ROAD TEST 1/64 SPORTS CAR GRAPHIC

FORD MUSTANG

A truly excellent American sports car...now, if we can only talk the Ford Motor Company into producing it!

WHEN THE MUSTANG WAS PRESENTED IN EUROPE it received a great welcome, in a sort of friendly, sceptical manner, by the motoring press. Most of us liked the idea of the car and its styling. On paper its European inspired chassis and suspension seemed fine, but, although we knew that the car had been tested on several occasions, none of us had been on the road with a Mustang. Frankly we were dubious about its possibilities on our roads, as well as its handling and performance, compared to some of our better sports-GT cars.

"It is a nice American gadget," but would it work from our own European point of view? Do not misunderstand me, we have great admiration for many of the US realizations in the big car field, and this year the heavy Ford Galaxie frequently trounced the Jaguars in England in a most convincing manner. But, and there is a "but", up to now no small, practical sports cars had come over to us from America.

It is widely known that Ford is making a great push in Europe, both in sales promotion and in the competition field, their latest move being the purchase of Lola and the hiring of ex-Aston Martin team manager John Wyer. Since the Mustang uses the German Ford Taunus 1500 V-4 engine, it was logical for Ford to show this car in some of the more important European auto shows, and after the recent Frankfort Show Ford went even further in arranging for test of this car by some of the European journalists. The Mustang operation was carried out in a quick, efficient manner, and on a fine day of October (Thank God, since the Mustang has no top!) I landed at the Stuttgart airport where I found a shiny blue and white, fast looking spyder waiting, surrounded by a crowd of curious Germans. Herr Zenmann from Ford Cologne, in his own improvized English, explained to me that the car was mine until the next day, and that I could go anywhere I wanted with it. Naturally he would keep me company, just in case the car required any servicing along the way, and this was fine with me.

The first thing I discovered when I examined the car was that I was lucky to have come with only two briefcases instead of a suitcase, as the trunk compartment, located above the engine in the rear, had a very limited amount of space. Getting into the Mustang requires suppleness, as you have to sort of sink deeply into the cockpit, but once installed the sitting position is very good. The leather covered seats are built around the frame and are not adjustable. The most suitable driving position is found by using the adjustable steering wheel and the pedals which have an adjustable length by means of a sort of brake lever. It is quick and simple to use. Visibility through the plastic windshield is poor and it is necessary to look slightly above it in order to drive properly. Fortunately the top part of the windshield is slightly curved in such a way that very little wind actually hits you, but I doubt if this arrangement would be as good when it rains.

The general finish of the car is of good quality but quite a few body rattles could be heard during our test, particularly on bad roads. Only one fully running Mustang has been made so far. The body is aluminum, and the car has been used extensively for one year now, which may explain part of that defect. Our readers are familiar with the general data and conception of the Mustang (see December 1962 SCG), so I will not go into too much detail on that. Let me remind you, however, that the Mustang is a rear engined, open sports car only 154 inches long, 61 inches wide and 39 inches high. Its wheel base is 90 inches. The chassis, designed by ex-Aston Martin engineer Roy Lunn, is of the tubular type and makes a very sturdy frame for the car. The car has independent suspension front and rear (double wish bones, telescopic shocks, coil springs and torsion bars) and disc brakes are used in front. The engine is the V-4 1500-cubic centimeter ex-Ford Cardinal, now called the Taunus 12 M. It is a good, compact engine giving 65 horsepower in the TS production version built in Germany, but in the States 89 and 109 DIN hp versions of this engine were developed for the car before it was sent to Europe. A four-speed gear box, operated by an excellent stick shift, is used. This box is mounted behind the engine, which, incidentally, is well up in the middle of the frame. Steering (2.9 turns from lock to lock) is rack and pinion type and a very good one, too. Ford Germany told me that the Mustang I drove was equipped with the same 65 hp engine used in their Taunus TS. The idea of saying that to the press is a clever one, but after I drove and recorded figures on this Mustang I am convinced that the car had closer to 85 horsepower than 65, these figures, incidentally, being quite common for 1500 cars today.

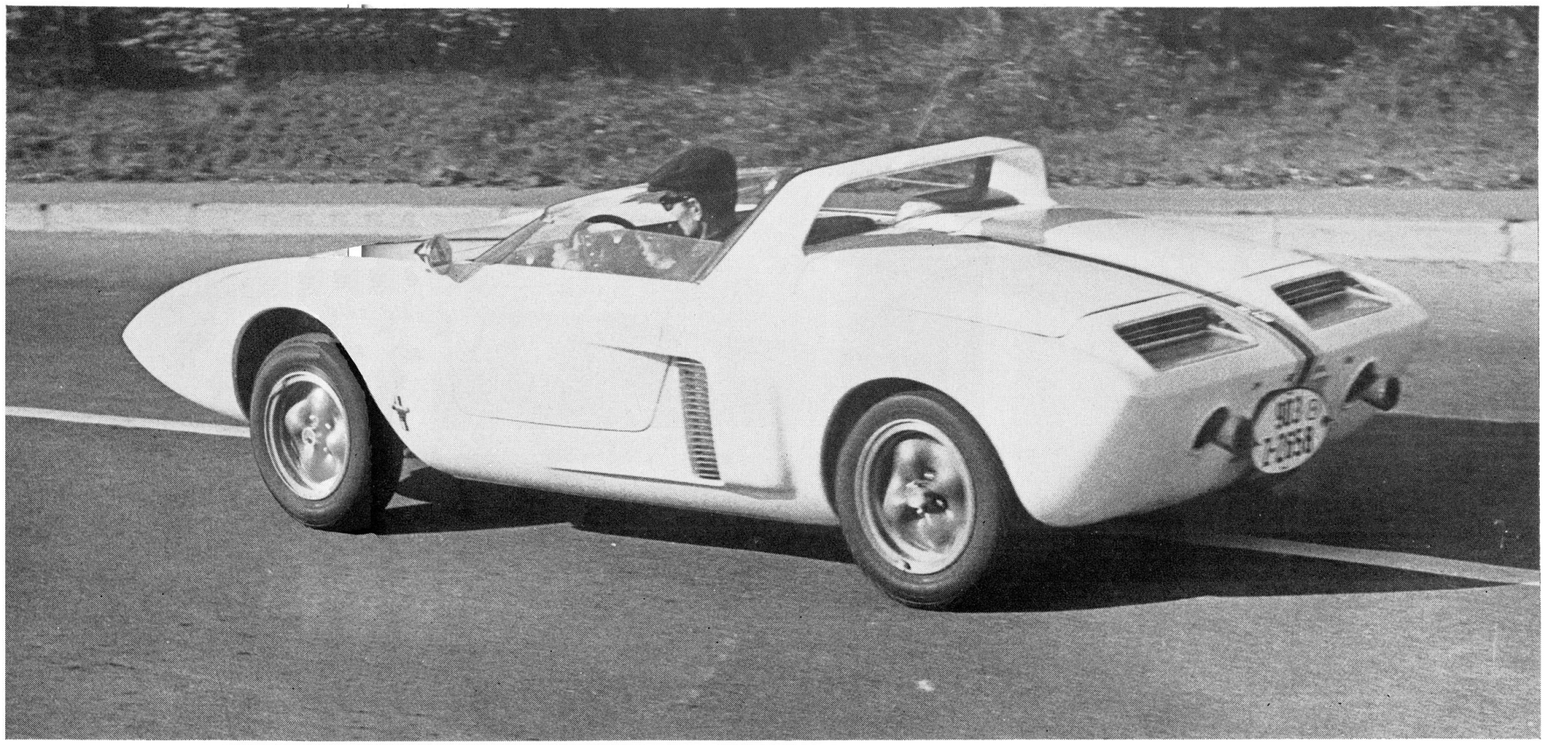
Curb weight with gas is 1550 pounds which explains why I had such good acceleration figures, but I doubt if they could have been achieved if it had 65 horsepower.

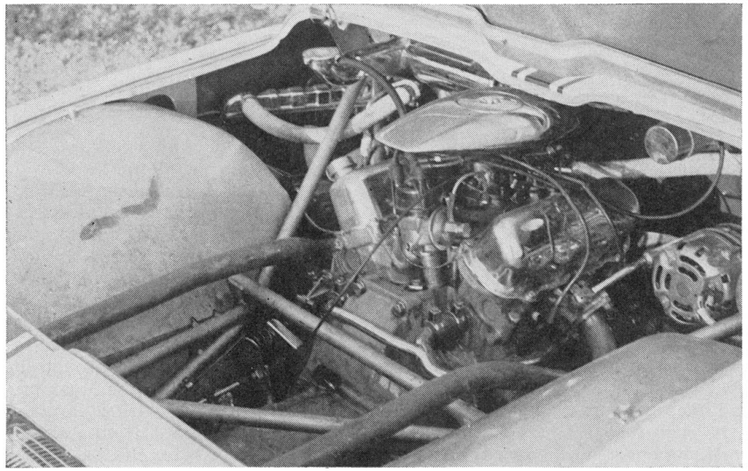
As soon as I started the car and hit the open road I was surprised by the ease with which the Mustang could be driven. The steering is light and pleasant, the quick action gear box is a joy to use, and the pedals are well placed although, unfortunately, there is no real space in which to rest your left foot — which can be tiring after a while. The engine was very peppy, with its liveliness being emphasized by the healthy sound coming from two large exhaust pipes.

As soon as I started along a curvy road I noticed that in spite of a certain general feeling of lightness over cambered roads, the Mustang is a marvelously handling car, giving a great confidence to its driver, almost immediately. It would follow a very precise line around a curve, and when using brisk steering correction around tight corners, taken at speed, I could hardly make the back break away, and it was only on really bad surfacing that the car felt jumpy.

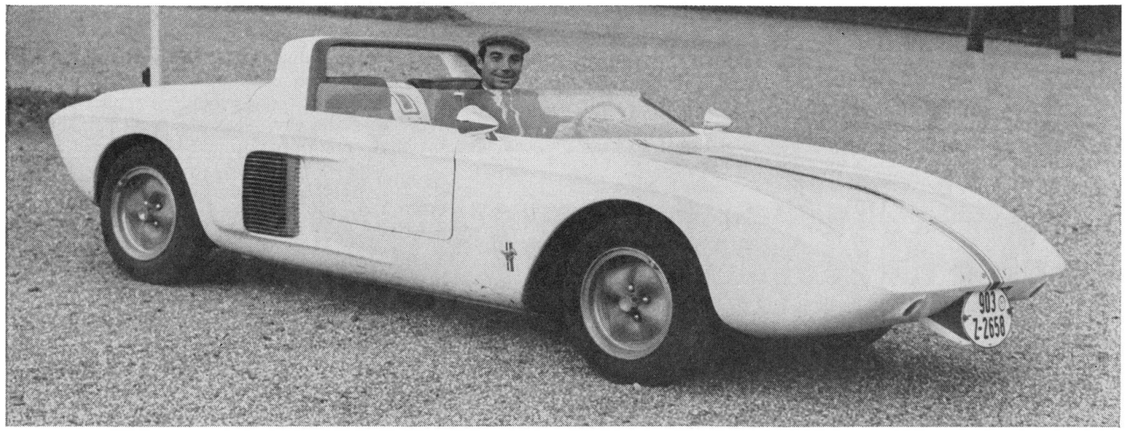
My journey eventually took me to the fast and tricky course of Solitude, where many long laps around it convinced me that Ford had produced, in the Mustang, a first class, good handling sports car with all-around excellent performances. Even under hard driving conditions the car always reacted in a safe, clean manner, and this even when voluntarily taking a bad line in a curve, or, even worse, braking in the middle of it. Fast, medium and slow turns were all absorbed beautifully and with the Mustang I discovered all the joys of a true fun, safe sports car with real spirit.

The ride was all right but I would not call it one of the best features of the car. Also, the back part of the seat does not have enough padding, I believe, and there-

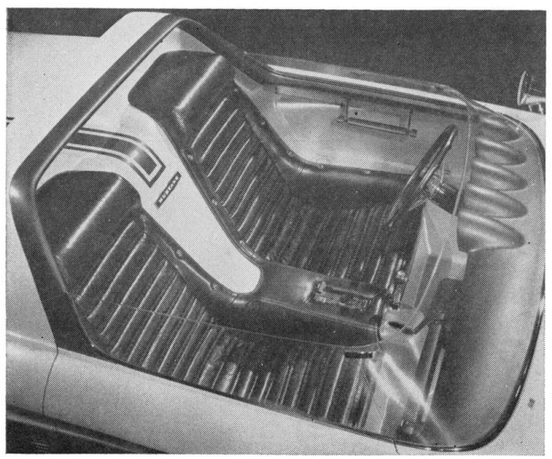


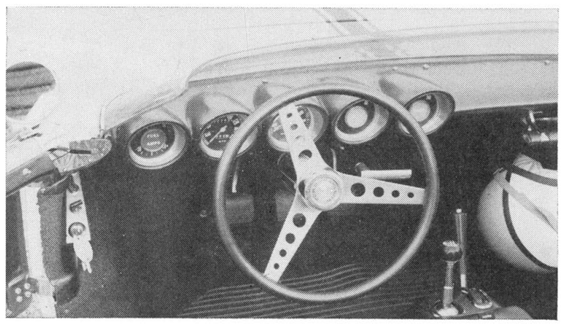


The considerably small space required by the sturdy, little V-4 is apparent in the photo at left. One of two radiators is visible. Cahier, directly below, found the Mustang extremely pleasant to drive and quite a performer for its size. In other photos, details of front compartment and cockpit area show quality work.

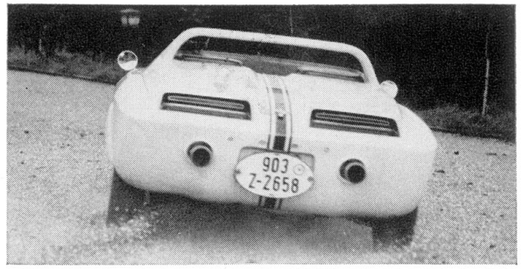


FORD MUSTANG *(continued)*





FORD MUSTANG: ROAD TEST 1/64



ENGINE:

Type	V-4 water-cooled
Head	Iron, removeable
Valves	OHV, pushrod, rocker actuated
Max. bhp	100 @ 6500 rpm
Max. Torque	89 lbs. ft. @ 3800 rpm
Bore	3.54 in. 90 mm.
Stroke	2.32 in. 58.8 mm.
Displacement	91.4 cu. in. 1488 cc.
Compression Ratio	9.5 to 1
Induction System	One double-throat downdraft Solex
Exhaust System	Two into one; two separate exhaust, one on each side
Electrical System	6-volt, distributor ignition

CLUTCH:

Single disc

Diameter	7.50 in.
Actuation	Hydraulic

TRANSMISSION:

4-speed, all synchronized

Ratios: 1st	4.02 to 1
2nd	2.33 to 1
3rd	1.48 to 1
4th	1.00 to 1

DIFFERENTIAL:

Sprung

Ratio	3.3 to 1
Drive Axles (type)	Open, 2-joint

STEERING:

Rack and pinion

Turns Lock to Lock	2.9
Turn Circle	30 ft.

BRAKES:

Disc in front — drum in rear

Drum and Disc Diameter	9.5 in. front; 9 in. rear
Swept Area	283 sq. in.

CHASSIS:

Frame	Multi-tube, chrome-moly
Body	Aluminum
Front Suspension	Independent, twin wishbones, torsion bar, telescopic shocks and coil springs.
Rear Suspension	Unequal length wishbone, single torque arms
Tire Size & Type	Dunlop SP 550 x 13

WEIGHTS AND MEASURES:

Wheelbase	90 in.	Ground Clearance	5.5 in.
Front Track	48 in.	Curb Weight	1550 lbs.
Rear Track	49 in.	Test Weight	1900 lbs.
Overall Height	39.4 in.	Crankcase	4 qts.
Overall Width	61 in.	Cooling System	8.5 qts.
Overall Length	154.3 in.	Gas Tank	13 gals.

PERFORMANCE:

0-30	4.1 sec.	0-70	15.0 sec.
0-40	6.1 sec.	0-80	19.4 sec.
0-50	8.0 sec.	0-90	2.6 sec.
0-60	11.1 sec.	0-100	34.1 sec.

Standing ¼ mile ..... 17.4 sec. @ 76 mph Standing KM: 32.5
Top Speed (av. two-way run) ..... 111 mph

Speed Error	30	40	50	60	70	80	90
Actual	30	40	50	59	69	79	88

Fuel Consumption Test ..... 29 mpg Average ..... 22/24 mpg

Recommended Shift Points:	
Max. 1st	38 mph
Max. 2nd	60 mph
Max. 3rd	80 mph
RPM Red-line	7,000 rpm

Speed Ranges in gears:

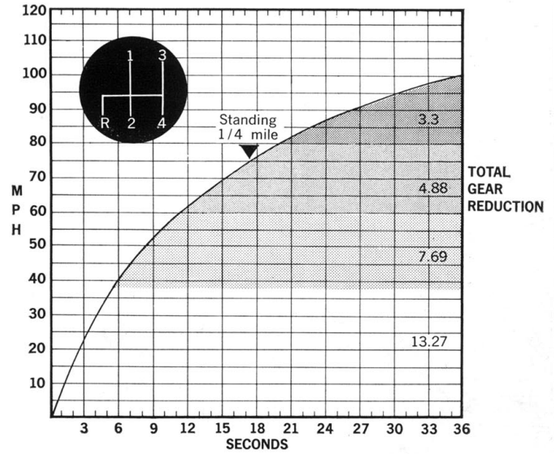
1st	0 to 38 mph	3rd	10 to 80 mph
2nd	5 to 60 mph	4th	15 to top mph

Brake Test: 75 Average % G, over many stops.

REFERENCE FACTORS:

Bhp. per Cubic Inch	1.09
Lbs. per bhp.	15.5
Piston Speed @ Peak rpm	2513 ft./min.
Sq. In. Swept Brake area per Lb.	0.183

No real fade encountered, but brakes pulled after relatively hard use.



fore you feel the bumps even more. After a couple of hundred miles on the road I went to work on the acceleration figures, which were taken on the Mercedes timed test track and on the Autobahn. The Mustang gave us more pleasant surprises in both departments and we recorded an average maximum speed of just over 111 mph, with the car showing good, steady handling at that speed. In acceleration I did zero to 50 mph in 7 seconds, zero to 60 in 11.2, zero to 80 in 19.4 seconds, while the standing kilometer and standing quarter of a mile were done respectively in 32.5 and 17.4 seconds. Considering that the Mustang is an open sports car and that it only has something around 80 hp under the hood, all those figures are remarkably good, and place the Mustang in a very favorable position in the 1500 Production Sports Car class. A fine 1500 cc performer, the Mustang has the advantage of having a very docile power plant for city driving, and if wanted the car can be driven in top gear at as low as 2,000 rpm.

If Ford's purpose it to find out from the public, by the interest shown, and from the journalists' criticisms, if the Mustang is worth being put into production, the answer is definitely YES from both parties. The car is different and quite exciting in appearance (the public interest was tremendous everywhere I went), it performed extremely well in town and on the open road, and its handling qualities can be ranked among the best European sports automobiles.

Ford must, of course, fit the car with a sturdier body, a true glass windshield, and a top, without forgetting, if possible, more space for baggage. Most of the rest, in my opinion, should not be touched, and I hope that Ford does not alter any of those good points which made those two days of driving so enjoyable. I arrived rather sceptical, and I must say that I left impressed by the car. With the Mustang, Ford could create a different type of production 1500 sports car and, naturally, with all kinds of speed options available to make it truly competitive in its class. I do not know if the car can take as much as 120 horsepower, or more perhaps, but if it does the Mustang could put on a convincing performance in the much more difficult field of pure sports car racing, and this at a low cost that only a powerful American company could afford. But to succeed, they will have to move fast, and I sincerely hope they do so without too many of those inevitable and mistaken production changes which all too often alter the original good points of a well-proven prototype.

— Bernard Cahier