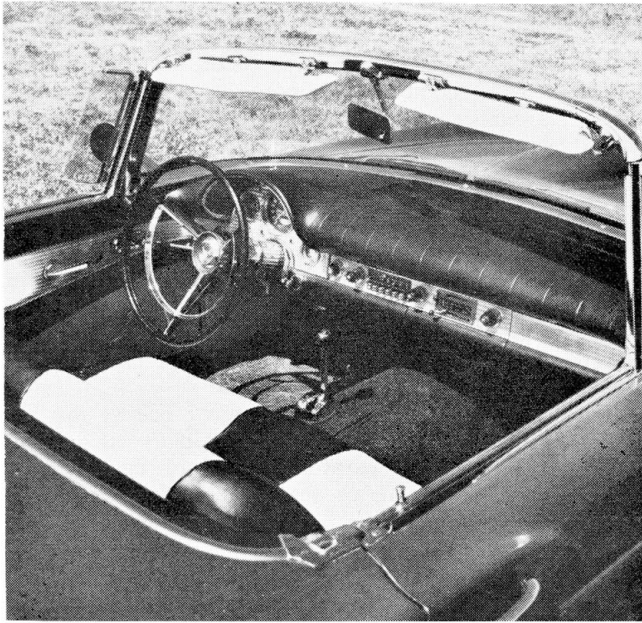
Among other new details are a radio that is fully transistorized and a rear-view mirror attached directly to the windshield with vinyl lamination.

With unit construction, a new body means a new chassis. Ford has taken advantage of the opportunity to re-engineer the suspension, steering and brakes.

The Thunderbird is one of several '61 cars to feature what engineers call "controlled wheel recession." In simpler terms, the wheels bounce fore-and-aft as well as up-and-down. The distance involved is only about a quarter-of-an-inch but it's enough to allow unsprung parts of the car to react more flexibly to road shocks, so overall riding qualities are smoother and quieter.

From the front, the three basic Thunderbird designs show the car's evolution in appearance; from the clean, simple lines of the '57 two-seater through the crisp, sculptured look of the '60 to the tapered, futuristic shape of brand-new '61 model.





The idea isn't completely new; Mercedes-Benz has long used something similar. For the first time, though, it's receiving serious attention in this country.

At the front, there's a new arrangement of coil springs with upper and lower control arms. The lower arm is a single, narrow unit instead of being A-shaped. From its outer end, a strut runs forward to a rubber bushing in the frontal structure. It's this bushing that permits the back-and-forth wheel movement.

Lincoln and Cadillac have similar layouts this year, with one difference. Their coil springs are placed between the control arms while the Thunderbird's are above the upper arms, like those of the Falcon, Comet and Rambler.

The rear suspension resembles the '61 Mercury's. The forward mounts of the semi-elliptic springs consist of new tension shackles that allow the wheels to move to the rear. Arms extending from the shackles to rubber mounts on the frame control the amount of movement.

These shackles have some additional advantages; they act as insulators and, under load, provide a build-up of the spring rates.

To try the new springing, I took the car over a stretch of concrete pavement laced with tar strips. I found to my surprise that I had to pay very close attention or I wasn't aware of the wheels hitting the strips. The passenger compartment was almost completely insulated from the usual jarring, thumping sensation.

Then I turned to some rough surfaces, gravel, cobblestones and just plain rocks. These I could hear and feel, though certainly not to the degree I would've in many other cars.

By this time, I knew the '61 Thunderbird was even better on the boulevard than its predecessors. Still, how would it handle on the open highway?

For greater stability, the tread has been increased one inch in front and three inches in the rear. But the biggest handling change is in the steering. Power is now standard and the overall ratio has been cut from 25-to-1 to 20.3-to-1. In addition, the diameter of the steering wheel has been reduced an inch to 16 inches for a handier feel.

Taking a series of constant radius curves, I discovered the car cornered with noticeably less body lean. And I was immediately impressed with the steering. It's not only quicker but has a more positive feel and returns more precisely. At the same time, it requires no greater effort than it did in previous models.

Power brakes have also been standardized. Incorporating self-adjustment, they have been increased in gross lining area to 233.75 square inches from 208 square inches in '60.

One chassis improvement found in the Ford Motor Company's other big cars for '61 but rejected at the last minute for the Thunderbird is the 30,000-mile lubrication interval. When I asked the reason for the omission, I was told the high torque of the car's new 390-cubic-inch engine required that the drive shaft universal joints be serviced more frequently.

However, the interval has been extended to 4,000 miles coinciding with the oil change recommendation for maximum convenience.

The new powerplant is essentially a bored and stroked version of last year's 352-cubic-inch unit. It develops the same horsepower, 300 at 4600 rpm, but torque has been boosted

The sports-car-like interior of the two-seater gave way to a new concept of four individual seats, divided by a console, in the '58 through '60 models. The latest version retains the same layout but with such refinements as heavier foam rubber padding and a redesigned console about 25 per cent smaller.

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to 427 pounds-feet at 2800 rpm from the 352's 381 pounds-feet at the same crankshaft speed. The carburetor is a four-barrel and the compression ratio 9.6-to-1.

This, incidentally, is the '61 Thunderbird's only engine. The 350-hp, 430-cubic-inch option borrowed from Lincoln isn't offered in the car any more.

The Cruiseomatic transmission, a torque converter and three-speed automatic, is also standard; manual and overdrive have been dropped completely. It's basically similar to the '60 unit but is about 25 pounds lighter and has a new method of shift control, relying on manifold vacuum instead of a mechanical linkage. The final item in the power train, the rear axle ratio, is an even 3-to-1.

Performance was the one driving quality I couldn't assess with any accuracy while at Dearborn. Certainly, the car felt smooth and powerful but so does any big V-8.

To do a little calculating, the '61 Thunderbird doesn't

seem to have quite as good a weight-to-power ratio as the '60. With 160 pounds greater weight, the new version has 13.7 pounds per horsepower while its predecessor, with the standard 352 engine, has 13.1 pounds per horsepower. This, combined with the new model's higher gearing, would indicate slightly slower acceleration.

However, this is all based on the assumption both 300-hp engines actually develop something like 300 hp. I'm not sure they do. The greater displacement and higher torque of the new 390 suggest that it's a significantly more powerful unit. My own suspicion is that the 352 was rated optimistically while the 390 produces closer to an honest 300 hp.

Which leaves a lot of unanswered questions about the new Thunderbird. When a production version can be fully road tested, MT will discuss these in detail.

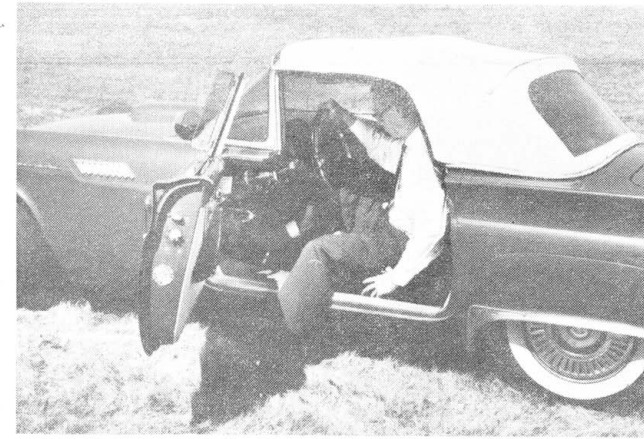
On the basis of the prototype, though, I believe the '61 model shows a new level of sophistication in its engineering. Without diminishing the particular appeal of the old two-seater nor the trailblazing of the previous four-seater, the latest Thunderbird looks to me like the best one yet. /MT

Although exterior width has been reduced, the rear seats have more shoulder and hip room than last year. Vinyl, Bedford cord and leather upholsteries are offered.

At the rear, a return to a single pair of circular tail lights not only distinguishes the '61's appearance but allows a lower deck opening for better trunk access.



Virtually the same size as the '60 Thunderbird, the new model's wheelbase is 113 inches, length 205 inches, width 75.9 inches and height 52.5 inches. The overall curb weight is 4117 pounds.



One of the biggest advances in the '61 Thunderbird's body engineering is improved entry and exit. Not only is the door opening larger and better shaped but a unique steering wheel that swings out of the way is standard equipment. The double exposure below shows how it moves 10.5 inches to the right.

