

A
GREAT
NEW
MOTOR
CAR

THE

NEW

F O R D

# The Story of the

### NEW EIGHT-CYLINDER FORD

T IS NOT too much to say that the New Ford is a revolutionary automobile, for it is a new motor car, made to meet today's new conditions. Many months have been spent in designing and perfecting it, to make of it the highest expression of Ford ideals of performance, comfort, beauty, safety, reliability and economy.

From the beginning the Ford Motor Company determined to produce not merely an improved model, but a new automobile that would for the first time bring the advantages of the higher-priced cars into the lowest-price field without adding bulk and weight, which result in high first and operating costs.

Mr. Henry Ford has frequently stated that: "The more a motor car weighs, naturally the more fuel and lubricants are used in propelling it; the lighter the weight, the lighter the expense of operation." And he has always insisted that: "Weight has nothing to do with strength." The inevitable result of these views has been seen in the more than twenty million

Ford cars that have been built—notably economical in operation, their weight proportioned to their tasks, their every part strong and sturdy and durable.

Every desirable feature of convenience, comfort, beauty and performance has been built into the new Ford. It has an 8-cylinder, 65-horsepower, V-type engine, large and roomy bodies, synchronized gearshifting and silent second. First cost is low, and running expenses are such as you have always associated with Ford cars.

## Beauty Expressed in Streamlines

A glance tells you this is a new automobile. From its new and modern V-type radiator to the fuel tank in the rear, its low and sweeping air-flow lines give it an appearance of graceful beauty and smoothness suggestive of its power. These new lines mean more than beauty alone, they actually improve car performance because of the lessened wind resistance resulting from the slanting windshield, low roofline and curved rear

panels. Both roof and sill lines harmonize with new, deeply-crowned fenders, and with the long, wide, rubber-covered running boards.

### New Standard of Performance

When you ride and drive this new motor car you will realize that it sets entirely new standards of performance. Comfort is especially marked. The car rides smoothly and easily at all speeds. You will notice the flashing acceleration, the ease with which it will reach its maximum speed, and hold it. When you take the wheel you will find all the controls grouped within easy reach. You will appreciate the synchronized gear shift, the light clutch and brake pressures, the effortless steering, and the fact that you can park with minimum effort.

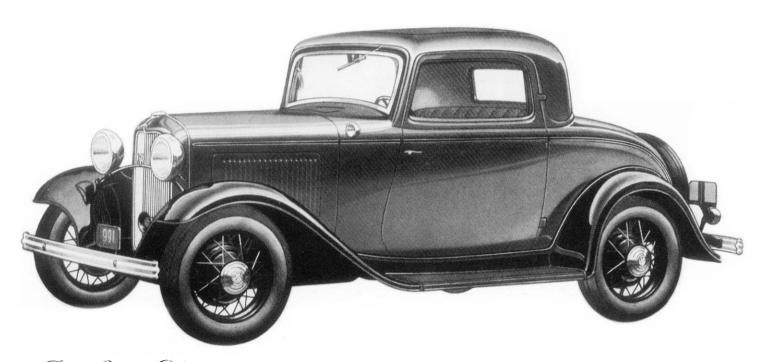
### 14 Handsome Bodies

There are 14 beautiful body types, offered in a wide variety of colors. Mohair upholstery is standard in all closed cars except the convertible types. A long-wearing wool cloth is optional in the standard closed cars and either broadcloth or Bedford Cord in the de luxe closed bodies. Bedford Cord or genuine leather is available in the convertible types. Genuine

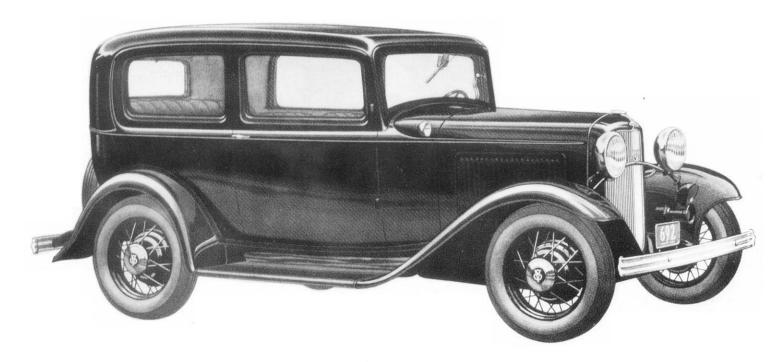
leather is used for the seat cushions and backs of the de luxe phaeton and in the front seat of the de luxe roadster. The standard roadster and phaeton are upholstered in artificial leather. Inside sun visors and dome lights are furnished in all closed cars. The de luxe closed bodies are especially attractive. They are fitted with cowl lamps, arm rests, ash trays and floor carpets. A robe rail is provided in the de luxe Fordor Sedan. In both standard and de luxe types hardware is of modern design, exterior hardware being of rustless steel, and interior hardware, nickel plated. One key controls the door and ignition locks. Unusually wide door pockets are recessed in front doors of many body types. In the following pages are illustrations of the new body types. No pictures, however, can reveal the full beauty of the car, just as no words can describe its performance. You must see the car yourself, ride in it, drive it. That you are cordially invited to do by your Ford dealer.

## Improved Four-Cylinder Engine

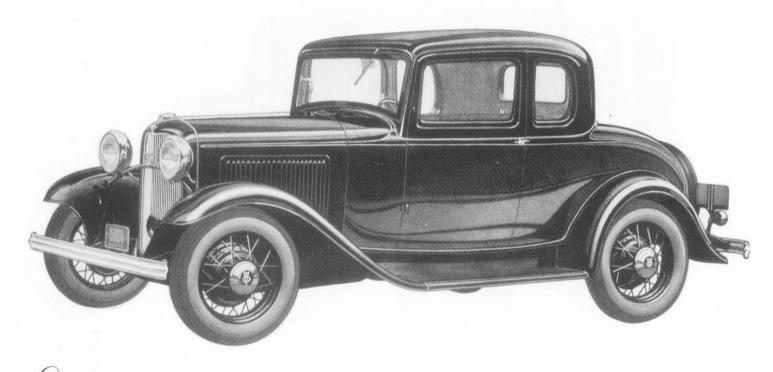
Those who prefer the four-cylinder type of engine may still obtain it in a Ford. An improved Ford fourcylinder, 50-horsepower engine, rubber mounted for smoothness, setting a new standard of four-cylinder performance, is available.



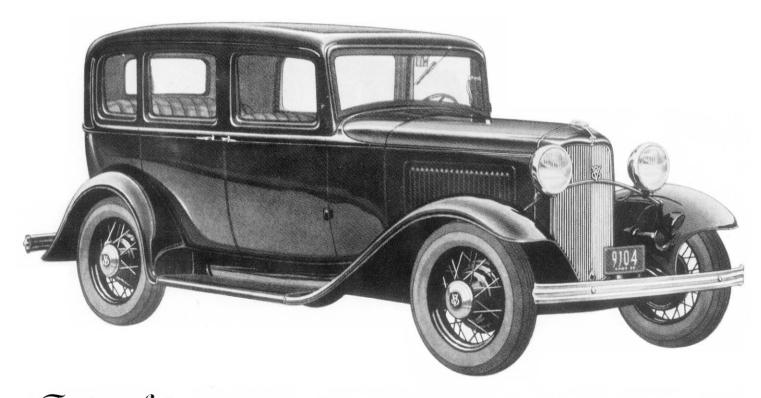
De Luxe Coupe There is distinction in every line and detail of this new Ford two-window Coupe. At the right of the instrument panel, in the dash, is a parcel compartment. Dome lamp, ash tray and lighter are among the de luxe items. Choice of mohair, broadcloth, Bedford Cord upholstery. Safety glass is used throughout and the rear window can be lowered.



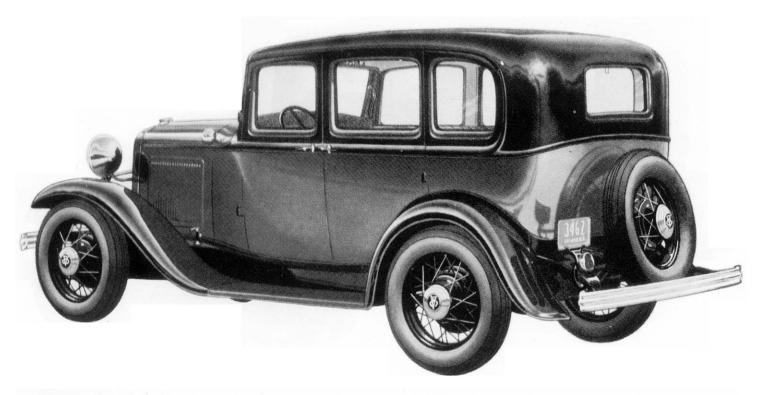
De Luxe Cudor Sedan This is the popular Tudor with special equipment including safety glass throughout. Choice of broadcloth, mohair, or Bedford Cord upholstery. Dome and cowl lamps, toggle grips and ash trays are other features. Front seats fold giving easy access to the roomy interior. Also available as a standard type at a lower price.



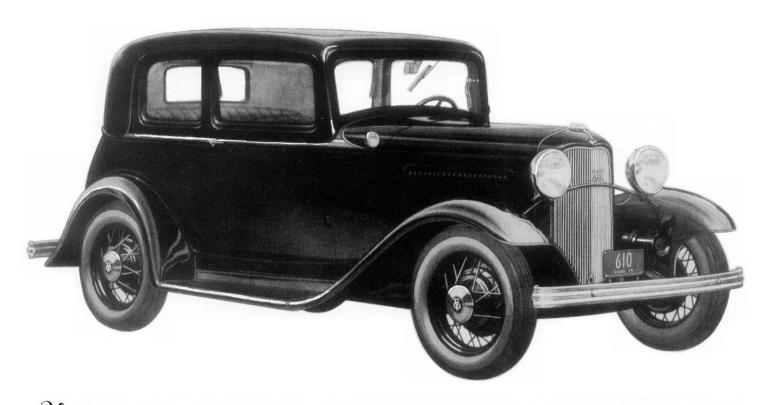
Coupe The new beauty and the low price, as well as the great utility of this popular two-passenger body of all-steel construction, make it a desirable car to own. There is ample room beneath the rear deck for baggage and parcels. The rear window may be lowered for ventilation. The seat is adjustable as in all closed cars. Choice of two durable upholstery materials.



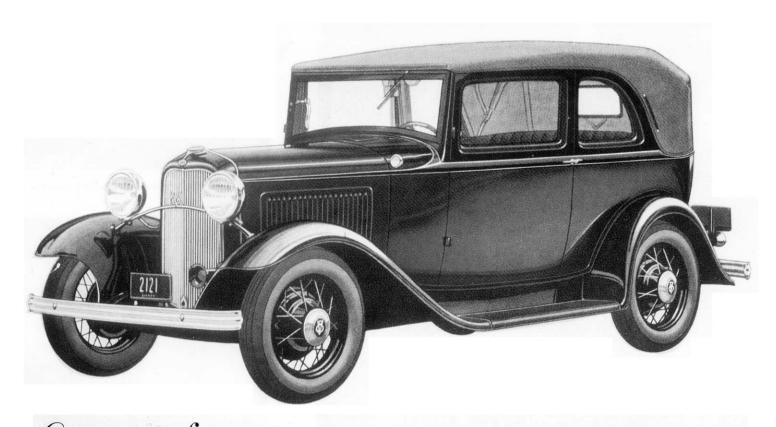
Fordor Sedan Offering at a low price the convenience of an independent entrance to front and rear seats from either side. The body is roomy and its length is accentuated by the well-proportioned third window. The compactness of the V-8 and 4-cylinder engines permits utilization of an unusual amount of space for passenger comfort.



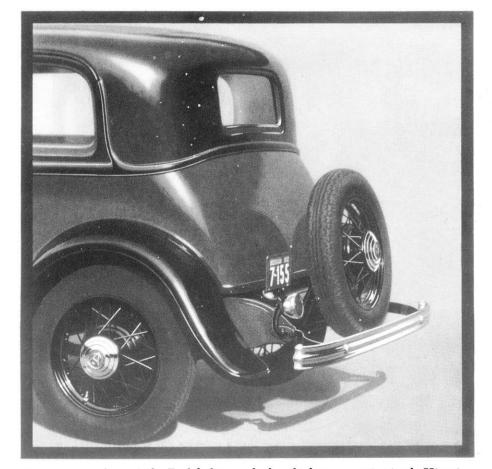
De Luxe Fordor Sedan All that the name implies, a truly de luxe motor car. Many extra appointments make it very attractive. Included in the equipment are dome and cowl lamps, robe rail, ash trays, toggle grips and safety glass all around. Three handsome upholstery materials are available: broadcloth, mohair, and Bedford Cord.



Dictoria This is a special de luxe type, whose graceful lines of top and rear give a Continental touch to its style. Behind the rear seat there is room for luggage. Beautifully and completely appointed, including dome light, ash trays, arm rests, toggle grips and durable rugs. Upholstery: broadcloth, mohair, or Bedford Cord. Windshield and windows are of safety glass.



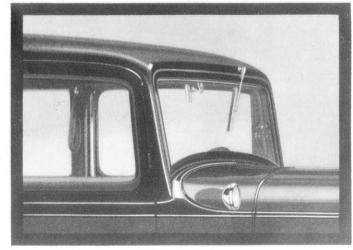
Convertible Sedan Offers five passengers all the advantages of a closed and an open car. All windows are safety glass, and the top is easily raised or lowered. Two wide doors and folding front seats give easy access. Upholstered in either russet brown genuine leather, or Bedford Cord. Ash trays, rear seat arm rests and cowl lamps are standard equipment.



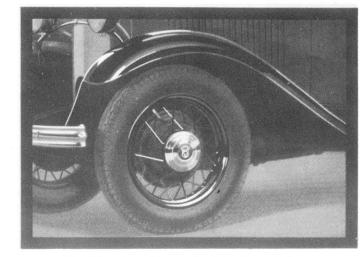
The new streamlines of the Ford bodies reach their highest expression in the Victoria. At the rear, this body curves forward and up from the fuel tank to the rounded roof, giving an especially attractive appearance and minimizing air drag.



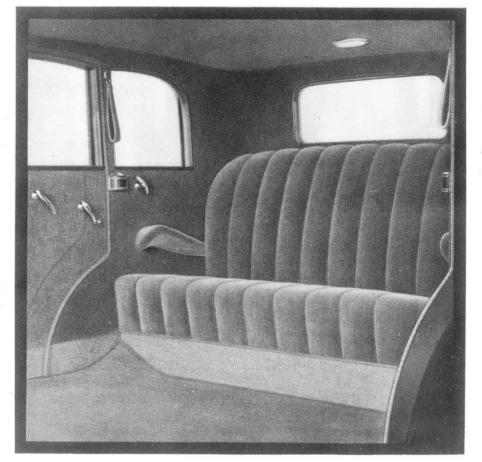
Note how all instruments are grouped within easy reach and view. The panel is indirectly lighted, eliminating all glare.



Slanting windshield and rounded roof line, without visor, enhance the beauty of the New Ford.



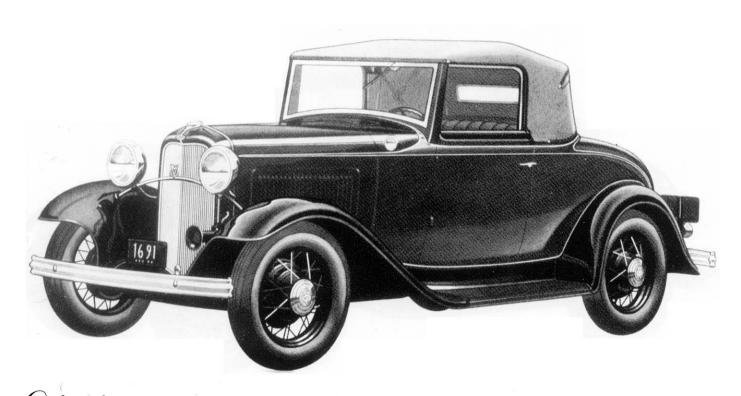
New 32-spoke welded steel wheel. Large hub cap conceals wheel mounting nuts.



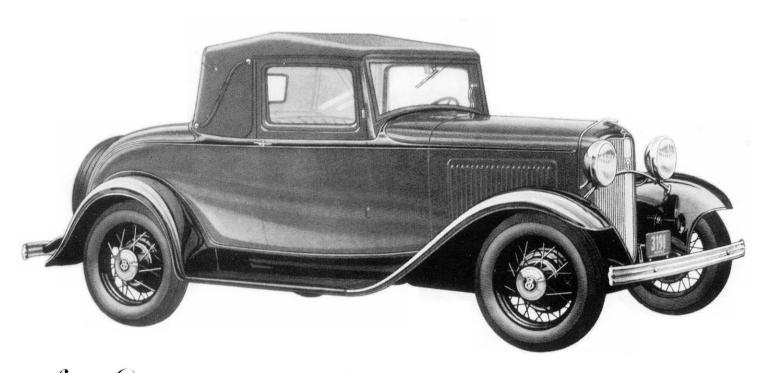
This rear interior of the De Luxe Fordor Sedan is typical of the comfort, convenience and luxury of de luxe bodies. Notice the arm rests, ash tray and toggle grips. There is a dome light and robe rail also. Cushions are soft and deep with three upholstery options.



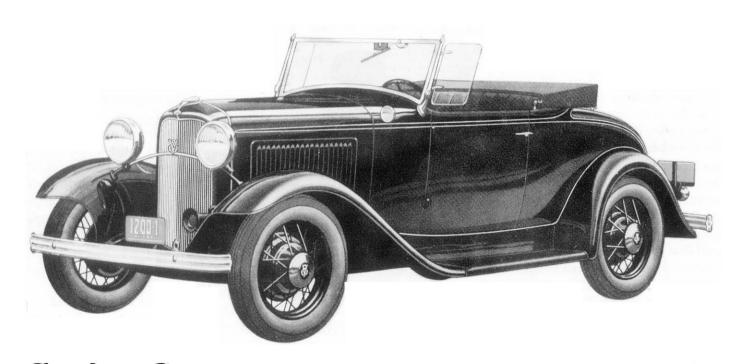
De Luxe Phaeton A roomy, smartly-equipped car, which offers five passengers the real joy of riding in an open body. There are four doors, and the front seat is full width. Seats upholstered in copra drab genuine leather. Cowl lamps and safety glass windshield and wings are standard equipment. There is also a standard Phaeton at a lower price.



Cabriolet Combines striking beauty with all the advantages of both an open and a closed car. Top irons located inside make it possible to easily raise or lower the top without getting out of the car. Safety glass used in windshield and all windows. Choice of genuine leather or Bedford Cord upholstery. Rear curtain can be fastened overhead. Rumble seat is standard.



Sport Coupe Chosen by many because of the sport appearance, given it by the soft top. This is in waterproof light brown landau grain material. All windows are of safety glass. The rear curtain is equipped with sliding seams and may be attached to the inside of the top thus permitting conversation with rumble seat passengers. The top is stationary.



De Luxe Roadster Luxurious equipment adds to your enjoyment of this roadster's snap and vigor of performance. The front seat is in genuine leather. Windshield, wings and rear window are of safety glass. A rumble seat is standard equipment as are cowl lamps, natural wood top bows, and tan top. There is a standard Roadster at a lower price.

# Features of the

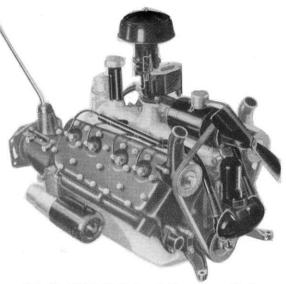
## NEW EIGHT-CYLINDER FORD

HE NEW Ford V-8 cylinder engine develops 65 horsepower and for the first time brings into the lowest price field the V-8 type of engine, which has previously been confined almost exclusively to cars selling in the highest price range. One of the important characteristics of the V-type engine is its smooth operation.

Like all Ford engines, the V-8 is simple in design and construction and is especially neat in appearance. Contributing to this is the use of a special aluminum cover between the cylinder blocks, upon which the down-draft carburetor is

mounted and into which is integrally cast the intake manifold.

The two banks of four cylinders each are cast in a single block with the crankcase, thus obtaining perfect rigidity and assuring that alignment will always be true. The counterbalanced crankshaft, weighing 65 pounds, is short and stiff. Its throws are arranged at 90 degrees, and the cylinders are set at the same angle, giving maximum smoothness of power production.



The Ford V-8 Cylinder 65 Horsepower Engine

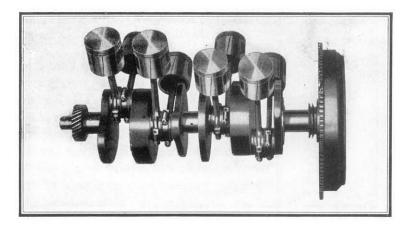
Connecting rods are placed side by side on the crankpin bearings, a simple and reliable construction. A new and unique feature is the use of a single floating bearing for each pair of connecting rods. This bearing consists of a curved steel plate, faced on both sides with babbitt. Thus the load on each connecting rod is distributed over the entire surface of the crankpin and the area of bearing surface is doubled, which increases the life and reliability of this vital engine part.

Pistons are aluminum, and pistons and connecting rods are of equal weight, for smooth performance. Bore and stroke

are  $3\frac{1}{16} \times 3\frac{3}{4}$  inches, and piston displacement is 221 cubic inches.

The new engine is provided with two water pumps, one for each bank of four cylinders, for uniform circulation of water. The fan is mounted on the front end of the generator shaft. Fan and generator are thus driven by the same belt, which also operates the water pumps. The belt is easily adjustable.

The destributor is located on the front of the engine, where it is driven directly from the camshaft, without any intermediary gears. It has two breakers, in accordance with the best 8-cylinder practice. The work of interrupting the battery current being divided between them, their life is long, and ignition reliability and accuracy are assured. An automatic spark advance mechanism is incorporated in the distributor, which times the spark at exactly the instant required for starting and best operation under all conditions.



The short, rigid crankshaft of the new Ford V-8 engine weighs 65 pounds. Crankpins are arranged at 90-degree angles and are counterweighted for smooth operation. Bearing surfaces are carefully lapped, honed and polished. The shaft is statically and dynamically balanced. Pistons are of aluminium alloy for lightness. Connecting rods are heat-treated steel forgings, all of the same size and straight end type. Rods from opposite cylinders are mounted side by side on a new type floating bushing. This is made of steel with babbitt on both sides, and covers the full length of the crankpin bearing. It thus forms a double area of bushing for each connecting rod, insuring long wear. Pistons and connecting rods are carefully matched in sets of equal weight and are in perfect balance with the crankshaft.

You will be impressed with the quietness with which the engine operates. The intake is practically noiseless, as well as the exhaust. There is a large, efficient muffler, and the carburetor is fitted with an air intake silencer.

The compactness of the Ford V-8 engine is an important advantage. It takes no more room than the Four, and thus you obtain all the advantages of 8-cylinder power and smoothness to the highest degree, without any sacrifice in the roomy comfort of the bodies.

### Remarkable Smoothness and Quietness

The New Ford V-8 is remarkably smooth in operation, and is unusually quiet. This is due not merely to the smooth, even production of power developed by the V-8 engine, but to the extraordinary precautions taken throughout the chassis and body to provide a means of absorbing noise and vibration. Rubber is used at scores of points as a mechanical insulator.

To insure maximum smoothness, the engine is mounted in the frame at three points, each insulated with rubber. At the front it is supported in the frame on two large inverted rubber cups, under compression at all times, giving the maximum cushioning effect. At the rear the engine is supported from the frame cross member by a steel plate which has rubber vulcanized on both sides, thus avoiding metal-to-metal contact.

Rubber is not only used to insulate the engine from the frame, but also to insulate the frame from the axles. The spring shackles and shock absorber connecting links all contain rubber insulators, while there is a rubber cup-between the front radius rod and the center cross member of the frame. There is also a rubber insulator between the cross member and the torque tube. All metal-to-metal connections between frame and axles thereby are abolished. Through the use of rubber insulators many lubrication points are eliminated, and the car is correspondingly easier and more economical to service.

To complete the silencing of the Ford V-8, the bodies are insulated from the frame by rubber pads beneath each body bolt. Thus the body, frame, engine and axles are insulated from each other. In addition, all bodies are carefully sound-treated. Electric welding, which makes solid, rattle-proof joints, is liberally used in body manufac-

Under side of chassis showing torque tube, radius rods and transverse cantilever springs. All driving and braking stress is brought to the heavy frame cross member through the torque tube and radius rods, leaving the soft flexible springs, controlled by double-acting hydraulic shock absorbers, free to perform their normal purpose of absorbing road shock. This principle of chassis design is an exclusive Ford feature. It improves riding qualities due to low unsprung weight and gives the Ford car unusual stability on the road under all driving conditions. Braking and steering are unaffected because of fixed axle alignment. Note the simple, clean-cut appearance of chassis construction.

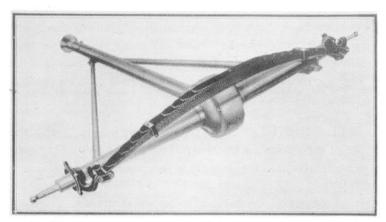
ture, and anti-squeak material is used between the parts that must be bolted together. All door panels that might produce drumming sounds are coated on the inside with sound-absorbing materials.

### New Comfort and Ease of Control

Your very first ride in the New Ford V-8 will reveal to you a new standard of motoring comfort. You sit in complete ease. Comfort was one of the prime objects in designing this car, and comfort is engineered into the chassis as well as into the bodies. Comfort, as a matter of fact, is not merely a matter of cushions and uphol-

stery and springs, but of basic car design.

It has always been a cardinal Ford principle to make the unsprung weight low, because the less the weight below the springs, the better a car rides. One of the great advantages of the Ford transverse cantilever springs is that they reduce unsprung weight, the very weight of the springs themselves being part of the sprung weight. The newly designed rear spring is soft and flexible and all of its length is effective in absorbing road shocks. It is mounted back of the rear axle on steel perches built integral with the rear axle housing. By this method the body may be mounted close to the road and a low center of gravity obtained.



A newly designed transverse cantilever rear spring, shackled at both ends, is soft and flexible and serves only to absorb road shock. Driving and braking forces are taken by the heavy torque tube. Spring hangers are mounted behind the axle, which considerably lowers the body.

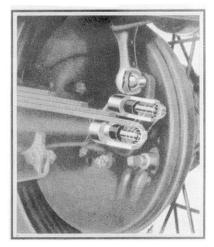
In fact, the car as a whole has a low center of gravity, which is a decided factor in comfort, as it makes the car hold the road on even the roughest surfaces, lessens side sway, and helps create that feeling of complete confidence that adds so much to your pleasure. Seats, too, are set low in the body, and have deep, soft cushions.

Another important comfort feature is the use of four of the newest type of Houdaille double-acting, self-adjusting, hydraulic shock absorbers. There is a thermostatic control built into each, which automatically changes the adjustment in accordance with temperature. There is also an automatic compensation for sudden shocks. Thus you get new and better riding comfort under all road and temperature conditions.

Large tires (18 x 5.25 inches) whose extra air capacity softens the ride, and the radius rod and torque tube mounting of the axles, which is exclusive with Ford, are other comfort features.

You will be amazed at the ease with which the New Ford V-8 is controlled. The driver's seat is adjustable in all closed cars to suit your exact requirements. Coincidental lock, starter, throttle and choke are all within easy reach. Gear shifting is synchronized, and you may shift in and out of second and high, up or down, quickly and without a sound. Only a light pressure is required to operate clutch and brake. The steering is exceptionally easy at any speed, and you can park the car with the minimum

effort. Women especially will appreciate the ease with which the car is handled, in traffic as well as on the open road. Second speed gears are of the helical, silent type and revolve quietly, which adds materially to the pleasure of driving. No spark lever is provided, as the spark is automatically timed for starting and for smooth power under all driving conditions. A coincidental lock in the steering column bracket secures both steering wheel and ignition.



Rubber insulated spring shackles and shock absorber links eliminate wear, require no lubrication, and insure quiet operation.

The Ford braking system has been designed to insure long service, trouble-free operation and great safety. The large, mechanical, internal, expanding four-wheel brakes have 186 square inches of braking surface, ample size to stop the car quickly and safely at all speeds. The drums are of special alloy iron, which tests show does not easily score. They are machined, accurate within ten one-thousandths of an inch, an unusually close limit for such a large diameter. Cooling fins serve the double purpose of radiating heat and excluding water and dirt. The brake cross shaft is short and mounted on strong brackets attached to the center cross member. This eliminates trouble due to deflection and gives positive brake action. All brakes are operated by the foot pedal and hand lever.

### Other Features of the Ford V-8

SAFETY GLASS. Safety Glass throughout is standard in all deluxe bodies including the Sport Coupe, Cabriolet, Victoria and Convertible Sedan. It is used in the windshields of all bodies and is available throughout in standard types at small extra cost, if specified at time of purchase. All windshields slant at an angle of 10 degrees, which is not only a beauty factor, but eliminates glare and decreases wind resistance.

The Ford steel-spoke wheels are small, only 18 inches in diameter. There are 32 spokes, which are short, sharply pitched and electrically welded to a drop-center rim and hub shell, forming an exceptionally strong unit. The hub caps are large and easy to remove. They add to the attractive appearance of the car and conceal the wheel mounting nuts inside the hub shell.

FUEL TANK. Made of electrically-welded rustless terne plate, and located at the rear, in a three point mounting that protects it against any distortion. Filler cap is at the left, permitting filling tank completely even when the car is standing on a highly crowned road. Simple fuel gage gives accurate reading on dash at all times.

BALL AND ROLLER BEARINGS. There is an unusually liberal use of these long-lived bearings. No less than 20 roller bearings are employed, an exceptionally high number, and 4 ball bearings. These minimize friction and wear. The drive in all forward speeds is carried entirely on ball and roller bearings.

DOUBLE DROP FRAME. The frame is designed to permit mounting the body directly upon it, and the running board is bolted to it, eliminating side dust shields. There are five cross members.

RUSTLESS STEEL. This metal that retains its brightness untarnished under all conditions is used for lamps and many other exposed metal parts.

BONDERITE. Enameled parts, such as fenders and wheels are Bonderized before the enamel is applied. This process cleans the metal chemically, and bonds enamel and metal tightly together. The result is that rust will not spread under the enamel.

PYROXYLIN LACQUER. All Ford bodies are finished in pyroxylin lacquer, which is given a high polish, adding greatly to the enduring beauty of the car.

# Ford V-8 Specifications

#### **ENGINE**

Eight cylinder, V-type, 90-degree crankshaft. Piston displacement, 221 cubic inches. Bore,  $3\frac{1}{16}$  inches; Stroke,  $3\frac{3}{4}$  inches. Horsepower rating, S. A. E., 30.; brake horsepower, 65.

#### **CRANKSHAFT**

Carbon manganese steel, heat-treated, machined, lapped and honed; statically and dynamically balanced. Three main bearings, all 2 inches in diameter. Length, front,  $1\frac{3}{4}$  inches; center,  $1\frac{11}{16}$  inches; rear,  $2\frac{1}{4}$  inches.

#### CAMSHAFT

Carbon manganese steel. Contours designed to operate valves silently. Three bearings, all 1.8 inches in diameter. Length, front,  $1\frac{21}{3\frac{1}{2}}$  inches; center,  $1\frac{3}{8}$  inches; rear, 2 inches.

#### **VALVES**

Chromium and nickel alloy. Mushroom-end.

#### CONNECTING RODS

Heat-treated steel forging, I beam section. All rods alike.

#### PISTONS

Special heat-treated aluminum alloy. Two compression rings and one oil control ring.

#### ENGINE LUBRICATION

Pressure from gear pump in oil pan direct to main bearings of crankshaft and camshaft. Crankshaft drilled for oil passage to connecting-rod bearings. Lubrication of other parts by splash and spray.

#### CARBURETOR—FUEL SYSTEM

Diaphragm pump mounted on top of engine driven by plunger operating on eccentric on camshaft. Down-draft carburetor on top of engine. Hotspot manifold. Air silencer. Fuel tank capacity 14 gals.

#### COOLING

Tube and fin type radiator with four rows of tubes. Efficient fan. Two centrifugal pumps, one in each cylinder head. Capacity 5½ gallons.

#### IGNITION

Battery, coil and distributor. New-type distributor driven directly off end of camshaft. Full automatic timing, vacuum-controlled.

#### TRANSMISSION

Synchronized selective sliding type with helical cut constant-mesh gears in second speed.

#### CLUTCH

Single plate. Moulded asbestos composition facings. Clutch and transmission in unit with engine.

#### FRONT AXLE

Carbon manganese steel forging, I beam construction.

#### REAR AXLE

Three-quarter floating type. Spiral bevel gear and pinion. Roller bearings throughout. Gear ratio, 4.33 to 1.

#### BRAKES

Four-wheel mechanical, internal expanding shoe type. Operated by both foot pedal and hand lever. Total braking surface, 186 square inches.

#### STEERING GEAR

Semi-reversible hour-glass worm and 3 tooth sector type with self-adjusting thrust bearings. Ratio, 13 to 1.

#### **SPRINGS**

New transverse cantilever both front and rear. Rear spring mounted behind axle.

#### RUBBER INSULATORS

All spring shackles and shock absorber links are rubber insulated. Rubber insulation in front radius rod ball socket. Engine rubber mounted at three points.

#### LIGHTS

Twolite, depressible-beam headlamps; combination rear and stop light. Instrument panel indirectly illuminated. Cowl lamps on De Luxe cars.

#### TIRES

Balloon, 18 x 5.25.

#### WHEELBASE

106 inches.

#### WHEELS

Ford steel spoke, one piece.

#### TREAD

56 inches.

#### TURNING RADIUS

19½ ft.

#### **EQUIPMENT**

Houdaille hydraulic, double-acting, self-adjusting shock absorbers, vacuum windshield cleaner, rear-view mirror. Pressure gun chassis lubrication, tool equipment, spare steel-spoke wheel.

We reserve the right to make changes, without notice, in prices, specifications, and equipment at any time without incurring any obligation.

FORD MOTOR COMPANY, DETROIT, MICHIGAN

