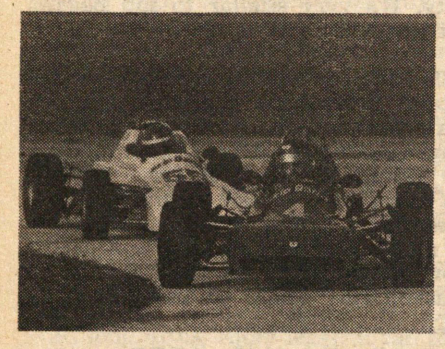
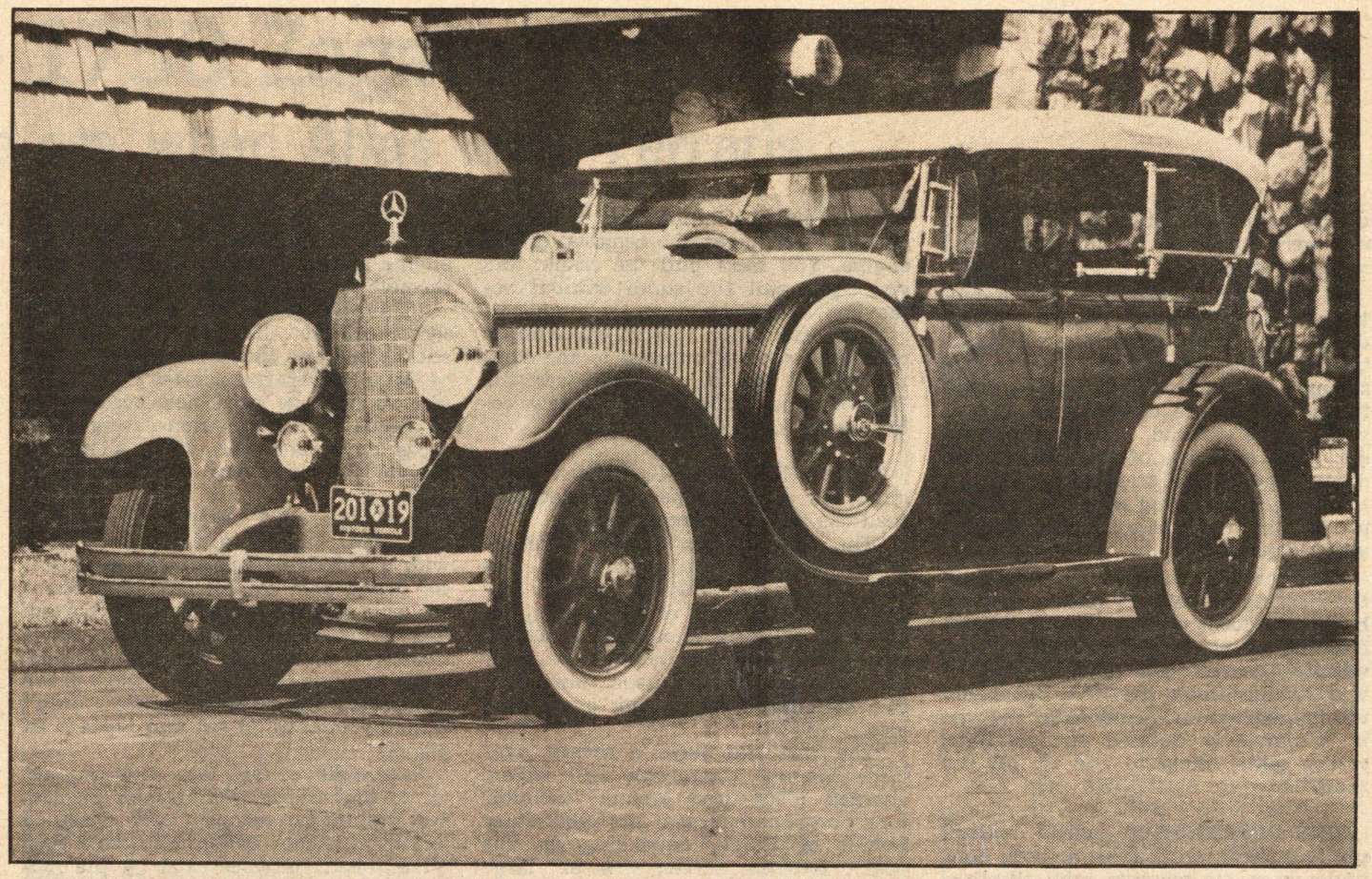




Mercedes-Benz 24/100/140

The touring car that spawned a generation of race cars

By John Mulhere

Ferdinand Porsche wanted to build a racing car in 1923, but the board members of Daimler-Motoren-Gesellschaft wanted a prestige touring car. What Porsche gave them was the 24/100/140, a car that at once satisfied the Mercedes penchant, present even in those early days, for a luxury car that fit into the highest segment of the market and also gave Porsche a base from which he would later spawn such great Mercedes-Benz race cars as the K, S, SS, SSK and SSKL.

The 24/100/140 in touring form hardly seems a machine capable of siring such a distinguished line of racing progeny. Its huge size and mass and attendant luxury seem more consistent with the Mercedes-Benz sedans of the '50s than with the sleek speedsters the firm raced to victory in the late '20s and '30s.

ONE DOESN'T slip into this Mercedes-Benz, one has to *step* into it, using both legs and being rather deliberate about it.

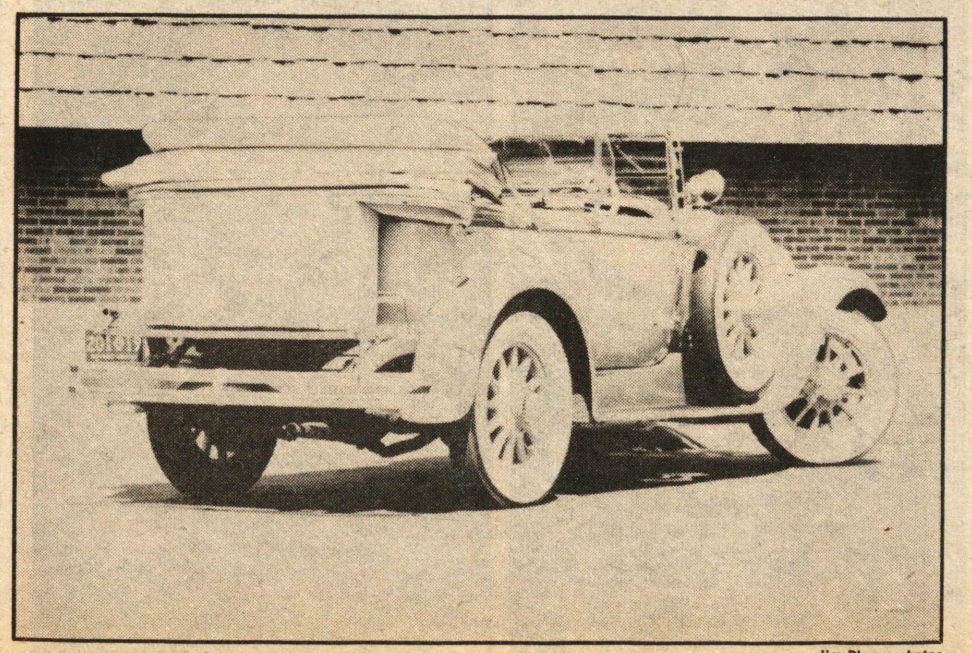
The first step takes you up to the running board, about 10 inches off the ground, and after unlatching the door from the inside—there are no exterior door handles—the next step takes you nearly another 10 inches into the carriage itself.

It's not mandatory, but a firm grasp on the mammoth steering wheel can help ease you into the right-hand driver's seat with minimal loss of balance. The steering wheel is quite a production in itself, giving the appearance of three concentric circles cut into quadrants by four supporting spokes. Outermost on the steering wheel is a thick, finely polished wooden circle about 20 inches in diameter. Inside that is a thinner circle made of brass, and the innermost circle is formed by the steering hub which bears the Mercedes name and the Daimler three-pointed star, flanked by red and black arrows.

Gauges, alternating between black surfaces with white numerals and white surfaces with black numerals, run the entire length of the leather-bound panel in front of you. The ones at the extreme left are so removed from the driver's view as to be useless without assistance from a copilot.

Below the steering wheel, at the driver's feet, is a curious assortment of three brass pedals, all bearing the Daimler star. The accelerator pedal, located in the middle, is about two-by-three inches and recessed somewhat further back than the three-by-four-inch brake pedal on the right and clutch on the left.

At the driver's right are the gearshift lever and handbrake, while in front of him is a split windscreen with adjustable top portion. Peering back through the windscreen, at the end of the tapered hood is yet another Daimler star.



Jim Plegue photos

THE HISTORY of the particular 24/100/140 we rode in (it was licensed and, presumably, insured, but we weren't able to drive it) is rather sketchy. The car currently belongs to Richard A. Kughn, owner of Classic Auto Restoration, Farmington, Mich., who purchased it along with a '37 Cord from the Auburn-Car-Duesenburg Museum about a year and a half ago.

Accompanying the car, which seems to have undergone restoration once already, was a letter stating that the chassis, complete with engine, had been purchased in 1927 and then shipped to a coachbuilder. The car still bears two nameplates from Erdmann & Rossi Karosserie, Berlin-Halensee, a German coachbuilder of the period from which there are still many existing Mercedes-Benz bodies in existence.

Judging by the profusion of Mercedes and Daimler stamps on the car and the absence of anything identifying it as a Benz product, it is conceivable it was built at the Daimler factory prior to the two companies' merger in 1926 and sold after that although it is registered as a '27. Mercedes-Benz records are quite good back through 1927, but are somewhat incomplete beyond that point.

The 24/100/140, according to Mercedes-Benz' histories, was manufactured from 1923 through 1926 in both touring and sports models. Equipped with a

6.25-liter inline six with supercharger, the car produced a peak horsepower rating of 100 when normally aspirated and 140 when the supercharger was engaged, hence the model designation. The 24 figure is derived from a complicated calculation used to tax car owners in Germany during the era and was known as "taxable horsepower."

THE ENGINE compartment on the 24/100/140 is a remarkably clean and simplified area. The huge, elongated six-cylinder extends almost the length of the entire compartment, with all of the accessories — centrifugal water pump, generator and Bosch ignition unit—neatly arranged along the right-hand side of the block. Both the cylinder block and head are constructed of cast iron. An overhead camshaft is driven by worm gears on a vertical shaft located off to the right at the rear of the engine.

The Roots-type supercharger manufactured under patents from Wittig's, is located at the front of the engine, and is designed to temporarily overcharge the engine.

"The primary objective of the supercharger," says the 24/100/140 owner's manual, "is to impart to the car a higher acceleration on starting and on climbing by increasing engine power . . . the supercharger often avoids a gear changing onto lower speeds and allows of (sic) obtaining a particularly high velocity."

When the supercharger kicked in the power output of the engine zoomed from 100 to about 140 horsepower.

THE SUPERCHARGER itself is activated through a set of cranks and rods connected to the throttle pedal. When the accelerator is depressed between two-thirds and three-fourths, the supercharger is automatically activated. Under normally aspirated conditions, the 6.25-liter reaches its peak 100 HP at about 2,800 RPM. Under the maximum 6-PSI boost from the supercharger, the engine reaches the peak 140 HP at about 3,100 RPM.

In full touring trim, the 24/100/140 was capable of speeds up to 72 MPH, pulling a 3,200-pound chassis and a carriage weighing another 2,000 or so pounds.

In sports trim, the 24/100/140 reportedly could attain speeds in excess of 90 MPH. Comparatively slow, yes, but given the weight handicap, the saving grace Porsche saw in the car becomes clearer: It's brutish powerplant. When the 24/100/140 was lowered and its chassis shortened by Porsche in 1926, the stately but slow 24/100/140 became a prototype for some of Mercedes-Benz' most successful race cars ever.

Unfortunately, the same could not be said for the chassis, suspension and transmission on the car. Although we weren't able to drive the 24/100/140, we were able to gain some insight into its road behavior through riding in it and questioning our driver.

IF THE POWERPLANT showed promise, the chassis and suspension boded disappointment. The earliest 24/100/140s had semi-elliptical rear leaf springs that were cantilevered from the frame, while the normal semi-elliptical leafs in front were directly attached to the high-slung frame. This odd arrangement in the rear was modified in 1926, when the rear suspension was changed to normal semi-elliptical springs. Still, the ride quality, even for short jaunts at well below its capable speeds, was a bit nerve-wracking. At full gallop, a ride in the 24/100/140 must have approached the suicidal.

The transmission uses four speeds, none in constant mesh. A dog clutch engages the direct-drive and all others are selected by sliding gears on the mainshaft into engagement with those on the countershaft. As a result, the system demands exact synchronization for quiet engagement—a near impossibility judging by the mashing sounds coming from the car and the pained look on our driver's face.

The steering appears tremendously heavy, and the simplest of turns are accomplished only with a great amount of effort from both arms. Adding to this problem is tremendous wheelbase — 12.3 feet.

It seems inconceivable that this rather ceremonial touring car with its many shortcomings would lead to development of such a long line of racing thoroughbreds in the following years.

Yet, with the marriage of Daimler and Benz in '26, the 24/100/140 became the amalgamated company's flagship. And its shortened, lowered and lightened versions were seen at the forefront of almost every type of racing for the next eight years.