

# Extended Pontons

## The six-cylinder models

The first six-cylinder Ponton appeared in 1954, only a year after the range's introduction with the 180, and more or less concurrently with the 180D. The new model 220, known technically but never by badging as the 220a, was launched at the Geneva Show in March 1954; full-scale production began in June, and the cars replaced the old W187 separate-chassis 220 saloons in the showrooms for the 1955 season.

Although the 220a shared the construction of the four-cylinder Pontons and resembled them closely in styling, it was in fact a rather better-proportioned car with a longer wheelbase and bonnet. These differences of size earned it the new type designation W180. The extra bonnet length, of course, was to accommodate the six-cylinder engine, while the extra length in the wheelbase was given over to the rear passengers' legroom, and was reflected in the body by wider rear doors. In addition, the rear passengers benefited from a larger rear window than was fitted to the four-cylinder cars.

As they would later do so often, Daimler-Benz used brightwork to help identify the prestige model of the range. Chrome indicator housings on the front wings picked up a theme from the older 220 model (they replaced the ugly indicator housings of the four-cylinder cars), and chrome was used for the drip mouldings, a band below the side and rear windows, and a strip on the rear wing pressing line. These were matched by twin aluminium strips on the sills and an aluminium stone-guard at the leading edge of the rear wing. The radiator grille was broader and more raked, while new full-size wheel trims with slotted rims bore a larger Mercedes-Benz star emblem. At the rear, there were larger light clusters and a bigger

chromed boot handle at the bottom of the lid. Twin fog-lights fitted as standard concealed the new air intakes at the front, which were now just above the bumper valance (where they picked up exhaust fumes, dust and mud – which was certainly not the intention!). Front and rear doors all had quarter-lights, those at the front swivelling to give draught-free ventilation, while the fixed panes at the rear enabled the smaller winding windows to retract fully into the doors. The 220a came in five standard colours, of which black was probably the most popular.

If the body of the old 220 had been outmoded, its engine was certainly not, as it had only been introduced in 1951. So the 2,195cc overhead-camshaft unit was taken over for the six-cylinder Ponton model with a few modifications, which added 5bhp and put the safe crankshaft speed up by 20% to 6,000rpm. The major changes were the new light-alloy cylinder head accompanied by new pistons and a higher compression ratio, but there were also a new carburettor and distributor, plus a new camshaft and altered valve timing. Durability had received attention, and a paper-element oil filter was fitted, which had the additional benefit of lowering service costs by nearly trebling the mileage between oil changes. A more powerful water pump ensured that the increase in operating temperatures brought about by the higher engine speeds would be kept under control, and as petrol quality was still very variable in certain parts of the world, a dash-mounted octane selector was fitted. The 220a could run without misfiring on the very lowest grade commercial petrol with its ignition fully retarded, but it could not then be expected to attain the near-100mph maximum speed



Introduced in 1954, a year after the announcement of the 180 Ponton, the 220a was built on a longer wheelbase, offering extra space both for the six-cylinder 2,195cc engine and for rear passengers, as well as achieving better-balanced styling.

possible under optimum conditions.

Like the 180, the 220a had dispensed with central lubrication and now had 24 greasing points in the running gear. The 220a also scored two notable 'firsts', being the first petrol-engined Mercedes-Benz to follow the European trend with a 12-volt electrical system (the diesel models already had them to cope with heavier starting loads), and the first Mercedes-Benz road car to use the single-pivot swing-axle rear suspension already described in the previous chapter. Its clutch and gearbox were identical to those of the 180, although the 220a had higher ratios in the indirect gears and a slightly lower axle ratio. The column shift was also retained, although in the six-cylinder car it always seemed rather more positive. As for the brakes, which were without any doubt the 180's weakest point, the 220a had finned drums all round, supplemented by cooling slots in the wheels and wheel trims, and twin-leading-shoe brakes with their inherent self-servo effect at the front.

To complete its prestige package, the 220a had a higher-quality interior than that in the four-cylinder cars. There was wood on the dashboard and on the door cappings, and a grab rail

with coat hooks like that in the 300 series was fitted above the side windows. Rear interior lights and twin sun visors were standard, and the remodelled instrument panel featured a strip speedometer in place of the 180's conventional round dial. The clock in the centre of the dash was now an electric one, and the driver was given an extra lidded glove box on his side of the fascia. Options included a screen washer, twin blowers for the heater, a radio (the expensive Becker Mexiko set), a fabric sunroof and the usual set of fitted luggage.

If the improvements introduced during 220a production are any guide to the car's faults, it would seem that the first examples had both stopping and starting problems. From spring 1955, some production cars were fitted with what was described as an experimental 'brake booster', and then, after the Frankfurt Show, an ATE vacuum servo became standard equipment, together with Alfin iron/aluminium drums at the front, which greatly improved both cooling and anti-fade properties. A bigger battery was also introduced for the 1956 season. Though the 220a lasted only one more year – for even better models were waiting to go into production – annual sales



The sleeker lines of the 220a as compared with the 180 are clearly evident here. The foglamps were a standard fitment and the six-cylinder cars could also be identified by the indicator light housings above the headlamps.

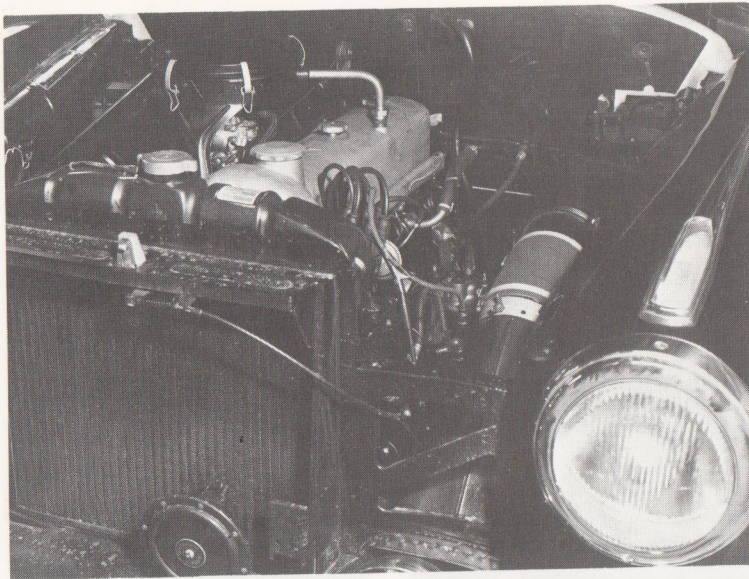
Inside the boot of a 220a, a model which set new standards for medium-sized saloons and was widely influential. This picture came from the archives of the Rover Company, who had a 220a for evaluation in the mid-1950s.

averaging nearly 13,000 during the two years of its production were ample demonstration that Daimler-Benz had already produced a winner. These figures were closely similar to annual averages for the 180, which meant they were extremely good for a car in the 220's more elevated market sector.

#### **1956: The 219 and 220S**

When the 220a stopped production, it was replaced by not one, but two new six-cylinder Ponton models, which arrived for the 1957 season along with the four-cylinder 190. The point of launching two replacement models was to cater more exactly for the requirements of what Daimler-Benz had identified as the two main types of 220a customer, and thus to broaden the market for the six-cylinder Pontons. The 219 was aimed at the buyer who wanted six-cylinder performance rather than prestige and refinement, and was targetted specifically at Opel's successful Kapitän model; the 220S, on the other hand, was aimed at those who were prepared to pay extra for luxury features and expected a six-cylinder engine as part of the package. Although the 220S was based closely on the



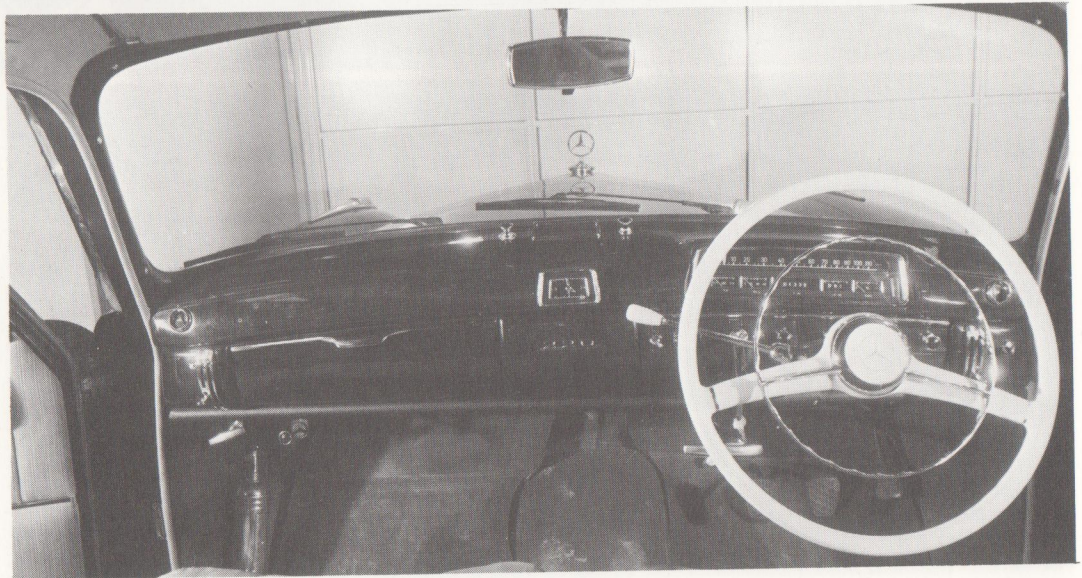


The overhead-camshaft six-cylinder engine installed in the 220a being assessed by Rover. Maximum output of 85bhp was achieved at 4,800rpm.

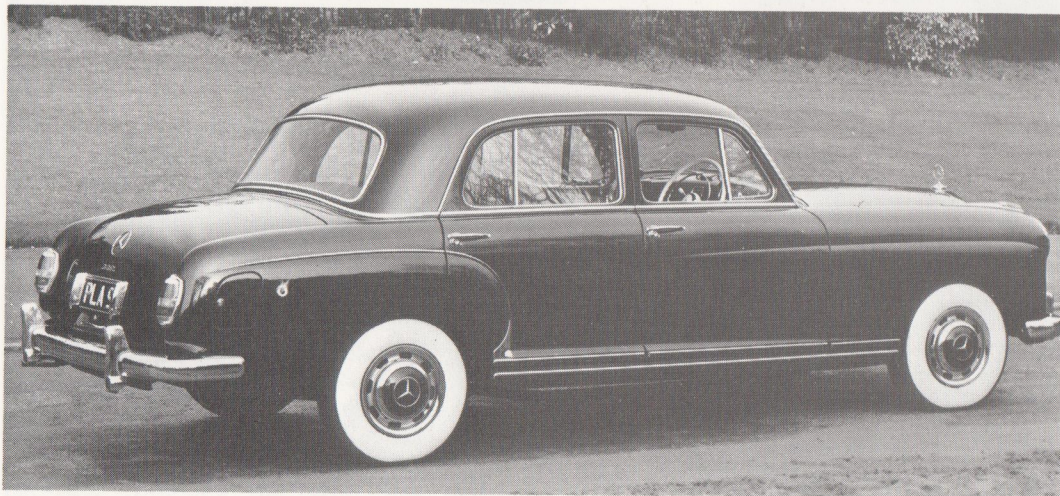
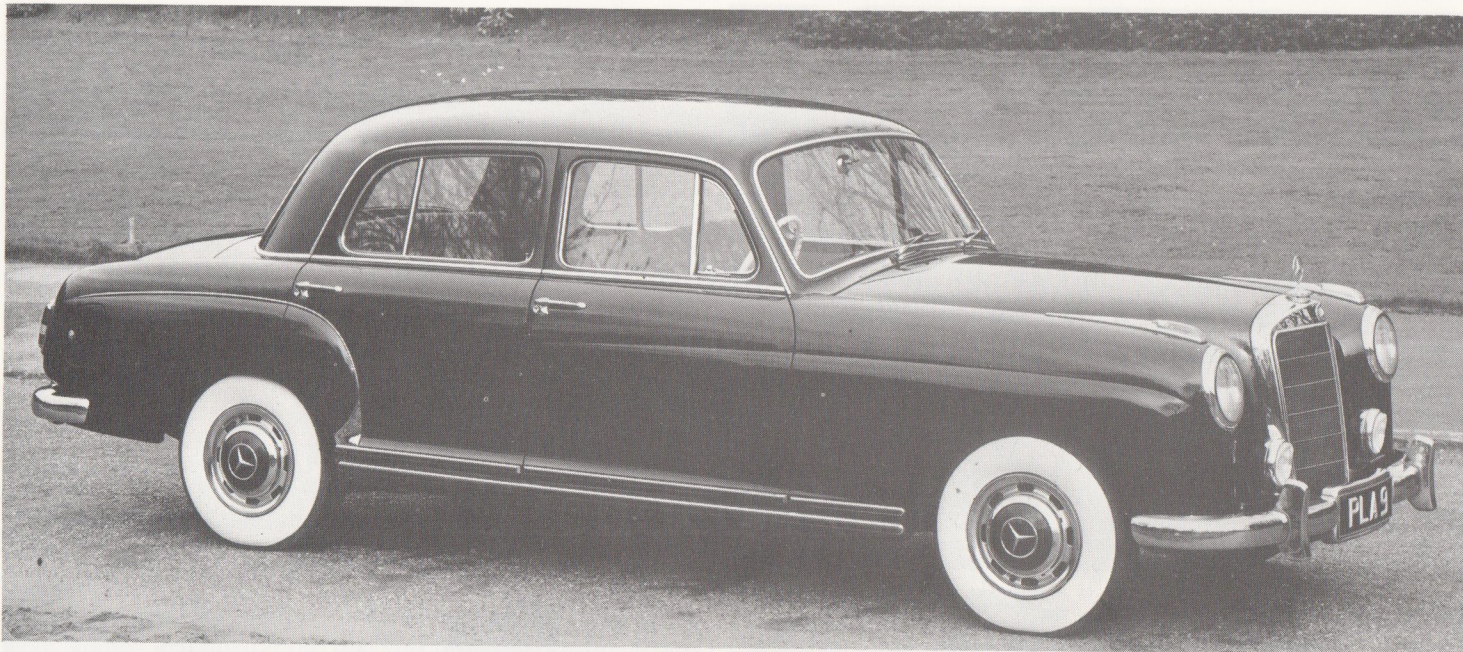
superseded 220a and retained its W180 type-designation, the 219 was very much a different car and was given the special type-designation W105.

The main reason for this was that the 219 was actually a hybrid, combining the short 180 body with the longer bonnet of the six-cylinder models. Thus although its wheelbase was longer than that of the four-cylinder cars, that extra length lay between bulkhead and front axle, and rear legroom was to four-cylinder standards. Since the engine was the same 2,195cc overhead-camshaft unit as in the 220a and the car was a few inches shorter and therefore lighter than the superseded model, its acceleration was somewhat enhanced, although maximum speed remained more or less the same. However, the smaller petrol tank of the four-cylinder models came with the 180-type bodyshell, and so the car's touring range was less than that of the larger-tanked 220a.

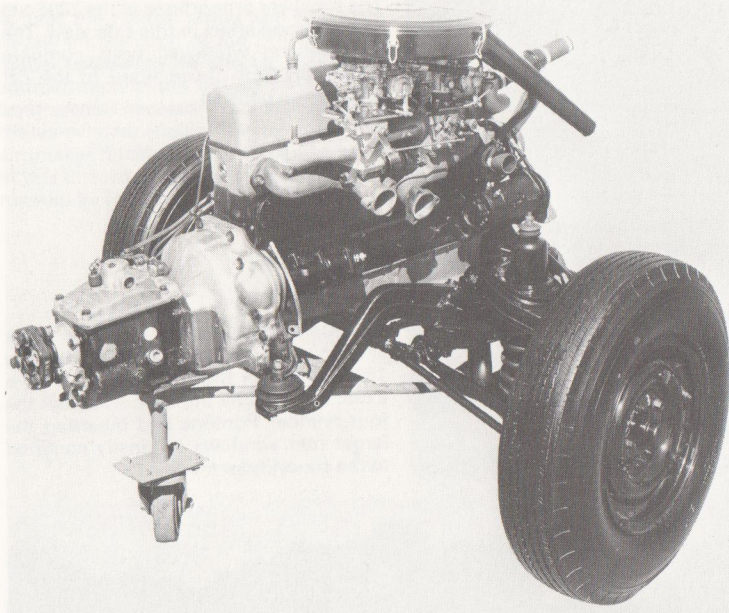
It was not difficult to spot a 219, as it looked rather like a stretched 190, with the same discreet levels of bright trim, and it lacked the twin fog-lamps of the 220a unless these were specified optionally; but the 220S was even easier to recognize,



The interior of the 220a, the dashboard of which, incorporating a ribbon-type speedometer, was to be shared with the coupe and cabriolet models which arrived later. Rubber floor matting was a typical Mercedes-Benz feature at the time.



Broad-band whitehall tyres give this 220a a transatlantic flavour although the car is in fact a right-hand-drive example and UK-registered. Although known as a 220a, this model always carried the '220' nameplate without suffix.



The twin-carburettor 100bhp version of the 2,195cc engine as fitted to 220S models installed in the front subframe from which this series of cars derived their Ponton name.

as it added to the long-wheelbase 220a body a chrome strip picking out the front wing pressing line. Its principal difference from the old 220a lay in its engine, which was now equipped with twin Solex carburettors and put out 100bhp – ‘more power than you need’, as Mercedes-Benz advertisements had it. The peak of the torque curve had risen by 900rpm, and the engine was both more flexible and more economical than the single-carburettor 219/220a unit. In addition, smoother running was ensured by a new four-point mounting between engine and subframe.

The 220S was a very quick car by the standards of the day, with a genuine 100mph capability in the right conditions. Yet Daimler-Benz had followed the American example for their prestige Ponton model, and its soft springing gave a boulevard ride at the expense of handling. The 220S rolled prodigiously on corners and dipped its nose markedly under braking. Fortunately, wider tyres than on the 219/220a models kept roadholding at a high standard within the limitations of the single-pivot swing-axle. Equipment levels were as for the 220a, plus a headlamp flasher as standard, but the options now included a central rear armrest, 21 special order colours in addition to the five standard paint finishes, and 26 two-tone



The 220S saloon is immediately identifiable from its 220a counterpart by the use of additional chrome to emphasize the double curve of the front wings.



The excellent proportions of the 220S are seen to good effect in this side view. The narrow-band whitewall tyres compare favourably with those fitted to the car pictured on page 94.

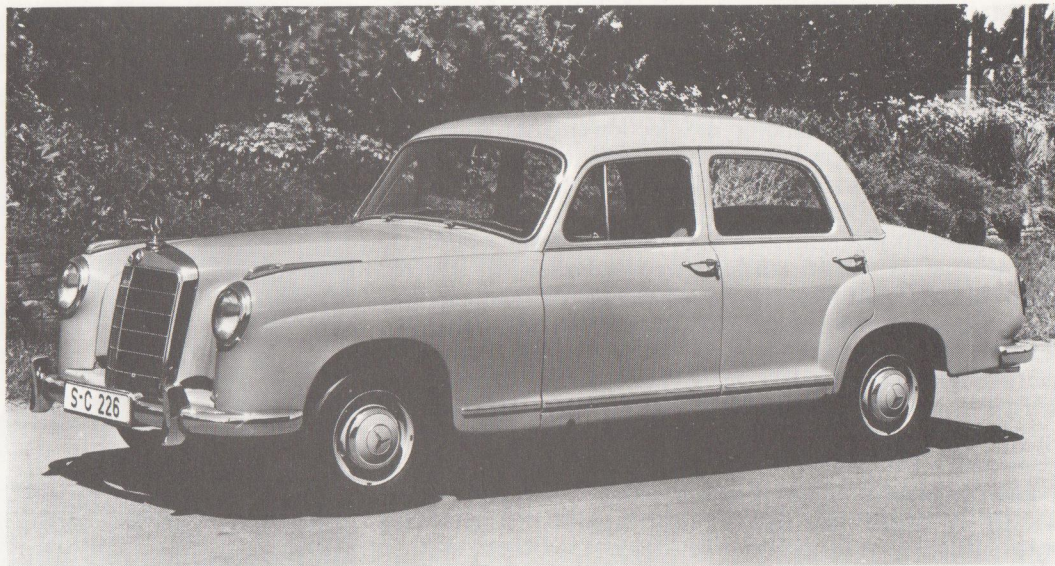
colour combinations. In spite of its undoubted faults, the 220S was pretty well without rivals in its class, and it rapidly became acknowledged as the standard by which all other medium-sized six-cylinder European cars were judged. Meanwhile, the 219 enjoyed immense success in overseas markets, and between them, the 219 and 220S put up sales of the six-cylinder Pontons by an average of around 17% annually.

Like the four-cylinder models, the 219 and 220S benefited from a series of improvements in autumn 1957 for the 1958 season. New seats and trim colours arrived, plus a collection of new options already detailed in the last chapter, and the octane selector disappeared from the dashboard to be replaced by a vernier adjustment on the distributor. Paralleling the changes to the 180, both six-cylinder models were also given uprated power units. Higher compression ratios put the 219 engine's output up from 85bhp to 90bhp and the 220S unit's from 100bhp to 106bhp, though Daimler-Benz followed their usual conservative policy and declined to mention the increased maximum speed of the 220S in their publicity literature. The 219, however, was given the higher 3.9:1 axle ratio of the 190SL sports car and altered gearbox ratios to produce not only more speed in keeping with its role as the sporting six-cylinder Ponton, but also improved fuel consumption. Both the six-

An interesting picture by Colin Peck showing the post-1957 rear lamps on a 180c alongside the pre-1957 type on a 220S. By the time the 180c was built the four-cylinder Pontons had inherited the larger rear windows originally confined to the six-cylinder models.



In 1956 the Ponton range was extended by the introduction of the 219, a hybrid model combining the shorter passenger compartment of the 180 with the longer front section necessary to accommodate the six-cylinder engine. The low-mounted air intakes flanking the grille can be seen in this picture, although often they were masked by foglamps.



cylinder models had uprated rear dampers, and both could be fitted with the new Hydrak automatic clutch.

The Hydrak was a device made by Fichtel and Sachs which gave the benefits of two-pedal control while retaining the standard four-speed manual gearbox. As such, it was typical of European attempts in the late 1950s to eliminate the clutch pedal on cars whose engine characteristics were not suitable for the fully-automatic transmissions then available. Basically, the Hydrak consisted of an orthodox clutch, which was operated by a vacuum servo as a consequence of pressure on the gear-change lever. This in itself was nothing very new, and indeed the first American automatic transmission developed by Chrysler had followed similar principles; but what was interesting was the use of a torque convertor to take up the drive progressively, plus a switch on the flexibly-mounted final-drive unit which controlled the rate of clutch engagement according to whether the car was accelerating (when the final-drive would move backwards) or decelerating (when it would move forwards). A freewheel in the driveline turned back-to-front also locked-up on the overrun to give engine braking. The concept of the

Hydrak was fine, and the use of the torque convertor did not harm performance too much through the inevitable slip, but unfortunately the Stuttgart engineers had not counted on the driving habits of the average owner. It was important to remember to lift the foot from the accelerator pedal when changing gear, just as in a normal three-pedal car, and failure to do so could produce some interesting kangaroo effects and rapid wear on the clutch friction lining. Likewise, a hand carelessly left on the gear-lever would actuate the clutch, with similarly undesirable effects, and although the Hydrak was a popular option on its introduction, cars fitted with it were difficult to sell on the secondhand market in later years.

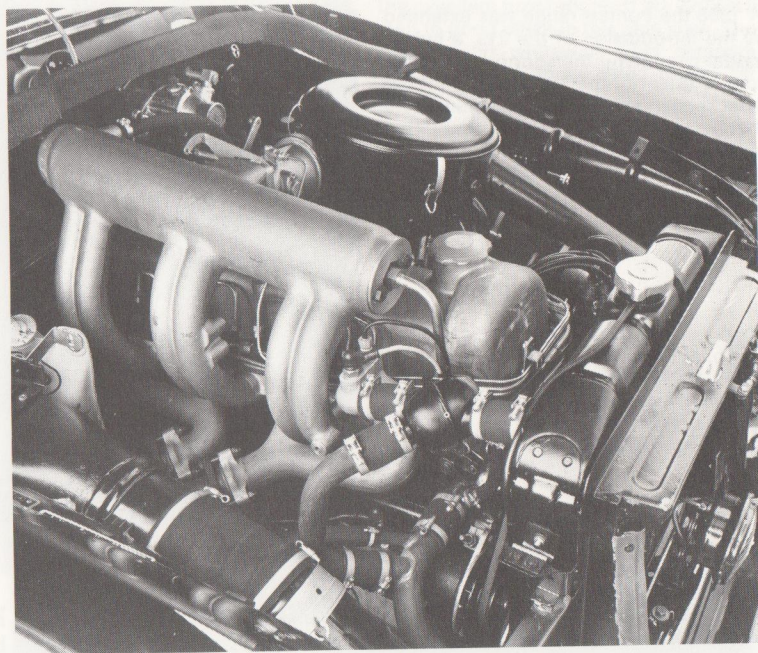
#### **1958: The 220SE**

Capitalizing on the sales success of the 219 and 220S, Stuttgart launched a new top-of-the-range six-cylinder model at the 1958 Frankfurt Show. Called the 220SE, it survived only a single season, but it was intended at the outset as a low-volume prestige model and to test the market for the planned W111 220SE model. Total sales figures of 1974 – less than 10% of

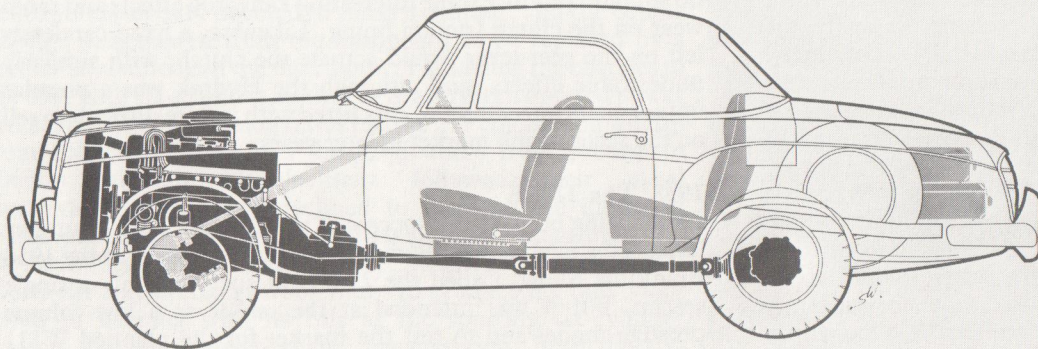


190D figures over the same period – were consequently no disappointment. In itself, the 220SE marked a notable achievement by Stuttgart, for it was the world's first *everyday* production car to use fuel injection (hence the E in its name, which stood for Einspritzmotor, or injection engine). Allegedly, the Mercedes engineers had turned to fuel injection when all other methods of uprating the 2,195cc 220S engine had failed.

The Ponton 220SE was introduced almost subtly, being an unheralded surprise at the 1958 Frankfurt Show and bearing no outward changes apart from badging to advertise its injected engine. In fact, apart from the engine and a slightly smaller fuel tank, it exactly paralleled the 220S in every way, although the engine differences were enough in Stuttgart's eyes to merit the new type-designation of W128. Fuel injection, of course, was not new to Mercedes-Benz cars, for the technology traced its ancestry to the diesel injection experiments of the 1930s, and through the 300SL of 1954 to the 300Sc and 300d prestige models. Yet, this time, it was applied to the engine of what was basically an upper-crust family saloon to give it a significant performance boost. It was a newer system than those used by Daimler-Benz before, with twin injection pumps working through a distribution system instead of a separate pump for each cylinder. There was also a special control system which



Bosch fuel injection was added to the 2,195cc engine enabling the 220SE model to be announced in 1958 with a power output of 115bhp at 4,800rpm.



Cabriolet and coupe versions were an inevitable development of the Ponton theme, although the extra weight of the two-door bodies made them more suitable for the 220S engine than for the 220 for which they were originally intended. This is the cabriolet A/C layout, which was offered with a choice of bench or individual front seats and either token or proper rear seats.

took such factors as outside temperature into consideration when regulating petrol flow; and in addition there was an overrun shut-off, which helped the specific fuel consumption of the injected engine to be better than that of the lower-powered 220S unit.

Power was increased by no more than 9bhp to give 115bhp at the same 4,800rpm power peak as the 220S, but there were significant gains in flexibility through the massive torque increase from 127lb/ft at 3,500rpm to 152lb/ft at 4,100rpm. Maximum speed was up to 103mph, while through-the-gears acceleration was improved as well. As the performance image of Mercedes-Benz cars in the North American market was a significant asset (the Americans had never quite got over the 300SL gullwing), 220SE models for that market were given even better acceleration through lower ratios in the indirect gears, although the axle ratio remained unchanged. Nevertheless, the Hydrak clutch option was often specified on the 220SE, and this did take the edge off its new-found performance.

The six-cylinder Ponton saloons all disappeared at a stroke with the close of the 1959 season, to be replaced by the W111 six-cylinder models which are dealt with in Volume 2 of this book; 219 production came to an end in July 1959 and 220SEs

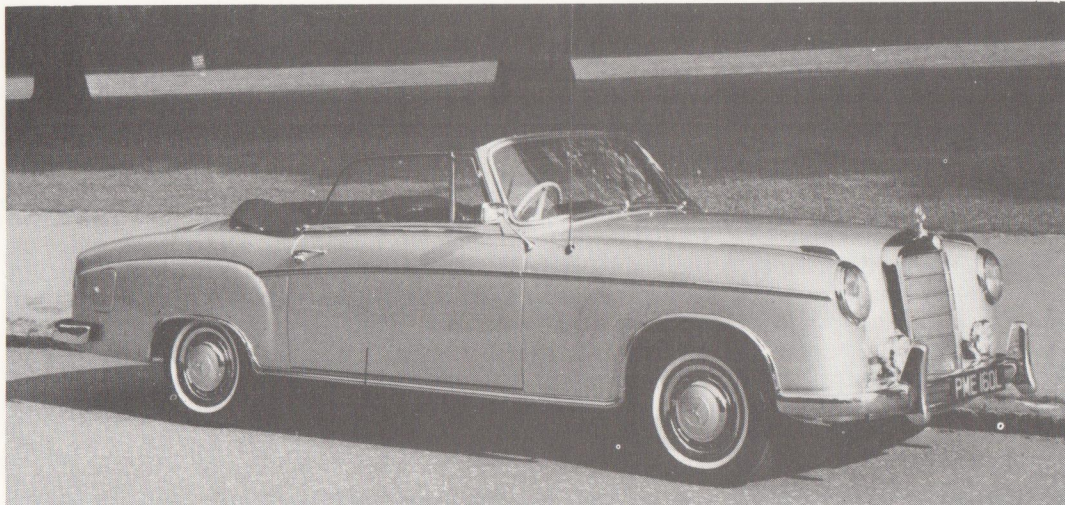
stopped coming off the lines a month later, although the rather more popular 220S soldiered on until October. Although the four models of the four-cylinder range remained in production, the only six-cylinder Ponton derivatives which survived into the W111 era were the 220SE versions of the two-door models.

### Cabriolets and coupes

The two-door Pontons made their first public bow at the Frankfurt Show in September 1955, the open models based on the old separate-chassis 220 having been withdrawn a month earlier. Two versions were announced: the 220A with either bench or twin bucket front seats and an occasional rear seat, and the 220C with a real rear seat. The Stuttgart engineers were no doubt delighted that it had taken such a short time to overcome the problems of making a unit-construction saloon into an open model, for this was the first time they had attempted such a task. To their intense embarrassment, however, the standard 85bhp engine endowed what the catalogues called the 220A/C cabriolet with a performance which scarcely did justice to the car's prestige image. The problem was that the extra reinforcement necessary in the open body had helped to put the car's weight up by 300lb over the equivalent saloon. Despite a flood of orders, management decreed that the model should not be made



A 1955 220 cabriolet with chrome strips accentuating the wing-line and the lower edge of the bodywork including the wheelarches.



Not many 220S cabriolets were made in right-hand-drive form, but this one has survived; it was originally owned by the comedian Max Wall.

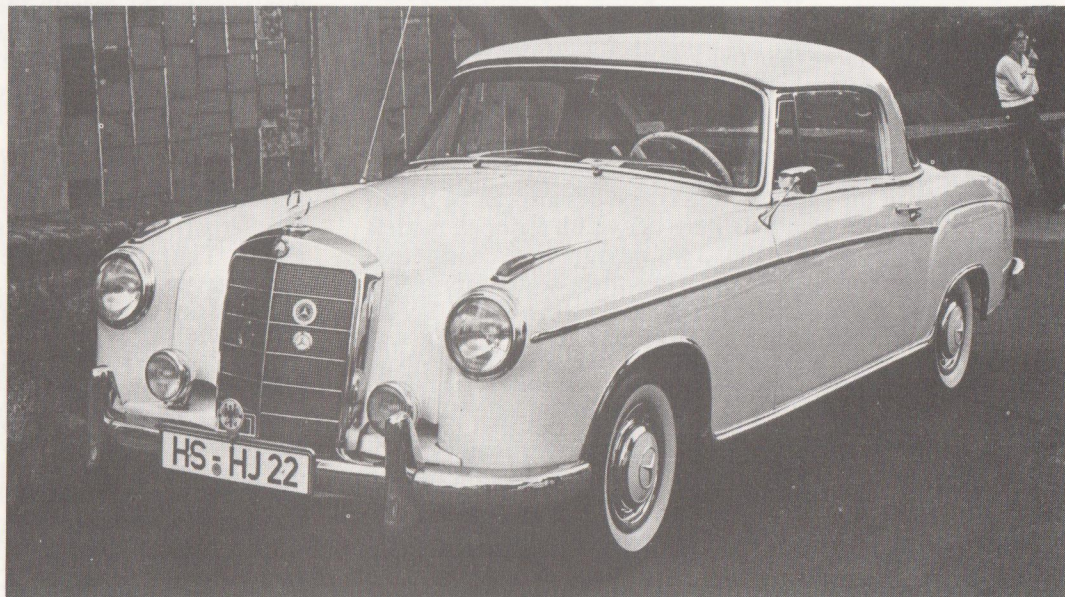


A 220S cabriolet with the top up is still an elegant-looking car, as this picture by Colin Peck reveals. Four additional badges attached to the radiator grille testify to the owner's enthusiasm.



The 220 cabriolets were almost invariably supplied with contrasting-coloured hoods, this lighter-top example making an interesting comparison with the car illustrated on the opposite page.

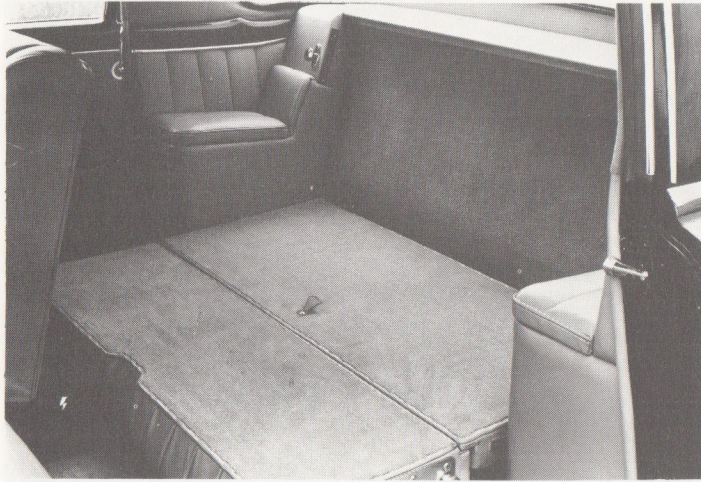
Series production of the 220 cabriolet in 1956 was followed three months later by the first of the coupe versions featuring a higher roof-line which terminated in a wraparound rear screen. Another example of a radiator grille indicating enthusiastic club membership. Photograph by Colin Peck.



available to the public.

Nevertheless, the company saved face as quickly as it was able by starting production of the open car with the more powerful 220S engine about four months after production of the 220S itself had begun. Assembly of a parallel fixed-head coupe began three months after that, in October 1956, with the effect that both models were available as part of the 1957 programme. Two years later, 220SE versions were also introduced alongside the 220S models.

The coupes and the delectable cabriolets were always intended as limited-production vehicles, and were hand-built at Sindelfingen to the very highest standards in the great tradition of the Mercedes-Benz prestige models. There were, of course, differences from earlier practice, for now the craftsmen's skills were devoted to fitting-out and finishing a body which had been mass-produced. Nonetheless, panels were individually fitted to cars in true coachbuilder's style, and this went some way to explaining why the 220S cabriolets and coupes cost nearly 75% more than their saloon equivalents, or nearly as much as a 300c



A sensible design feature of this 220S coupe is the fold-flat rear seat, which offers substantially more luggage accommodation when only two people are being carried.

luxury saloon and more than twice as much as a 219! The 220SE models were slightly cheaper in relation to their equivalent saloons, but were very definitely cars for the wealthy connoisseur, classic luxury machines rather than the sporting machines their appearance might have suggested.

The history of the cabriolet and coupe designs can be traced back to 1953, when proposals were drawn up for open models based on the four-cylinder 180. Two variants were considered: a four/five-seater cabriolet B, and a two/three-seater cabriolet A using the same short wheelbase (94½in) as the 190SL sports car, which was then under development. Body styling was essentially that of the saloons, but clearly it was felt at Stuttgart that there was room for improvement and by 1955 there had been radical changes. Quite apart from the fact that the two-doors would now only be made with six-cylinder engines, only one wheelbase length was available. This was nearly 5in shorter than that of the saloons, while the rear overhang had been extended by a couple of inches to give the bigger boot necessary in a touring car and better balance to the overall styling. As far as construction went, the floorpan had been reinforced to help

compensate for the absence of a roof in the cabriolet versions, and of course there were only two doors, which were much longer and heavier than those of the saloons, though their steel skins were stretched over lightweight aluminium frames.

The general lines of the two-door Pontons were similar to those of the four-door models, but there were distinct differences. Unlike the saloons, they had a wraparound windscreen, while front and rear wing lines were different, with heavy chrome trim for emphasis, which would be supplemented by an extra fillet ahead of the front wheelarch if two-tone paint was specified. Bright trim also ran around the wheelarches and along the sills, as on the contemporary 300Sc. The rear overhang was noticeably larger than on the saloons, and the wings terminated in huge tail-light clusters similar to those of the contemporary 300d limousine. The cabriolets had a fully retracting hood, which was easy to operate despite its immense weight and looked good either up or down; but the coupe roof was not an aesthetic success, its abbreviated form contrasting incongruously with the otherwise sweeping lines of the body. It was possible to specify the coupe with a sunroof, and many customers did. Interiors were beautifully put together with leather and wood, of course, and for the cabriolet it was possible to order the A (token rear seat) or C (proper rear seat) specification. Front seats on coupe and both cabriolet models could be bench, individual, or individual reclining type.

The extra weight of these prestige vehicles meant that their performance was not quite up to that of their saloon counterparts, and fuel consumption was also worse for the same reason. The cabriolets were the heaviest of all, thanks mainly to their massive hood frame and mechanism; but none of this deterred the buyers, who after all were interested primarily in the quality and exclusivity of the cars rather than in maximum performance. The best sales year was 1959, in which 1,414 220S and 220SE cabriolets and coupes went to their lucky new owners. A total of 3,429 two-door 220S models had been built by the time production ceased in October 1959; 220SE production continued until November 1960, and the 1,200 coupes and cabriolets built in this final season had the 120bhp fuel-injected engine of the new W111 220SEb model (described in Volume 2). A final production figure of 1,942 for three seasons, demonstrates the exclusivity of these models.