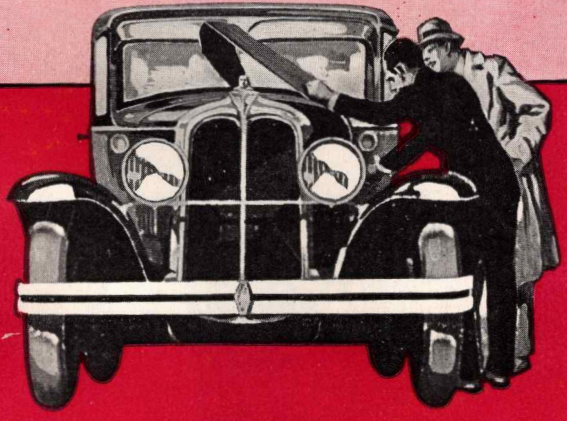
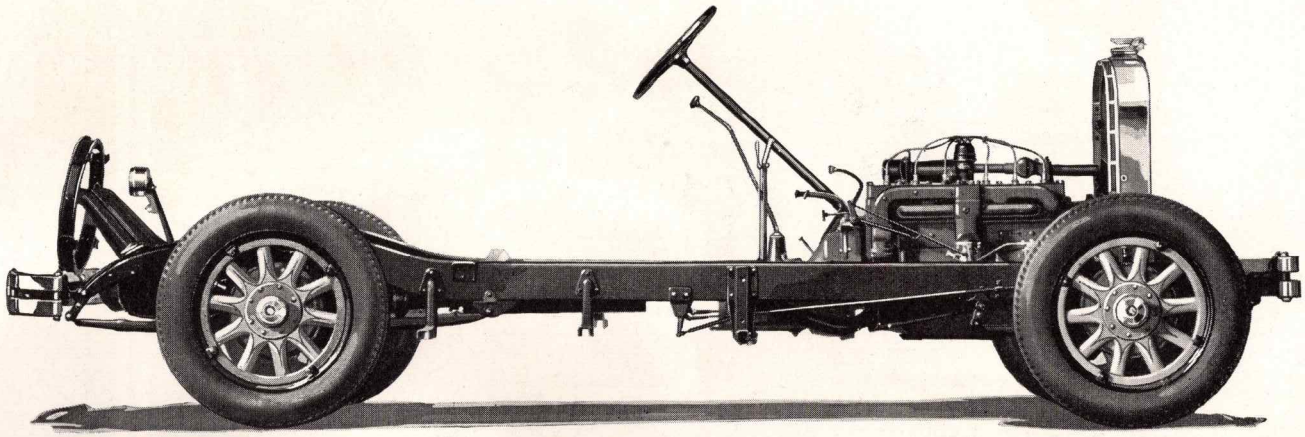
An intimate Close-up *of the* NEW SERIES PONTIAC BIG SIX





A BIG CAR CHASSIS

The New Series Pontiac Big Six chassis provides a carefully designed, stiff, rugged frame which is the foundation for its smoothness and quietness of operation. In every particular, its sturdiness and resistance to torsional stress are characteristic of the finest big car engineering.

AS you read the following pages, your first impression of the smart, generously proportioned New Series Pontiac Big Six will be broadened and deepened by a more intimate knowledge of its inward excellence of design, materials, and construction. As the underlying reasons for its impressive power, speed, acceleration, smoothness, quietness, beauty, comfort, ease of handling, and economy are unfolded, you will realize that here is the most gratifying success in Pontiac history. Gratifying for us because it enables us to offer engineering advancements and refinements of design, both internal and external. Gratifying for you because it enables you to enjoy true big car performance, luxury, and dependability at low cost. Be sure, after reading about the New Series Pontiac Big Six, to get behind the wheel and drive it—see and feel the actual results on the road of the mechanical qualities which have made this Pontiac so widely popular.

OAKLAND MOTOR CAR CO.
PONTIAC, MICH.

A Famous Name

A FINER CAR

SINCE the first car to bear this name appeared upon the market, Pontiac has always represented constant improvement and refinement. During 1926, the original Pontiac Six won the greatest first year sales which had ever been awarded to a new make of car. The motoring public bestowed this distinction on Pontiac simply because of the value it offered. But that was only the beginning of value giving on the part of the Pontiac Six. During 1927, this already famous car was enhanced mechanically and in style—and later was actually reduced in price. The following year saw even greater improvement in Pontiac value. And then came the Pontiac Big Six, a memorable achievement in motor car manufacturing. It offered the greatest performance, the most distinctive beauty, and the highest reliability which any Pontiac had ever combined.

The rugged power plant, which was in the main responsible for the success of the Pontiac Big Six, forms the basis of the advanced engine design of the New Series Pontiac Big Six.

The Power Plant

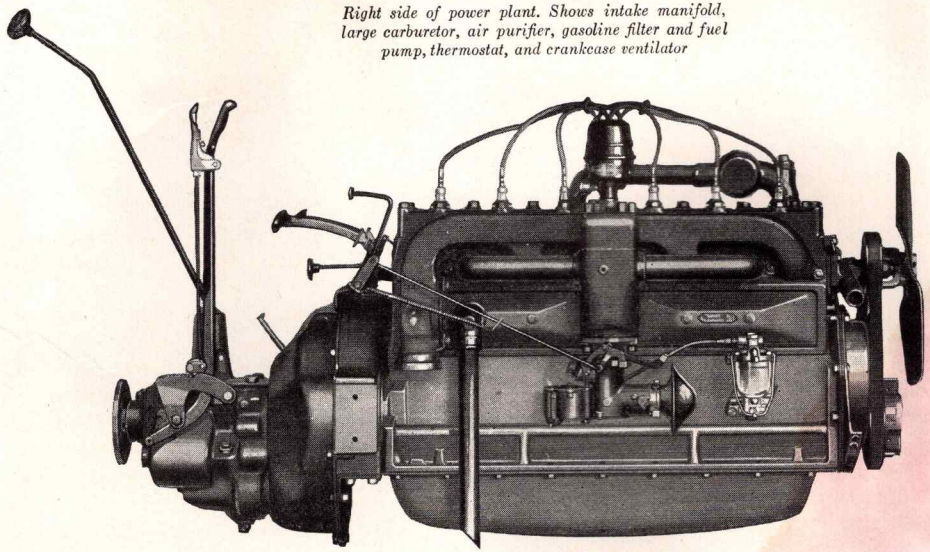
Pontiac's big, L-head engine has a piston displacement of 200 cubic inches with $3\frac{5}{16}$" bore and $3\frac{7}{8}$" stroke. Smoothly and silently it develops 60 brake horsepower at 3000 r.p.m.—a moderate engine speed which protects moving parts from excessive strain and wear.

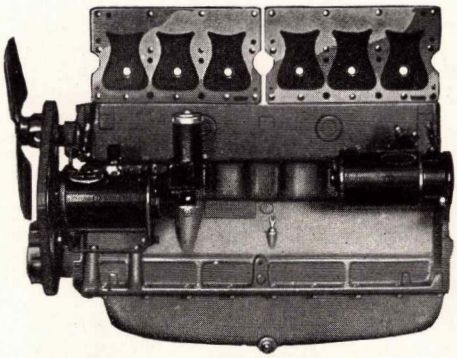
In acceleration it is equally impressive. There is no depending upon a low rear axle ratio for pep at low speeds. Moderate engine speed for any given road speed enables the Pontiac to accelerate rapidly even at 40 and 45 m.p.h.

New Four-point Rubber Mountings

Greater smoothness is achieved by a new four-point mounting with rubber bushings

Right side of power plant. Shows intake manifold, large carburetor, air purifier, gasoline filter and fuel pump, thermostat, and crankcase ventilator





Left side of motor with G-M-R Cylinder Head

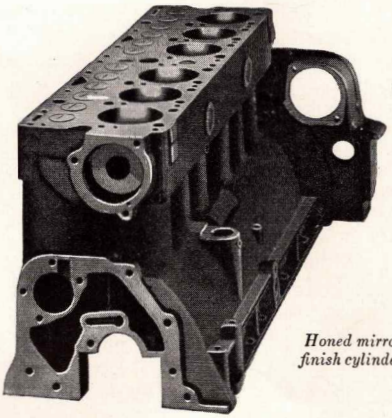
which insulate the engine support brackets from the frame. Another improvement is the adoption of metric spark plugs which overcome preignition troubles. The lateral rigidity of the crankcase has also been greatly increased. This counteracts crankshaft distortion and reduces bearing noise and wear. Still another new feature is the semiautomatic, manually controlled starting motor, which eliminates the chipping of gear teeth on the flywheel and prevents freezing of the pinion in the starting motor shaft.

G-M-R Cylinder Head

In the G-M-R cylinder head of unique design, developed in the General Motors Research Laboratories, you will find one of the most important reasons for the fine performance of the New Series Pontiac Big Six. As you can see from the illustration above, the curves in the G-M-R head are convex, instead of concave. The most evident result of these convex curves is greater smoothness. "Spark knock" becomes negligible. Roughness or thump is completely smoothed out. By permitting the advancement of the automatic spark control to a point of maximum efficiency without disagreeable effects, the G-M-R head results in greater power. To these advantages is added greater economy, because ordinary standard fuels will give excellent performance with the G-M-R head.

Honed Cylinders

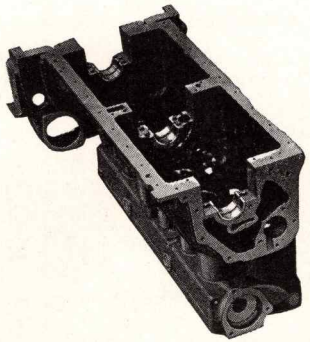
It is one thing to generate power and another thing to retain it. In the New Series Pontiac Big Six, the cylinders are finished smooth as glass by a special honing process originally introduced by Oakland. The result is accurate fitting of pistons and rings and greater retention of power within the cylinder walls. Honing not only makes the cylinders accurate in dimensions, but also removes particles of steel and does away with roughnesses, making new Pontiac Big Six cylinders smooth and shiny. In this way, not only is power used more effectively and economically, but wear is reduced to a fraction of what it might otherwise be—one of the many reasons why the New Series Pontiac Big Six is so inexpensive to operate and so long-lived.



Honed mirror-finish cylinders

Integral Crankcase

Strength and rigidity of the crankcase and cylinder block are vitally necessary to the satisfactory performance of an engine. In the New Series Pontiac Big Six, these units are cast in one massive piece. The crankcase extends more than two inches below the center line of the crankshaft, giving the latter both vertical and horizontal support. An entirely new improvement in the New Series Big Six crankcase is its greatly increased lateral rigidity. This is accomplished by the addition of ribs running the



Crankcase and cylinder block cast integrally, giving great strength and rigid support to the crankshaft

full length and on the outside of the crankcase, parallel and adjacent to the crankshaft. This improvement reduces crankshaft distortion and its two accomplices—bearing noise and wear.

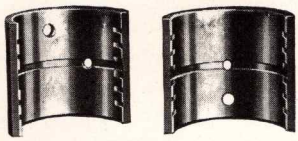
The Crankshaft

Quietness of operation, with the feeling of substantial strength, is due largely to the improved design and weight of the short, rigid Pontiac crankshaft. It is of three-bearing construction, with large journals and crankpins. The weight of the shaft complete is 53 pounds.

To further eliminate crankshaft distortion at all speeds, counterbalances are employed, offsetting the swiftly moving weight of the crankpins and the lower ends of the connecting rods. These counterweights also eliminate excessive main bearing pressures and crankcase deflection at higher engine speeds. By doing so, they increase motoring pleasure and satisfaction, for they remove the primary causes of engine rumble and other disturbing noises, vibration, and loss of power.

Crankshaft Bearings

Low maintenance cost of the New Series Pontiac Big Six is due in part to the interchangeable, bronze-backed, babbitt-lined main bearings. A very thin babbitt layer is used, providing greater strength and much greater heat-conducting capacity. Coolness and a very highly polished surface maintain an oil film that retards bearing wear. New bearings need no "limbering up" period, due to their interchangeability. Extremely accurate machining makes shims or hand fitting unnecessary.

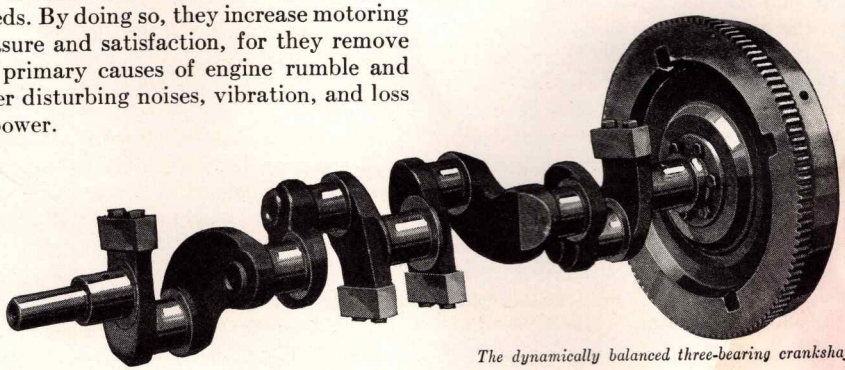


Interchangeable bronze-backed bearings

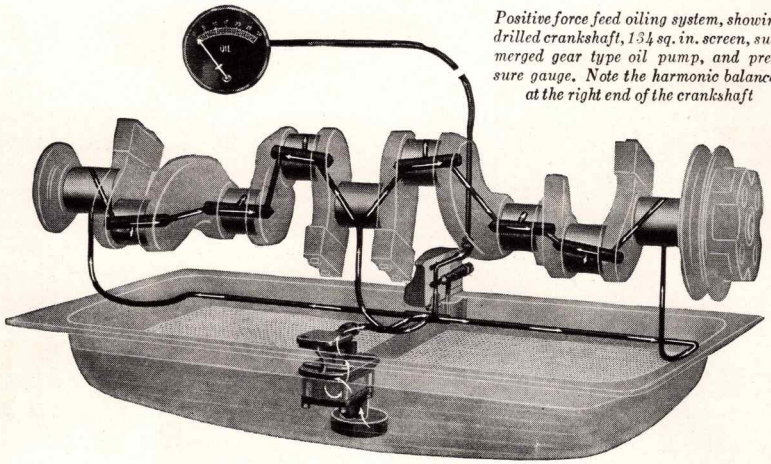
Harmonic Balancer

The use of the harmonic balancer with the short, rigid, counterbalanced crankshaft promotes still further the smoothness of the New Series Pontiac Big Six.

Placed at the extreme front end of the engine, the harmonic balancer neutralizes any vibration in the crankshaft which appears especially at high speeds as a result of torsion or twist. Its construction is very simple, and there are no parts to wear or need adjustment or replacement. It is



The dynamically balanced three-bearing crankshaft



Positive force feed oiling system, showing drilled crankshaft, 134 sq. in. screen, submerged gear type oil pump, and pressure gauge. Note the harmonic balancer at the right end of the crankshaft

effective every moment the engine is running. To appreciate fully its remarkable contribution to smoothness, one must actually ride in the New Series Pontiac Big Six.

Full-Pressure Lubrication

Pontiac was the first car in its field to introduce this important improvement. The full-pressure lubricating system in the New Series Pontiac Big Six is the result of four years of successful operation and constant refinement.

Under pressure and with the flow constantly regulated, oil is carried to the main bearings, and thence to each connecting rod through passages drilled in the crankshaft. The flow is regulated by means of a redesigned, improved, adjustable pressure relief valve. A stream of oil under pressure lubricates the timing chain, while other parts are splash-lubricated. The oil is filtered through 134 square inches of screen. Overflow from the pressure relief valve circulates without going through the screen, giving quick, certain oil supply in the coldest weather.

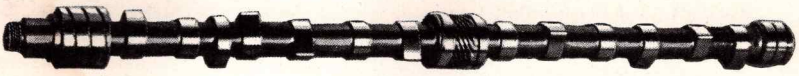
Crankcase Ventilation

For every gallon of gasoline consumed by an engine, approximately one gallon of water is formed. Part of this water gets past the pistons in the form of vapor, and condenses along with other vapor in the crankcase. Allowed to remain, this water dilutes the oil and causes corrosion of casehardened parts. In order to eliminate this water, the Pontiac has a pressure and suction type ventilator. Air is forced in through a ventilator inlet on the left side of the engine, sweeps through the crankcase, takes the moisture with it, and is discharged at the right-hand side of the engine, underneath the car. The result is longer life due to efficient lubrication, and greater economy due to less frequent change of oil. This ventilation also makes driving more comfortable by keeping engine fumes out of the body.

Camshaft

This remarkably efficient unit is of drop-forged steel with cams and bearings case-hardened and ground. There are three large

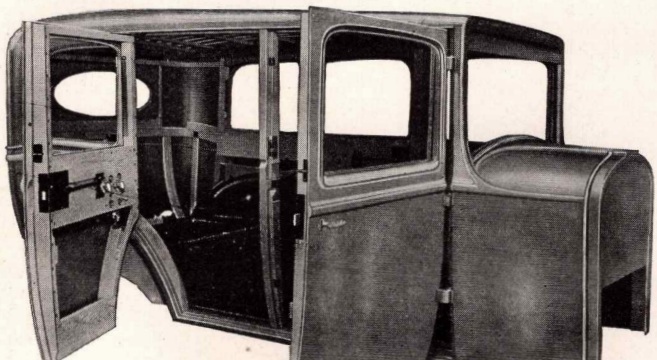
(Continued on page 10)



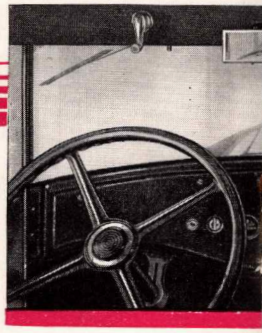
Drop-forged steel camshaft, with three large bearings

Bodies by Fisher Provide Big Car

THE NEW SERIES



Sturdy, resilient construction of body and roof



New, clear-vision, sloping, r

Adjustable driver's s
lights, slanting one-pie
sturdy, resilient, weat
steel construction, wid
interiors—help to mak
Big Six exceptionally
ient.

The New Series Pontiac Big Six embodies the style, comfort, and sturdiness of bodies by Fisher. It is due largely to these beautiful Fisher bodies, finished in genuine Duco colors of pleasing harmony, that the Pontiac is so attractive in appearance and so comfortable a car in which to ride.

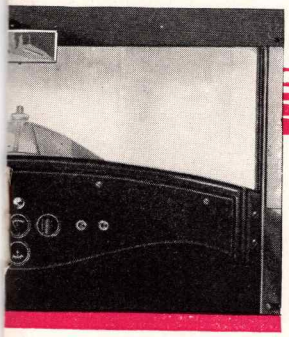
Big Car Appearance

The New Series Pontiac Big Six is long and low of line, and refreshingly smart in every contour. A half-oval belt moulding, starting at the radiator and continuing in what is practically a straight line all around the car, adds a new touch of graceful, poised fleetness to the body lines. It supplements the distinctive concave belt which is exclusive with Pontiac Big Sixes. The door handles are finished in lustrous chrome plate. Inside, the trimly tailored upholstery is of excellent quality. The special designed fittings are of highly polished nickel and are immediately recognized as durable and practical, as well as beautiful. Altogether, the effect of the New Series Big Six upon the eye and the artistic sense is one of true big car beauty and impressiveness.

Big Car Luxury

There is a roominess about these New Series Big Six interiors that gives both driver and passengers ample space for legs, heads, and elbows. The result is delightful relaxation and comfort. The cushions are comfortably soft and deep. The closed bodies all have the adjustable driver's seat, which may be moved back and forth to suit the comfort and convenience of the driver while the car is in motion and the seat occupied. The windshield is of the Fisher VV one-piece adjustable type, sloping at an angle which practically eliminates annoying reflections, and improves the general appearance of the car.

Luxury, Long Life, and Beauty in PONTIAC BIG SIX



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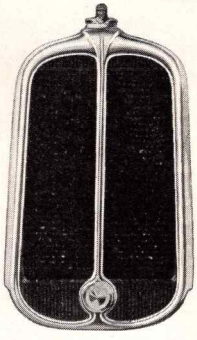
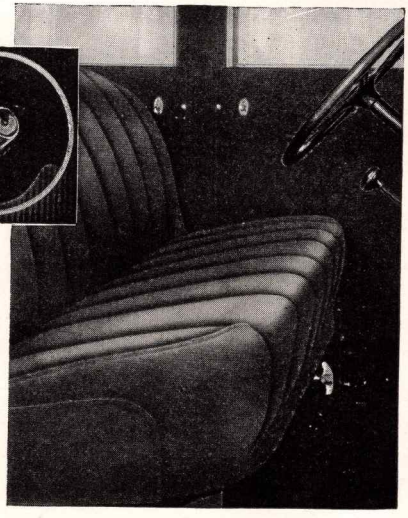
Toe button controls tilting beam headlights



Chrome-finish radiator of distinctive design



Driver's seat adjustable while driving

Big Car Sturdiness

The sturdy framework of selected wood, with steel braces to support it wherever strains occur, forms the foundation for Fisher body dependability. Experience has proved that it is necessary to have both the resiliency of wood and the rigidity of steel in order to build a body that will meet every emergency and continue to be strong and noiseless. An important feature of Fisher bodies is the complete waterproofing of the wood framework. After it has been assembled, a thick coat of wood preservative is sprayed over it and dried into the wood by heating.

The roof of each closed Fisher body is scientifically constructed for strength with light weight. By taking weight from the top, the car is given a low center of gravity, making it easier to handle at high speeds and increasing its road-gripping ability. The roof structure permits the use of a metal roof rail panel, which extends upward over the top and carries the Duco finish as far as the eye can see.

Heavy gauge steel panels are mounted over and reinforce the framework. A layer of heavy felt is inserted between the wood and steel, absorbing squeaks and rattles and making these bodies unusually quiet and delightfully free of distracting sounds.

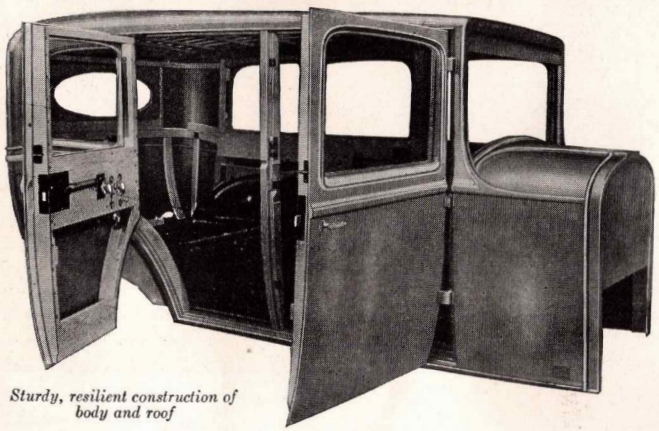
Upholstery is chosen for durability as well as beauty, and all hardware is practical in design, carefully fitted to insure permanent trouble-free service.

As a safeguard of that dependability and long life so highly prized by Pontiac owners, each body is rigidly inspected at every stage of its construction.

It comes to you a finished product in every detail, ready to match the chassis mile for mile through a long life of thoroughly reliable performance.

Bodies by Fisher Provide Big Car Luxury, Long Life, and Beauty in

THE NEW SERIES PONTIAC BIG SIX



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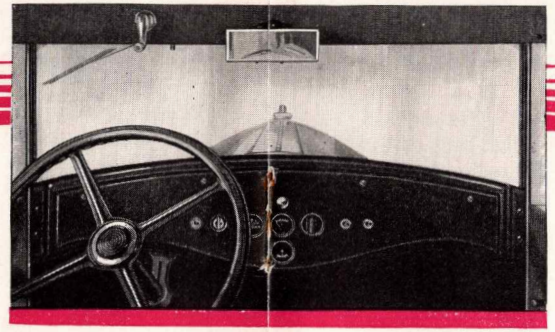
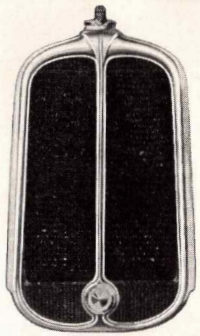


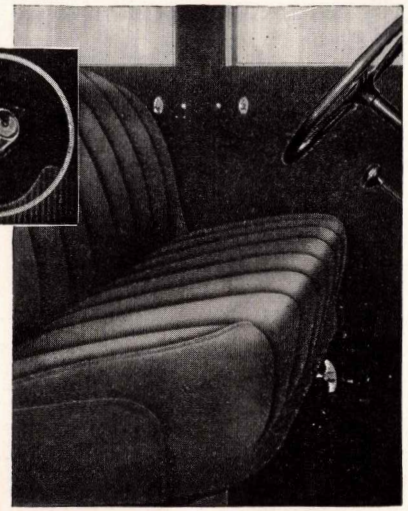
New, clear-vision, sloping, nonglare Fisher VV windshield

Adjustable driver's seat, toe button for headlights, slanting one-piece VV Fisher windshield, sturdy, resilient, weather-tight hardwood-and-steel construction, wide, roomy, deep-cushioned interiors—help to make the New Series Pontiac Big Six exceptionally comfortable and convenient.

Toe button controls tilting beam headlights



Chrome-finish radiator of distinctive design



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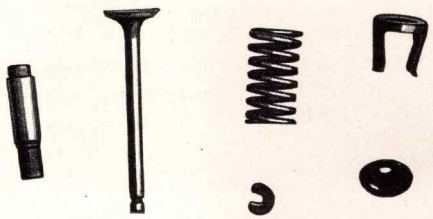
(Continued from page 7)

bearings, and a special eccentric at the front end drives the AC mechanical fuel pump.

Valve Assembly

The valves are amply large in relation to piston displacement. Intake valves, of nickel steel, are 1¼ inch clear in diameter, and the exhaust valves, of heat-resisting silicon chromium steel, are 1 3/16 in. The valve assembly is very simple. Special provision has been made for lubrication of the stems and stem guides. Valve chambers are enclosed with dust and oil-proof covers. Cup-shaped



Alloy steel valves, tempered springs, spring dampeners, and long guides for quiet, efficient valve operation

dampeners prevent vibration or spring surge at high speeds. Pontiac valve operation is sure, silent, and accurate.

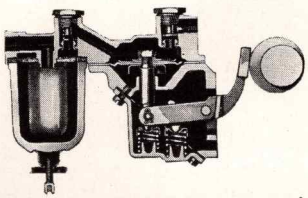
Liberal limits of .007 to .009-in. clearance for valve lifter adjustment keep the valve action quiet, even at high speed with engine at high temperature. This is one reason why Pontiac has such a widespread and deep-rooted reputation for consistent, trouble-free performance.

Pistons and Rods

Great strength with light weight are the advantages of the improved semisteel pistons used in the New Series Big Six. So precisely are they fitted to the cylinder wall that, regardless of temperature, the maximum of power is retained by the engine. That is because the rate of expansion of the piston equals that of the cylinder wall, and the piston can be fitted to give a minimum clearance. The pistons and connecting rods are weighed in matched sets with a weight variation not to exceed ½ oz. The rods are drop-forged from high-grade steel to provide maximum stiffness with smallest weight. The crank pin babbitt bearing is shimless and cast in the rod, giving the latter high resistance to deformation from the force of the explosions in the cylinders.

The Fuel System

In the highly developed fuel and carburetor system of the New Series Pontiac Big

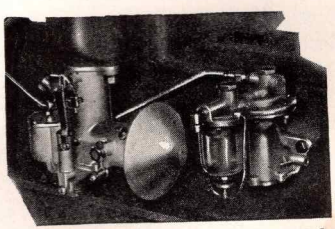


Mechanical fuel pump and filter insures an ample supply of filtered gasoline to the carburetor

Six are to be found many of the reasons for smooth, economical, dependable performance.

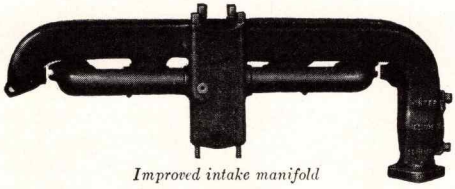
Gasoline is supplied to the carburetor by the positive action of the AC fuel pump, which is driven off the camshaft of the engine. No lack of gas on hills, nor on open stretches when you need pick-up to pass the car ahead. The pump insures a steady supply of fuel at all times and at all speeds. A filter unit is incorporated in the fuel pump. Water and dirt are completely eliminated from the fuel by a double-cleansing section.

The large 1¼-inch vertical type, multiple



Large carburetor with accelerating pump and air purifier shown at left of fuel pump

jet Marvel carburetor has an accelerating pump and automatic choking device. No adjustment at any time is required for either,



Improved intake manifold

and correct mixture and volume are assured at all speeds. A simple air purifier clears the air of dust and dirt particles.

Construction of the large three-port intake manifold has been modified to provide even greater efficiency. The mixture is evenly distributed to each cylinder. Vaporization of the fuel is improved by applying heat from the exhaust manifold without greatly increasing the temperature of the air and already vaporized gasoline. This is important, because the engine works best and most economically with cool air. The amount of heat applied may be adjusted to seasonal temperature or climate.

The large size of the intake manifold and the short leads from the carburetor to the ports insure an ample gas supply and result in high engine efficiency, particularly at high speeds.

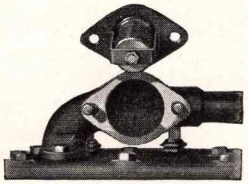
The Cross-Flow Radiator

No material changes have been made in the famous Cross-Flow Radiator which has contributed so much satisfaction in performance, convenience, and economy to owners of the Pontiac Big Six.

Water from the engine jackets enters the radiator about one-third of the way from the top.

Even though it be boiling, the water must flow *across* through the cooling core before it can reach the top tank and vent pipe. By this time it has been condensed and cooled so that practically no vapor can escape. In cold weather, when a mixture of alcohol and water is used, its temperature can be high enough for efficient operation without the loss of vapor through boiling or evaporation from the top tank, as is the case in the down-flow radiator. This retention of alcohol over long periods results in great economy as well as a safeguard against freezing of the radiator or engine.

Water circulation is thermostatically controlled. An automatic valve, located in the water outlet from the cylinder head water



Thermostatic control of engine temperature

jacket, controls it. When the water temperature is low, the valve restricts the flow. When proper working temperature is reached, normal flow is resumed. This means quicker warm-up in cold weather, less unvaporized fuel entering the cylinders to dilute oil, more efficient engine operation, and longer life due to reduced wear.

Cross-flow cooling prevents water and alcohol losses

The Electrical System

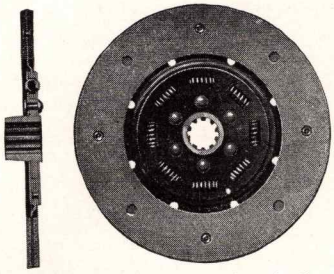
The new metric spark plugs and the manual shift starting motor which eliminates chipping of the flywheel gear teeth are im-

Distributor and oil pump

provements in the efficient New Series Pontiac Big Six electrical system. Another change is the new coil lock, placed in the engine primary circuit and built as a unit with the ignition coil. An ample supply of current for all starting and lighting requirements is assured by the Delco-Remy three-unit electrical system with third-brush regulation on the generator. The charging rate is varied by means of the third brush, increased for city driving which calls for frequent starting, and decreased for long distances with infrequent starting. A full automatic distributor maintains the exact timing for greatest spark efficiency under all conditions and for every increase or decrease in engine speed. You have no spark control lever to operate, and greatest engine efficiency is automatically assured at all times. The large 13-plate battery is the equal of many batteries in far more costly cars. It is powerful enough to spin the motor quickly, even in coldest weather. The starting motor is completely protected from water, ice, and dirt. The starting switch is directly on top of the starting motor, eliminating excessive voltage drop and simplifying battery wiring.

The Clutch

The smooth, powerful action of the New Series Big Six clutch is one of the features that make driving an easy, pleasant experience. It is the single plate, self-ventilating, self-adjusting type, built of the finest materials. Spring cushion mounting absorbs vibration and noise. The disc is so light that it comes to a quick stop when the clutch is thrown out, and permits the transmission gears to mesh smoothly, silently. Women drivers will find the light pedal pressure a safeguard against foot fatigue.

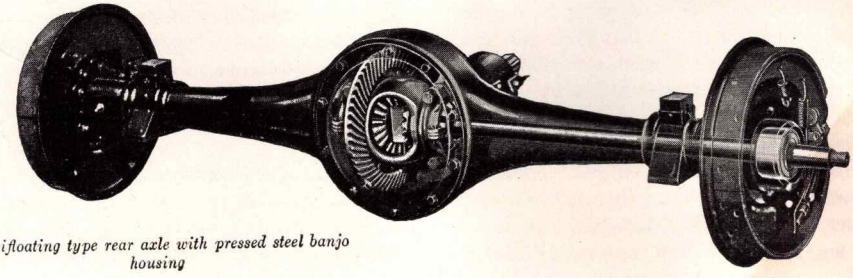


Single disc of the cushion drive clutch

The Axles

Ease of steering and great strength are provided by the heavy steel forged "I" beam type front axle. It is designed to absorb the back-and-forth and twist torsions of the front wheel brakes and to sustain the most severe braking strains. The weight of the car is taken on ball thrust bearings.

The big, semi-floating Pontiac rear axle combines light weight with great strength. The one-piece "banjo" type housing is of pressed steel, light, strong, and impervious to oil and dust. New Departure ball bearings are used throughout, except for rear wheel bearings, which are Hyatt. Standard gear ratio is 4.42 to 1, with a 5.2 to 1 ratio available as special equipment. Ring gears

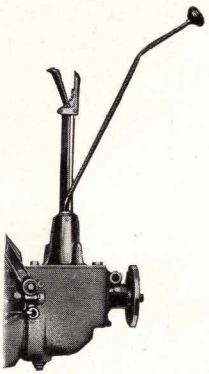


Semifloating type rear axle with pressed steel banjo housing

and pinion are of heat-treated nickel steel. Axle shafts are of heat-treated chrome nickel steel.

The Transmission

Easily operated and smooth is the standard gear shift on the New Series Big Six. The power is transmitted to the rear axle through gears made of specially heat-treated chrome vanadium alloy steel, strong yet light in weight, designed with sturdy, wide teeth



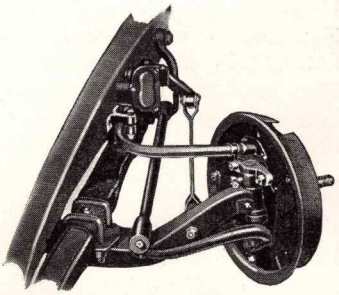
The New Series Big Six transmission with standard gear shift

for strength and wearing quality. The clutch shaft and main drive shaft each revolve on a large annular ball bearing, and the countershaft gears turn on two bronze bushings.

Internal Four-Wheel Brakes

Improvements of a very important nature make the braking system of the New Series Pontiac Big Six more than ever dependable. The non-squeak internal four-wheel brakes now have an improved one-piece "T" section shoe, giving greater flexibility. Sliding friction in applying brakes has been replaced with rolling friction, by rollers added to the toggle links. The result is reduced pedal pressure.

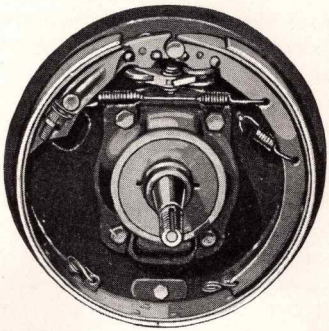
The emergency brake lever is connected directly to the service brakes. Through a novel arrangement of levers, added brake pressure can be applied through the emergency lever, even though the brake pedal is



Front wheel brake, internal mechanical, protected from water and dirt

as far down as it will go. Greater safety than ever is afforded also by provision for forcibly releasing the pedal by pulling it back, should it for any reason refuse to release automatically.

These unusual brakes often run 20,000 to 30,000 miles on a set of linings. They are entirely free from noise, require no lubrication, and are fully enclosed and protected from dirt, splash, or ice. They constitute



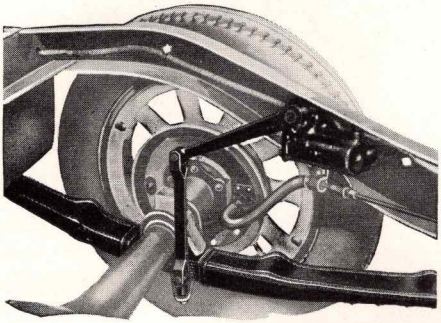
Rolling friction on toggle links insures smooth action with minimum pedal pressure

one of the major factors in the low maintenance cost of the New Series Pontiac Big Six, as well as in its greater safety and ease of handling.

Shock Absorbers

The famous Delco-Remy Lovejoy Hydraulic Shock Absorbers are now standard equipment at no extra cost on the New Series Pontiac Big Six. The smoothness,

added comfort, and safety afforded by Lovejoys are known to motorists the world over. On the New Series Big Six, they now have solid metal links replacing the attaching straps formerly used. The solid

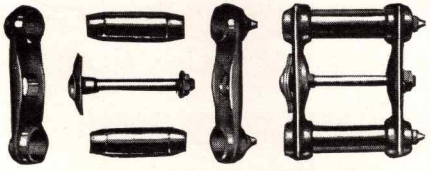


Lovejoy hydraulic shock absorbers standard equipment at no extra cost

links insure positive action on every bump, and new rubber-bushed link joints insure quiet operation. Lovejoys are very simple in design. There are no adjustments to make. Just check them for oil every three months and thoroughly satisfactory operation is assured.

Springs

The riding qualities of an automobile are directly dependent upon spring design and construction. In the New Series Pontiac Big Six, the length of the sturdy, semi-elliptic springs equals 82 per cent of the wheelbase. Deflection rate in the front springs has been decreased, and provides still greater smoothness in the front end of the car. The spring leaves are thin and numerous, giving soft action with adequate strength for the load.



Spring shackles that eliminate rattle, squeak, and side play

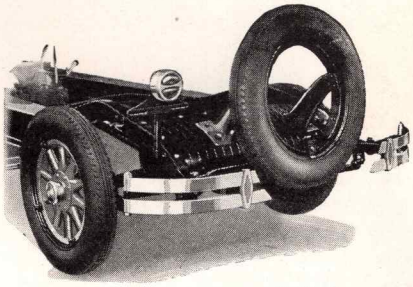
Self-adjusting spring shackles on both front and rear springs automatically take up wear and looseness, eliminating squeaks and rattles, and preventing side sway. Hollow pins, which replace spring bolts, carry enough oil to lubricate the shackles for 1000 miles at a time.

Spring covers packed with grease keep the springs flexible and protect them from water and mud. These covers are included in standard equipment at a slight extra cost.

Together with the semielliptic springs and Lovejoy shock absorbers, they assure smooth, unvarying riding ease for an indefinite period.

Bumpers and Tire Carriers

Front and rear bumper brackets are integral parts of the frame, giving bumper



Integral bumper mounting provided by frame

installations of clean design and exceptional strength. All shocks are transmitted directly to the strongest part of the car. On the New Series Big Six, bumpers and rear fender guards of new, attractive design have been adopted. They provide strength without bulk. Attachment or replacement is done simply and easily without special fittings or tools.

Tire carriers are neat, compact, sturdy, and rigid. A new side type fender well carrier has been designed for special six-wheel equipment.

New design chrome-plated front bumper

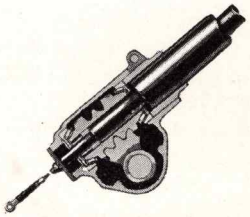
Extra tires and wheels are securely cradled in front fender wells, and held in place at the top by a chrome-plated retainer clamp, and a sturdy tire lock at the bottom.

The Steering Gear

An improved steering system adds immeasurably to the ease and accuracy of handling the New Series Pontiac Big Six. No effort has been spared in perfecting the new worm and sector design found best adapted to Pontiac's needs. The gear has an hourglass type hardened steel worm mounted at either end on taper roller bearings and meshing with a hardened steel sector, easily adjustable for wear. Steering is evenly distributed over three teeth of the worm and sector at all times, insuring smooth, positive action. The pitman arm shaft is mounted on two hardened bronze bushings.

Improved worm and sector type steering system, with increased gear ratio

A seventeen-inch steering wheel provides excellent grip and leverage. It has a narrow rim with flat spokes and finger grips, and a large horn button is mounted in the center. The entire unit is finished in ebony to match the instrument panel.

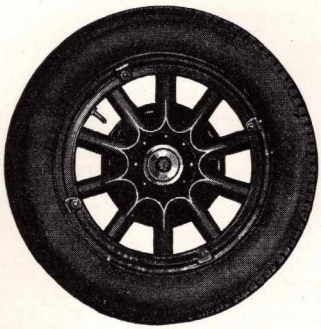


Cutaway view of worm and sector steering gear

Ten-Spoke Wheels

Beautiful new ten-spoke wheels have large hub flanges and hub caps bearing the Pontiac name plate. The spokes are 1¾ inches in thickness and are attached to the hubs by eight flange bolts. Staunch resistance to severest blows or pressure is assured.

Special wire wheel equipment, consisting of six wire wheels, six tires, trunk rack, front fenders with tire wells, and side carriers with two locks, is available at slight extra cost. This equipment is especially designed and engineered to harmonize with the proportions and styles of the New Series Pontiac Big Six.



Sturdy, beautiful, ten-spoke wood wheels built to resist severest blows and pressure

Mechanical Details of

THE NEW SERIES PONTIAC BIG SIX

ENGINE – Six cylinders, L-head, honed cylinders cast en bloc with crankcase integral. Removable head in two sections. Bore, 3 5/16 inches; stroke, 3 7/8 inches; displacement, 200 cubic inches. G-M-R cylinder head with 4.9 to 1 compression ratio. Water cooled with pump circulation, automatic thermostat control. Interchangeable bronze-backed bearings. Silent chain camshaft drive. Semisteel pistons with two plain rings and one oil drain ring. Pressure feed regulated constant flow type lubrication system with pressure-suction crankcase ventilation. Harmonic balancer. Extra rigid crankcase reinforced by new ribs parallel and opposite to the crankshaft.

ENGINE SUPPORTS – Four point supports. Insulated from frame with rubber inserts.

CRANKSHAFT – Three-bearing counter-weighted type, weighing 53 pounds, statically and dynamically balanced. Bearing sizes: Front, 1 13/16-inch diameter by 1 5/8-inch; center, 2-inch diameter by 2-inch; rear, 2 1/16-inch by 2-inch. Bronze-backed, babbitt-lined interchangeable main bearings.

CAMSHAFT – Drop-forged steel, integral cams. Cams and bearing journals case-hardened and ground. Lift, 5/16 inch. Bearing sizes: Front, 1 3/32-inch diameter by 1 1/2-inch; center, 1 3/32-inch diameter by 1 3/32-inch; rear, 1 5/8-inch diameter by 1 1/4-inch. Lubrication by special oil pockets fed by spray from crankshaft. Silent drive with 1 1/4-inch chain.

PISTONS – Semi-steel, assembled in matched sets, 3 5/16 inches in diameter with three 7/16-inch rings. Piston pin, 1 1/16-inch diameter, locked in piston. Special aluminum plug in ends of pin assures permanent fit.

CONNECTING RODS – Selected in matched sets, drop-forged, heat-treated. Lower bearing, 2-inch diameter by 1 5/16-inch; upper bearing, 1 1/16-inch diameter by 1 1/16-inch bronze; lower bearing, high-grade babbitt, accurately broached to size.

VALVES – High temperature resisting. Intake valves, 1 1/4-inch clear diameter nickel steel; exhaust valves, 1 5/16-inch clear diameter silicon chromium. Accessible for grinding by removing head. Valve spring dampeners. Tappets have long-wearing chilled cast-iron foot with steel stem; self-oiling, mushroom type.

LUBRICATION SYSTEM – Special design known as regulated constant flow type, pressure being taken care of by adjustable pressure release valve. Pressure feed from gear-driven pump to all main bearings, connecting rods, and timing chain. Submerged gear type oil pump, driven off center camshaft bearing. Valve compartment open to spray. Valve chamber provided with oil-tight coverings. Pressure gauge on instrument board. Oil filler and oil level gauge located on left side of engine. Oil capacity, 6 quarts. Pressure oil lubrication fittings for chassis. Pressure-suction type crankcase ventilator with individual air cleaner.

GASOLINE – Gas pump feed and filter. Thirteen-gallon elliptical tank in rear provided with gasoline gauge on dash.

MANIFOLDING – Three-port intake manifold with riser heated by exhaust gas from all six cylinders. Heat control valve in exhaust manifold, adjustable for summer or winter temperature conditions or for temperature between these extremes.

CARBURETOR – New 1 1/4-inch vertical, multiple jet type with accelerating pump and economizer, easily adjusted. Air purifier furnished.

ELECTRICAL SYSTEM – New metric spark plugs. Delco-Remy starting, lighting, and ignition. Manual shift starting motor. Foot-controlled tilting beam headlights. Generator third brush current regulation. Automatic distributor. Six-volt, 13-plate, 80-ampere hour storage battery. Side lamps for parking. Approved combination tail light and stop light with tubular support. New Delco-Remy ignition coil lock.

CLUTCH – Dry single disc cushion drive type, ventilated and self-adjusting. Driven disc faced with long-wearing lining. Outside diameter, 8 7/8 inches. Six pressure springs, pedal adjustable to compensate for wear. Release bearing operates only when clutch is disengaged.

COOLING SYSTEM – Water, circulated by pump with balanced impeller; cellular type, cross-flow radiator with thermostat control; chrome-plated shell. Frontal area core, 393 square inches. Capacity, 13 quarts. Two-blade fan on pump shaft, 17 inches in diameter.

TRANSMISSION – Unit power plant type, selective sliding; three speeds forward and one reverse. Gears of heat-treated alloy steel accurately cut and finished. New Departure ball bearings for ten-spline main drive shaft. Bronze bushings for countershaft gears. Greater gear tooth area.

FRAME – Pressed steel channel section, 5 inches deep, 1 3/4 inches wide. Straight side members. Tapers from front to rear. Five cross members including rear engine support. Integral bumper mountings. New design tire carrier.

STEERING GEAR – Hourglass type; hardened steel, worm and sector gear. Worm mounted on taper roller bearings and fully adjustable for wear. 17-inch steering wheel. Ebony finish rim with metal spider to match rim. 14 to 1 ratio for easy steering. Horn button, black to match, in center of steering wheel.

INSTRUMENT PANEL – New grouping of speedometer, gasoline gauge, oil gauge, and ammeter in center of raised panel on instrument board. Instruments are individually mounted. On one side are placed the ignition lock and lighting switch buttons. On the other side are the choke and throttle control buttons. All instrument dials black with white figures. Illuminated by a soft, reflected light in center of instrument panel.

FRONT AXLE – Heavy, drop-forged, I-beam, reversed Elliott type. Springs over axle. Ball bearings for wheel spindles. Ball thrust bearings on king-pins. Tie rod and drag link ball and socket connections have springs to cushion road shocks and automatically take up wear.

REAR AXLE – Heavy semifloating type, pressed steel banjo housing; spiral bevel drive gears. Heat-treated nickel steel pinion and ring gears. New Departure ball bearings used throughout except wheel bearings which are Hyatt roller type.

WHEELS – New conventional artillery wheels with steel felloes having ten massive spokes with large hubs and 6 3/4-inch diameter flanges. Equipped with 19 x 4-inch rims. Natural wood wheels on Custom Sedan. Special equipment, at slight extra cost, includes six wire wheels, six tires, trunk rack, front fenders with tire wells, and side carriers with two locks.

TIRES – Low-pressure balloon cords, 29 x 5 inches, non-skid tread. Spare tire extra.

BRAKES – Improved four-wheel brakes of mechanical type, internal-expanding with 177 square inches of braking surface; parking brake hand lever connected to regular service brake on all four wheels. Rubber cups seal openings around brake and clutch pedal slots when pedals are in normal position.

SPRINGS – Semielliptic, front and rear. Length of front spring, 36 inches; width, 2 inches. Length of rear spring, 54 inches; width, 2 inches. Front spring, special quality carbon steel. Rear spring, silicon-manganese steel. Spring shackles, self-adjusting for wear. Lovejoy shock absorbers included as standard equipment at no extra cost.

TURNING CIRCLE – 38 feet to left, 39 feet 2 inches to right.

OVER-ALL LENGTH – 167 5/8 inches.

ROAD CLEARANCE – 8 3/8 inches.

BODIES – Closed models built by Fisher, equipped with adjustable driver's seat. Specially designed hardware and interior fittings. Custom-selected upholsteries. Sloping VV windshield.

UPHOLSTERY – Coupe, Two-Door Sedan, Four-Door Sedan, Sport Coupe, and Custom Sedan upholstered in mohair. Sport Roadster and Phaeton upholstered in Spanish leather with fabrikoid to match.

SPRING COVERS – Standard equipment, at slight extra cost.

LOVEJOY SHOCK ABSORBERS – Standard equipment, included in the list price.

BUMPERS AND FENDER GUARDS – Standard equipment, at slight extra cost on all closed body types. Full length chrome-plated front and rear bumpers on open body types.

We reserve the right to make changes or improvements at any time without incurring any obligation to install same on cars previously sold.

OAKLAND MOTOR CAR COMPANY · Pontiac, Michigan

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