THE WORLD'S FINEST MOTOR CAR

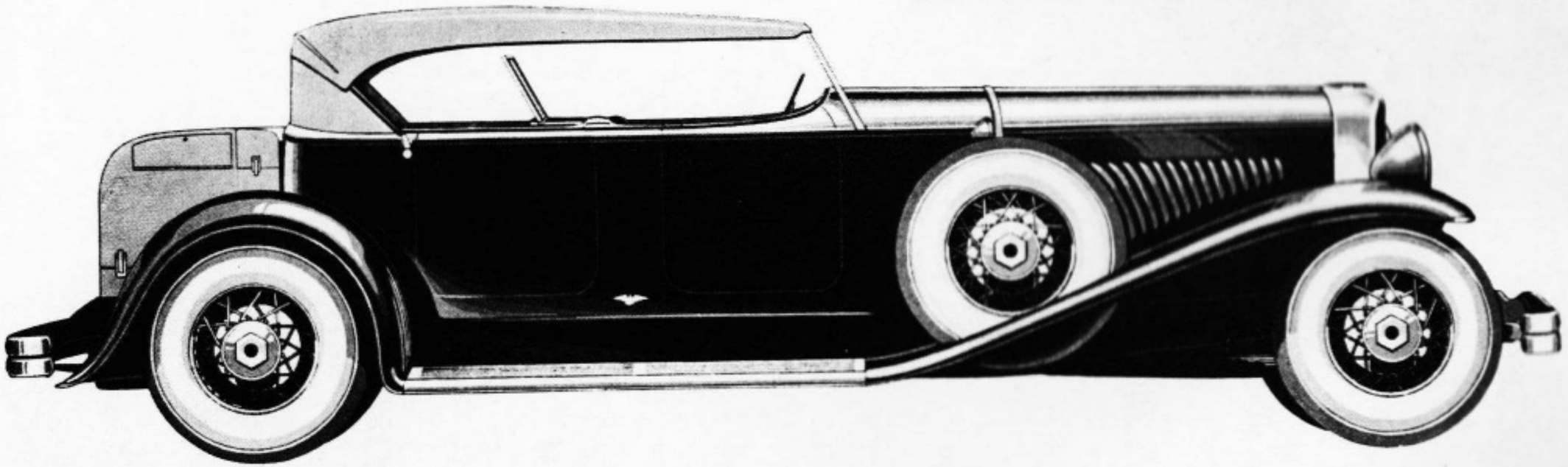
DUESENBERG

THE PURPOSE of this brochure is to acquaint you with some of the features by which a Duesenberg excels all other automobiles; to tell you something about the marked superiority of the materials, workmanship, engineering and construction that go into The World's Finest Motor Car. We invite you to study the designs pictured, as representing examples of our ability to build a motor car that will meet your special requirements. Whether you are interested in an automobile suited for formal town use or frequent coast-to-coast travel; a motor car adapted for hunting or other sports uses—Duesenberg is able to draw on the widest exclusive custom experience in designing and building it for you. Duesenberg holds the word "custom-made" rigidly to its fine old original meaning: "Built to the buyer's order." You are not limited, in your selection, to the designs pictured here. Our staff of artists would consider it a pleasure to sketch for you a motor car incorporating your own thoughts regarding comfort and convenience and appearance. Your Duesenberg may be as individual as you care to have us make it. But it shares with all other Duesenberg cars the mechanical excellence summarized in some of the later pages of this book. It is this wide margin of structural superiority which plays a large part in making the Duesenberg the most desirable of all motor cars for you to own and drive.

A REPRINT

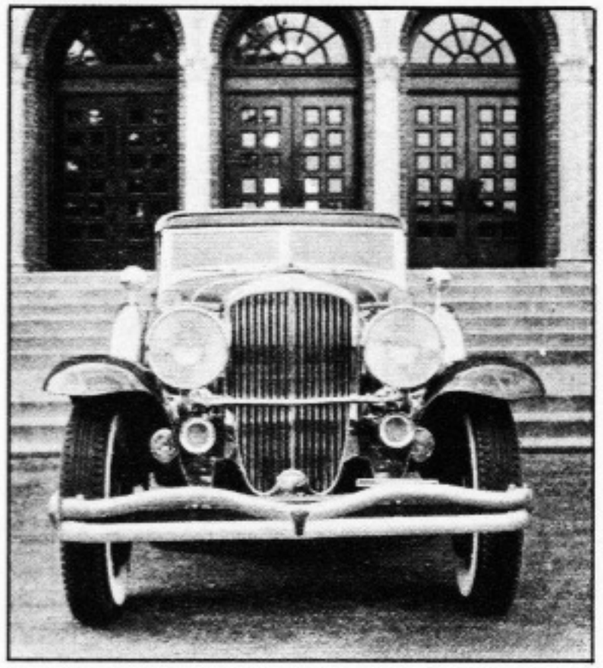
This folder is a reprint of an original catalog on the 1933 Duesenberg. A limited number of copies have been reprinted by us for collectors who wish to preserve historical material on automobiles.

Specially designed for the long chassis. Tonneau windshield turns down into front seat cowl. Unusual chrome panels add to the attractiveness of the doors. The rubber tile floors are extremely practical.



THE DUESENBERG TOURSTER

DESIGN NUMBER 18202

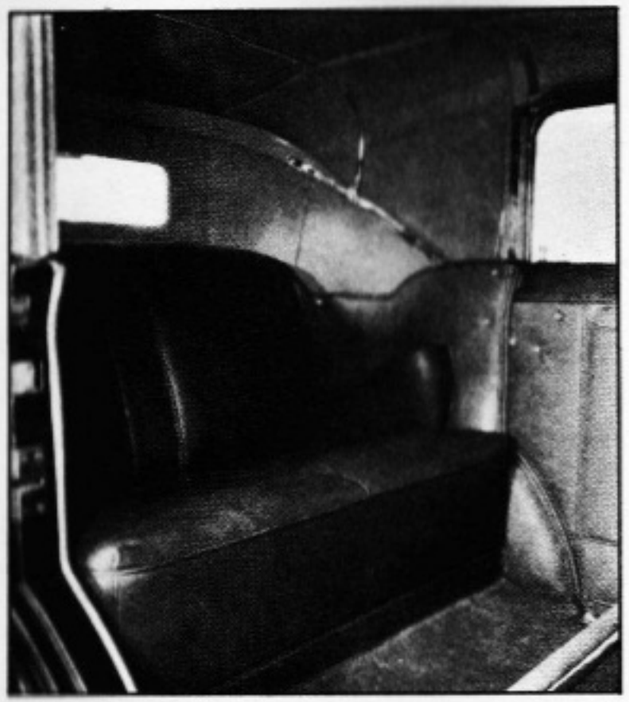


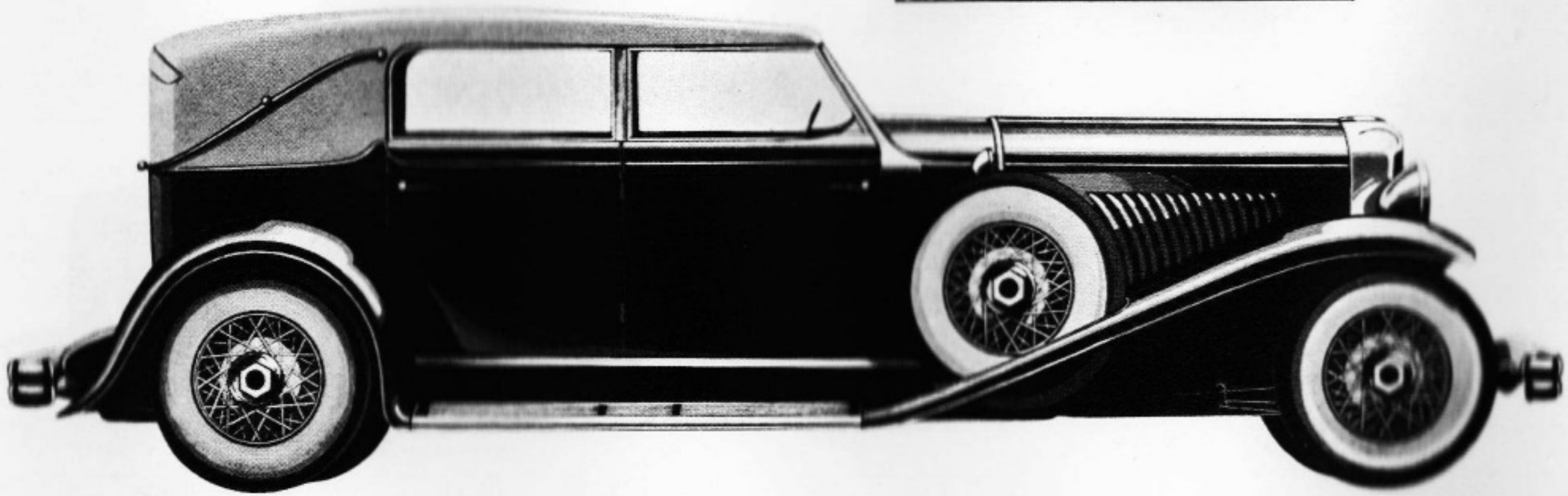
Low, rakish appearance that radiates speed and horsepower. Note the especially striking front view and the neatly folded top.

THE DUESENBERG PHAETON

DESIGN NUMBER 15201

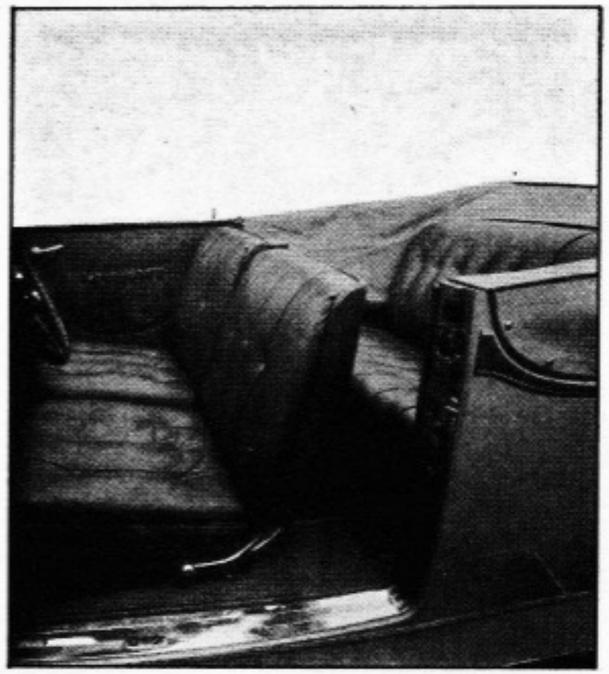
This car is suitable for owner or chauffeur driving. Designed on long wheelbase and with partition. Auxiliary, side facing seats. A large, roomy body; may be used either as a sedan or phaeton.



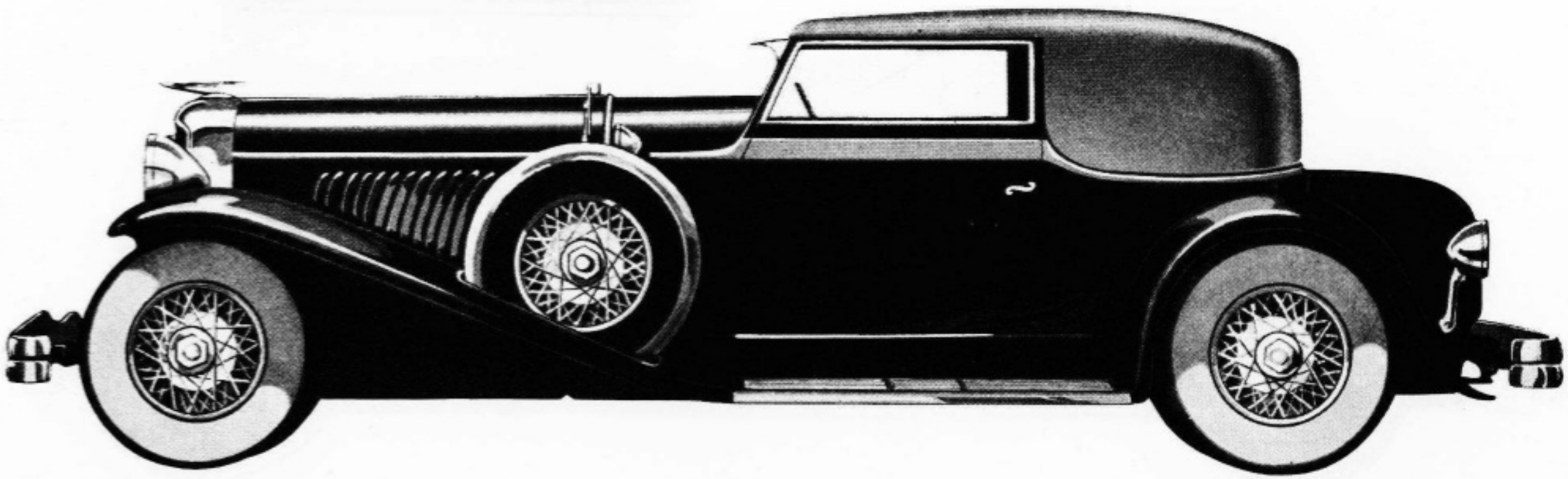


THE DUESENBERG CONVERTIBLE BERLINE

DESIGN NUMBER 471B502



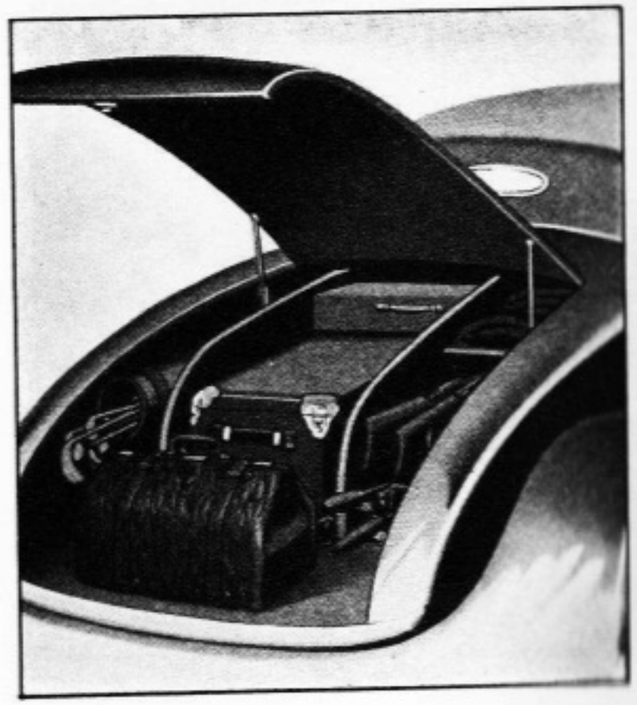
The top folds compactly, making a very attractive open car. The individual front chairs are unusually comfortable, and there is exceptional room in the rear, due to the sunken floor.

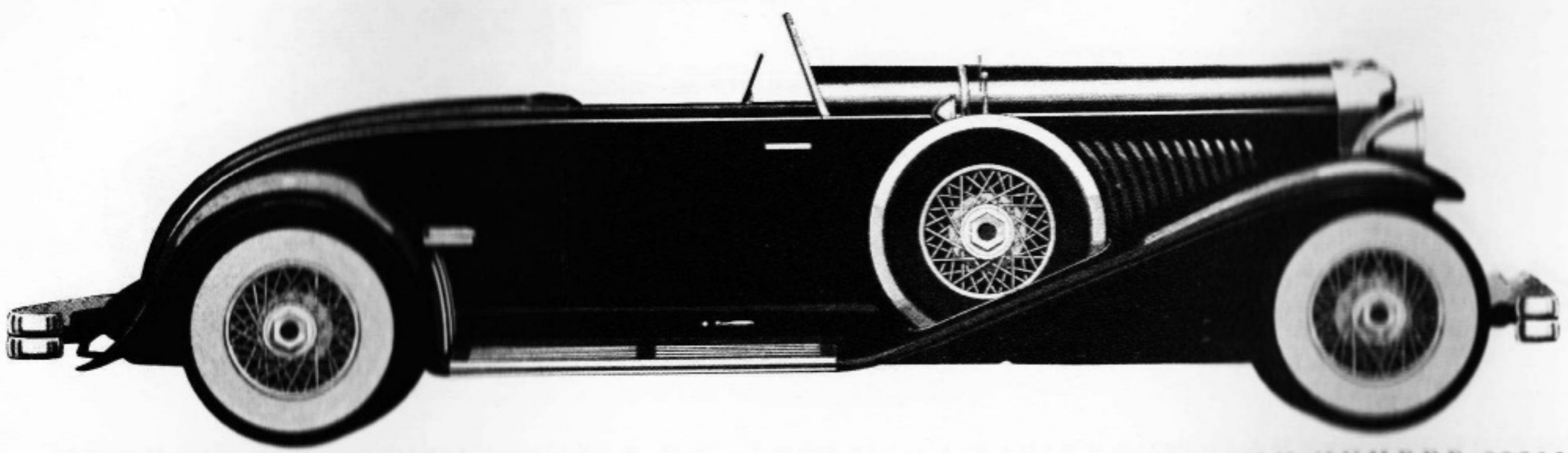


THE DUESENBERG CONVERTIBLE VICTORIA

DESIGN NUMBER 1051101

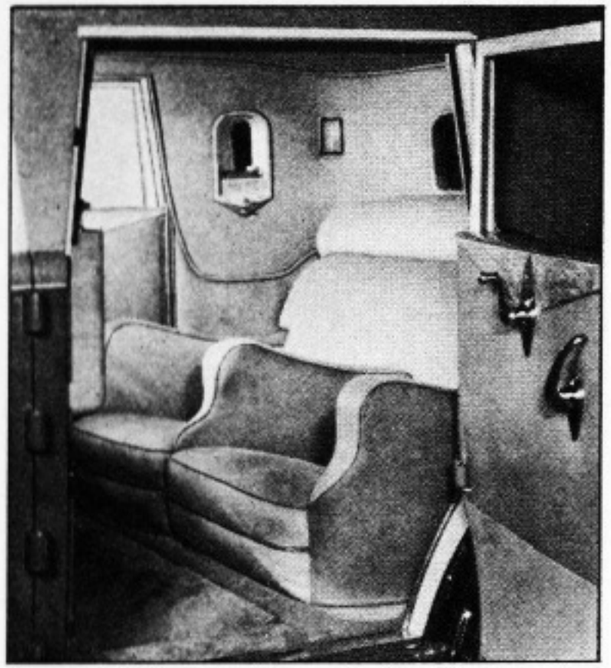
This model is really a coupe, the top disappearing into the body. When the windows are lowered into the doors it becomes a smart roadster. The rear deck can be fitted to suit your requirements or with rumble seat.



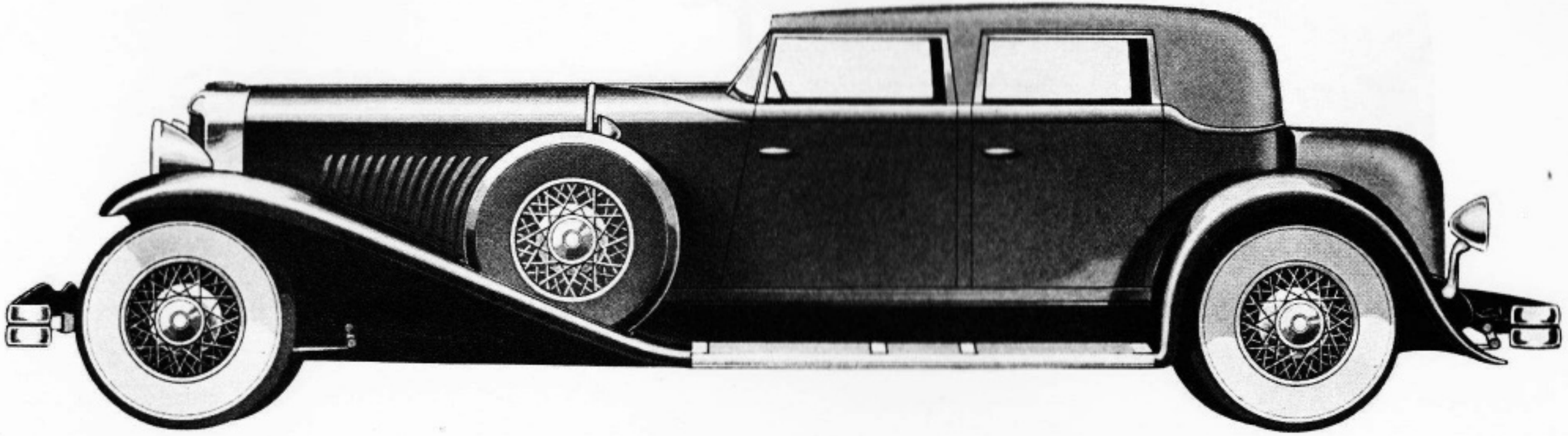


THE DUESENBERG CONVERTIBLE ROADSTER

DESIGN NUMBER 22301



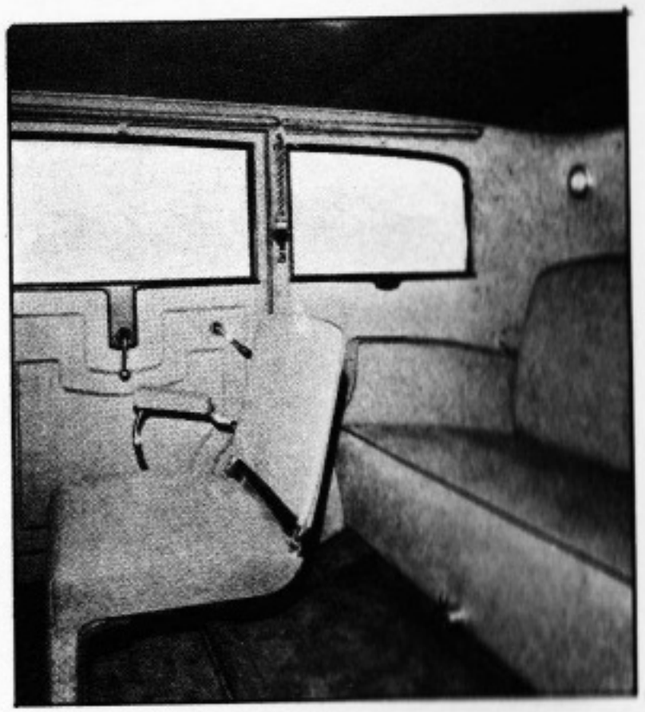
Introduces unique design features: arm chair seats with removable arm rest; built-in vanity with background mirror and indirect light; oak cabinet containing remote control radio, speedometer, split-second stop clock and altimeter. Has exterior appearance of convertible sedan, although top is rigid.

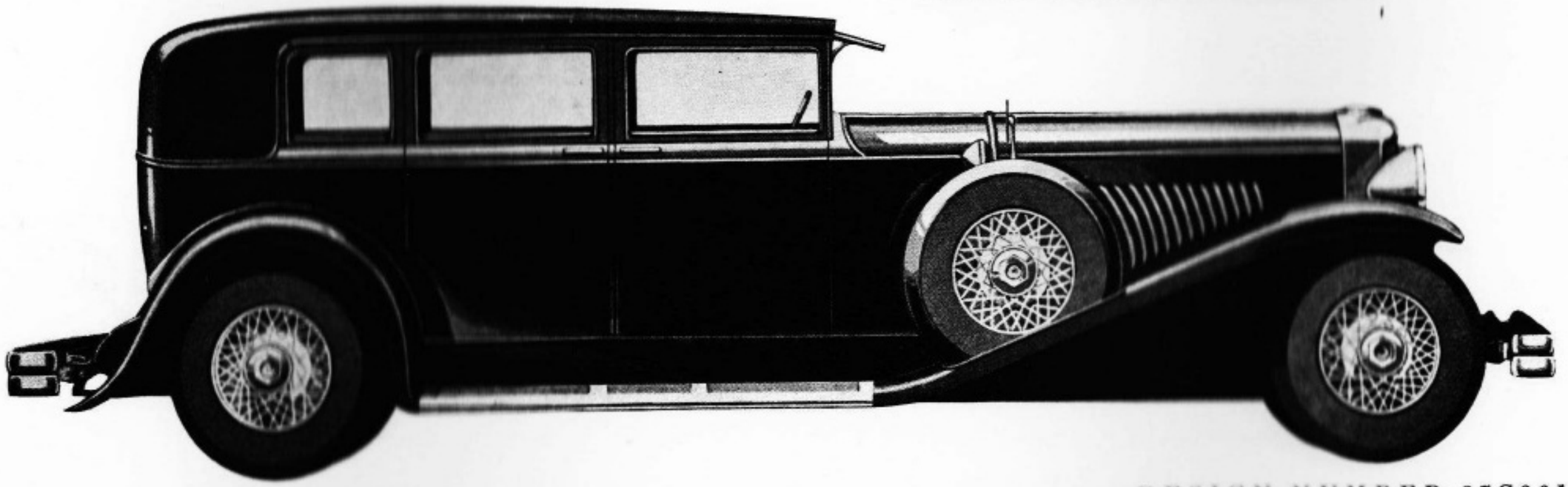


THE DUESENBERG BEVERLY

DESIGN NUMBER 65702

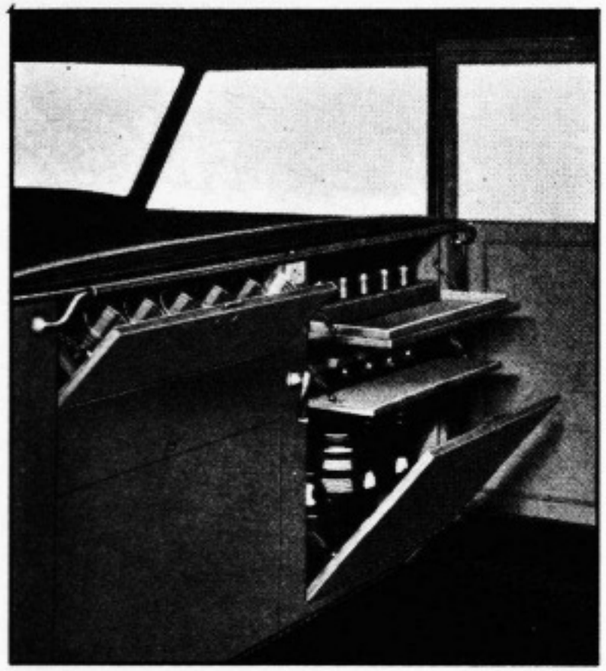
Unusual body width has been the aim in this design. Six persons ride comfortably in the rear compartment. The large upholstered auxiliary chairs fold completely out of sight. The rear seat is adjustable.



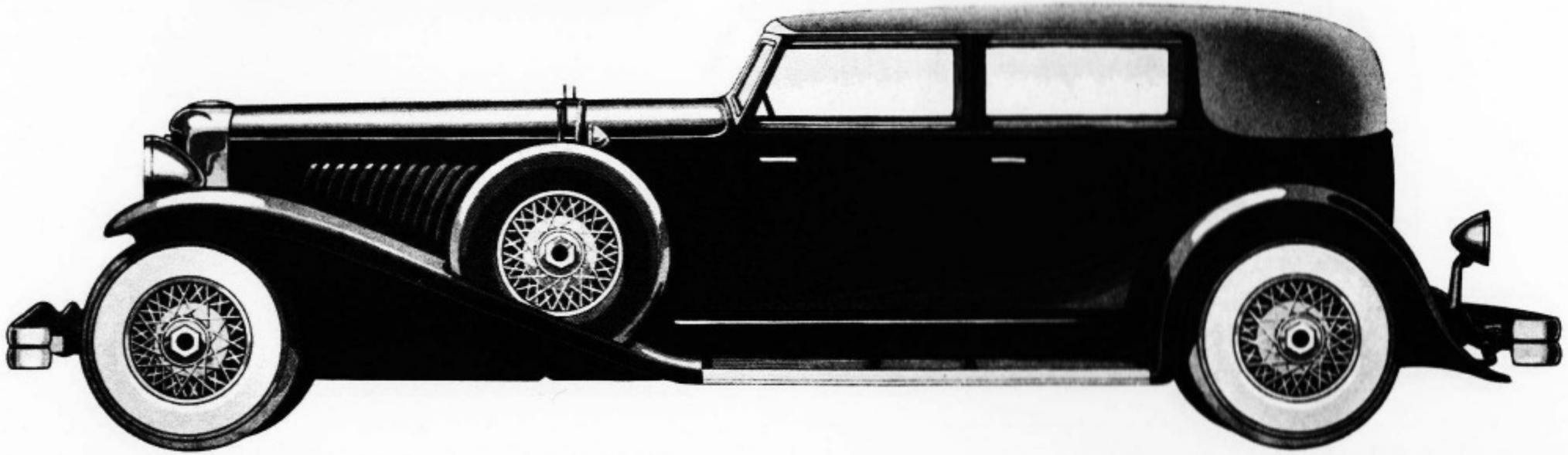


THE DUESENBERG LIMOUSINE

DESIGN NUMBER 87C901



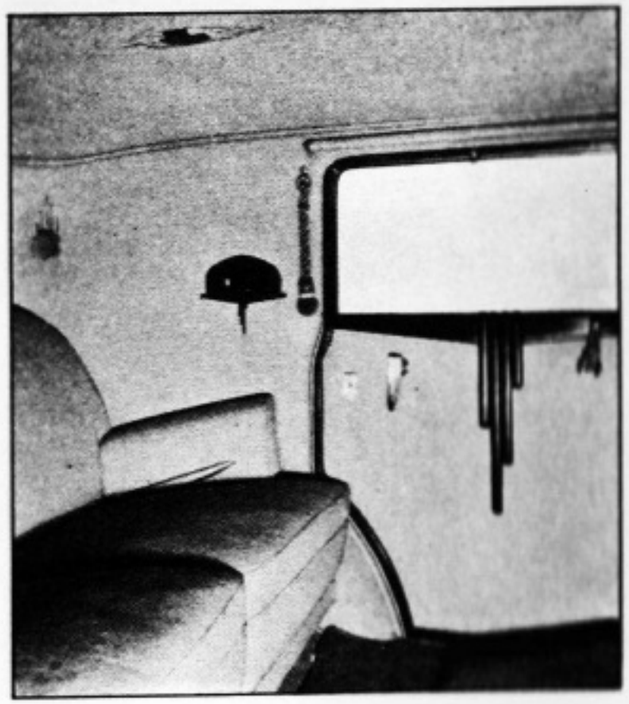
This is a man's car, with an interior particularly suited for sports use. The completely outfitted cabinet and other unique features will appeal to those who appreciate the unusual.

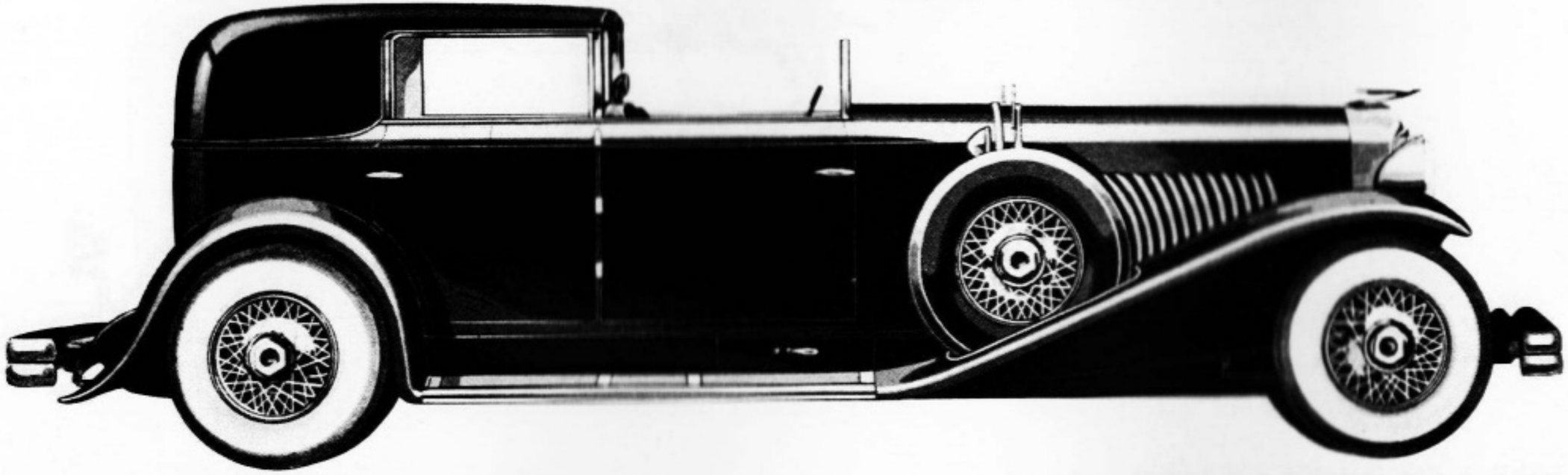


THE DUESENBERG PRINCE OF WALES SEDAN

DESIGN NUMBER 75803

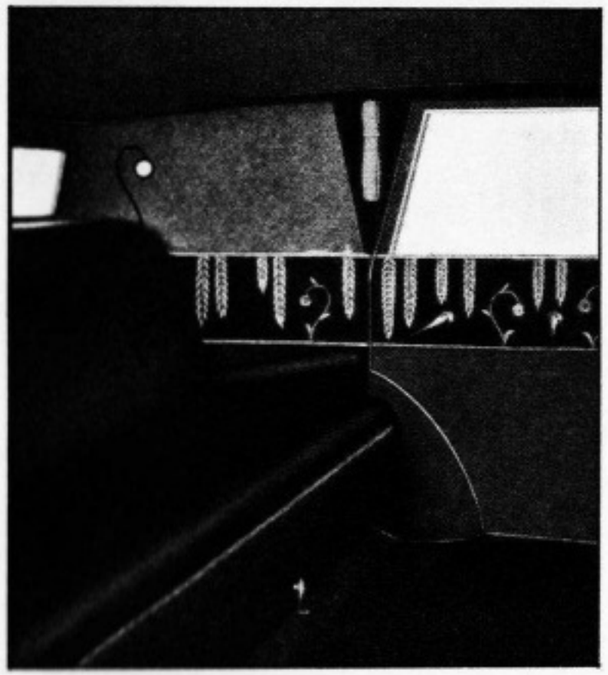
Unusual features of this model are long, low, rakish lines; exceptional vision due to thin, duraluminum corner posts; modernistic interior; harmonizing hardware and lights; ebony woodwork; two rear-facing occasional chairs.



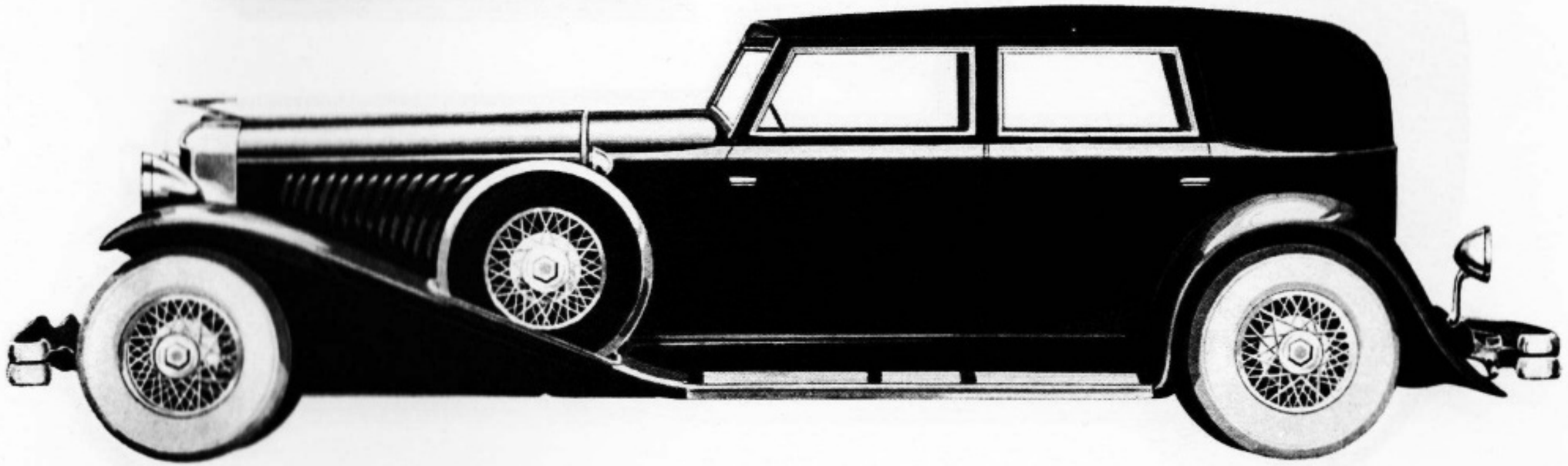


THE DUESENBERG TOWN CAR

DESIGN NUMBER 97A1001



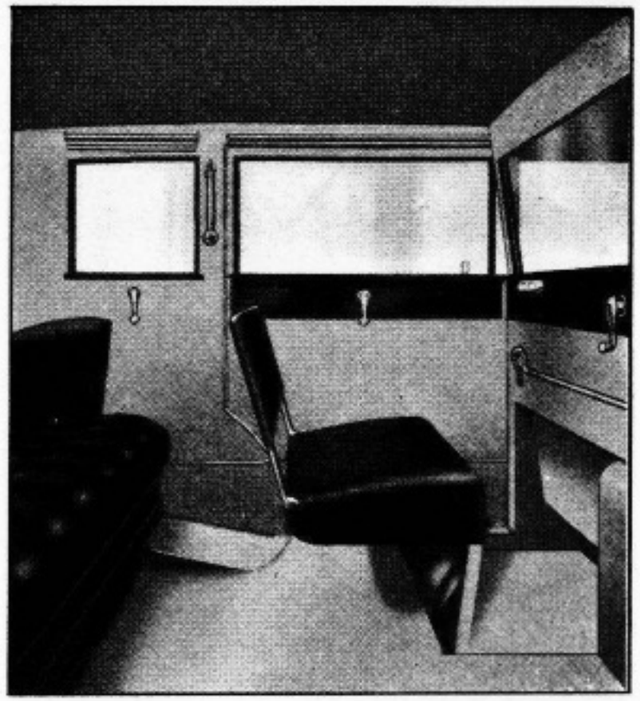
Essentially a lady's car. The interior is delightfully feminine from the contrasting broadcloth and embroidered satin to the very complete cabinets designed and fitted by Elizabeth Arden.

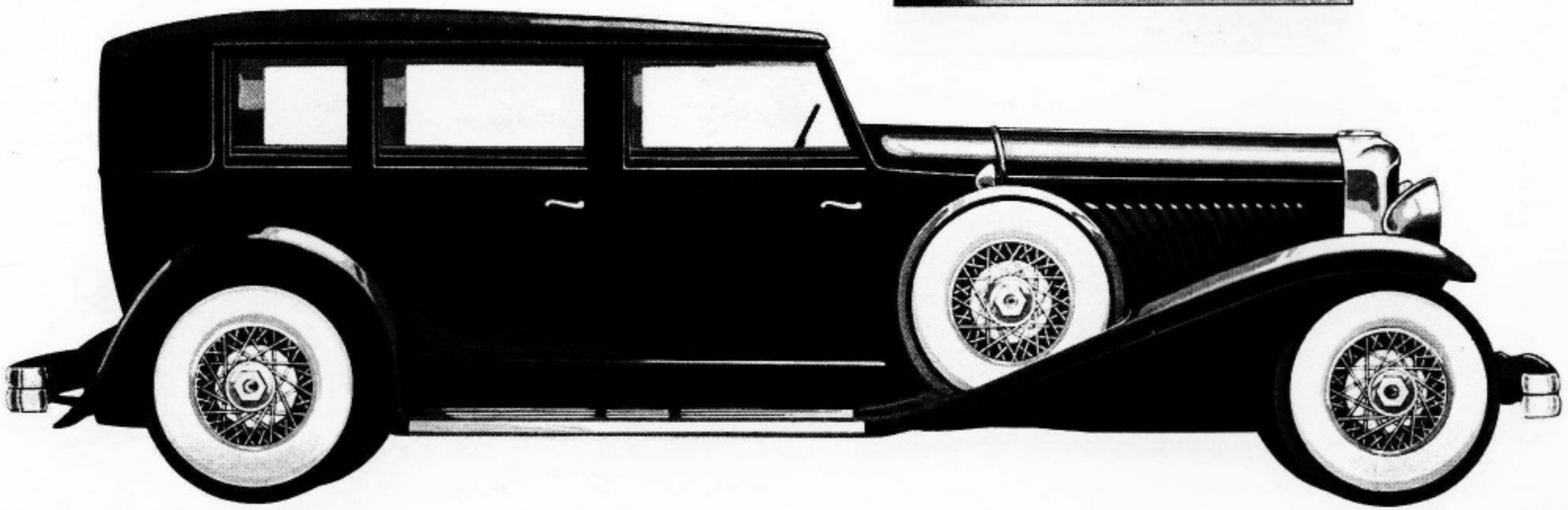


THE DUESENBERG TOWN LIMOUSINE

DESIGN NUMBER 77B801

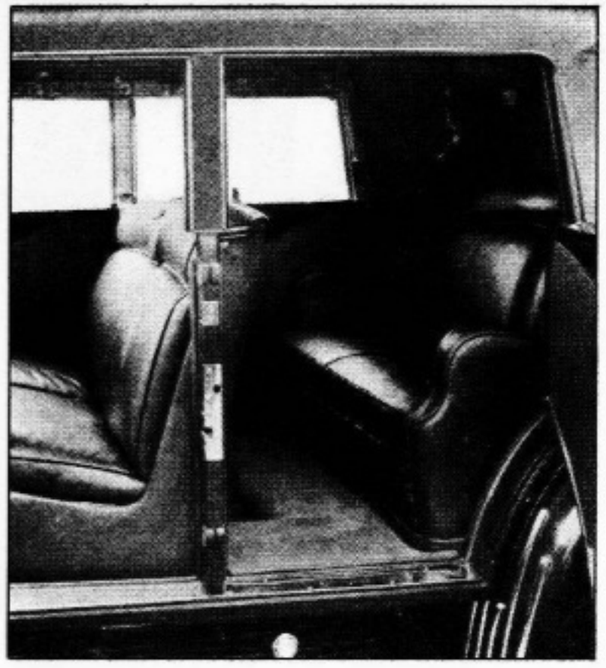
This model is designed especially for those desiring maximum comfort and exceptional headroom. It has high windows affording excellent vision. Large, high doors permit comfortable entrance. Body lines are of the square, formal type.



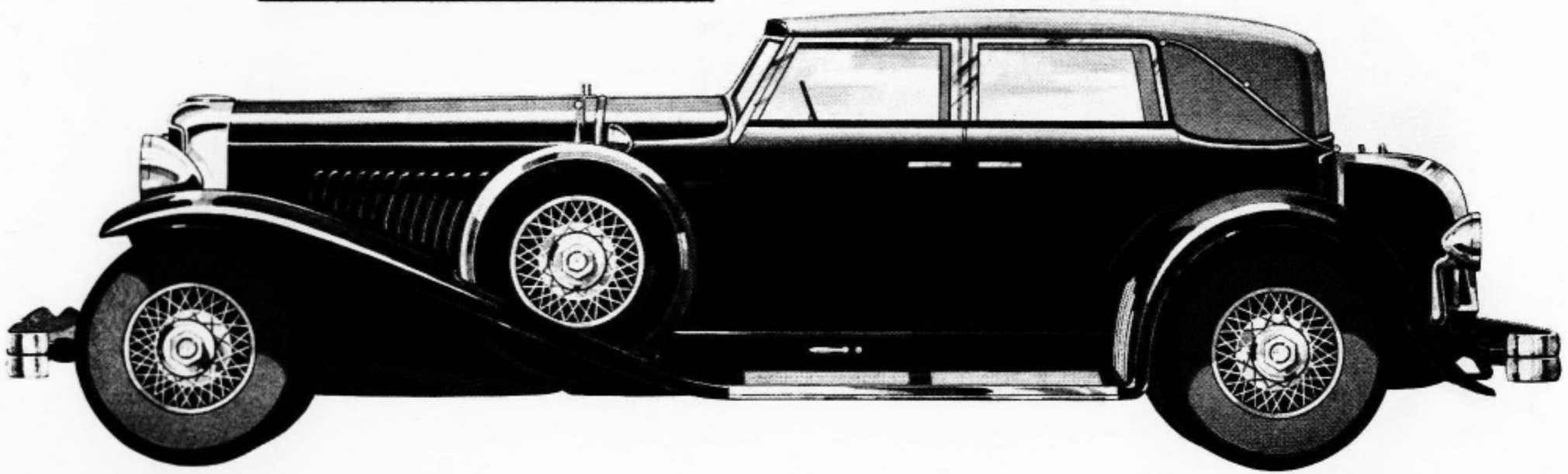


THE DUESENBERG TOWN LIMOUSINE

DESIGN NUMBER 87C902

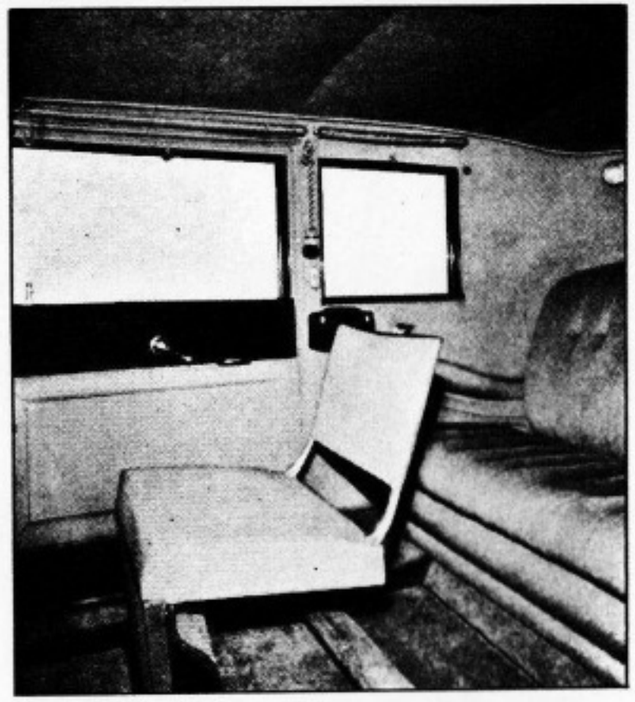


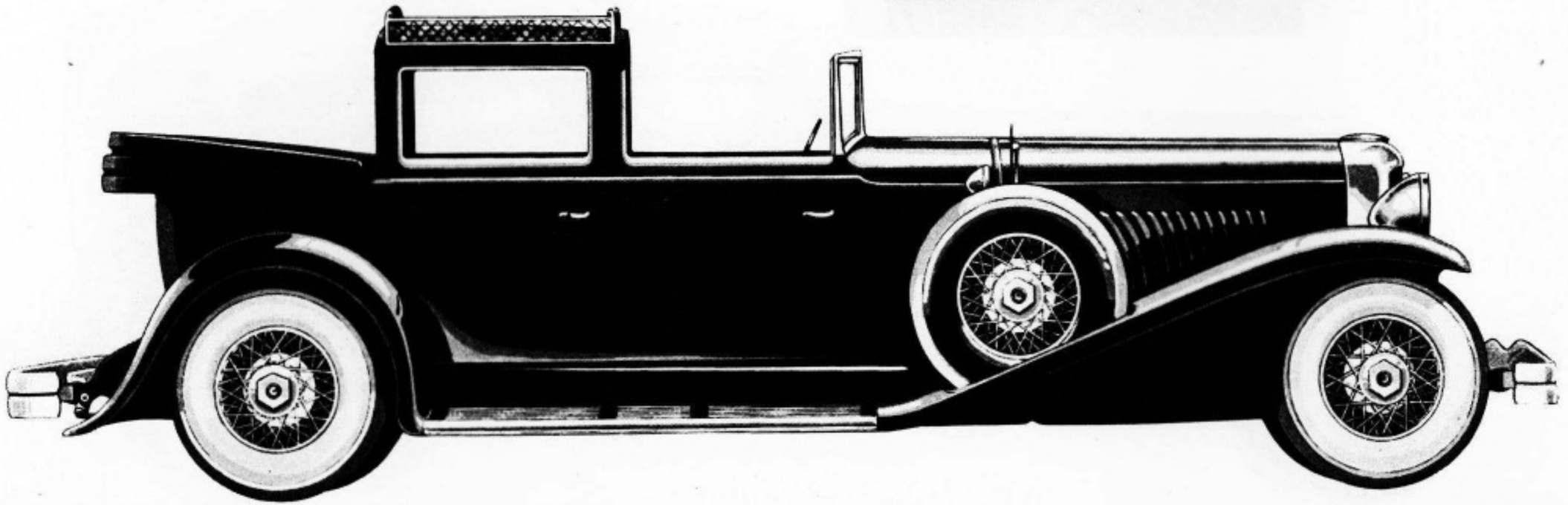
This model is equally smart, open or closed. Usually trimmed in leather. Front and rear seats are both exceptionally wide, easily accommodating three people. Rich walnut panels in rear compartment include stop clock and speedometer.



THE DUESENBERG CONVERTIBLE PHAETON DESIGN NUMBER 45501

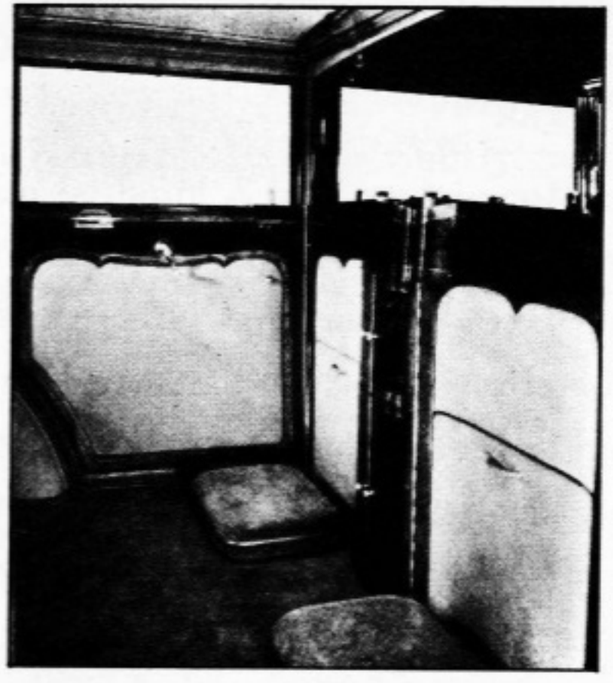
Extremely adaptable; can be used as limousine, town car or landaulet. Has large, roomy interior; soft, luxurious cushions; comfortable, forward-facing extra chairs.



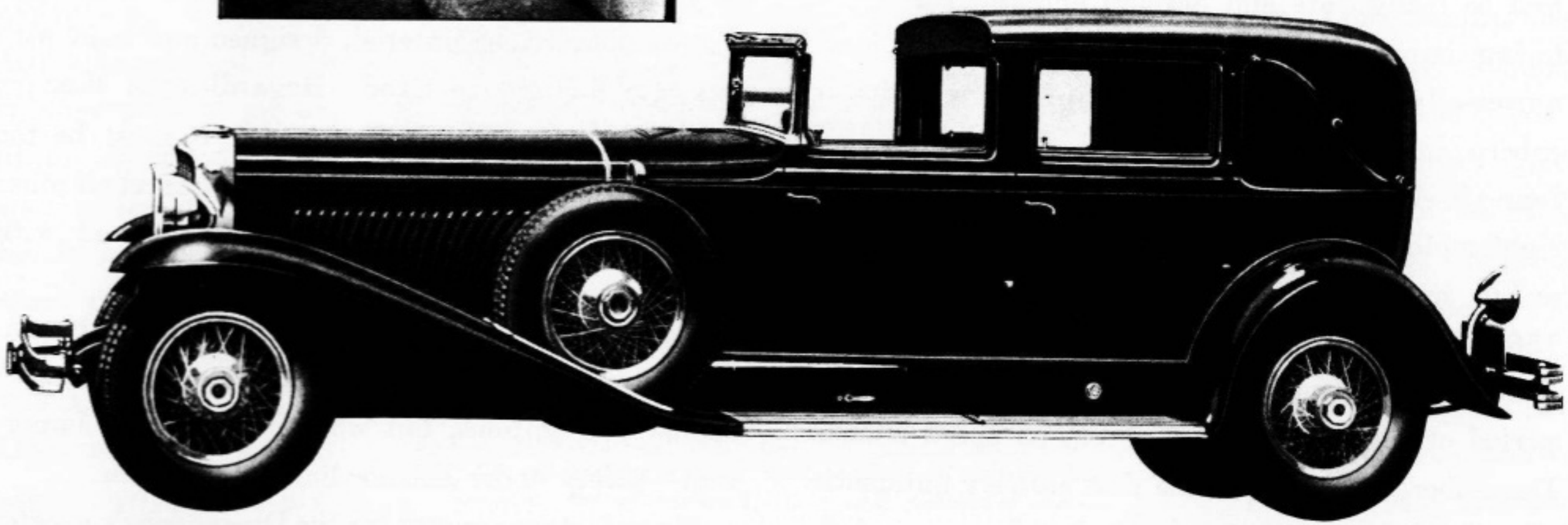


THE DUESENBERG ALL-WEATHER TOWN LANDAU

DESIGN NUMBER 97C1003



The otherwise conservative lines of this correct town car are balanced by the distinctive Vee windshield and leather quarter. The illustration shows one of several interiors —silver inlaid circassian walnut; bone fitted hardware; cloisonee vanity; two opera seats.



THE DUESENBERG FORMAL TOWN CAR

DESIGN NUMBER 97B1002

THE WORLD'S FINEST MOTOR CAR

MODEL J, 265 HORSEPOWER

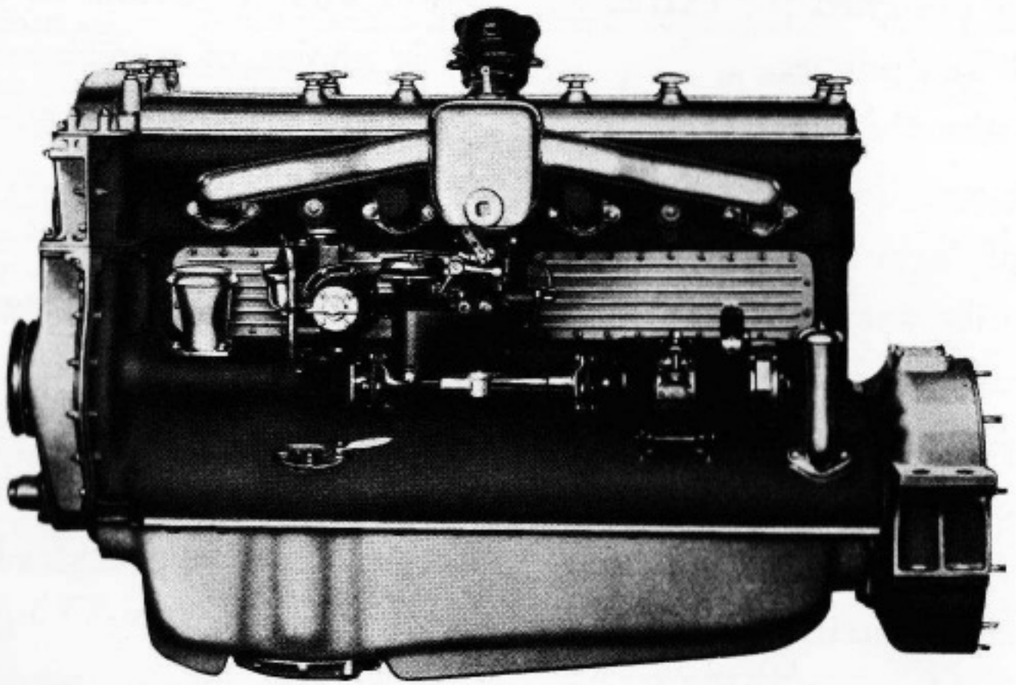
To those who know fine motor cars the name Duesenberg today represents the final expression of automotive excellence. More Duesenbergs are sold than any American automobile costing over $9,500. This enviable position has been achieved by years of far-sighted pioneering. Again and again Duesenberg has been the first to inaugurate and develop and introduce motoring improvements that have been later almost universally adopted by other manufacturers. Duesenberg built the first American automobile with four-wheel brakes; and the first American straight-eight motor. Duesenberg engineered the first automobile in the world to attain an official speed of 156 miles per hour, and established a world's record with it at Daytona Beach, which stood for a longer period of time than any other official speed record. Duesenberg built one of the first entirely automatic chassis lubricating systems; developed mercury balancers for motors, and a hundred other automotive inventions, some of them less spectacular, but adding to everyone's comfort and safety in motoring.

Therefore it was only natural that Duesenberg should be the first to vision and produce the advanced type of motor car that would meet the requirements of men and women of wealth under today's changed driving conditions. The Duesenberg car was deliberately planned, engineered, designed and built with a single thought in mind. Regardless of time or precedent or costs or selling price, it must be the finest automobile in the world. It must excel all other motor cars to a very marked degree—and with finality.

First among its requisites of superiority, Duesenberg placed safety; absolute security, not only under ordinary conditions, but what is even more important—safety under extraordinary conditions.

Many factors account for the Duesenberg's greater

degree of safety; but we believe the basic reason is its exceptionally high horsepower. In all other forms of travel, the most powerful vehicle is rightly regarded as the safest. The extra fare fast train; the new, record-breaking ocean liners; the multi-motored airplane, offer familiar examples. The same principle holds true for the motor car. There are times when it is safer to go ahead than to stop, especially when the driver knows that there is a surplus of power, at all speeds, that responds instantly to a touch on the accelerator. This large reserve of power has other advantages. It enables Duesenberg to accomplish easily, smoothly, quietly, and without strain, that which a less powerful motor car can do only with very noticeable effort. In day-by-day driving a Duesenberg's resources are never taxed; the limits of its endurance are never even approached. High horsepower assures still further guarantee of safety. Every part of the automobile must be designed in keeping with the requirements of so powerful an engine. For example, the entire chassis is built with almost 100% surplus of strength over and above the amount required by the 265 horsepower motor.



Clean design is a feature of the Duesenberg engine. This view shows the fuel pump and timing box, intake manifolds and carburetor, ignition distributor and generator. The cylinder block and upper half of crankcase are a single rigid casting. All polished surfaces are either chromium plated or finished in polished aluminum

The second requirement demanded of the Duesenberg was that it must be as easy to drive

and care for as smaller motor cars; that it should not be necessary to hire a special driver to operate it; that the owner, whenever he feels so inclined, should be able to take the wheel and start across the continent, secure in the knowledge that he is driving a car which is master of every situation. The Duesenberg in every detail is designed for extreme simplicity, as well as strength and power.

Duesenberg believed that the third essential for the world's finest motor car was the discarding of all traditional conceptions of large car design. A new type of exterior appearance was created; a new luxury of appointments and accessories; a new standard of riding and driving comfort, in keeping with the advanced mechanical construction. Each body was fashioned by leading custom builders from designs developed by Duesenberg artists and engineers. Today Duesenberg builds more individually different types of bodies than any other automobile manufacturer. This wide experience fits us pre-eminently to design and build exactly the type of body you want. Contrary to general practice, we invite the thoughts and suggestions of owners who wish to have us incorporate their individual ideas in the automobile we build for them.

We are proud to number among Duesenberg owners hundreds of men and women throughout the world who are known as the most discriminating in their choice of a motor car. These include many members of royalty and nobility in foreign countries, as well as industrial, financial and social leaders in the United States and abroad. They find that the Duesenberg offers a degree of excellence matched by no other motor car.

Duesenberg has provided service facilities in the larger cities of this country and at strategic points throughout the world. It is our constant aim to assist owners in securing the utmost pleasure and satisfaction in the operation of their automobiles. Demonstration cars are available for the asking, without obligation. It will give us great pleasure to place one of these at your disposal.

SUMMARY OF SPECIFICATIONS

MODEL J, 265 HORSEPOWER

ENGINE: Eight cylinders in line; bore 3¾ inches, stroke 4¾ inches; piston displacement 420 cubic inches; N.A.C.C. horsepower rating 45; actual power development, 265 horsepower at 4200 revolutions per minute. Cylinders and crankcase cast integrally; oil pan, aluminum. *Pistons:* Special aluminum alloy, constant clearance type, with three compression rings and one oil ring. *Wristpin:* 1 1/16 inches diameter; floats in piston and bronze bushed rod. *Connecting-rod:* Unusually strong, heat-treated aluminum alloy of light weight; drilled for pressure lubrication of wristpin. Crank-pin bearing: 2½ inches diameter, 1¾ inches length. *Crankshaft:* Double heat-treated alloy steel; statically and dynamically balanced and fitted with counterbalance weights; five main bearings, 2¾ inches diameter, length from front to rear, 3 5/16, 1⅞, 2⅜, 1⅞ and 2⅞ inches. Engine is suspended in rubber at four points. Cylinder block attractively finished in green enamel.

VALVE MECHANISM: Two overhead camshafts with five bearings mounted in detachable cylinder head; cams act directly on valves. Four valves per cylinder for high efficiency. Two intake valves have 1½-inch clear diameter and .35 inch lift; two exhaust valves 1⅞ inches diameter and .36 inch lift. All valves of heat-resisting silchrome steel. Two concentric springs per valve insure positive action at high speed. Valves shim adjusted for permanency, clearance being .025 inch. Valve mechanism operates in bath of oil. Camshafts driven by 2-inch silent chain; automatic adjustment.

LUBRICATION SYSTEM: Gear pump in base of oil pan forces lubricant to: Main bearings, connecting-rod bearings, wristpins, camshaft bearings, chain sprocket bearings and auxiliary shaft. Three oil filters, including two screens and a Purolator. Crankcase ventilating system. Aluminum oil pan has fins on bottom to cool oil.

FUEL SYSTEM: 26½-gallon gasoline tank; fuel fed by unique cam-operated pump of unusual capacity; gasoline filter; duplex carburetor of special design having two 1½-inch openings; dual intake manifolds of polished aluminum; mixture heated by water circulating from cylinder head to radiator.

COOLING SYSTEM: Capacity 7 gallons. Copper radiator protected with thermostatically controlled shutters; four-blade fan mounted on two large ball bearings driven by Vee endless, rubberized-fabric belt; water pump of ample capacity; cylinder block has large water spaces.

ELECTRICAL SYSTEM: Specially built starting, lighting and ignition units by Delco-Remy. Ignition system has a four-lobe cam, two brakers and two coils. Unusually powerful starter operated by a pull button on instrument board; is engaged by Bendix gear. Generator has large capacity at low speed. Exide battery has 21 plates and 160-hour capacity; located in battery box in right running board apron.

EXHAUST SYSTEM: Dual exhaust manifolds finished in heat-proof green enamel to match cylinder block. Mammoth muffler, 6½ by 54 inches, gives perfect silencing with minimum back pressure. By-pass pipe through center of muffler.

CLUTCH: Two-plate type. Diameter 11 inches. Woven asbestos facing. Coil spring drive in clutch hub. Clutch shaft pilots at front in large Hyatt roller bearing in crankshaft. Ample ball throwout bearing with mechanism automatically lubricated.

TRANSMISSION: Three speeds and reverse. Second gear absolutely silent due to special internal-external gear construction. Large ball and roller bearings used throughout. Gears and shafts of finest alloy steels. Transmission case heat-treated aluminum.

UNIVERSAL JOINTS: Front universal special rubber ball and socket construction, long wearing and silent, without need of lubrication. Rear universal all-metal type, large size, automatically lubricated by chassis system.

TORQUE TUBE: Large steel tube surrounding drive shaft; relieves springs of driving and torque strains. Front of torque tube attached to frame cross member through aluminum yoke, with ends mounted in rubber blocks. Sturdy diagonal brace rods from torque tube to axle ends.

REAR AXLE: Semi-floating type, of great strength but relatively light weight, secured by costly construction. Hypoid pinion and ring gear give long life and silent action. Pressed steel housing reinforced by axle tubes. Pinion integral with hollow pinion shaft mounted on oversize single and double row ball bearings. Hollow alloy steel axle shafts of large diameter, $2\frac{3}{16}$ inches, provide excessive strength with light weight. Differential and wheels carried on oversize ball bearings. Steel forgings at axle ends give increased strength with reduced weight. Malleable iron differential carrier and pinion shaft housing with aluminum hand hole cover.

GEAR RATIO: Various ratios between $3\frac{11}{14}$ and $4\frac{7}{12}$ to 1 are optional.

FRONT AXLE: Alloy steel I-beam of tremendous strength, with reverse Elliott ends. King pins carried on double row ball bearing at top and ball thrust bearing at bottom, giving easy steering and long life. Lubricated once a year. Each front wheel mounted on two annular ball bearings of exceptional size. Tie rod and drag link have ball and socket ends.

STEERING MECHANISM: Special cam and lever steering gear with oversize parts constructed of finest heat-treated alloy steel.

BRAKES: Hydraulic type, an exclusive Duesenberg design, simple and dependable. Two cast aluminum brake shoes act internally on completely machined forged steel drums with five external cooling fins. Only one hydraulic cylinder required per wheel. Master cylinder is self-filling, self-compensating type used in connection with vacuum booster. Brakes are large, 15 inches diameter by 3 inches width. A single, simple adjustment at each wheel regulates both shoes with perfect equality. The hand brake is a two-shoe contracting type at rear of transmission. Its large size, 8 by 3 inches, permits it to be used continuously on the road, if desired.

WHEELS AND TIRES: Six wire wheels, six tires and tubes are standard equipment. Tires are 31 by 7 inches. Wheels have unusually heavy spokes, chromium plated.

SPRINGS: Wide and long with smooth, polished surfaces for easy, silent action—lubricated and fitted with spring covers. Front springs are 41 by 2½ inches; rear springs are 62 by 2½ inches. Spring action effectively controlled by four double-acting hydraulic shock absorbers engineered into chassis. Spring shackles have exceptional wearing surfaces and are automatically lubricated by chassis system.

FRAME: Tremendously stiff alloy steel frame with seven strong cross members. Depth of frame is 8½ inches, flange width 2¾ inches, thickness $\frac{7}{32}$ inch. Double kickup at rear and single drop at front. Top of frame only 20 inches from ground.

CHASSIS LUBRICATION SYSTEM: Operated by engine, it automatically supplies oil to the following parts every 80 miles: All spring bolts and bushings, linkage on four shock absorbers, drag link, clutch throwout mechanism, rear universal joint, drive shaft bearing at front of torque tube.

EQUIPMENT: No other car is nearly so completely equipped, the items including: Six wire wheels, tires and tubes; bumpers front and rear; double-acting hydraulic shock absorbers; automatic chassis lubrication system; automatic windshield wiper; rear view mirror; spring covers; Purolator; gasoline filter; combination tail, stop and backing light 8 inches in diameter; 8-day, split-second clock; 150-mile-an-hour speedometer; 5000 r. p. m. tachometer, altimeter, brake pressure gauge; oil pressure gauge, ammeter, gasoline gauge, temperature indicator.

WHEELBASE: 142½ inches and 153½ inches.

BODIES: All bodies are specially made by the finest custom body builders.

PRICE: Chassis only, with fenders, running boards, hood, dash, and complete equipment, $9500 F.O.B. Indianapolis, Ind.

THE DUESENBERG
Supercharged SPORTS CHASSIS

MODEL SJ, 320 HORSEPOWER

IN ANSWER to the demand from numerous sportsmen and owners of fine cars, Duesenberg offers this fast strictly sport automobile with supercharger in addition to the 265 horsepower model described in the fore part of this book.

It is appropriate that Duesenberg which is responsible for many of the most advanced engineering contributions to the industry—the Straight Eight Motor, Hydraulic Four Wheel Brakes and Automatic Chassis Lubrication—should introduce in this country, a passenger car with supercharged motor. Duesenberg was the first in America to use a supercharger, employing it on a specially built racing car for the Indianapolis Speedway in 1923. The present perfected unit is the result of extensive experimenting, testing and operation under varying conditions, over a period of ten years.

The Duesenberg supercharger is scientifically designed to develop higher sustained speed, additional and smoother power, greater acceleration and im-

proved hill climbing ability. All of these have been accomplished with a notable freedom from noise and vibration.

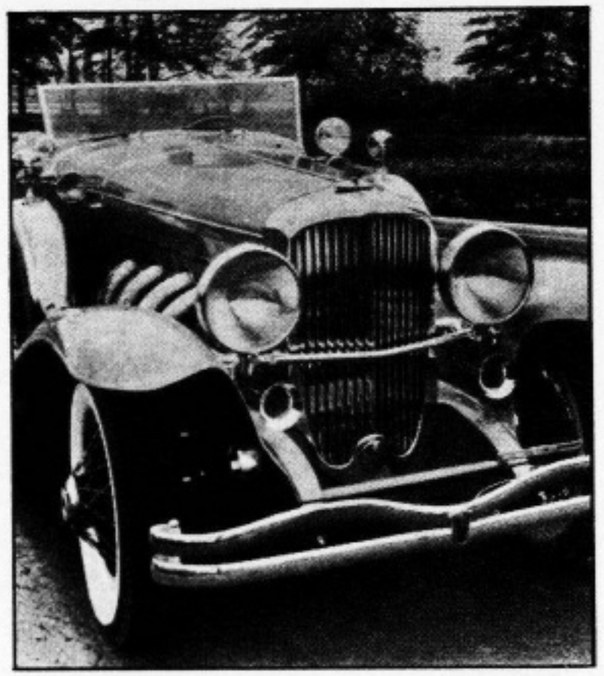
Indicative of the superlative performance that a supercharger makes possible, the Model SJ, 320 horsepower Duesenberg can be throttled down to three miles per hour and will accelerate from a standing start to 100 miles per hour in twenty seconds. A Phaeton with top lowered has been driven 129 miles per hour in high gear and 104 miles per hour in second gear. Even at these exceptionally high speeds the car holds the road perfectly, and does not have the slightest tendency to "wander".

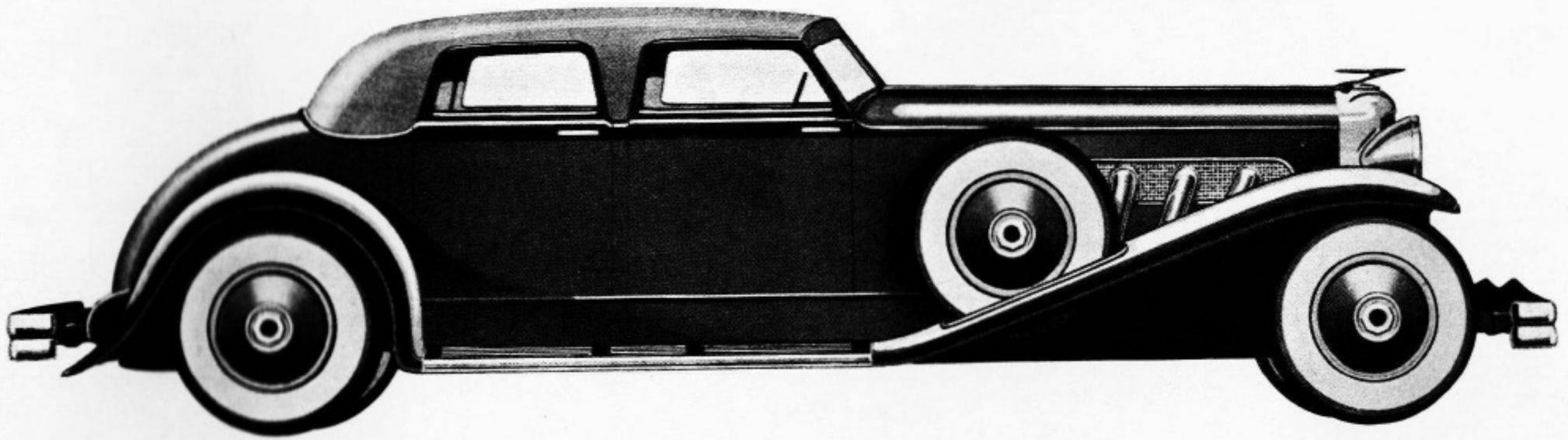
The need for a supercharger on a fast sport automobile is easily evident. At the higher motor speeds the downward or suction strokes of the pistons are so rapid that it is not possible for them, unaided, to draw in a quantity of gas sufficient to meet the demands of the combustion chamber. The supercharger overcomes this condition. It includes an impeller revolving at six times the motor speed, which forces more gasoline mixture into the manifold and keeps it there under considerable pressure. This allows more mixture to enter the combustion chamber. Due to the high rotating speed of the impeller and driving units, Duesenberg has gone to great lengths to develop a mechanism rugged in construction, materials and mounting, but built with the critical precision of a watch.

In addition to providing extraordinary power and speed, Duesenberg has designed the 320 horsepower supercharged chassis to be entirely distinctive in appearance. This is accomplished by the beautiful exposed manifold, jacketed in flexible, polished, stainless steel, and brought to the exterior through a chromium-plated grill. A cut-out provided for the exhaust can be properly muffled for town driving.

The supercharged chassis is furnished in the 142½ inch and 153½-inch wheelbase lengths. All coach work is custom-built, to order, and of exclusive Duesenberg design. Prices, suggested designs and additional information submitted on request.

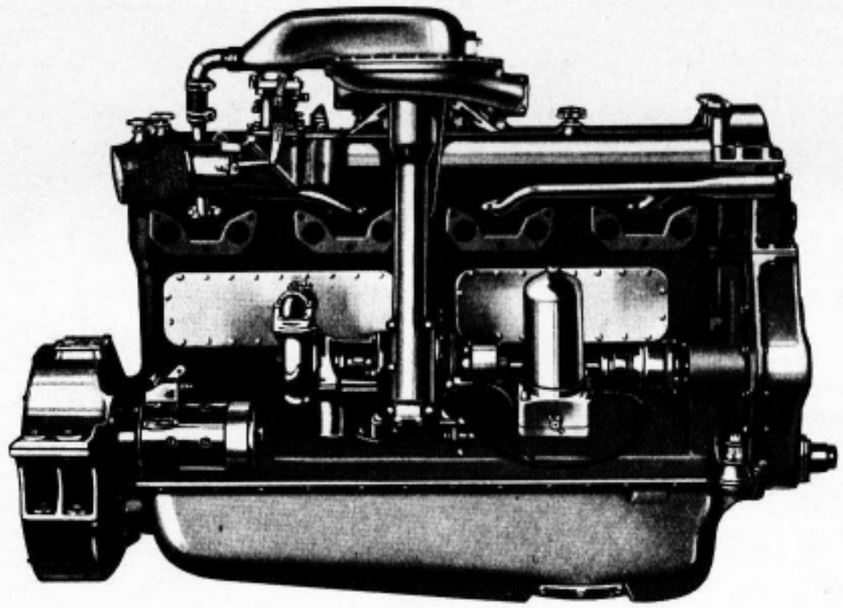
This stream-lined supercharged Duesenberg is not freakish in appearance. There are many designs and suggestions for you to choose from.





320 HORSEPOWER SUPERCHARGED DUESENBERG

DESIGN NUMBER 153S146



CONDENSED SUPERCHARGER SPECIFICATIONS

MODEL SJ, 320 HORSEPOWER

TYPE: The Duesenberg supercharger is of the centrifugal type, in constant engagement, designed for freedom from noise and vibration.

IMPELLER: The forged and heat-treated impeller is of duraluminum—mounted on the upper end of a vertical shaft on the right-hand side of the motor. This impeller rotates at six times motor speed and delivers approximately five pounds of pressure at 4,000 RPM's.

DRIVE: The supercharger is worm-driven through a flexible cushioned drive member of the right accessory drive shaft.

BEARINGS: The utmost accuracy is required in manufacturing, assembling, and fitting the bearings in this high-speed unit.

CARBURETOR: This unit is of special design to provide for conditions that are peculiar to a supercharged motor. A screen is provided to prevent foreign particles entering the impeller chamber and damaging the blades.

COOLING: Water jackets for controlling the temperature of the gas are provided around the supercharger inlet pipe and over the impeller chamber and intake manifold to the point where the mixture is branched to the various cylinders.

OPERATION: The supercharger is placed in the intake system between the carburetor and the motor. The mixture is drawn from the carburetor by the impeller, thoroughly mixing the fuel and air before delivering the charge to the motor. In this manner the most efficient distribution is obtained eliminating the possibility of detonation due to higher compression obtained through the use of the supercharger. This fact also assists in obtaining greater power at varying speeds.

A REPRINT

This folder is a reprint of an original catalog on the 1933 Duesenberg. A limited number of copies have been reprinted by us for collectors who wish to preserve historical material on automobiles.

Published by

FLOYD CLYMER

1268 So. Alvarado St. **Los Angeles 6, Calif.** NO.DR-2