

*the Great New, All-New **V8!***

180 h.p. Pontiac

Strato-Streak



**Surging power . . . remarkable economy . . .
tremendous performance and dependability . . .
proved by more than 3,000,000 grueling test miles!**

Pontiac *Strato-Streak*

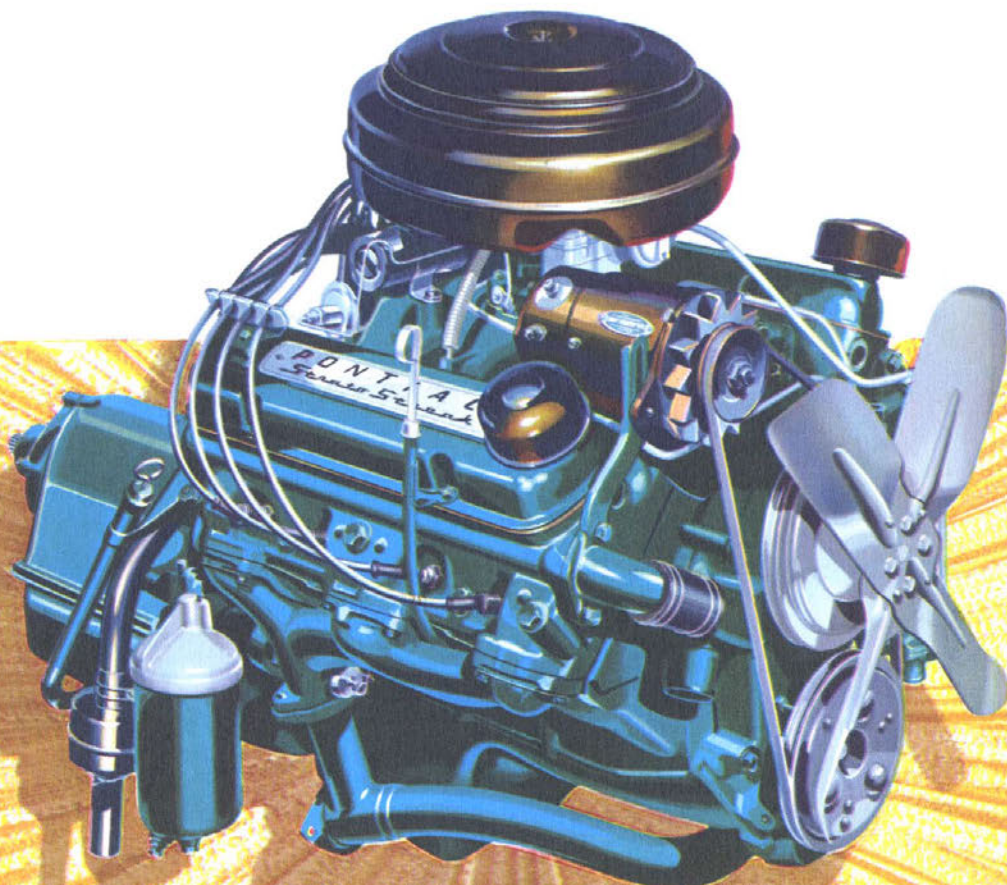
V8

Here it is, America's most remarkable V-8 engine . . . 180-horsepower strong! Eager to deliver flashing performance at just the touch of your toe . . . ready to whisk you off in a smooth, continuous flow of power . . . that's Pontiac's great new Strato-Streak V-8! But power is just part of the story of this tremendous engine, for within the realm of this marvelous new engine is economy and performance like you've never known.

Not until every phase of this dynamic performance was thoroughly perfected . . . not until the function of every mechanism within this new engine was perfect did Pontiac engineers feel it was time to put the radical

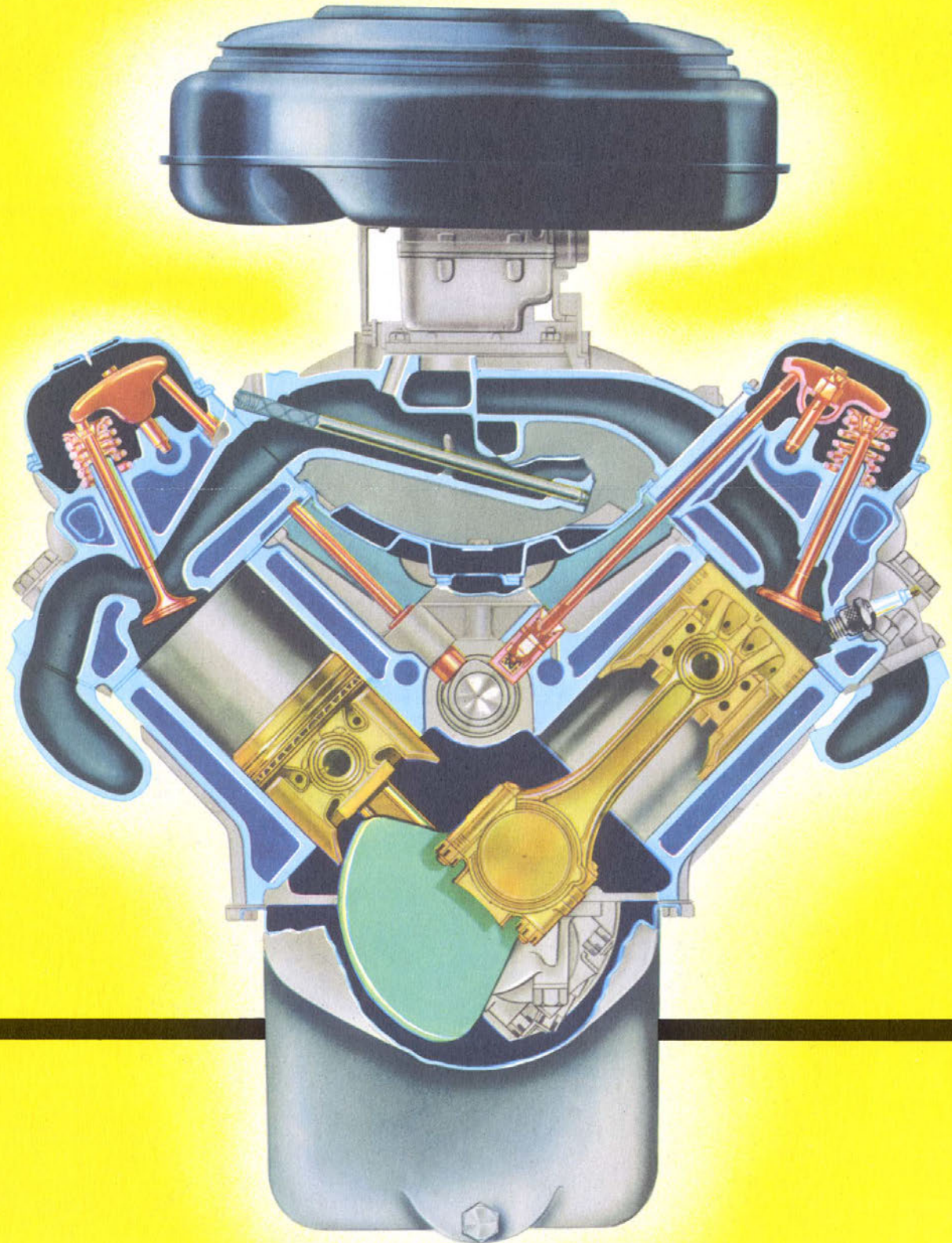
Strato-Streak V-8 masterpiece into production. More than 3,000,000 test and development miles substantiated their decision.

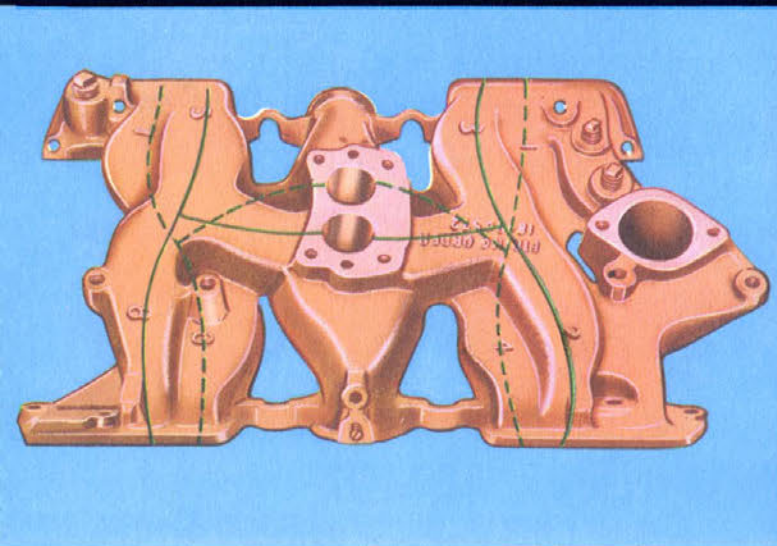
It's this persevering thoroughness coupled with inventive and productive know-how that make the Pontiac Strato-Streak V-8 the world's most dependable engine. Study some of its advantages on the following pages . . . see why this engine is sure to be the envy of the industry. See why the great new Strato-Streak is the V-8 of the future. Then drive a sparkling new '55 Pontiac and experience the thrill of guiding this great, remarkable new power plant.



The Most Highly Perfected **V8** in the Industry!

Pontiac *Strato-Streak*

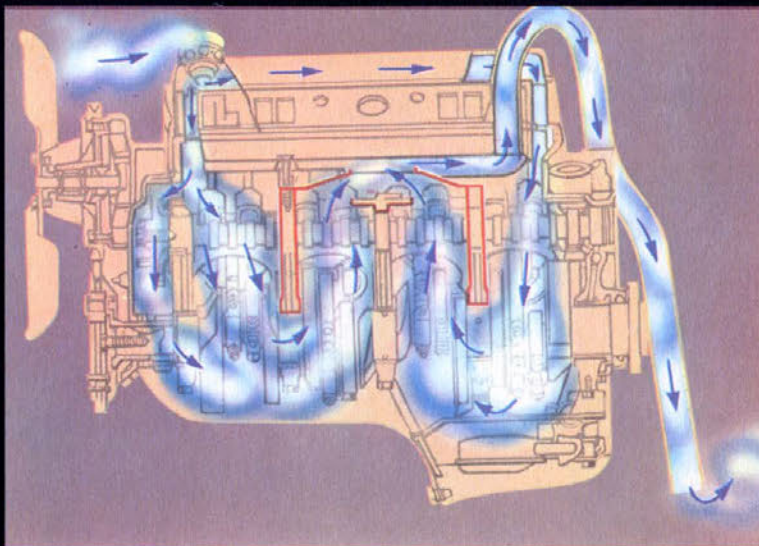




More even flow of fuel with Pontiac's

BALANCED-INTAKE MANIFOLD

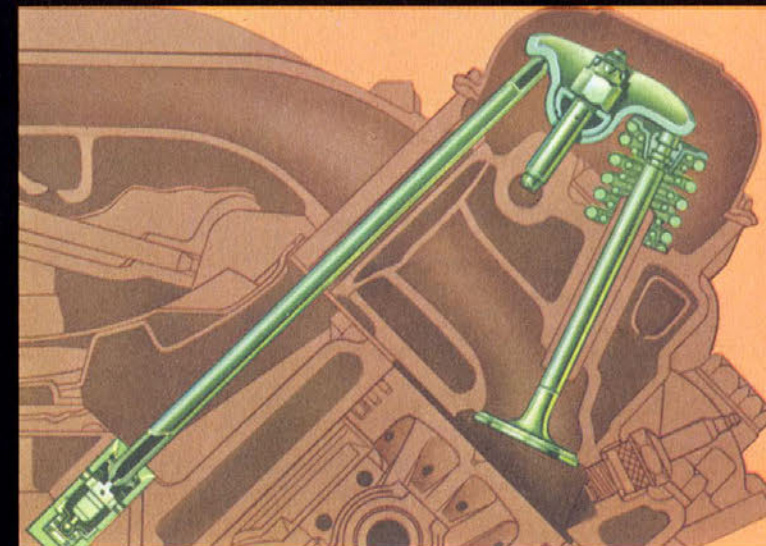
Precision design of Pontiac's intake manifold provides passages practically equal in length with turns generously rounded to reduce surface friction. This results in a more even distribution of the fuel mixture, greater gas economy and smoother power flow! A stove, included in the manifold and controlled by a temperature-sensitive heat valve, by pre-heating assists in more complete vaporization of fuel.



Completely aerates every corner of engine!

PRESSURE-SUCTION CRANKCASE VENTILATION

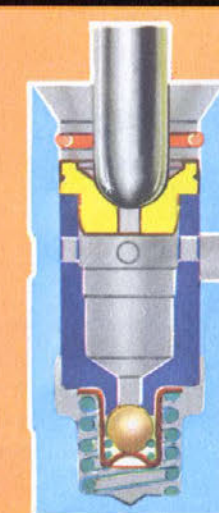
Another Pontiac "first"! Ideal flow pattern, pressure-suction crankcase ventilation aerates every part of the engine even during idling. Sulphurous acid, formed in every gas burning engine, plays havoc with delicately machined parts! Pontiac protects against the formation of this acid by completely ventilating rocker arm chambers, crankcase and timing chain cavity. Long engine life results.



Greater engine power, smoothness and durability!

PONTIAC'S NEW BALL-PIVOT VALVE TRAIN

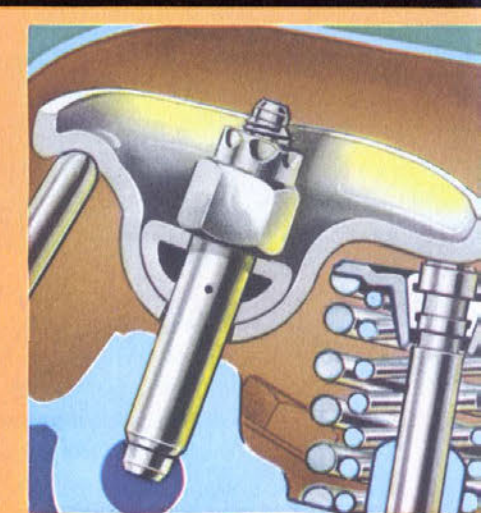
Pontiac's ball-pivot valve train more effectively performs the task of admitting and expelling gases. Cam-actuated hydraulic lifters move push rods which in turn move the rocker arms. Valves open and close by the pivot action of the rocker arms on the stud mounted balls. Tapered valve guides improve valve seating, guard against valve sticking and minimize valve-stem oil leakage.



Better performance!

HYDRAULIC LIFTERS

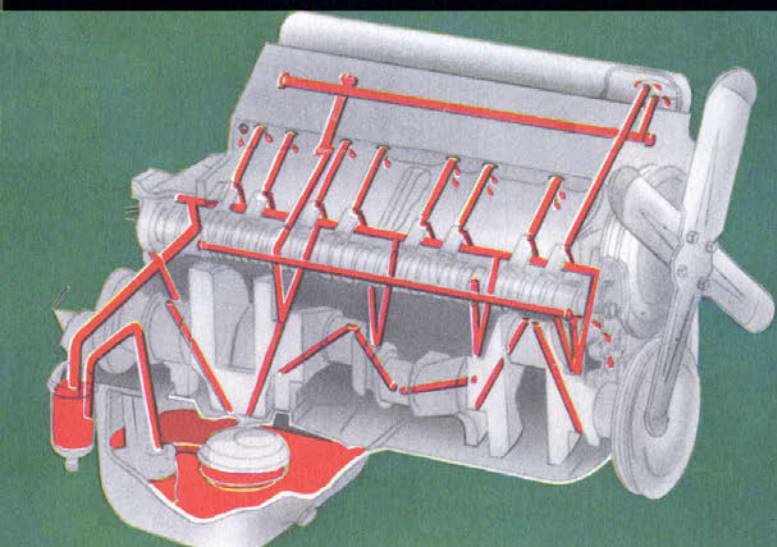
Timing is precise... no tappet adjustment needed with Pontiac's hydraulic lifters. Constant contact is maintained between lifters and push rods.



Eliminates rocker arm shaft!

BALL-PIVOT ROCKER ARMS

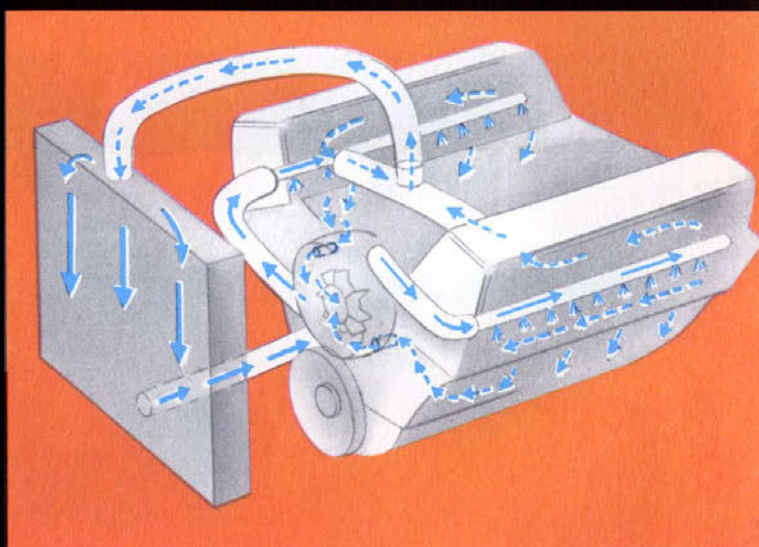
Cyanide-hardened steel rocker arms are stud-mounted to heads. Ball pivots provide a seat for rocker arms, so designed that valve cocking and stem wear are minimized for greater engine life, efficiency. Automatic wear compensation is provided!



Every bearing part is positively lubricated!

QUAD-GALLERY LUBRICATION SYSTEM

Four galleries, two in cylinder block and one in each head, deliver oil under pressure to crankshaft, connecting rods, camshaft bearings and valve actuating mechanisms. The high-pressure areas between the push rods and rocker arms are pressure-lubricated. Also, piston pin bushings, timing chain and sprockets, distributor, cylinder walls are effectively lubricated!



Lower heat increases engine durability!

REVERSE-FLOW COOLING SYSTEM

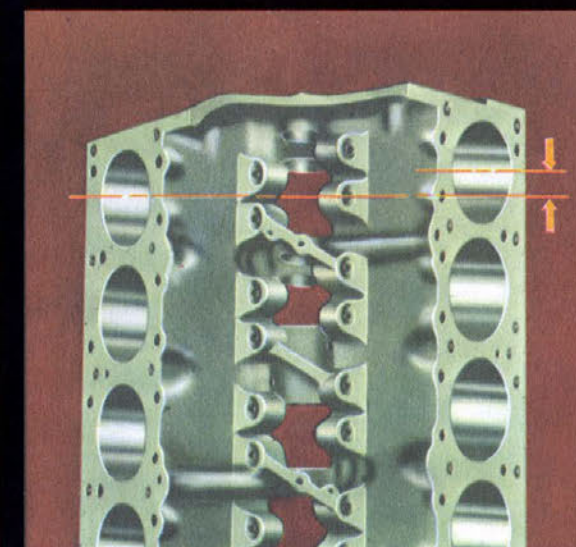
Pontiac lowers engine operating temperatures by a new reverse-flow system where coolest water is first thrown on the hottest part of the engine... exhaust valve seats in cylinder heads. Water, which does not exhaust to radiator, flows to full-length water jackets and around each cylinder. No cold water is thrown directly on cylinders to cause distortion. Oil sludging is minimized.



Exhaust valves and seats

GUSHER COOLED

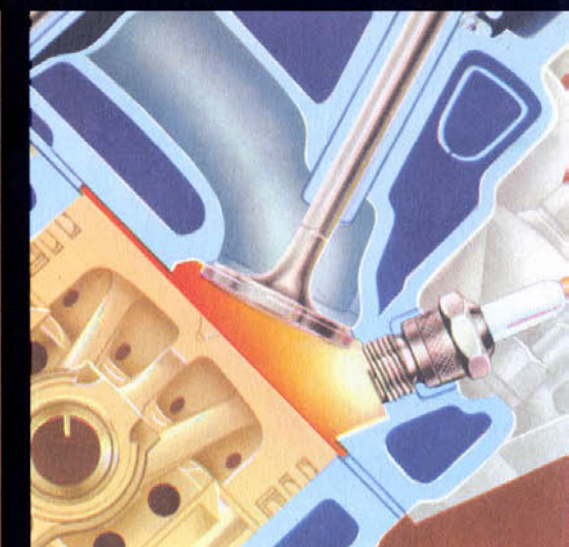
Each cylinder head contains a brass water distributing tube. Through tubes cool water from radiator is ejected at high velocity on exhaust valve seats. Thus, destructive heat is reduced.



New shorter and more rigid

CAST CYLINDER BLOCK

Greater cylinder block strength, smoother power are assured with the Strato-Streak V-8! Furthermore, because right bank is forward, the fuel pump may be located low on the left side of the engine. Ideal location of the distributor is possible, excellent generator support is provided.



Prevents preignition of fuel mixture!

ANTIKNOCK CHAMBER

A large "quench area," covering approximately 35% of the piston head, prevents abnormal combustion and resultant power loss. Since the combustion chamber is completely machined to provide equal explosion pressures in all cylinders, engine smoothness is greatly increased.



combination fuel, vacuum pump

Because of its location (low on left side of engine), Pontiac's new fuel pump gives maximum freedom from vapor lock (a feature further enhanced by the elimination of the settling chamber). A new Pontiac vacuum booster insures smooth, even windshield-wiper action.

Pontiac's balanced crankshafts

Forged-steel crankshafts are machined to exact tolerances, dynamically balanced by six counterweights to insure engine smoothness. 3/4-inch overlap between bearing journals and crankpins means a solid section of steel extends the entire length of the shaft for added ruggedness!

new harmonic balancer

Smooth, quiet engine operation and added life result from the use of Pontiac's new Harmonic Balancer. Built into the fan drive pulley, the balancer tends to oscillate out of phase with the crankshaft and therefore dampens crankshaft vibrations which would otherwise be felt.

tapered-cam camshafts

Camshaft cams are tapered with the high side of the cam toward the rear. This means, as the cam contacts the spherical base of the hydraulic valve lifter, the lifter rotates, thus contact surfaces keep changing. Naturally, quieter operation and longer life result!

tin-plated, offset pistons

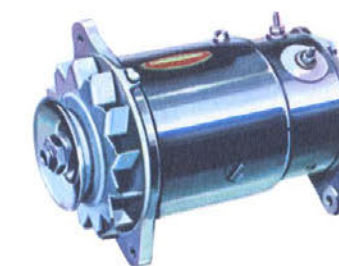
Tin-plated for maximum wear, slipper-skirt pistons are reinforced with steel struts to control expansion and give added strength. Piston pins are offset so that a gradual change in thrust pressure against the cylinder wall produces much quieter engine operation.

balanced connecting rods

Perfectly balanced within 1/4 ounce to insure engine smoothness and long bearing life, connecting rods are rugged, steel I-beam forgings. Two precise balancing operations are performed before connecting rods are approved for installation into the new engine.

faster, surer starting with new 12-volt electrical system

Better ignition performance, higher generator output, faster cranking speed... all outstanding advantages of Pontiac's new 12-volt system. Furthermore, the new system boasts a greater capacity to meet the demand of more electrical accessories, increased compression ratios.



NEW power

180 mighty horsepower . . . sure, dependable power to take you through any traffic condition quickly and safely! Steep grades melt away to mere hills . . . long, open stretches of road fleet by with the greatest of ease when you're driving a new Pontiac with the Strato-Streak V-8 engine. Developing 180 horsepower, the Strato-Streak delivers remarkable performance.

NEW performance

Greater passing power, greater maneuverability . . . greater all-around performance go hand-in-hand with the Pontiac Strato-Streak's tremendous torque (264 lbs. ft. at 2400 rpm). It's this torque that takes you away quickly and safely . . . it's this high torque (along with other features) that gives you a wonderful improvement in acceleration.

NEW economy

You'll be astounded at the actual gas saving . . . tests have proved the new Strato-Streak averages approximately 8% better fuel economy than the 1954 Pontiac engine. Through Pontiac's engine with new fuel system, which includes down-draft carburetor and balanced-intake manifold you receive more "go" out of every gallon of gas. Drive the new '55 Pontiac with the Strato-Streak V-8 . . . enjoy tremendous power and performance, realize exceptional economy and dependability.

NEW dependability



for newest beauty, power and value

Look to **Pontiac** in '55

read these **SPECIFICATIONS** . . . see the value you receive in a **PONTIAC!**

● **STRATO-STREAK V-8 ENGINE** is a 90° V-block eight-cylinder engine of the valve-in-head design. With the standard compression ratio of 8.0 to 1, maximum brake horsepower is 180 at 4600 rpm and maximum torque is 264 lbs. ft. at 2400 rpm. Bore and stroke, 3.75 inches by 3.25 inches. Displacement, 287.2 cubic inches. Completely counter-balanced crankshaft with counterweights ideally distributed for uniform bearing loads. Five overlapping main bearings. Oil seals both front and rear. Tin-plated aluminum pistons to reduce scuffing and wear. Tapered valve guides for ideal, non-stick operation and valve seating. Chain-driven camshaft supported by five bushings. Rubber engine cushioning. Pressure-Suction Crankcase Ventilation to ventilate the entire engine with a

complete, ideal-flow, ventilating pattern. A low-compression engine is available for use with standard fuels as optional equipment with Synchronesh transmission.

● **ENGINE LUBRICATION:** Full-Pressure Quad-Gallery Lubricating System for complete bearing lubrication at all times, full lubrication to all engine parts. Helical gear type oil pump. Oil refill capacity (less filter), five quarts. Full-flow oil filter, accessory.

● **FUEL SYSTEM:** Dual-type multiple-venturi downdraft carburetors. Fuel pump with vacuum booster. Heavy-duty oil-bath air cleaner and silencer, accessory. Balanced-intake manifold with pre-heat chamber for extra quick warm-up, efficient use of fuel. Automatic choke. Twenty-gallon fuel tank,

except station wagons. Eighteen-gallon fuel tank in station wagons.

● **COOLING SYSTEM:** Reverse-Flow Gusher-Valve Cooling. Centrifugal water pump. Thermostatic control of water circulation. Water around all cylinders. Full-length water jackets. Four-bladed fan of 19-inch diameter, except in cars equipped with Air Conditioning. Coolant capacity: 24 quarts without heater; with underseat heater, 26 quarts.

● **ELECTRICAL SYSTEM:** 12-volt, 9-plate battery with corrosion-resistant retainer. Twenty-five ampere generator. Current and voltage regulator. Centrifugal and vacuumatic spark control. Spark plug make and model: AC 44-5. Key-Quick Automatic Starting.

Pontiac Motor Division of General Motors Corporation reserves the right to make changes at any time.