PUBLIC RELATIONS
RESEARCH AND ENGINEERING CENTER
FORD MOTOR COMPANY
20000 ROTUNDA DR. • P.O. BOX 2053 • DEARBORN, MICH.



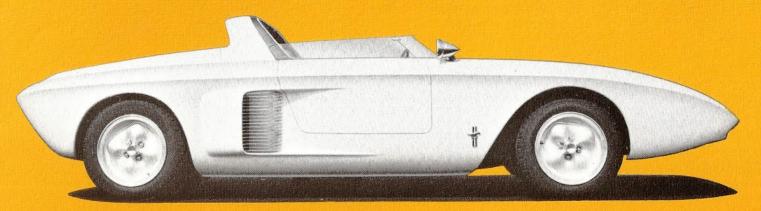
PRESS INFORMATION



# Mustana

# PRESENTING THE

by Ford Engineers and Stylists



The MUSTANG is the development of Ford Motor Company engineers and stylists— men who have a genuine fondness for motor cars— men who experience each day the excitement and satisfaction of creating, in much of their variety, the cars on the American road. And the particular team which designed this car has a professional interest in sports cars.

In the MUSTANG are represented their best talents—their ideas of what the American sports car should be— the spirit of the wild MUSTANG bred into a fine machine, a car with manners, a superb performer on road or track, a proud possession.

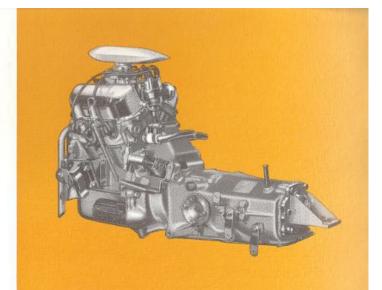
All these, yes, but a great deal more . . .

The frame is basically a tubular steel space frame that is reinforced by the aluminum sheet metal body skin.

Basic frame tubes are 1.00-inch outside diameter with 0.064-inch wall thickness.

Reinforcing gussets provide greater strength in critical areas. Sheet metal brackets provide pick-up points for all chassis items.

Unit skin and frame provide great strength with minimum weight.



BODY AND STYLING

The MUSTANG body is aerodynamically styled and clean in function. The shape was determined by styling characteristics and wind tunnel tests. The shape design gives the best handling and driving conditions under wind pressures at high speeds with a minimum drag effect.

The windshield has been taken from competition running design. Its aerodynamic shape gives smooth wind flow over the passengers' heads.

The roll bar is a regulation bar that is styled to blend in with the body shape and provides an added safety feature. It is incorporated as part of the frame and body structure.

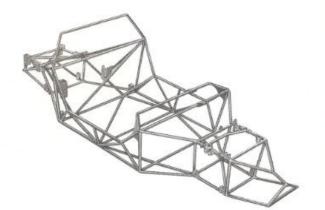
The interior has been styled to locate the controls, switches and instruments in the most advantageous positions for the driver. There is a forward arm rest console that incorporates easy-to-reach choke and turn signal controls, the horn, the gear shift lever, and the fly-off hand brake.

FRAI

FRAME FEATURES

3

ENGINE



The 60° V-4 Mustang engine, produced by Ford of Germany, is located forward of the rear axle. The three-mount system that supports the engine also supports the transmission and clutch. The engine transaxle unit can be easily removed through the bottom of the space frame by removing one bolt- on crossmember.

A single-venturi carburetor is installed for road driving and is replaced with two double-venturi carburetors for competition driving.

#### SPECIFICATIONS

| Displacement      |    |      |           |   |
|-------------------|----|------|-----------|---|
| Bore and Stroke   |    | <br> | <br>***** | 3.54 x 2.32   |
| Brake Horsepower  |    |      |           |   |
| Road Version      |    |      |           | CONTRACTOR OF THE PARTY OF THE |
| Track Version     | 10 | <br> | <br>10    | 09 at 6400 rpm  |
| Torque (lbsft.)   |    |      |           |   |
| Road Version      |    | <br> | <br>      | 89 at 3600 rpm  |
| Track Version     |    | <br> | <br>      | 99 at 5200 rpm  |
| Compression Ratio |    | <br> | <br>      | 11.0 to 1.0   |

The S.L.A.- type front suspension is constructed with tubular arms and all parts are fully stressed to minimize weight.

The adjustable pivot axes provide tailoring of the steering geometry to assure best handling conditions on road or track.

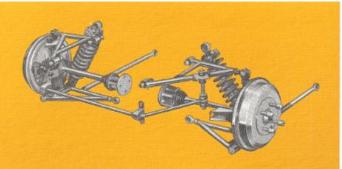
Camber and caster is adjustable within a range of ± 2°.

The combined unit coil springs and shock absorbers can be adjusted to vary the riding height up to 1.25 inches.

Take-apart-type shock absorbers permit valving changes.

#### **SPECIFICATIONS**

| Tread                      | King Pin Indination 5.0°       |
|----------------------------|--------------------------------|
| Wheel Travel               | Scrub Radius 2.5 in.           |
| Jounce 3.0 in.             | Caster Angle 4.5° - 6.5°       |
| Rebound 3.0 in.            | (2-pass.)                      |
| Roll Center Height 4.0 in. | Toe Setting (2-pass.) 1/16 in. |



The tubular rear suspension has an "A" frame upper arm and an inverted lower arm "A" frame with a trailing strut.

Suspension arm adjustable pivot points permit varying the geometry.

Stress on the space frame is minimized by the wide spacing of the suspension attachment points.

The unit is a transaxle type and is attached directly to the engine.

The four- speed, fully synchronized transmission has the following ratios:

(1) Gear 4.02:1 (2) Gear 2.33:1 (3) Gear 1.48:1 (4) Gear 1.00:1 The overall ratios are as follows:

Std. (3.30:1 Ring and Pinion) Opt. (3.56:1 Ring and Pinion)

(1) Gear 13.30:1 (4) Gear 3.30:1 (1) Gear 14.30:1 (4) Gear 3.56:1

(2) Gear 7.70:1 Reverse 13.10:1 (2) Gear 8.30:1 Reverse 14.10:1

(3) Gear 4.90:1 (3) Gear 5.30:1

The following table shows MPH per 1000 engine rpm in each gear:

Standard Optional
(1) Gear 4.85 (3) Gear 13.1 (1) Gear 4.48 (3) Gear 12.1
(2) Gear 8.3 (4) Gear 19.6 (2) Gear 7.8 (4) Gear 18.0

The transmission is shifted by a short shift lever, located in the console, and operated by push-pull cables.

The clutch is a hydraulically actuated 7.5- inch diameter, single dry-plate unit.

# FRONT SUSPENSION

 Camber Setting |2-pass.]
 1° pos.

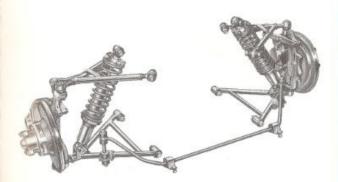
 Spring Ratio (Wheel vs. Spring Travel)
 1.54/1

 Spring Rate
 118-177 |b./in.

 Wheel Rate (less tires)
 50-75 |b./in.

 Roll Stiffness (less tires)
 88-132 ft. lb. per degree

 Outer and Inner Hub Bearings
 Tapered Roller Bearings



# REAR SUSPENSION

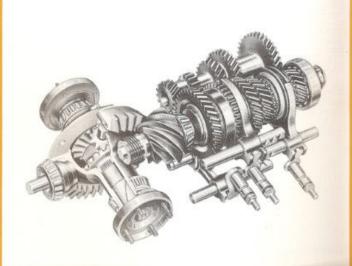
The independent rear suspension eliminates torque steer effect.

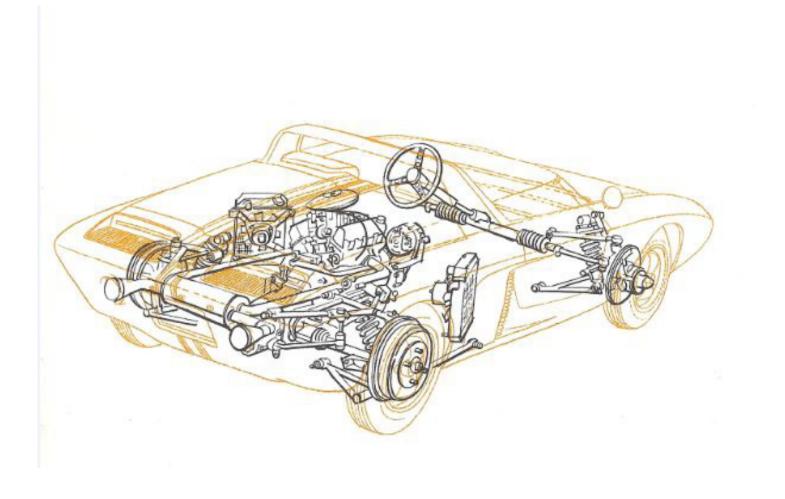
The 0.88- inch diameter axle shafts have single cardan joints at the out-board end and pot joints at the in-board end.

#### SPECIFICATIONS

| Tread  |
|--|
| Jounce                                       |
| Rebound                                      |
| Roll Center Height                           |
| Camber Setting (2-pass.)                     |
| Toe Setting                                  |
| Inner Joint Angle (2-pass.)                  |
| Outer Joint Angle (2-pass.)                  |
| Spring Ratio (Wheel vs. Spring Travel) 137:1 |
| Spring Rate                                  |
| Wheel Rate (less tires)                      |
| Hub Bearing Double Row Ball Bearing          |

# 6 TRANSMISSION & AXLE







# MUSTANG SPECIFICATIONS

#### OVERALL DIMENSIONS

| Wheelbase                | 90 in    |
|--------------------------|----------|
| Length                   | 154.3 in |
| Height (at cowl)         |          |
| (at roll bar)            | 39.4 in. |
| Width                    |          |
| Tread (Front)            | 48 in    |
|                          | 49 in    |
| Curb Weight 1544 lbs. (4 |          |

#### ENGINE

| Position                                 |
|--|
| Type                                     |
| Displacement                             |
| 1500.0 cu. in                            |
| Bore                                     |
| Stroke                                   |
| Horsepower (Road Version) 89 at 6600 rpm |
| (Track Version) 109 at 6400 rpm          |
| Torque (Road Version) 89 at 3600 rpm     |
| (Track Version)                          |
| Compression Ratio                        |
| Axle Ratio (Std.)                        |
|  |



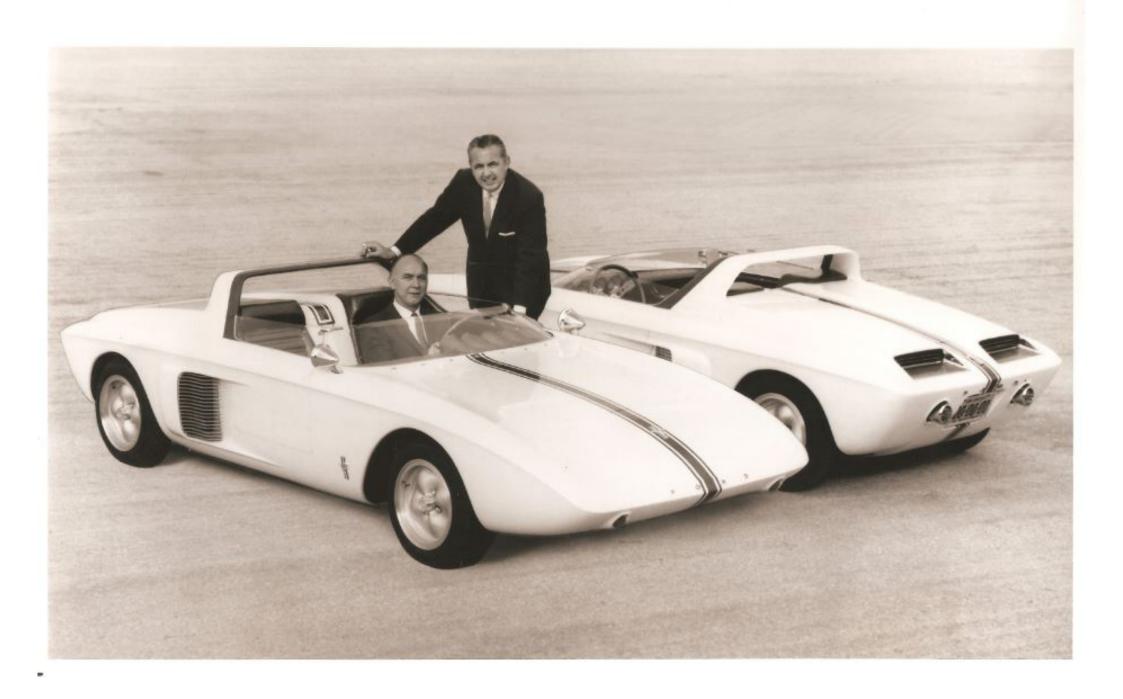
For further information, write:

Vice President, Engineering Ford Motor Company P.O. Box 2053 Dearborn, Michigan

#### RELEASE SUNDAY, OCTOBER 7, 1962

Coming or going, Ford Motor Company's new experimental sports car, the Mustang, is all new. Looking it over are the two Ford executives responsible for its development, H. L. Misch, vice president-engineering and research staff (left) and Gene Bordinat, vice president-styling. The front and rear view is shown by the real car at left and a fiberglass show model at right. The Mustang is the first car built by a major American manufacturer which fits into the European-dominated popular sports car class. It has a V-4 engine, located midship, which delivers 106 horsepower and a top speed of 117 miles an hour. It's only 28.8 inches to the top of its hood. Wheelbase is 90 inches with an over-all length of 154 inches. The Mustang made its debut prior to the running of the U.S. Grand Prix today at Watkins Glen, NY.

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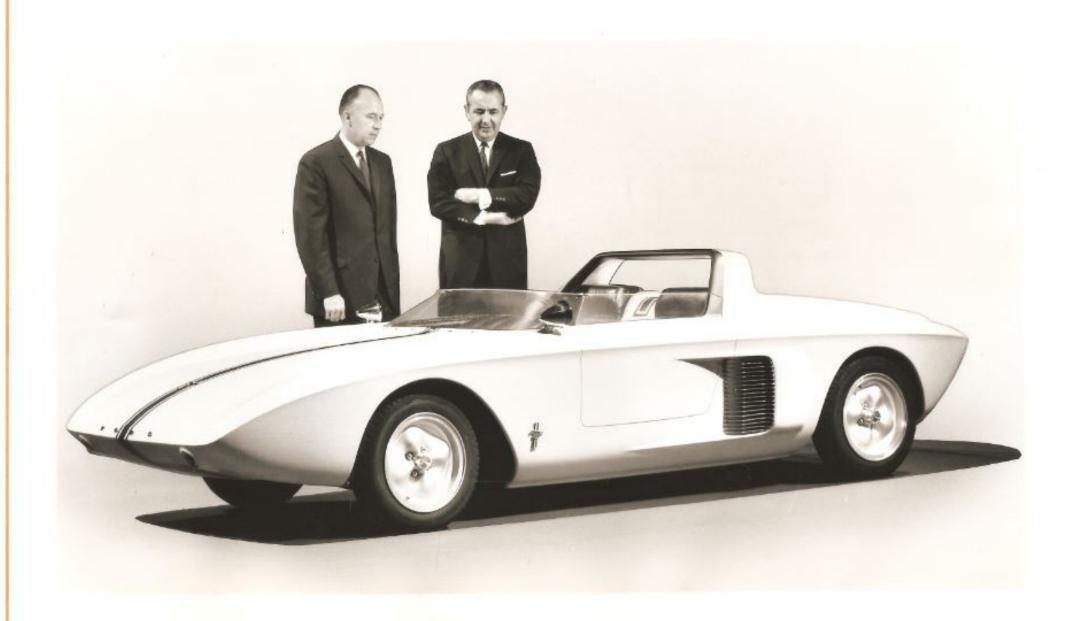


### RELEASE SUNDAY, OCTOBER 7, 1962

The cockpit of the Mustang, Ford Motor Company's new experimental sports car is like the exterior -- beautiful and functional. The ignition and light control switches are at the driver's left. The instrument panel consists of five round gauges. From the left are the fuel-ampere gauge, speedometer, tachometer, oil pressure and water temperature gauges. On the console between the two seats are the fly-off brake handle and four-speed shift lever. To the rear on the console is the horn pedal, operated with the heel of the hand, a toggle-switch turn indicator and the choke lever. The bucket seats, shown below, are built as a fixed part of the body structure. The steering column and foot pedals are adjustable to fit drivers of different sizes.

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| Make<br>Model   | Alfa Romeo<br>Giulietta Spyder                  | Fiat<br>1500 Cabriolet                          | MG<br>1600 Mark II                               | Porsche<br>1600N                                   | Sunbeam<br>Alpine Mark II                        | Triumph<br>TR4                                   |                   |
|---|---|---|--|--|--|--|-------------------|
| Dimensions (Inches)   |   |   |  |  |  |  |                   |
| Wheelbase<br>Tread, Front<br>Tread, Rear<br>Length<br>Width<br>Height | 86.6<br>50.6<br>50.0<br>152<br>62<br>52         | 92.1<br>48.5<br>47.9<br>158.7<br>59.8<br>51.2   | 94.0<br>47.5<br>48.8<br>156.0<br>58.0<br>50.0    | 82.7<br>51.5<br>49.3<br>158.0<br>65.6<br>52.4      | 86.0<br>51.2<br>48.7<br>155.2<br>60.5<br>51.7    | 88<br>49.0<br>48.0<br>156.0<br>57.5<br>50.0      |                   |
| Engine  |   |   |  |  |  |  |                   |
| Position  | Front   | Front   | Front  | Behind Rear Axle                                   | Front  | Front  | Fwe               |
| Type  | 4-Cyl. In-Line<br>Water Cooled DOHC             | 4-Cyl. In-Line<br>Water Cooled DOHC             | 4-Cyl. In-Line<br>Water Cooled OHV               | 4-Cyl. Hor. Opp.<br>Air Cooled OHV                 | 4-Cyl. In-Line<br>Water Cooled OHV               | 4-Cyl. In-Line<br>Water Cooled OHV               | Wat               |
| Displacement<br>Gross HP/RPM<br>Torque/RPM                            | 1290 cc<br>92/6000<br>79.6/4000                 | 1491 cc<br>90/6000<br>77/4000                   | 1622 cc<br>93/5600<br>97/4000                    | 1582 ec<br>70/4500<br>82/2800                      | 1592 cc<br>85/5000<br>94/3800                    | 2138 ee<br>105/4750<br>128/3350                  | 150<br>89,<br>89, |
| Transmission  |   |   |  | 22   |  |  |                   |
| Number of Speeds<br>Number of Synchro                                 | 14<br>14  | 4<br>3  | 1 <sub>4</sub><br>3                              | 14<br>14   | 4<br>3   | 1 <sub>4</sub> 1 <sub>4</sub>                    |                   |
| Seating Capacity Curb Weight P.O.E. Price Top Speed Standing 4 Mile   | 155-15<br>2<br>2040<br>3150<br>100<br>19.2 sec. | 155-15<br>2<br>2200<br>3650<br>105<br>18.5 sec. | 5.60-15<br>2<br>2050<br>2444<br>105<br>18.7 sec. | 5.60-15<br>2+2<br>1980<br>4195<br>100<br>19.4 sec. | 5.90-13<br>2<br>2150<br>2595<br>100<br>19.3 sec. | 5.50-15<br>2<br>2240<br>2849<br>110<br>17.8 sec. | 108<br>NA         |



#### RELEASE SUNDAY, OCTOBER 7, 1962

The only one of its kind -- that's the Mustang, experimental sports car introduced today by the Ford Motor Company. The two Ford executives responsible for its development are H. L. Misch, vice president-engineering and research staff (left) and Gene Bordinat, vice-president-styling. The Mustang is powered by a V-4 engine, has 106 horsepower and a top speed of 117 miles an hour. Engine location is midship. The Mustang is only 28.8 inches high at the peak of its hood. Wheelbase is 90 inches and over all length, 154 inches. The car is the first built by an American manufacturer which fits into the European-dominated popular sports car class. Ford introduced it to the public prior to the running of the U.S. Grand Prix at Watkins Glen, N.Y.

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