

# The Distinguished Eight HUPMOBILE



A line of luxurious motor cars in which the trustworthy sturdiness that is so outstanding a Hupmobile attribute is combined with exquisite beauty, pronounced refinement, and the sensational performance of a superb eight-in-line engine

HUPP MOTOR CAR CORPORATION DETROIT, MICHIGAN, U. S. A.





# The Newest-and Finest-in Motoring

UTOMOTIVE progress, seeking constantly the smoothest flow of power, the utmost refinement of riding ease, culminates in the eight-in-line engine as designed and built by Hupmobile.

This mighty power plant, Hupmobile's greatest engineering achievement in eighteen years of fine car building, reveals a swiftness of acceleration, a smoothness at all speeds, a compactness and simplicity that fully satisfies every requirement of fine transportation.

As an eight-in-line, it has precisely that complete blending of power impulses, one into another, which means velvety smoothness. As a Hupmobile product, it has that fundamental stamina, reliability, and effective sturdiness for which the motoring public everywhere respects the Hupmobile name.

Powered with this perfected mechanism, the Hupmobile Eight offers qualities of performance heretofore expected only from the most expensive cars, plus a brilliance and spirit of its own—offers them all in a car compact enough and so scientifically balanced that it handles at a touch.

In coachcraft, the various models, as herein pictured, fully match the merits of this sound mechanism. They give an outer appearance of long, low grace, an effect that is emphasized by the different and beautiful colour combinations. And utilizing with rare skill the generous length of the 125-inch wheelbase, they are truly spacious in passenger accommodations.

### THE SALOON Five-Seater



OTORISTS have long looked to light, compact cars for surpassing performance and easy handling. For roominess, passenger comfort, and gratifying refinement of detail, they have turned to the heavy, expensive ones.

To-day they find both sets of qualities combined in masterly fashion in the Hupmobile Eight Saloon, combined to a degree that supplies the final measure of luxurious transportation.

In general design and in every small detail, this outstanding model discloses good taste, beauty and finely fashioned excellence, which rank it high among the aristocrats of motordom.

Its length is emphasized by the body roof, which is carried forward as the visor, and by the mouldings extending the full length of bonnet, cowl, and body. Its spacious comfort is one of its most impressive features. Despite the smart slimness of the body, the interior is amply wide and three adults find roomy comfort in the rear seat. Both front and rear compartments provide an abundance of leg, knee, and head room.

Heavy mohair, the finest of closed car upholstery fabrics, lends an atmosphere of refinement which is intensified by the handsomely inlaid door mouldings and instrument panel, the attractive hardware in graceful design, and the silk cord loops from the rear door posts for assistance in entering or alighting.

To complete its fittings as a car of luxury, it carries front and rear bumpers, rebound snubbers, rear signal light, petrol gauge and electric clock on the instrument board, vision-ventilating windscreen, and automatic windscreen cleaner.



This cozy interior matches the refinement of the Saloon's exterior. Every aid to comfort and convenience is provided. Soft, inviting cushions, arm and foot rests, spaciousness—everything bespeaks rest and relaxation



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### HUPMOBILE EIGHT

Five-Seater Saloon N ITS every detail, the Hupmobile Eight Saloon reveals an artistry and elegance that set it in the forefront of fine cars. The singularly charming body lines match the superlative qualities of the chassis with coachcraft of surpassing beauty and refinement. Three colour options are offered—Musketeer grey with Matchlock grey upper panels; Copra drab with upper panels in Chicle drab; and Larchmont blue with black upper structure. In all, the beading is black, with two fine stripes.

### THE SALOON Seven-Seater

ROBABLY the most impressive motor car ever built by Hupmobile, this seven-seater Saloon clearly establishes its dominance among fine closed cars of maximum passenger capacity. For in this spacious model, seven people find ample comfort, generous room, and the uniquely smooth performance that only an eight-cylinder

car can give. Its beauty is as outstanding as its comfort. The

added body length serves to accentuate the original attractive body lines, and fully realizes the possibilities for good looks inherent in this body type, always so symbolic of majestic elegance.

An ingenious feature is that the back of the front seat curves inward to provide even more leg room for those using the two extra seats, with special foot room under the front seat. The extra seats themselves deserve special comment for their thick padding, their ample width, and actual comfort. The rear seat is extremely comfortable and of unusual width (49 inches).

The Saloon is also furnished as a Limousine, with a glass partition separating front and rear seats. The glass is adjustable so that the degree of privacy desired according to who is driving, the owner or the chauffeur, can be quickly obtained.

To drive this great car is to enjoy the finest performance of which any automobile is capable, in a setting of luxury and refinement appreciated by those families which such qualities naturally attract. It is indeed a car for all the family, realizing their hopes and aspirations among motor cars and

doing so at a price much less than other cars which presume to do as much.

Recall, if you can, any other auxiliary seats that even looked so comfortable. These seats back up their looks as you'll find by trying them

The adjustable glass has many advantages over the fixed partition type



### HUPMOBILE EIGHT

Seven-Seater Saloon IKE other Hupmobile Eight closed cars, this body was created by one of the foremost custom body designers in the world. Its construction and finish are as fine as its design. Viewed from any angle, it is impressive majestic—dominating. And its colour combinations in Larchmont blue or Biscay green with black upper body, give you a new idea of motor car beauty.

# THE COUPE

### Two-Seater

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RILLIANT in performance and rich in beauty, the Hupmobile Eight Coupe commands right of way on the road and in public favour. Its outer appearance realizes to the full the possibilities of this graceful and popular body type.

The single seat, amply wide even for three passengers, is upholstered as preferred in either hand-crushed, genuine leather or in mohair, in harmony with the body colour.

There is genuine comfort in this dickey seat. When not needed for passengers, its cushions may be removed to increase luggage capacity

The unusual range of vision from the seat, here as in the Saloon, is a welcome contribution to safety. Placing a slender steel pillar at the forward corners, cuts down the customary blind spots beside the windscreen.

The convenient, practical, and genuinely comfortable dickey seat increases the passenger quota to four. This seat disappears neatly when not in use. If desired, its leather cushions may be quickly removed to leave the full locker capacity for luggage.

But when needed for passengers, it opens at a touch, is reached easily via convenient steps on the mud-guard, and is upholstered with the same care as the interior of the Coupe. The rear window lowers for communication among all passengers.

And its Hupmobile eight-in-line engine, hydraulic four-wheel brakes, cam-and-lever steering gear assure surpassing performance, subject always to soft but positive control.

The single seat is extremely comfortable for even three people. Hupmobile construction makes the range of vision unusually complete

### HUPMOBILE EIGHT

Two-Seater Coupe with dickey seat ISTINGUISHED in any company by its modish charm, the Coupe is a car of compelling appeal to all lovers of action. There is about it a grace and smoothness which aptly symbolize the smooth, abundant power of its mighty eight-in-line engine and which furnishes ready passport to enthusiastic favour among the most exacting motorists. The colour treatment is striking, with body panels in Pelham blue, upper structure in rich black, set off by black beading edged by striping in gold.





In this spacious seven-seater, a passenger on any seat, front, rear, or extra, finds complete comfort and ample leg room

### THE TOURER Seven-Seater

RIMARY among the essentials of a seven-seater Tourer is an abundance of smooth, ready power. Here this essential is supplied in a generous measure that only the eight-in-line engine as built by Hupmobile can deliver.

And associated with it is a complete allotment of those elements of grace, utility, and roadworthiness which have kept the open car, since the very beginning, a popular favourite among body types.

A spirited engine, a compact wheelbase, hydraulic fourwheel brakes, and cam-and-lever steering, make it easy to drive, whatever the road or the traffic.

Particularly impressive are the long, low lines of the body,

still more strikingly emphasized when the tailored hood is lowered into a compact fold flush with the body lines.

Upholstery is hand-crushed, genuine leather in colour to match the body. Seat cushions and backs are exceptionally deep. There is an abundance of room; passengers on the extra seats also find ample leg and knee room for comfort on long trips.

Equipment includes one-panel windscreen, automatic windscreen cleaner, petrol gauge on the instrument panel, reserve fuel supply, bumpers front and rear, snubbers, and rear signal light. Storm curtains go on easily, swing with the doors, and afford wellnigh closed car protection from inclement weather.



HUPMOBILE EIGHT Seven-Seater Tourer OR those motorists who require an open car of generous accommodations, the Hupmobile Eight Tourer supplies the highest degree of comfort with a performance ability truly remarkable. Long and low, and finished with distinctive mouldings and striping, it is an aristocrat among open motor cars. It may be had in either blue or Matchlock grey colour treatment.



Steering may be either right or left drive, with gear change and hand brake levers in central position

### THE TOURER Five-Seater

N THIS trim and graceful open model those qualities of roadability for which the Tourer is especially prized find their highest development. Swift acceleration at a touch, finger-tip control, instant, positive braking, inherent balance that enables it to follow the road without side-sway of any kind, make it supreme for riding qualities, exhilarating always, restful and refreshing on long drives.

Both front and rear compartments are spacious with deep cushions finely shaped for the utmost measure of comfort for all passengers.

The tailored hood lowers quickly into a compact fold flush with the body. Storm curtains fit quickly and smoothly when needed, afford positive protection, and give wide, safe range of vision.

A sport Tourer is furnished at slight extra cost. In this model, even greater distinction is gained by its special two-tone finish in Southfield and Monte Carlo green, and the gleaming nickel in which the headlights, windscreen supports and other metal parts are done. The hood is khaki with natural wood bows, and hood boot. Upholstery is hand-crushed, grey unpleated leather. Disc wheels in red, and black beading with red striping also combine to make the ensemble striking and attractive.



Both the front and the rear compartments are generously proportioned and luxuriously cushioned

# HUPMOBILE EIGHT Five-Seater

Five-Seater Tourer MART bearing of the distinctive sport model without sacrifice of the dignity desired in a motor car for family use is attained in this modish open Hupmobile Eight model. Fast, smooth, and responsive, it measures up to every demand for superior transportation. Finish is either blue or Matchlock grey; special colours on sport type.

### THE ROADSTER Two-Seater

SPECIALLY designed to meet the requirements of that growing body of motorists who demand the swank and snap of a sport two-seater type, this Hupmobile Eight model attains the highest development of the smart and capable. Its eight-in-line engine powers it with an abundance of reserve energy for every demand, with swift acceleration and sustained high speed as matters of course. And every detail of finish and fitting is attended to in full harmony with this exceptional ability.

Its striking appearance is brightened by a touch of sharp contrast in the khaki-hued hood handsomely set off by natural wood bows and bright nickel trimmings. The rear curtain may be removed; or, if preferred on occasions, the entire hood can be readily detached from the car.

Upholstery is genuine hand-crushed, pebblegrained leather, and is soft grey and unpleated. The seat is 44 inches wide.

THE REAL PROPERTY OF THE PROPE

The extra seat in the rear deck sets highest standards of comfort and roominess. Easily reached, and wholly comfortable, it invites luxurious relaxation. As in the Coupe, the rear luggage space can be reached through the convenient side door.

Disc wheels, bumpers front and rear, and sparkling embellishment in bright nickel on all lamps, windscreen supports, radiator and cap, and other metal fittings, are items of equipment that complete the sport atmosphere of this superb model.

> Readily accessible and generously comfortable and roomy, the extra seat contributes much to the Roadster's quality

The driver's seat, 44 inches wide, invites the care-free relaxation so essential in a smart Roadster



Two-Seater Roadster with dickey seat ITHE and low, the Hupmobile Eight Roadster is the embodiment of graceful motion. It combines surpassing beauty of design and line, performance equally individual, and unlimited comfort and convenience, into a creation of surpassing vigour and smartness. The flashing colour scheme is in complete harmony with the entire design, Pelham blue body with gold striping, and beading in black.



The right side view of the Hupmobile Eight engine illustrates its clean-cut character. Engine, clutch, and gear box are a unit—short, rigid, compact. The clutch requires only a slight pedal pressure, and a gentle movement of the lever changes gears

Impressive in its clean, compact appearance, this mighty engine embraces all the stamina, reliability, and fundamental simplicity which the public long ago learned to expect from Hupmobile. It propels the Hupmobile Eight with that rhythmic smoothness characteristic of the eight-in-line engine, and with an ease that thrills and delights every driver



### MECHANICAL FEATURES

That Assure Merit

TUDY of the design and construction of the Hupmobile Eight chassis quickly establishes its clear title to the Hupmobile name. At every point it discloses the sound construction, the in-built stamina for which Hupmobiles have long been known throughout motordom.

The eight-in-line L-head engine (3-inch bore by  $4^{3}_{4}$ -inch stroke) is the shortest and most compact power plant of this type ever built and embodies the highest development of this most advanced construction. In addition to the advantages of its precisely over-lapping power impulses, it follows a firing order which distributes these forces equitably along the length of the shaft.

The great compactness of the engine is possible because Hupmobile is using a crankshaft of new design; and because at a great cost Hupmobile has developed a new valve mechanism based on aeronautic practice.

### A Crankshaft Free from Vibration

The crankshaft weighs  $99\frac{1}{2}$ pounds—probably the heaviest in any engine of comparable size —and its weight and rigidity account for much of the supersmoothness of this engine. Its thick, heavy cheeks, and its dy-



Short, balanced crankshaft—beavy and stiff; light, rigid connecting rods; light pistons—these in themselves spell "no vibration"

namic and static balance, forestall possibility of whip and distortion. It is rigidly supported in five oversize main bearings made of the best grade of phosphor bronze with special high-speed babbitt lining.

The vibration damper on the extreme front end of the crankshaft completes the Hupmobile mastery over vibration factors. This damper consists of two steel plates, clamped together, each of a design similar to the flywheel. They are perfectly attuned to counter, by their friction against each other, the minute deflections or the infinitesimal "shivers" likely to occur in any crankshaft.

But Hupmobile goes even further and accurately machines the entire inside of every combustion chamber to .005 inch limit.

This means uniform-sized combustion chambers—equal gas charges in all—the added smoothness of explosions of the same power in all cylinders.

Connecting rods are drop-forged from duralumin, a new and tremendously strong alloy combining light weight with great strength.

The camshaft, supported in five large bearings and receiving full pressure lubrication, is also of unusual size, strength, and rigidity. The expensive and silent chaindrive method is used.

The starter and dynamo set were designed especially for this engine,



### PRESSURE LUBRICATION TO 35 POINTS

Oil under bigb pressure is distributed to the connecting rod, crankshaft, and camshaft bearings, valve lifters, and igniter drive gear bearings, in fact, to 35 points in all, through special channels drilled in the crankshaft, and cast in the crankcase. Cylinder walls and pistons are lubricated by oil spray thrown by centrifugal force from the main and connecting rod bearings. Adequate, constant and positive lubrication of an engine is the prime fundamental of long life, and the year-in and year-outbrilliant performance which distinguishes this car. It can be assured only through this careful, complete Hupmobile method

### AIRPLANE TYPE VALVE MECHANISM

The value mechanism is rocker-tappet type, a special design which assures silence, is compact, and requires adjustment only at long intervals. On those infrequent occasions when adjustment does become necessary, the entire value mechanism is easily and completely exposed by removing the single cover plate. An interesting instance of the extreme refinement of this engine is the utilization of this plate as an air cleaner. The value mechanism is lubricated positively under high pressure direct to point of contact



### MECHANICAL FEATURES

That Assure Merit

and are exceptionally powerful and dependable. The finest type of accumulator-coil ignition is used, with double breaker points, giving unfailing, hot, intense sparks.

Perfect carburction is also responsible for much of the engine's great smoothness. At low speeds of two miles or less per hour, the engine never misses—never falters, and responds instantly to an exultant seventy miles when the accelerator is depressed, without

the trace of choking. A feature, small but important, is the reserve petrol supply, which provides enough fuel for thirty miles or more after giving warning of diminishing supply.

Both back and front axle are very heavy and strong. Each and every rear axle shaft is individually tested to withstand a shock of over 120,000 pounds, and every steering spindle receives the most rigid scientific tests to determine its strength.

### Easy Steering

To facilitate driving and easy parking, even with the big 33 by 6 inch balloon tyres used, the steering gear is made easy to operate and extremely powerful. It is of the cam-and-lever type with a variable pitch which gives an accelerating ratio to the wheel turn. Its design assures steadiness in operation and quick return to normal position.

### Simple, Safe, Positive Brakes

The braking system is conspicuous for safety and simplicity.



### NO DIRT ENTERS THIS ENGINE

Absolute cleanliness inside the engine is assured by the system of air cleaning already mentioned, by a petrol filter, and an oil purifier. In these ways all dust, grit, or sediment are kept away from the finely machined bearings and combustion chambers. Excessive wear and carbon deposits are thus prevented, and the long life and faultless functioning of the engine are greatly promoted Hydraulic four-wheel brakes are built into the chassis and so connected that very slight pressure suffices to apply a firm, positive retarding force on all wheels. The brake drums, 14 inches in diameter, are accurately machined and polished to assure perfect smoothness and roundness. As hydraulic brakes, they are automatically equalized at all times.

With this positive foot-brake system always ready, it is doubtful if the emergency hand brake will ever be called into play. When needed, it requires only a slight pull. It is of the adjustable, external-contracting type, located on the main drive shaft, and always equalized through the rear axle differential.



Control of engine temperature is assured by this thermostat. To do its best work an engine must neither be too hot nor too cold, no matter what the climate. The Hupmobile Eight cooling system will prove by experience to be ideal

The cooling system presents two notable advancements. The pump forces water, not directly into the cylinder block, but into a distributing passage beside it from which the water enters the block at various points for absolutely uniform distribution around all the cylinders. A thermostat prevents the water circulating through the radiator until it reaches 155 degrees F., so that the engine comes quickly to operating temperature and stays there with resulting efficiency. The water jacket completely surrounds the cylinder bore for the full length of the piston stroke. Valve seats and spark plug ports are equally well cooled





# BRIEF SPECIFICATIONS

Eight Cylinder-Series E

- movable head; 3 inch (7.62 cm.) bore by  $4\frac{3}{4}$  inch (12.07 cm.) stroke. Piston displacement 268.6 cubic inches (4400 ccm.).
- CRANKSHAFT-In static and dynamic balance. Weight 991/2 pounds (45.13 kg.). Five extra-large bearings. Vibration damper.
- PISTONS-Grey iron type, weighing 16 ounces (454 grams) each. Three rings.
- CONNECTING RODS-Drop-forged from aluminum alloy weighing 1.3 pounds (590 grams) each. Length 91/2 inches (24.13 cm.) between centers. Bearings integral.
- CAMSHAFT-Extra diameter and rigid; five bearings, receiving full pressure lubrication. Silent chain drive.
- VALVE MECHANISM-Rocker-tappet type, lubricated under pressure.
- IGNITION-Accumulator-coil type, double breaker ignition unit.
- STARTING AND LIGHTING SET-Two-unit system. Automatic starter release. Double-filament bulbs with tilting beams.

CARBURETTOR-Plain tube type.

FUEL SYSTEM-Vacuum feed, 161/2 (American) gallons (62.4 litres) including 21/2 gallons (9.4 litres) reserve. Petrol strainer.

ENGINE-L-head type, eight cylinders in line, cast en bloc, re- LUBRICATION-Pressure system direct to crankshaft, connecting rod, camshaft, and valve lifter shaft bearings; oil spray to pistons. Oil purifier.

- Cooling-By pump. Capacity 43/4 gallons (17.97 litres). Thermostatic control, restricting water cooling until 155 degrees temperature is reached.
- CLUTCH-Dry-disc type. Single plate of spring steel, 93/4 inches (24.77 cm.) diameter. Very easy shifting insured.
- GEAR Box-Selective type. Three speeds forward and one reverse. Unit with engine. Gears of high carbon chrome-nickel alloy steel, oil-treated and tempered, of uniform hardness throughout.
- STEERING-Cam-and-lever type; semi-irreversible; 18-inch (45.72 cm.) walnut wheel. Right or left drive, with center control.
- BRAKES-Foot brakes; four-wheel hydraulic brakes, with 14-inch (35.56 cm.) drums, external contracting. Hand brake operates on main driveshaft.
- Springing-Semielliptic; front 37<sup>5</sup>/<sub>16</sub> inches (94.77 cm.) long; rear, 561/2 inches (143.51 cm.); width, 2 inches (5.08 cm.). Rebound snubbers, front and rear.
- BACK AXLE-Semifloating type. Axle shaft Molybdenum steel. Spiral bevel gears. Reduction 4.9 to 1. In seven-seater Saloon, 5.3 to 1.

WHEELBASE-125 inches (3.175 m.). Tread 56 inches (1.42 m.).

# BRIEF SPECIFICATIONS

Eight Cylinder-Series E



FRAME— $170\frac{7}{32}$  inches (432.35 cm.) long, 6 inches (15.24 cm.) deep,  $\frac{5}{32}$  inch (4 mm.) thick. Seven cross-members.

Tyres—33 by 6 inch balloon tyres, six ply.

- WHEELS—Wood. Steel wheels standard on Coupe and Roadster; on other types at small extra cost. Wire wheels in black, green or red on any model, at slight extra cost. Rims: Five, demountable.
- BODY TYPES—Five-seater four-door Saloon; seven-seater four-door Saloon; two-seater Coupe with dickey seat; two-seater Roadster with dickey seat, and five- and seven-seater Tourer.
- COLOURS—Saloon, blue with black upper body; Musketeer grey lower body, with Matchlock grey upper; or Copra drab lower with Chicle drab upper body; all with double belt, striping on belt and bonnet louvers, and black beading. Seven-seater Saloon, Larchmont blue, or Biscay green, with black upper body. Coupe, Pelham blue lower body with black upper, set off with gold striping and black beading. Roadster, Pelham blue, gold striping with black beading. Either Tourer, blue or Matchlock grey. Sport Tourer, Southfield green with Monte Carlo green belt. (Colour combinations subject to change.)

UPHOLSTERY—Saloon in grey or brown mohair. Coupe in mohair or leather. Tourer and Roadster in leather. All models have very deep back and cushion springs.

- STANDARD EQUIPMENT—In addition to above includes one-piece windscreen, with automatic cleaner; rear-view mirror; head, cowl, rear signal and instrument board lights; petrol gauge on dash; oil pressure gauge; clock; horn; speedometer; ammeter; tyre carrier; front and rear bumpers; gear-lever lock; grease gun; pump; jack; set of tools. All models have nickel-plated radiator with special cap design; drum headlights and cowl lights. Tourer models have black hood and boot; Roadster, khaki hood and boot.
- EQUIPMENT FOR CLOSED CARS—Dome light in Saloon and corner lights in Coupe. Vision-ventilating windscreen.
- WEIGHTS—Approximate: Saloon, 3545 pounds\* (1608 kg.); seven-seater Saloon, 3730 pounds (1692 kg.); Coupe, 3465 pounds (1572 kg.); Roadster, 3355 pounds (1522 kg.); five-seater Tourer, 3300 pounds\* (1497 kg.); seven-seater Tourer, 3360 pounds\* (1524 kg.). Fully equipped ready for shipping.
- \*With steel wheels about 75 pounds (34 kg.) heavier. (Above weights do not include water, oil, and petrol.)

We reserve the right to change specifications and prices without notice, or to use equipment other than that specified.

HUPP MOTOR CAR CORPORATION  $\sim$  DETROIT, MICHIGAN, U. S. A. Manufacturers of Eight-Cylinder and Six-Cylinder Motor Cars



The Hupmobile main works at Detroit, Michigan, employing 3000 men and containing 1,500,000 square feet of manufacturing space. Here Hupmobile has set for eighteen years new standards of precision and quality in motor car building. In this great factory the complete car is manufactured—not assembled—and at every step, rigidly supervised and inspected

This special building devoted to eightcylinder engine manufacture with the most modern, most efficient machinery and equipment in the entire industry

Part of the axle and gear plant at Jackson, Michigan, where is also located Hupmobile's own heat-treating plant. Hupmobile thus controls the temper—the strength—and the fineness of the metals used in the car

