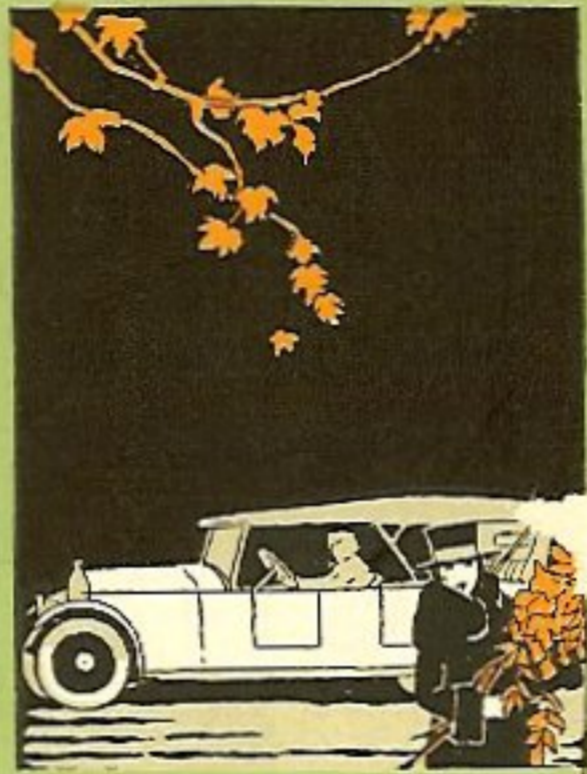


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The
NATIONAL
SEXTET

SEVEN PASSENGER
TOURING CAR



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The
**NATIONAL
SEXTET**

SEVEN PASSENGER
TOURING CAR



National Motor Car & Vehicle Corporation

Twentieth Successful Year

Indianapolis, Indiana, U. S. A.



A Better Method of Body Mounting Distinguishes the National Sextet

THE National Sextet Touring Car for seven passengers is distinguished by a road-hugging lowness unduplicated in any other American car. The low, smartly continental style, which is both refreshingly new and prophetic of the motor modes, has been attained through the adoption of a novel and advanced method of body mounting exclusively National.

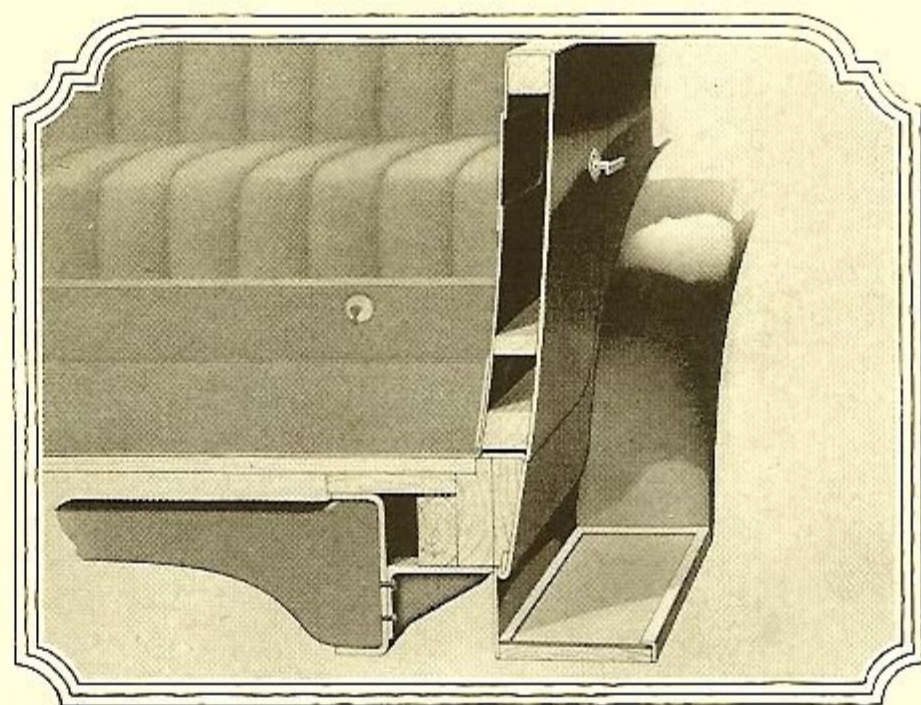
By this method—a distinct departure from common practice—the body sides of the Sextet are brought $3\frac{1}{8}$ inches closer to the ground without sacrificing road clearance. Utmost solidity of construction has been achieved as well, with the resultant elimination of all squeaks and rattles.

In body building, two broad wooden planks, known as sills, are used for the foundation. Since the first automobile was built, these sills have been laid flat, leaving no alternative but to mount the body directly on top of the chassis frame.

On the National Sextet, however, the body overlaps the chassis frame, instead of setting on top of it. The sills are laid on edge, instead of flat, for trebled strength and rest on brackets, attached several inches below the chassis frame's upper edge.

Thus, the low appearance so pleasing in the finest of European cars is duplicated without following the European practice of reducing road clearance.

On the continent, where most roads are improved, a low road clearance is well within the limits of safety, but a dangerous expedient to adopt in this country with its many thousands of miles of rough highways.



By suspending the body on brackets attached to the outside of the chassis frame, the body sides have been lowered without sacrificing road clearance, and the high, ungainly apron between body and running board has been eliminated, being replaced by a trim and slender valance

A Forerunner of Fashion

PLEASING dignity and rare distinction are the major motifs in National Sextet style. For individuality in body design has been achieved without the least surrender to the freakish. The seven-passenger touring car is an ultra-modish ensemble of straight, flowing lines, deep, flat surfaces, and sharply defined angles, with graceful curves relieving all severity. And each of these style attributes serve to accentuate the lowness that has been gained primarily by the new method of body mounting.

The body sides, for example, are glassy flat and unusually deep, and since they extend nearly all the way to the running board, there is no high, ungainly running board apron to offend the eye, but just the suggestion of a trim and slender valance.

The hood is high and rounding, with high, narrow louvres and a flat, tapering edge that continues in a smooth, unbroken line along the cowl and the upper edge of the body. The body edge, too, is flat and broad, and a most pleasing departure from the conventional bevel edge so much in present evidence.

The doors are wide and square, and fitted with bar handles. The fenders are deeply domed and closely hug the wheels, being of the individual type in front and independent of the running board. These front fenders, in fact, contribute much to the distinctiveness of the National Sextet.

The windshield tilts at a rakish slant, and is wider at the top than at the bottom. The supporting members are virtually a part of the body, being



Seen head on, the National Sextet is like no other car you meet in your travels. The high radiator is distinctively National in contour, while the double head lamps, with non-glare lenses, closely harmonize with the radiator design

mounted on castings integral with the body frame and thus assuring solidity.

When seen head on, the National Sextet is like no other car you meet in your travels. The high radiator, topped by a Motometer, is distinctively National in contour, while the double head lamps, with non-glare lenses, closely harmonize with the radiator design.

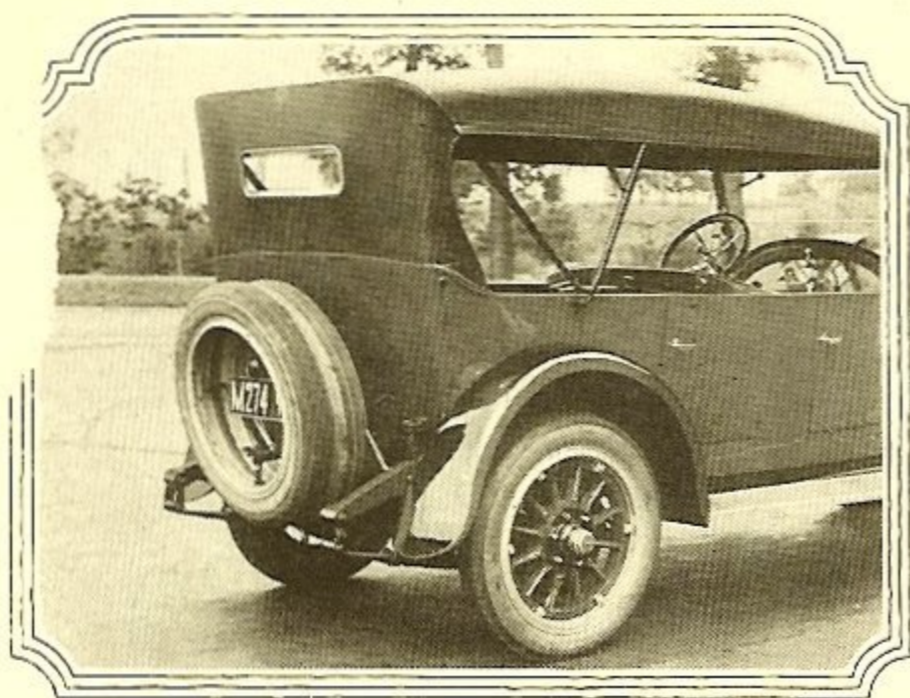
Trim and comely, too, is the National Sextet astern. Unsightly straps have no place or purpose on the double, Yale-locked tire carrier, the spare casings being held securely by rigid irons. A neat apron of sheet steel conceals the gasoline tank, and a plate glass rear window is an attractive refinement in the individually-tailored top.

And the finish of the National Sextet is just what you would expect in a fine car of such charm and character. Rich, perhaps, is the word that best describes it, and it is a richness that is attained by twenty-four operations, each painstakingly and skillfully performed. Color options are National blue, gray or green, with fenders and running gear enameled black.

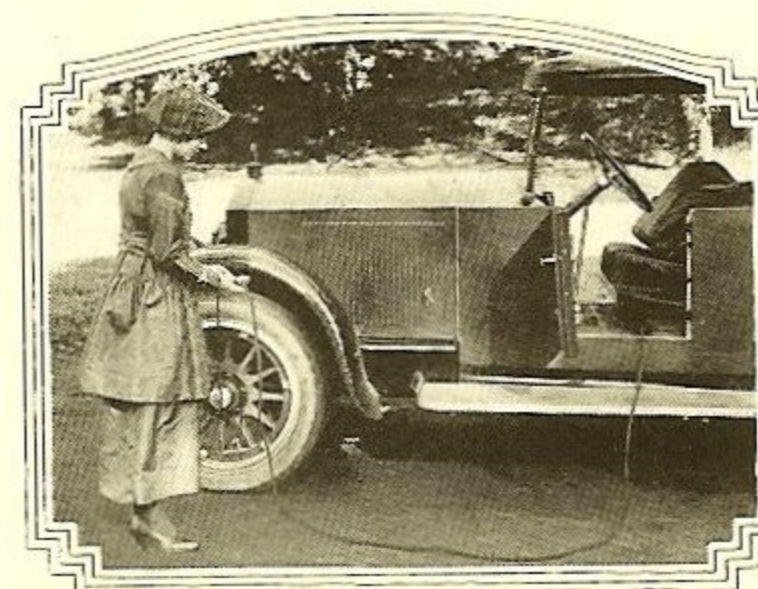
Nor is this richness of finish confined to the exterior of the car, for the interior has every evidence of it as well. The paneling in back of the center cowl is of walnut, which is also used for the instrument board and steering wheel.

The seats are luxuriously upholstered in the finest handbuffed black leather. Thick gray wool carpeting is used for covering the tonneau floor and for lining the walls of both the front and rear compartments, while heavy gray linoleum, bound with a wide aluminum moulding, withstands the extra wear that the driving compartment receives.

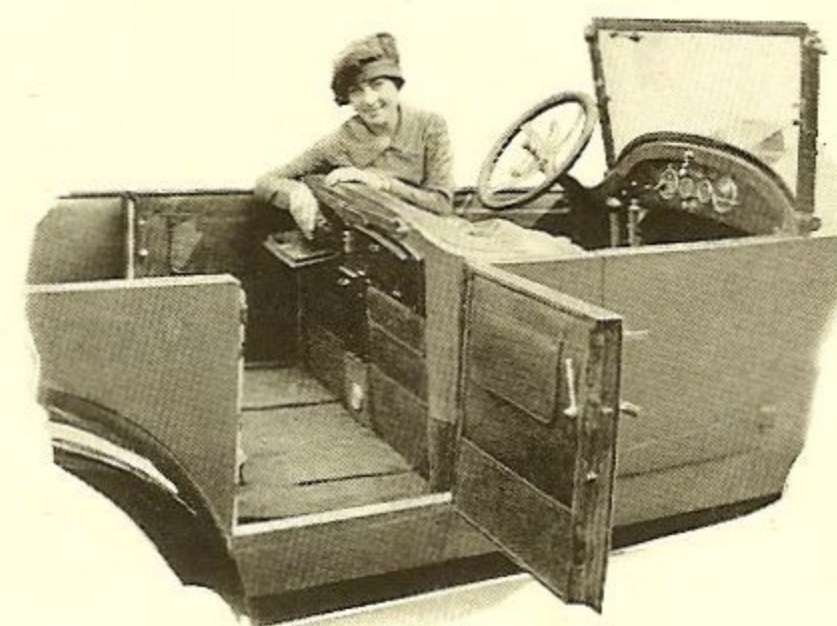
Trim and comely is the National Sextet astern. Unsightly straps have no place or purpose on the double, Yale-locked tire carrier, the spare casings being held securely by rigid irons. And a neat sheet steel apron conceals the gasoline tank



Spacious pockets are provided in the right fore door and both tonneau doors for the carrying of Blue Books, gloves, goggles and the other touring impedimenta



The engine-driven tire pump is mounted on the transmission, and readily connected without the trouble and annoyance of raising either the bonnet or the floor boards



In the walnut center cowl are three handy compartments, lock-filled, and a tonneau light. Auxiliary chairs fold neatly out of sight when not in use

Little Things That Count

NOT the least appreciated feature of the National Sextet is the host of provisions that have been made for the utmost ease and convenience of the driver and those who ride with him in this big, roomy car for seven.

The equipment and appointments of the Sextet, in fact, include many items that usually are listed as "extras," and establish a new standard for fine motor cars.

The walnut instrument board is as clean and as business-like as an executive's desk, with ignition and lighting switches, speedometer, ammeter, oil gauge and electric primer button located for the convenience of busy hand and eye. All instruments are finished in nickel and illuminated at night by a dash light.

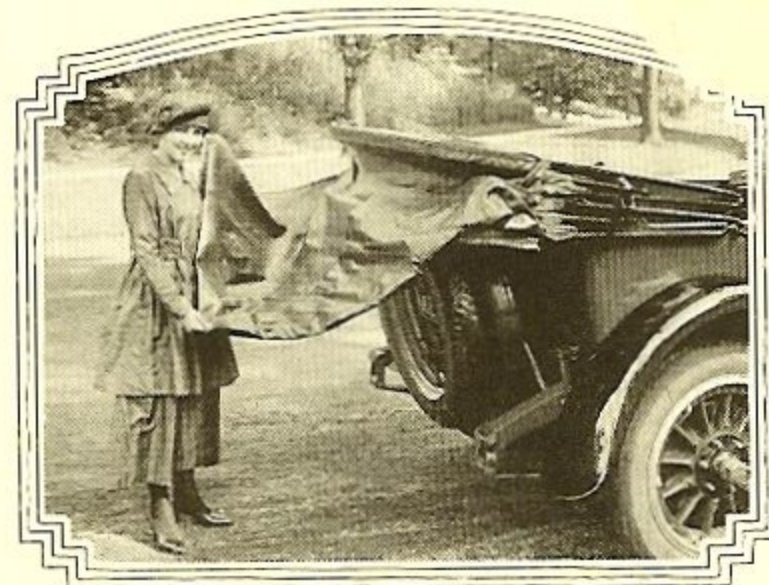
The emergency brake and gear-shifting levers are unusually long

and operated without change of posture. Brake and clutch pedals yield easily to pressure, and are fitted with corrugated rubber pads to prevent slipping. Tools are carried under lock and key in the left fore door pocket.

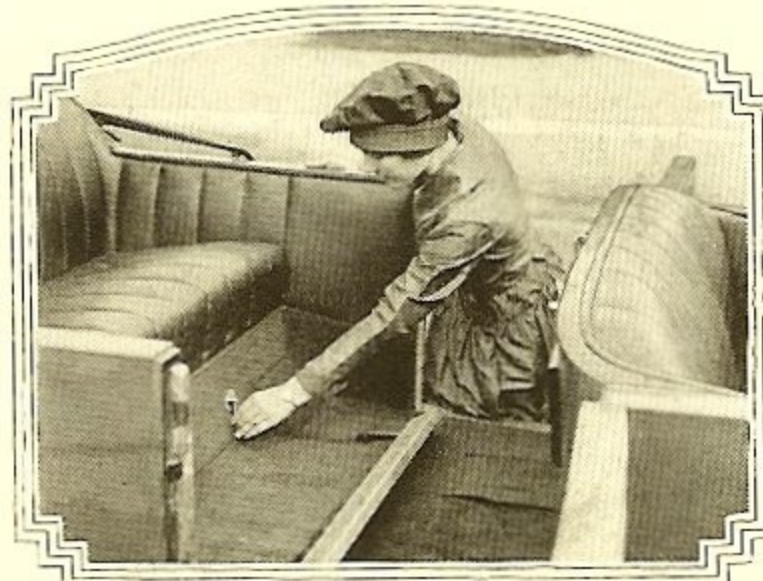
Within easy reach of the driver is an inconspicuous but efficient windshield cleaner. A hooded ventilator, operated by a small crank on the dash, sweeps the driving compartment with a current of fresh, pure air. And the engine-driven tire pump is readily connected without raising either the bonnet or the floor boards.

An occasional glance at the Motometer tells the driver of the National Sextet whether or not the radiator needs refilling. Automobile thieves are foiled by a theft lock on the transmission, operated by the same key as that used for the lighting and ignition switch. Similar provisions have been made for the protection of tools and spare tires.

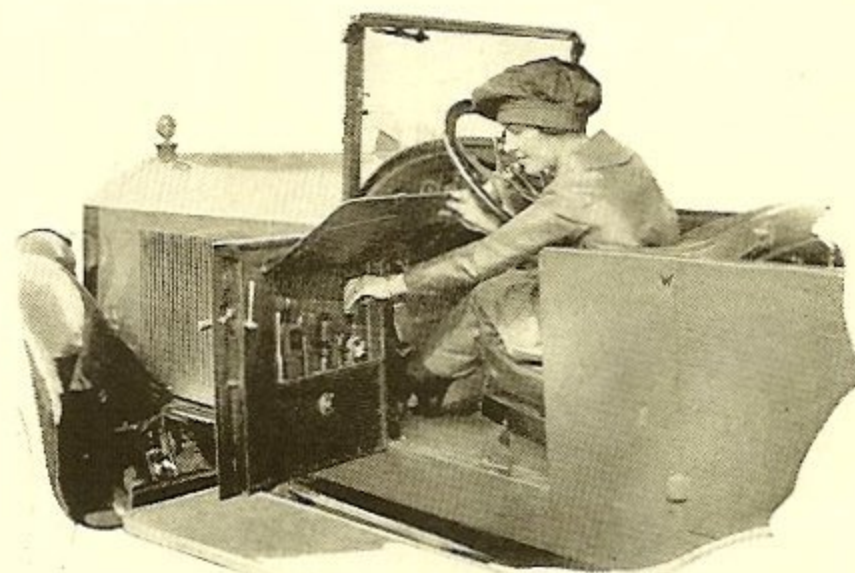
At night, the driver of the



Because the individually-tailored top is not fastened to the bows, it is neither crushed nor cracked when folded, and retains its freshness even after many months of use



Forget to fill the gas tank? Don't worry. Merely turn the emergency valve on the heel board of the rear seat, and ride from 15 to 20 miles on the reserve supply



Tools are rarely needed, but should you want a wrench or pliers, turn the lock in the left fore door and you will find them there, each in a special compartment

National Sextet is always within the law. The main driving lamps are fitted with non-glare lenses, and the auxiliary lamps underneath, for city use, have bulbs of considerably less intensity. And if a spark plug must be changed or a carburetor adjustment made, there is a lamp underneath the hood which illuminates the right side of the engine.

In the wide center cowl of the National Sextet are three handy compartments, walnut paneled and lock-fitted. They are large enough for the carrying of a kodak, a carton of cigarets, a box of chocolates and other essentials of the week-end trip or vacation tour.

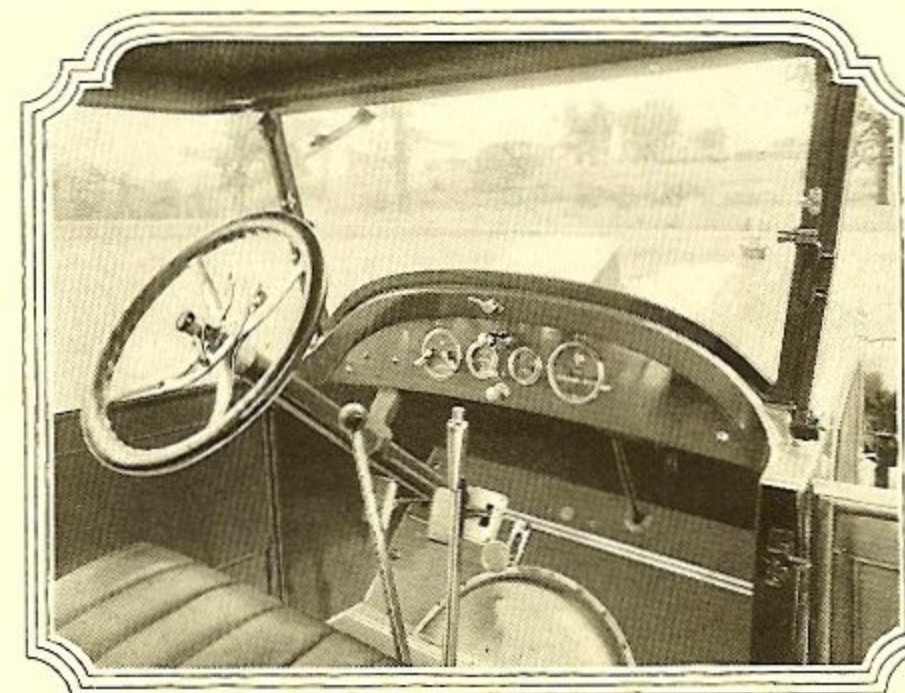
Spacious pockets also are provided in both tonneau doors and the right fore door for the storage of Blue Books, veils, gloves and goggles. They are veritable kit bags of generous bellows and depth, their contents protected by large, dust-proof flaps.

A robe strap of Cordovan is an artistic feature of the tonneau appointments, which also include a tonneau lamp that floods the rear compartment with a soft light, diffused through a lens of frosted glass.

On the heel board of the rear seat is an emergency gasoline valve, which, when opened, affords a reserve supply of 1½ gallons, sufficient for a run of from fifteen to twenty miles.

The Neverleak top is individually tailored, and lined inside with heavy gray wool. Because it is not fastened to the bows, it is neither cracked nor crushed when folded, and consequently looks fresh and like new even after a year or more of use. In inclement weather, it is no trouble to enter or leave the car. The side curtains open with the doors, to which they are attached by means of stanchions.

Cord tires are standard equipment on the National Sextet. The reason for their adoption seems most obvious, since they have the quality rating and represent that extra value which characterizes the National Sextet in every detail, large and small.



The walnut instrument board is clean and businesslike, and the emergency brake and gear-shifting levers usually long. The hooded ventilator is operated by a small crank on

Comfort a Salient Quality

THERE is no misnomer in calling the National Sextet Touring Car a seven-passenger model. It is that and nothing less, measuring 130 inches from hub to hub, and what is more to the point, all seven ride without crowding or cramping.

Though slim and narrow to the eye, because of the long, arrow-straight lines, the body of the Sextet is notable for generosity of room. The rear seat, for example, is especially deceptive. While apparently narrow, it embodies the utmost comfort for three large persons, the body sides being carried straight back to give extra width where it is most needed—at the rear of the seat.

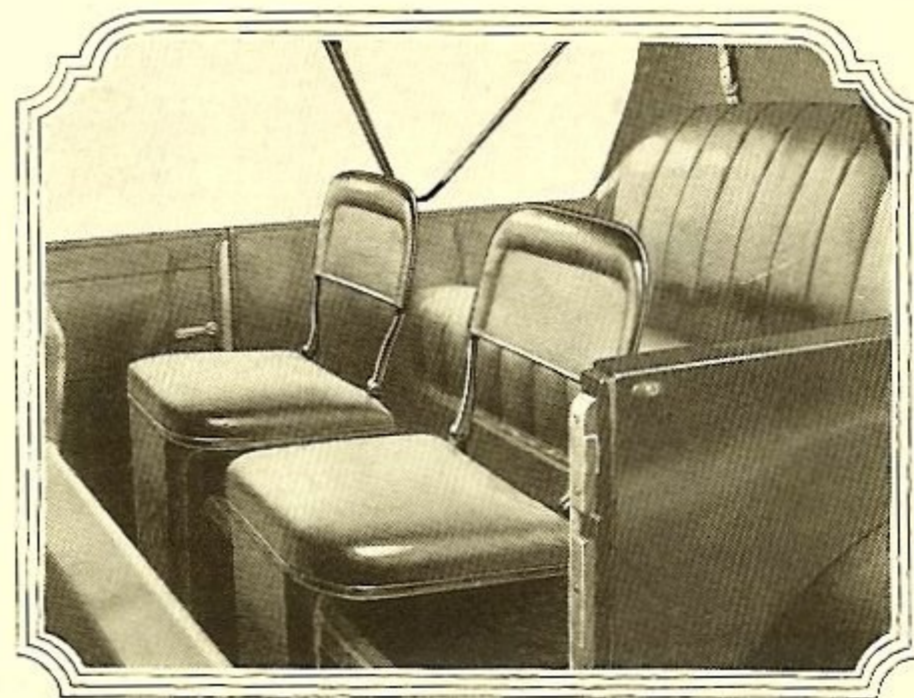
In the National Sextet, all seats are built well below the upper edge of the body, giving a delightful feeling of security. They are tilted, as well, at just the right angle for lounging comfort, and match in restful ease that favorite overstuffed chair of yours at home.

The cushions are wide and deep, upholstered in the finest pleated leather and stuffed with genuine curled hair. Permanency of shape is assured by the use of double non-sag springs.

The auxiliary chairs are strong and substantial. They, too, are upholstered with genuine black leather, and fitted with comfortable folding backs. Bringing them from their hidden recesses in the center cowl or dropping them out of sight entails minimum effort.

The 21-inch opening of the wide, square doors and the low running boards contribute to ease of entrance and exit.

And although the National Sextet is a long, big, roomy car, it is turned without gear-shifting maneuver in a 40-foot street and is handled with utmost ease in the crush of city traffic.



Seats are low, wide and deep, and tilted back at just the right angle for lounging comfort. There's plenty of leg room, too. Upholstery is genuine pleated black leather, with double, non-sag cushion springs. The substantial auxiliary chairs have folding backs

The farther you ride and the rougher the road, the more you will appreciate the exceptional riding qualities of this car. With an unusually low center of gravity, due to the new method of body mounting and underslung rear springs, and with its adequate weight of 3600 pounds nicely distributed, the Sextet rolls merrily along without jolt or sidesway, even when the engine's full power is unleashed.

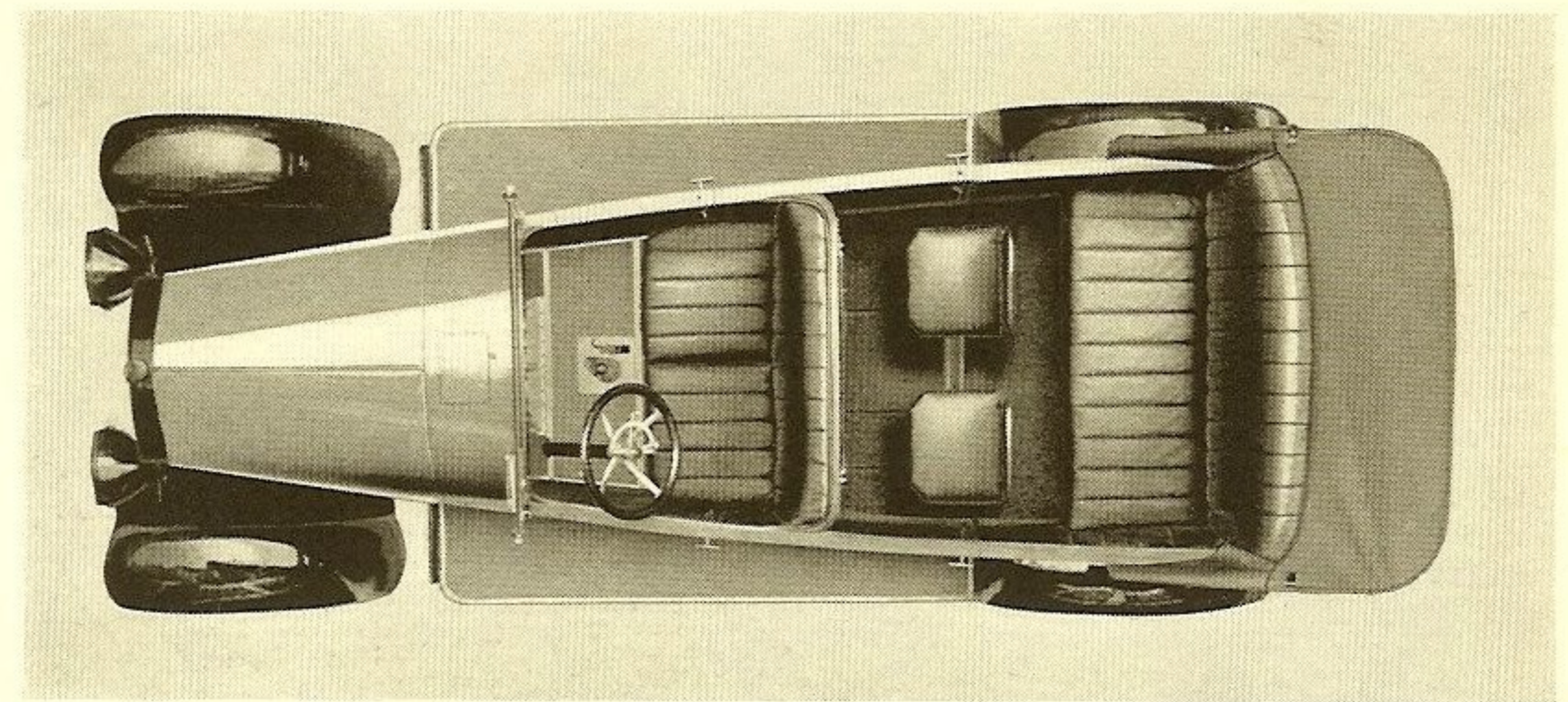
A vital source of this riding comfort is the semi-elliptic springs, all around. They are strong, flexible and extra long, measuring 38 and 60 $\frac{1}{4}$ inches, respectively, and their cushioning power is materially augmented by the use of heavy Hartford shock absorbers, front and rear.

You will be proud to sit behind the wheel of the National Sextet Touring Car, for there you will be master of a power that is percussively responsive, and flexible as a riding master's whip.

Or you may lounge with exceeding comfort and satisfaction in the low, deep seats of the roomy tonneau, secure in the knowledge that the Sextet embodies the best there is in a motor car.

And wherever you may drive or wherever you may park, the Sextet will attract admiring eyes and stamp you as a person of discriminating taste.

For the new Sextet embodies the experience gained in two decades of pioneering, development and achievement, and is offered, without reservation, as the finest car that has ever borne the respected name of National.



The National Sextet is notable for generosity of room, measuring 130 inches from hub to hub

Body Specifications—7-Passenger Touring Car

- FRAME**—Selected kiln-dried hardwoods, accurately cut to size, with half and half joints, carefully screwed and glued together.
- SILLS**—Solid hardwood, mounted on edge instead of laid flat, giving three times the strength with considerably less weight than the ordinary construction. Body held permanently rigid, eliminating squeaks and rattles.
- MOUNTING**—On brackets riveted to outside of chassis, lowering body sides $3\frac{1}{8}$ inches, and allowing floor boards to rest directly on chassis in most solid possible manner.
- SHEATHING**—Twenty-gauge steel, seamlessly welded by electric process and accurately fitted to body frame.
- DOORS**—Of unusual size, square construction, with 21-inch opening, and provided with rubber and aluminum stop, rattle proof.
- DOOR POCKETS**—In right front and both rear doors, 18 inches wide and 12 inches deep, with flap covered openings.
- HINGES**—Invisible hinge at top, external hinge at bottom, holding door in vertical position when open and insuring satisfactory operation of door curtains.
- LOCKS**—Rattle proof, with external nickel plated bar handles turning in either direction. Inside lever release.
- HOOD**—Twenty-gauge steel, high and narrow construction, with flat tapering edge and 25 louvres in each side. Invisible hinges. No rivets.
- HOOD FASTENERS**—Substantial automatic spring fasteners with bar handles, locking securely yet easy to manipulate.
- FENDERS**—Deeply domed fenders of 20-gauge steel with 3-inch crown. Front fenders bolted to frame and braced by stay rod from one fender to the other. Rear fenders bolted to body and running board. Rattle proof construction.
- FRONT FENDERS**—Individual, closely hugging wheel and separated from running board by space of ten inches.
- RADIATOR**—Distinctive National design, unusually handsome in appearance. Black enameled shell with individual hexagon cells.
- LAMPS**—Special black enameled and nickel trimmed lamps conforming to radiator design, with integral auxiliary lamps underneath for city driving. Fitted with non-glare lenses and mounted on individual standards bolted to frame.
- RUNNING BOARDS**—Three-piece construction—shrink and warp proof—covered with heavy, gray linoleum, bound at the edges with wide, aluminum moulding.
- FOOT SCRAPER**—Wide aluminum foot scraper at forward edge of running boards.
- BRACKETS**—Four pressed steel brackets riveted to frame, with running boards bolted in place. Extremely rigid construction.
- VALANCE**—Twenty-gauge steel, black enameled, bolted to frame and running boards.
- FRONT APRON**—Deep splash apron of black enameled 20-gauge steel protecting radiator from water and mud. Opening for starting crank sealed with black enameled cap.
- REAR APRON**—Black enameled 20-gauge steel, concealing gasoline tank from view. Opening in apron with sliding cover discloses capacity gauge on tank.
- FLOOR BOARDS**—Solid hardwood. Front floor boards removable, giving access to battery and transmission; covered with heavy, gray linoleum, bound at edges with wide aluminum moulding; held in place by nickel plated studs and half nuts, preventing rattles. Hand hole with pressed steel cover gives access to tire pump connection.
- SEATS**—Wide and deep, tilted slightly backward to allow body to assume natural reclining position. Storage space underneath front seat for curtains and jack. Rear seat bottom is removable, giving access to rear axle underneath.
- UPHOLSTERY**—Double non-sag cushion springs of finely tempered steel, giving unusual riding comfort, covered with genuine pleated and hand buffed black leather, stuffed with genuine curled hair.
- AUXILIARY SEATS**—Rigid and substantial folding seats covered with genuine black leather that disappear into back of front seats when not in use. Raised and lowered without effort.
- DIMENSIONS, INCLUDING UPHOLSTERY**—Width of front seat, 40 inches. Height of front seat, 12 inches. Depth of front seat, $18\frac{1}{2}$ inches. Thickness of seat upholstery, $8\frac{1}{2}$ inches. Thickness of back upholstery, 5 inches. Distance from back upholstery to toe board, 44 inches. Steering wheel clearance, 8 inches.
- Width of rear seat, 48 inches. Height of rear seat, 14 inches. Depth of rear seat, 21 inches. Thickness of seat upholstery, $8\frac{1}{2}$ inches. Thickness of back upholstery, 7 inches. Distance from back upholstery to back of auxiliary seats, 29 inches.
- Width of auxiliary seats, $14\frac{1}{4}$ inches. Height of auxiliary seats, 15 inches. Depth of auxiliary seats, 15 inches. Distance from back of auxiliary seats to back of front seat, 25 inches.
- WOODWORK**—Paneling in back of front seat finished in walnut, with three small lockers for storage of veils, gloves, goggles, or other articles of value.

- INSTRUMENT BOARD**—Finished in walnut, with nickel plated instruments, illuminated by dash light—70-mile-an-hour magnetic speedometer driven from transmission, Sargent-locked electric switch, ammeter, oil gauge, carburetor adjustment, and electric primer button. Dash lamp removable for connection of trouble lamp.
- CONTROL LEVERS**—Nickel plated levers of unusual length, 23 inches, manipulated without changing position.
- STEERING WHEEL**—Walnut, 18 inches diameter, corrugated inside, with aluminum spider and black enameled steering column. Horn button of vulcanized rubber on top of steering column.
- CONTROL PEDALS**—Clutch and brake pedals black enameled, with rubber foot pads. Accelerator and starting buttons conveniently located.
- THEFT LOCK**—At foot of control levers on transmission. Key operating theft lock also operates electric switch on dash.
- TOOL POCKET**—Lock fitting tool compartment built into left front door. Tools are accessible without disturbing passengers.
- VENTILATOR**—Hooded ventilator measuring 6 by 9 inches on top of cowl operated by nickel plated crank on dash.
- EMERGENCY GASOLINE VALVE**—On front of rear seat, giving $1\frac{1}{2}$ gallons extra gasoline supply when main tank is empty.
- TONNEAU LIGHT**—In center of back of front seat, slightly above floor, operated by nickel plated switch set in walnut paneling above.
- TRIMMING**—Floor and walls of rear compartment and walls of front compartment lined with heavy carpet of gray wool. Pocket in lining of front compartment for emergency starting crank.
- WINDSHIELD**—Heavy, slanting, plate glass, rain vision windshield of special design with rectangular side supports harmonizing with body and hood lines. Windshield is wider at top than at bottom, giving unusually distinctive appearance. Pivoted squeegee windshield cleaner standard equipment.

- MOUNTING**—Windshield is mounted on castings forming an integral part of body, giving extremely rigid and solid support. The windshield is virtually a part of the body itself.
- TOP**—Genuine individually tailored Neverleek top of one-man construction, lined inside with heavy gray wool fabric, and fitted with plate glass window at rear. Front and rear bows trimmed with nickeled mouldings. Top is not fastened to bows and consequently is not crushed between them when folded, preventing cracks and wear.
- TOP BOOT**—Of Neverleek material, snug fitting and easy to manipulate.
- CURTAINS**—Collins curtains attached by snap fasteners and carried under front seat. Door curtains are provided with irons to open with doors.
- FOOT RAIL**—Pivoted foot rail of rectangular cross section in rear compartment, covered with heavy, gray wool carpet, bound at edges with aluminum moulding.
- ROBE STRAP**—Flexible robe strap of genuine Cordovan leather, suspended from nickel plated mountings.
- COLORS**—Body and hood painted National gray, blue or green.
- PAINTING**—Genuine coach finish, applied in twenty-four operations. All bodies sand-blasted before painting.
- WHEELS**—Selected close-grained hickory, painted to match body, with nickel plated hub caps.
- ENAMELING**—Fenders, running board valance, front and rear splash aprons and lamps black enameled.
- EQUIPMENT**—Standard equipment includes in addition to items mentioned above, Motometer, power-driven tire pump mounted on transmission, large size electric horn, muffler cut-out, Hartford shock absorbers, front and rear, motor light under hood, double tire carrier with Yale lock, extra demountable rim, cord tires, and full set of tools, including improved screw jack.

We reserve the right to make changes in construction and equipment as we see fit at any time, without obligation to make corresponding changes on cars previously sold or shipped.

NATIONAL MOTOR CAR & VEHICLE CORPORATION
Twentieth Successful Year INDIANAPOLIS

Detail Chassis Specifications

- ENGINE**—Six cylinder, high efficiency, improved overhead-valve construction, designed especially for handling low grade fuels, and built complete in National shops under advanced methods of precision manufacture. With bore and stroke of only $3\frac{1}{2} \times 5\frac{1}{4}$ inches, engine develops 71 horsepower at 2600 revolutions per minute, due to advanced method of handling fuel, reduction of inertia losses through use of light weight reciprocating parts of highest grade material, and elimination of friction through extreme accuracy in alignment of parts and improved lubricating system. S. A. E. rating 29.4 horsepower.
- CYLINDERS**—Semi-steel, cast en bloc with detachable head, giving complete access to valves and combustion chambers, which are machined to hold uniform volume of fuel.
- PISTONS**—Close-fitting pistons of cast semi-steel, holding compression at all engine temperatures. Weight less than 2 pounds.
- RINGS**—Three rings, upper ring plain, lower rings pressure-proof construction, preventing dilution of oil through seepage of fuel into crankcase.
- CONNECTING RODS**—I-beam drop forgings, extremely light and strong, with bronze backed nickel babbitt bearings.
- CRANKSHAFT**—Extremely heavy and stiff, $2\frac{1}{2}$ -inch diameter, eliminating binding action at bearings due to shaft distortion. Fitted with long lived, extra large front, center and rear bronze backed nickel babbitt bearings, $3\frac{3}{8}$, $2\frac{1}{8}$, and $3\frac{1}{2}$ inches long respectively. Accurate balance weights forged integral with shaft eliminate vibration and give smooth performance at highest engine speeds.
- CAMSHAFT**—Drop forged, with integral cams, accurately ground. Three large bearings insure rigid alignment and resultant accuracy of valve timing under all conditions. Bearing dimensions: Front $2\frac{1}{2} \times 2\frac{1}{2}$ inches; center, $2\frac{1}{2} \times 2\frac{3}{8}$ inches; rear, $1\frac{5}{8} \times 2\frac{1}{2}$ inches.
- VALVES**—Special warp-proof steel alloy, with large opening, $1\frac{3}{8}$ -inch inside diameter; operated by double valve springs giving quick opening and soft seating. Readily adjusted by special screw setting on ball joint of rocker arm.
- VALVE MECHANISM**—Completely enclosed in dust-tight and sound-proof pressed steel housings, readily removed for inspection and adjustment.
- ROCKER ARMS**—Drop forgings of extreme fineness and light weight, mounted on hollow shafts through which oil is forced to bearings under pressure, eliminating wear and consequent noise of usual overhead-valve construction. Spring spacers, holding rocker arms in place, permit easy inspection of bearing surface. Fingers of rocker arms are of unequal length in proportion of 3 to 2, increasing lifting effect of cams on valves and enabling use of cams of less height, with quieter and smoother valve action as result. Long end, $2\frac{5}{8}$ inches; short end, $1\frac{3}{4}$ inches.
- PUSH RODS**—Light and extremely rigid, cupped at upper end to receive ball socket of rocker arm. Cup is automatically supplied with oil by engine vapor, giving permanent lubrication at this point.
- TAPPETS**—Inverted steel pistons forming automatic oil reservoirs into which spherical bottomed lower ends of push rods are inserted. Construction permits removal of push rods without disturbing any other part of valve mechanism.
- CRANKCASE**—Two-piece copper aluminum crankcase, light and strong, with crankshaft bearings mounted in upper half for easy take-up after wear. Lower half removable, giving ready access to main and connecting rod bearings.
- LUBRICATION**—Improved system, providing complete circulation of oil under pressure to every vital wearing part. Gear oil pump in crankcase forces oil through hollow crankshaft to all main and connecting rod bearings, to camshaft, accessory drive shaft, and to overhead rocker arm shaft. Regulator maintains pressure at fixed point, overflow lubricating timing chain and sprockets. Cylinders and valve mechanism run in bath of oil vapor thrown off by rapidly revolving crankshaft.
- TIMING SPROCKETS**—Driven by Morse silent chain, $1\frac{1}{2}$ -inch wide with special eccentric adjustment, easily reached through handhole in case, to eliminate slack and compensate for wear.
- COOLING**—Positive pressure system with centrifugal pump and hexagon cellular radiator, individual tubes of which are easily removed for repair in case of accident. Capacity of system, 6 gallons.
- FAN**—Four-blade pressed steel design of maximum efficiency, 16-inch diameter, driven by flat, endless fabric belt, $1\frac{1}{4}$ -inch wide, provided with easy take-up.
- IGNITION**—Delco distributor, driven by spiral gear from camshaft.
- CARBURETION**—Rayfield, $1\frac{1}{2}$ -inch intake, with water jacketed bowl and electrically heated primer for starting in extreme cold weather.
- INTAKE MANIFOLD**—Integral with cylinder head and water jacketed so as to be entirely surrounded by heat. External elbow, connecting manifold to carburetor, is combined with exhaust to give hot spot at point of entry of gas into intake system. Amount of heat accurately proportioned to give maximum power and economy with low grade fuels.
- FUEL FEED**—Stewart vacuum system, largest size tank mounted on reverse side of dash underneath hood.

