The engine of a restored Strato-Streak 285-hp 1956 Pontiac with the delta-wing air cleaner in place on a hardtop's 316.6-cid V-8 at the iola Old Car Show. (Angelo Van Bogart photo)

Poncho Punch

The 285-hp Strato-Streak was Pontiac's horsepower king in '56

By John Gunnell

he horsepower race was in full swing when Pontiac introduced its new Strato-Streak 285-hp engine in the February 1956 issue of *Service Craftsman News*, a company publication aimed at its service technicians.

"During the past few months, requests from both dealers and individuals have indicated that an engine of 'extra' horsepower should be made available for those who wish to race professionally or those who vie with each other in having a 'hot' performing car," said the publication. "Such an engine is now available as a factory-installed option on all 1956 Pontiac models except those with Air Conditioning."

The new engine was the Strato-Streak V-8 with two four-barrel carburetors, and it was developed to thrill power enthusiasts. The new engine was rated for 285 hp at 5,100 rpm and maximum torque of 330 lb.-ft. at 3,600 rpm. According to company engineers, the extra power was the result of improved thermal and volumetric efficiency that could be attributed to the use of two Rochester four-barrel carburetors, a higher 10.0:1 compression ratio and new valve timing that permitted the intake and exhaust valves to remain open longer for better engine breathing. Pontiac also modified other engine components to meet special operating requirements.

The following were some details of the major differences between the 285hp Strato-Streak V-8 and the regular Strato-Streak engine:

Special Camshaft

A new camshaft was used in the 285-hp Strato-Streak V-8 that provided

greater valve overlap and improved engine breathing. This cam could be identified by its plain front end, which lacked the lettering seen on other 1956 Pontiac cams.

Special Air Cleaner

With two big carburetors, a unique air cleaner was needed to purify the air being sucked into the new engine, as well as to quiet things down. A special air cleaner with a Delta-wing-shaped air manifold made out of sheet metal was used. It was designed to fit over both four-barrel carburetors. It incorporated one air cleaning element for each side of the engine.

Special Carburetors

Two four-jet Rochester carburetors were employed. They were mounted on a special intake manifold and distributed the fuel-air mixture to the cylinders. The "285" carburetors looked like the regular single four-barrel carburetor, but they were calibrated differently and were not interchangeable. An adjustable rod linked the carburetors together and had to be set to properly synchronize their operation by adjusting the angles of the throttle valves. Special idle speed and idle mixture adjustments were required.

Special Fuel Pump

To feed two big carburetors, Pontiac provided a new fuel pump with larger valves in the fuel chamber to flow more fuel. The 285 hp was no economy engine.

Special Cylinder Heads

The cylinder heads for the Strato-Streak 285-hp V-8 were machined to have a 10.0:1 compression ratio. This reduced the volume of the combustion chambers and moved the heads of the valves closer to the top of the block.

Special Valve Train

To make the use of the stock push rods, rocker arms and factory valve train, the 285 valve stems were made 3/32-in. longer than those of the regular engine. Higher-tension valve springs were also required. The design of the inner and outer valve springs was modified so that interference between the springs could occur during assembly. If this happened, they were supposed to be forced together. Also, no intake valve spring shields were used.

Special Hydraulic Lifters

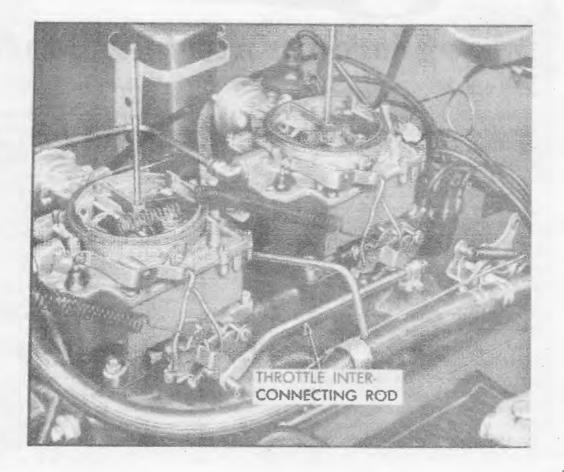
Pontiac developed new hydraulic valve lifters for the 285 engine. They minimized the tendency to "pump-up" at high rpm. The new lifters incorporated a spring-loaded check ball and a new check ball retainer inside. While they looked externally similar to regular lifters, they had an "A" stamped on the lifter body.

Special Electrical Equipment

The distributor used with the 285 V-8 featured dual points and no vacuum advance mechanism. Only centrifugal advance was used. The dual breaker points provided a longer dwell to deliver increased voltage to the spark plugs. A special ignition coil produced greater secondary output because of an increased ratio of secondary to primary turns. On the primary side of the ignition system, a resistor of lower resistance value was used. To reduce generator speed, a larger 3-1/2-in. pulley was used. AC 44 spark plugs were specified.

Additional Special Parts

Other special parts for this special engine included the fuel pipes, the rocker arm balls, the crankcase ventilating



This period illustration from Pontiac reveals the dual Rochester carburetors with the deltashaped "bat wing" air cleaner removed. system, the push rod cover, the right-hand rocker arm cover, generator mounting fittings and more.

Fine-tuning the Strato-Streak

Adjusting the dual four-barrel carburetors was an 18-step procedure that started with turning the mixture screws finger tight, then opening them two turns on each carburetor. Then, the choke was to be held open while the carburetors were synchronized. After all the screws and rods were properly set to work in unison, the idle speed was set to 650 rpm.

Later in the year, the September-October 1956 issue of

Service Craftsman News addressed some problems experienced with all Pontiac carburetor setups, including the dualquad option. Apparently, some owners of 285-hp jobs experienced hot starting problems. Pontiac released a new throttle body-to-bowl gasket (part no. 7009256) for each carburetor to address the problem.

Other 285-hp owners were plagued with stalling after a hot stop. Engineers determined this could be solved by removing the air horn assemblies from both carburetors and drilling internal vents in each side with a 1/8-in. drill. This had to be done just right and only in two specific vents. Otherwise, ex-



Where is Ab Jenkins' record run 285-hp Pontiac?

By John Gunnell

Dave Allen of Warren, Ohio, is looking for a 1956 Pontiac 860 two-door sedan with the Strato-Streak 285-hp V-8. Finding such a car isn't easy, especially in Allen's case. He is also looking for *the* car that his great uncle owned — and did we mention his great uncle was famous racing car driver Ab Jenkins?

The Pontiac that Allen is looking for is famous, too. In June 1956, Ab and his son Marvin drove the car over the Bonneville Salt Flats for 24 hours, setting 54 performance and endurance records in the process. Ab Jenkins was an amazing 73 years old at the time.

If the car is located, Allen hopes to purchase it for a new museum being established in Salt Lake City. In an article he wrote for the September 1956 issue of *Motor Trend*, Ab Jenkins stated, "The car I drove was an 860 two-door stock Pontiac, 285-hp engine. It was fully equipped including radio, heater and defroster."

The Pontiac averaged 126.02 mph for the first 100 miles and 118.375 mph for 24 hours. The one-day run broke all American unlimited and Class C records existing at that time, including records that Jenkins himself had set in a special Duesenberg racing car 24 years ear-

lier. During the 1956 run, temperatures up to 123 degrees were recorded.

Lou Moore of Pontiac was a friend of Jenkins, who the driver had visited during the 1956 NASCAR Speed Trials, in Daytona Beach, Fla. While there, Jenkins told Moore that he could use a new dual-carburetor Pontiac to break records at Bonneville. Moore set things up with Pontiac chief engineer George Delaney, but passed away of a heart attack before Ab's run took place. His death delayed the start of the marathon run until June 25.

NASCAR, Continental Oil Co., Firestone Tire Co. and Pontiac Motor Division teamed up to carry off the promotion. NASCAR president Bill France visited Pontiac to check over two stock cars and seal them. They were shipped to Salt Lake city and were securely stored in a garage there. A 10-mile circular course was created for the endurance trial.

One newspaper reporting on the event quoted Ab Jenkins' wife as saying at the finish, "Now the trouble begins... now he'll insist on driving home!" Ab Jenkins drove for 18 of the 24 hours and 36-year-old Marvin was behind the wheel for six hours. "I think it was a remarkable event for Pontiac," Dave Allen says. "And that Ab was 73 when he did it is equally remarkable." cessive fuel spilling could result.

A third problem was a lag on acceleration. To solve this, a new accelerating pump plunger (part no. 7010846) was released. The redesigned plunger reduced the initial discharge of fuel from the accelerating pump system.

Selected Specifications Strato-Streak V-8

Туре

Bore x Stroke Displacement Compression Valve Arrangement Valve Lifters Maximum Horsepower Maximum Torque Fuel Required Carburetor 90-degree V-8 3.94 x 3.25 316.6 cu. in. 10.0:1 In head Hydraulic 285 @ 5,100 rpm 330 @ 3,600 rpm 97 research octane Rochester Model No. 7009820 Wing-Type Oil Bath

Air Cleaner

■ <u>Suggested reading</u>: "Pontlac V8 Engines Factory Casting Number and Code Guide, 1955-81." Available at www.shopoldcarsweekly.com. Item #Z9577 saratoga automobile museum presents



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4th Annual

Saturday, August 21

TUPELO AUTO MUSEUM HOSTS RAGS TO RICHES TOUR

The Tupelo Automobile Museum will host its fourth annual Rags to Riches Tour Saturday, August 21. The classic car cruise commemorates the ride Elvis Presley and his family took when they moved from his hometown of Tupelo, Mississippi, to Memphis, Tennessee. The cruise begins in Olive Branch, Mississippi, and travels down the old twolane Highway 78 to Tupelo. Cruisers will stop for a tour of the Elvis Presley Birthplace and the Tupelo Automobile Museum. The first 125 registered participants will receive a barbecue lunch at the Automobile Museum. The day ends with a cruise to Holly Springs, Mississippi, for a tour of George Poteet's Ford Farm.

The Tupelo Automobile Museum showcases over 100 classically restored automobiles, which were acquired by connoisseur and broadcast executive the late Frank Spain. The collection is valued at more than \$6 million with cars ranging from an 1899 Knox, a Duesenberg, and two Hispano Suizas to a Tucker, a Lincoln owned by Elvis Presley, and a never-driven Dodge Viper. Hundreds of antique automotive signs, an old-fashion garage replica and a collection of all-original Elvis movie posters are also featured. For more information about Tupelo Automobile Museum, hours of operation, or to pre-register for the Rags to Riches Tour, visit www.tupeloautomuseum.com <http://www. tupeloautomuseum.com> or call 662-842-4242.

a classic car cruise hosted by the Tupele Automobile Museum consistent cum/special php 662-642-4242