DODGE FOURS FOUND IN STRONG POSITION

Line Which Brought Fame and Fortune To Founders Being Improved

When Dodge Brothers, inc., brought out their Victory Six many dealers inquired of the factory if the four cylinder line would be dropped and at once began emphatically emphasizing to the sales heads the value and position in the automobile market of the oldest of the Dodge models.

This four cylinder model has and has been equipped with four been improved greatly this year wheel steeldraulic mechanical brakes. The price remains the same with the exception of a drop of $25 on the de luxe sedan which now sells for $950 fob Detroit. Improvements and refinements have been made with regularity from the first. There are over two million of the four cylinder Dodges in use which is an indication of the strong place this car has in the automotive field. The supplying of four wheel brakes to the four cylinder passenger cars constitutes a major improvement.

A unique feature of this system part of the mechanism supported is the connection between that on the frame and that on the axle which is through a special flexible connection, eliminating the complicated universal points and shafts usually associated with mechanical four wheel brakes. This connection consists of a steel cable, passing through the center of short steel guides or vertebrae, the ends of which are rounded and cupped so that as they fit together, they form a series of ball-and-socket joints, permitting a considerable amount of bending. These guides are supported in a coiled spring casing around which is placed a heavy protecting cover of rubber fabric.

This construction possesses sufficient rigidity to transmit tension in the cable without changing form. The shape of the joints in the conduit is such that the length along the center line does not change, when the conduit is bent, therefore the brake action is not affected by the turning of the wheels, spring action or body roll.

Another unique construction is the brake shoe which floats on the brake support, not being fastened to the anchor pin and therefore is not affected by eccentricity of the brake drum. The brake shoe itself is of pressed steel, the rear half being rigid and the front flexible, giving a full wrapping action on this half when the brake is applied. The shoe is expanded by a toggle, moved by pull from the cable through the flexible connection, and returned to the released position by a cross spring in the brake shoe. The shoe is held in position by the anti-rattler spring which holds it against the anchor pin and the brake shoe stop.

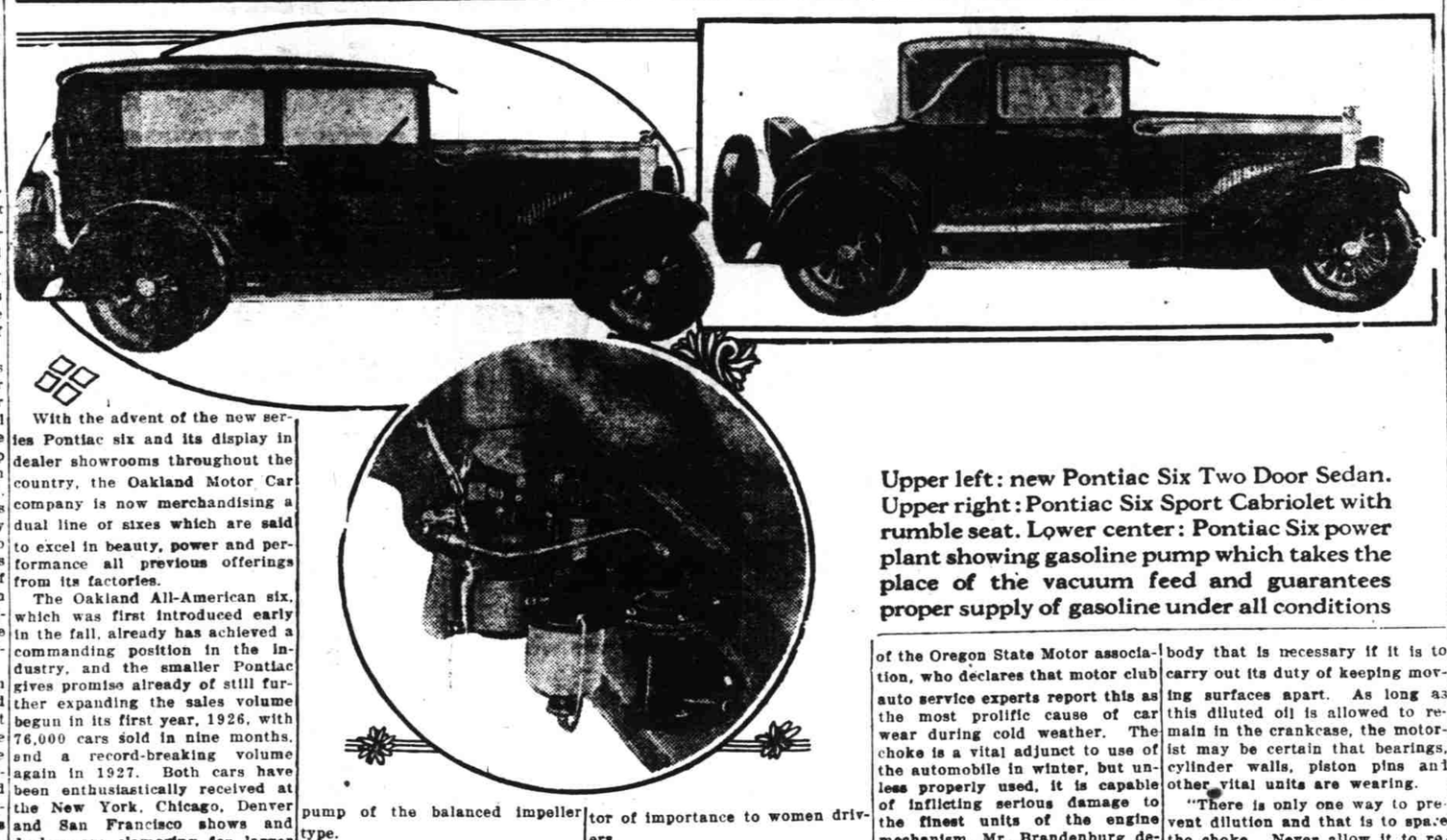
The brake linkage is very simple, consisting of a tubular cross shaft in the frame with double levers on each end, which connect through pull rods to the flexible connections to each wheel, and connections on the cross shaft to the brake pedal. The connection to the brake pedal if by double rods giving a push-pull action, which eliminates side thrust from the cross shaft.

Anti-rattlers on the rods, and springs on the crosshaft keep the linkage in tention at all times to prevent rattles.

The brake drums are of the same flanged design used in the Dodge Senior sixes protecting the mechanism from dust and mud. An inspection hole in the brake drum between the spokes of the wheel, allows brake adjustments to be made without removing the wheels.

The Oregon man who bet 50 cents he could get a billard ball in his mouth lost $4.50 on the operation and the doctor's bill of $5 was moderate at that.—Topeka Capital.

Pontiac Six Offers Many New Features for 1928



Upper left: new Pontiac Six Two Door Sedan. Upper right: Pontiac Six Sport Cabriolet with rumble seat. Lower center: Pontiac Six power plant showing gasoline pump which takes the place of the vacuum feed and guarantees proper supply of gasoline under all conditions

With the advent of the new series Pontiac six and its display in dealer showrooms throughout the country, the Oakland Motor Car company is now merchandising a dual line of sixes which are said to excel in beauty, power and performance all previous offerings from its factories.

The Oakland All-American six, which was first introduced early in the fall, already has achieved a commanding position in the industry, and the smaller Pontiac gives promise already of still further expanding the sales volume begun in its first year, 1926, with 76,000 cars sold in nine months, and a record-breaking volume again in 1927. Both cars have been enthusiastically received at the New York, Chicago, Denver and San Francisco shows and dealers are clamoring for larger shipments from the big factories in Pontiac, Mich. The chassis of the new Pontiac Six with four-wheel brakes, gasoline pump, an entirely new type of radiator which prevents evaporation, semi-coincidental lock, improved carburetion, crankcase ventilation, new cylinder head, higher compression, new clutch and steering gear, heavier frame and many other mechanical advances appears to justify the manufacturer's assertion that it is "new from radiator to tail-light."

Although the new series has the same number of cars that comprised the previous line, two of the new models carry new body types representing the latest advances in Fisher design. The two new body types are the Sport Landau sedan and the Four-Door sedan, which supersede the former Landau and De Luxe Landau sedans. The Two-Door sedan, the Coupe, the Sport Cabriolet and the Sport roadster are again represented among the six body choices, but all have been completely re-designed and closed models carry the latest Fisher body creations, new Duco colors, new fenders, headlamps and many other refinements.

One of the outstanding pioneering features of the new car is a radically changed principle of engine cooling as embodied in the unique "cross-flow" radiator, from which it is practically impossible to lose either water or anti-freeze solution by evaporation. The water flows horizontally through the radiator cells instead of vertically as in other radiators. The water circulation is thermostatically controlled and the flow is maintained by a new water pump of the balanced impeller type.

Among other important changes on the engine are the adoption of the G-M-R cylinder head and the replacement of the conventional vacuum tank with a gasoline pump, two late developments both of which were pioneered successfully on the Oakland All-American six.

The new G-M-R cylinder head (developed by General Motors Research engineers) is of the same type that eliminates spark knock and roughness in the Oakland All-American six. It gives an impulse to the car comparable only to the smoothness of the steam engine and has also enabled the Pontiac compression ratio to be raised to 4.9 to 1.

The gasoline pump, operated from the camshaft, assures a proper supply of filtered fuel at all speeds.

A combination pressure and suction type of crankcase ventilator has been added, which prevents fumes from entering the body compartment and decreases dilution of the engine oil by condensed water vapor, the vapor being discharged underneath the car before it has reached the condensation point.

The new design clutch is very similar to that of the Oakland. It may be shifted with even greater ease than the clutch on the previous Pontiac sixes, requiring only a light pressure on the foot pedal, a feature especially attractive to women drivers. A new steering gear design of higher ratio and with burnished bronze bearings together with a new 17-inch wheel carrying finger rips on the inside of the rim has measurably improved steering ease, another factor of importance to women drivers.

A new semi-coincidental lock has been incorporated in the transmission. It is operated from the ignition switch by the switch key. Thus a turn of the switch key locks both ignition and transmission without danger of soiling hands or gloves. A position has been provided so that the ignition may be turned off without locking the transmission.

Although the New Series Pontiac six retains its former wheelbase of 110 inches for ease of handling and parking, the car has the appearance of being considerably larger and more sturdy than its predecessor. This effect is achieved principally through the larger, deeper radiator, surmounted by its new Indian head radiator cap. This year the radiator and the new raised panel on top of the hood are nearly two inches higher than in 1927. Full crown fenders with hood sills completely covering the front of the frame gave distinction to the front of the car.

CHOKING OF AUTOS DOES LITTLE GOOD

Some Times Choke Necessary But Usage Should Never Be Abused

In spite of all the warnings that have been issued, motor car owners are continuing this winter to "choke their cars to death," says George O. Brandenburg, secretary of the Oregon State Motor association, who declares that motor club auto service experts report this as the most prolific cause of car wear during cold weather. The choke is a vital adjunct to use of the automobile in winter, but unless properly used, it is capable of inflicting serious damage to the finest units of the engine mechanism, Mr. Brandenburg declares.

"Automobile experts associated with this club point to the fact that notwithstanding the comparative mild climate of Oregon that there are certain crisp mornings such as occurred during the recent cold snap that make the use of the choke necessary," continued Mr. Brandenburg, "but this use should not be abused.

"The function of the choke is to cut off the air at the carburetor, thus enricvhing the gasoline mixture for cold weather starting. The instant the engine has fired, the choke should be pushed in. If it is not, raw gasoline will gather in the combustion chamber of the cylinders, and seep down the walls and into the crankcase where it will mix with the lubricating oil. Diluting this oil, it robs it of the body that is necessary if it is to carry out its duty of keeping moving surfaces apart. As long as this diluted oil is allowed to remain in the crankcase, the motorist may be certain that bearings, cylinder walls, piston pins and other vital units are wearing.

"There is only one way to prevent dilution and that is to spare the choke. Never allow it to remain out an instant longer than is necessary to bet the engine started and to keep it running when it shows signs of stalling. Motor club service men find literally thousands of cases where this precaution is not being taken. The club feels itself duty bound to reiterate this warning, one of the oldest but most sorely need in motordom."

SELF ADJUSTING TIE ROD ENDS

The ball and socket type, steering knuckle tie rod ends on Dodge Brothers Senior and the new Victory Six are provided with an ingenious arrangement for taking up automatically any wear or play. Two crescent shaped hardened steel pieces held in place by a retaining spring surround the ball. The spring automatically moves the shoes in a circular path far enough to take up any lost motion. This construction is said to aid materially in preventing any tendency toward shimmying.

THREE ROLLER BEARINGS FOR VICTORY DRIVE PINION

The drive pinion of Dodge Brothers Victory Six is straddle mounted between a straight roller bearing and two tapered roller bearings. The latter take thrust both ways and are adjustable to provide means for securing proper meshing of the pinion and ring gear. The pinion is integral with the short pinion shaft and both the pinion and the ring gear are of heat treated chrome vanadium steel.

Read the Classified Ads