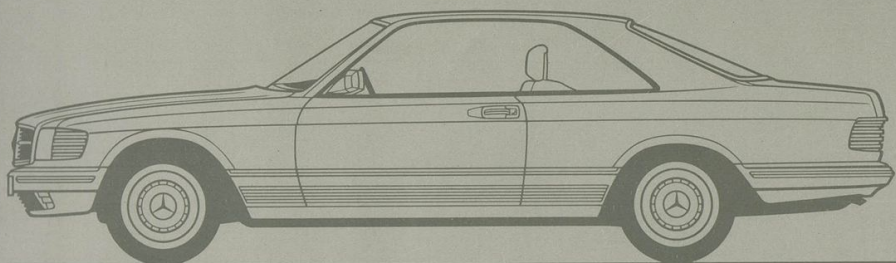


# Mercedes-Benz



# Following tradition, the latest, most elegant shape of Mercedes engineering. The new coupe

For decades, Mercedes-Benz have always built very special coupes, distinguished by their high degree of individuality. The new coupe continues this tradition.

In the new models, this individuality is expressed by the very latest developments in engineering and aesthetics.

The two new models, the 380 SEC and 500 SEC, are based on the S-class; they have the stress-minimising comfort, the safety and the performance, over the longest journeys, of the best Mercedes saloons.

Together with the attraction and appeal of a coupe; the clean, sporty lines, without any superfluous frills.

The new coupe is a rare car, in that it is a refined, sporty car, yet with no sacrifice in comfort or safety.

On the contrary, sports-car attributes have been added to the established features that are typical of every Mercedes saloon.

The way in which the unique character of the coupe communicates itself to the driver and passengers is difficult to describe, but it is there, it is positive, yet not obtrusive.

Development of distinctive Mercedes-Benz coupes has, over the years, never been an end in itself, it has always been an investment for the future.

The new coupe is a car which can contribute to modern life-style in an exciting yet totally refined way.





Aerodynamics combined with style. The result is an extremely low co-efficient of drag (0.34).

### Elegance from the wind-tunnel

The new coupes, the 380 SEC and 500 SEC, have many new features which further improve their practicality.

Further technical development has, to an appreciable extent, determined their shape. Their contemporary profile results from the integration of function and style, not from undisciplined extravagance.

Intensive efforts to lower the co-efficient of drag even further have resulted in more than a reduction in fuel consumption.

The results are obvious at first glance, from the smooth line of the body-shell and the absence of sharp edges and corners.

### Shaped for a purpose

Seen from the side, the body is wedge-shaped; the bonnet is sloped and the boot lid is higher than the bonnet. The front roof-pillars are aerodynamically angled and shaped. The roof slopes down towards the rear. These

visible modifications result in invisible, but very effective, improvements in important areas.

They reduce lift-forces at the front axle, improve road-holding, and the driver has an even better view of all four corners of the car.

The coupe concept has, of course, helped in achieving the low co-efficient of drag.

Styling features of the coupe are frameless side windows, all of which can be fully recessed. Side windows in the rear that can only be wound half-way down are a compromise that Mercedes-Benz would never accept.

Because there is no centre pillar, the view to the sides is not obstructed. Forward visibility is also generous, and fully-recessed wipers sweep 76% of the screen.



Front roof-pillar with recessed rain runnel. An aerodynamically-shaped rear-view mirror which is adjustable from inside the car.



Halogen headlamps and wrap-around indicators. Fog-lamps.



Door-handle set in dirt-deflecting panel. There is a rain-water outlet in the barrel of the lock.



Recessed windshield wipers, with overload protection.

### A beautiful shape, both functional and efficient

A number of detail features protect the bodywork against minor damage. For example, front bumpers shaped like spoilers; these also reduce lift-forces at the front axle.

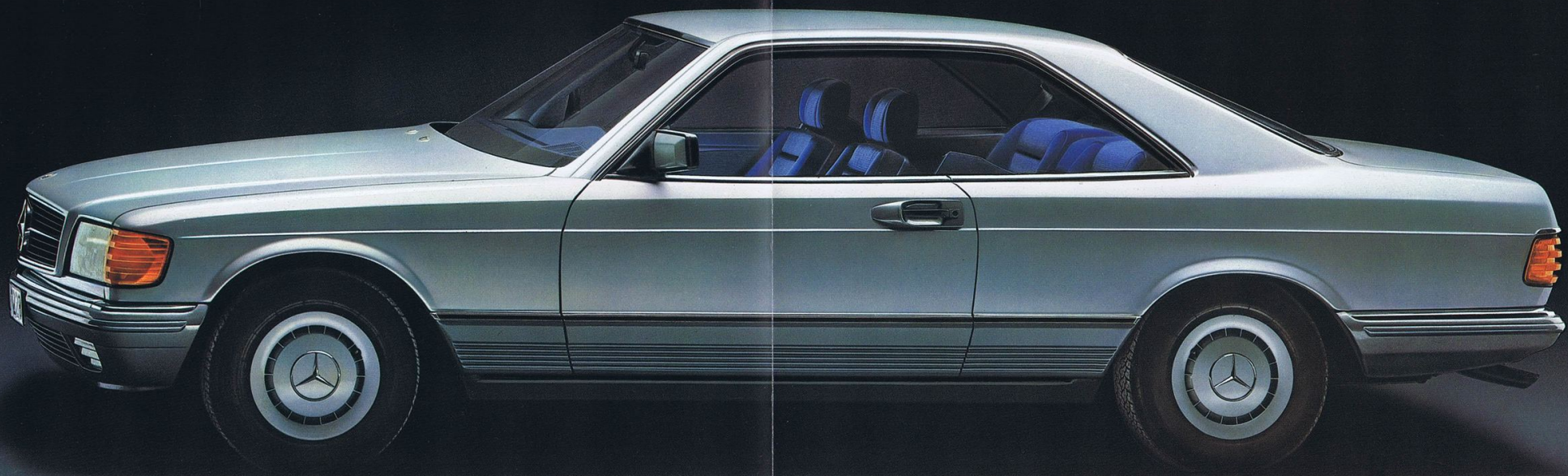
The shield extends along the sides of the car in the shape of deep protective panels, and to the rear. Bumpers and side panels are made of light, yet highly durable material and are easily replaced.

Another example of the co-ordination of all of the features is the front fog-lamps, with their "stepped" lenses, which are integrated into the lower bumper panel, so that they are protected against damage from gravel or minor impact, as well as being positioned in the right place, close to the ground.

For easy access, the light-alloy boot lid opens to a generously wide angle. Boot-capacity is the same as in the S-class saloon, 0.505 m<sup>3</sup> (17.6 cu.ft.).

### A wide range of colours

To enhance the individuality of the new coupe, there are twenty-six different paint colours to choose from, eight standard colours, nine special shades and nine metallic finishes.



# In a Mercedes coupe you don't just drive, you enjoy driving

The stress-minimising comfort of a saloon car and the distinctive styling of a coupe are no longer incompatible; in a Mercedes-Benz coupe they are combined into a totally-integrated entity.

This is illustrated perfectly by the design and finish of the interior.

You are surrounded by refined understatement and logical style. No fashion-conscious, contrived decoration, no technical gimmicks, these would be superfluous, and moreover, be susceptible to failure.

In the new coupe, shape and style are fully co-ordinated, inside and outside.

The car has been designed, deliberately, to seat four people, no more. This concept emphasises its exclusivity in two ways.

On one hand, it provides space for a standard of comfort previously unknown in cars of this type. On the other hand, the interior design underlines its individualistic, sports-car characteristics.



In the rear, two single seats, with folding centre armrest and oddments tray.

Large, wide-opening doors make access to the front seats easy. When the driver's door is open, the vacuum locking mechanism of the front seat backs is released automatically. Rear-seat passengers can also get in without trouble, they have individual seats.

Space, in the front and in the rear, is appreciably greater. There is more headroom in the rear. The slightly "stepped" shape of the backs of the front seats gives rear-seat passengers even more room to move.

The seats, with their steel spring cores and "breathing" covers, are soft enough to be comfortable, but sufficiently firm to give the body support on long journeys and to ward off fatigue.

Both front seats are electrically adjustable to eight different positions, for perfect comfort.

Exclusivity is also expressed by the standard of interior equipment in the two coupe models. Seats covered in a new, striped velour, available in eight different colours. As optional extras, you

can choose from velour in three different two-colour combinations or leather in eight colours.

Electrically-operated windows are standard equipment, the rear side windows can be operated from either the front or rear of the passenger compartment.

When the doors have been closed and the ignition turned on, the seat belts are automatically moved towards the driver and front-seat passenger by means of belt-guides. They can, therefore, be fastened even more easily.

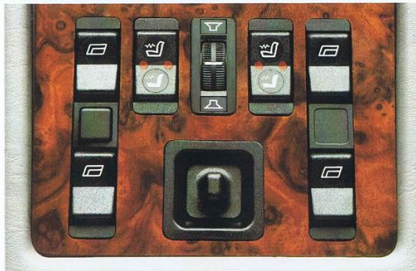
When the belts have been fastened, the belt-guides return to the rest position, on the driver's side and on the passenger side after some thirty seconds.

Another example of the large number of practical features is the third sun visor, which is behind the rear-view mirror, so that a low sun can no longer dazzle the driver.





Available as an optional extra, the electronic automatic temperature control system.



Electrical seat heating is an optional extra. You cannot always park your car in a garage.

A car can demonstrate its sports-car attributes in many ways, one of the least desirable is by excess noise. Not in a Mercedes coupe, where you can talk to all of your passengers without raising your voice, even when travelling at high speeds.

Double door seals, a bulkhead between the engine and the passenger compartment and low noise levels from the engine and transmission all make the car more quiet.

### In a Mercedes coupe, you are insulated from traffic-created stress

The "climate" inside the coupe helps to create that unique feeling of well-being, just as it does in an S-class saloon.

This is essentially due to the remarkable electronic "Heatmatic" control system which allows the temperature to be adjusted exactly to the required level — independently for each side of the car.

Driver and front passenger can set the heating to any temperature between



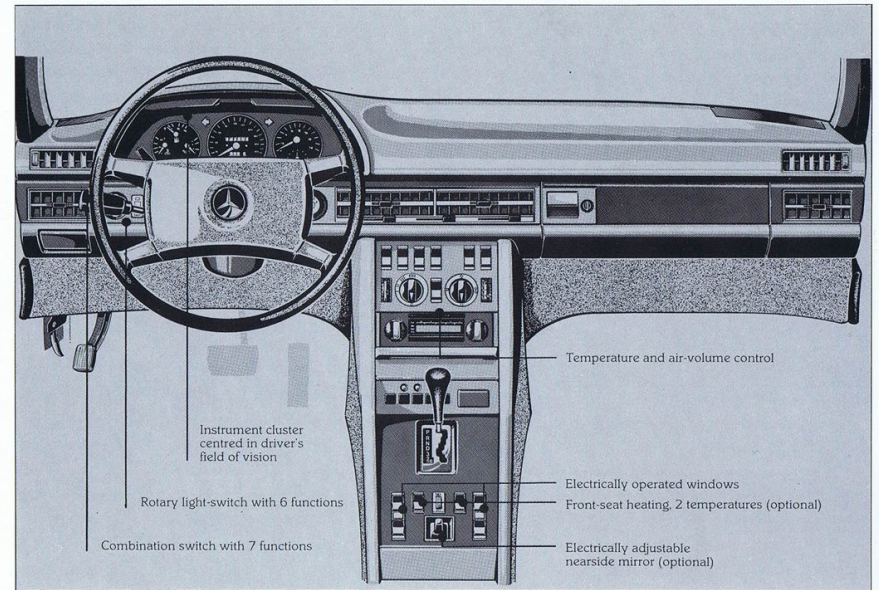
With this switch, the front seats can be adjusted, electrically, to eight different positions.

16° and 32° C (60–89,6° F). Once the desired level has been reached, it is, in principle, maintained, regardless of outside temperature and road speed.

Other features which also contribute are the heating ducts inside the doors and the advanced ventilation system with its four-stage booster and distribution control.

Rear-seat passengers have their own supply of fresh air, through an adjustable inlet in the centre console.

Air conditioning (an optional extra) is, when fitted, integrated into the standard heating and ventilation system. The cooling, as well as heating, can be pre-set and controlled automatically and separately for each side of the car.



For the driver: cannot be confused, accessible only to him

For driver and front passenger: within equally close reach of both

### Ergonomically designed instruments, positioned to reduce driver-stress

Today, a driver has to concentrate even harder, whether on long journeys or in congested city traffic.

Ergonomically designed, logically-positioned instruments and controls go a long way toward minimising the inevitable stress.

Switches and levers that are obvious in their function and cannot be confused one with another. Instruments that can be read at a glance, by day or by night.

In a Mercedes, there are, as a matter of principle, no technical gimmicks to distract the driver and to go wrong.

On the contrary, to benefit the driver, Mercedes-Benz have been endeavouring to reduce the number of controls. One example of this is the combination lever on the steering column, which operates the indicators, the three-speed wipers, the screen-

washer, the headlamp flasher and the dipswitch.

Tempomat (cruise control) is an optional extra which contributes towards stress-minimisation on long journeys. It will keep the car at any pre-set speed above 40 km/h (24.8 mph), up and down hills, until you brake, accelerate or switch off the unit.

The Tempomat contributes not only to greater comfort, but also to greater fuel economy; you can monitor this with the fuel-consumption trend indicator.

A central locking system is standard on the new coupe; it is reliable, because it operates on the dual-pressure principle.



# The Mercedes-Benz Energy Concept

The Mercedes-Benz Energy Concept is the name of a development project which is part of the basic Mercedes-Benz philosophy, namely the production of cars that are highly practical and also economical, in every way.

Against the background of the current energy situation, these principles have acquired a new significance, and the Mercedes-Benz Energy Concept covers a large number of specific trend-setting ideas in the area of economy.

It is a fully comprehensive project, and includes improvements to the transmission and the suspension, as well as further development of engines.

The new coupes have all the latest features of the Mercedes-Benz Energy Concept.

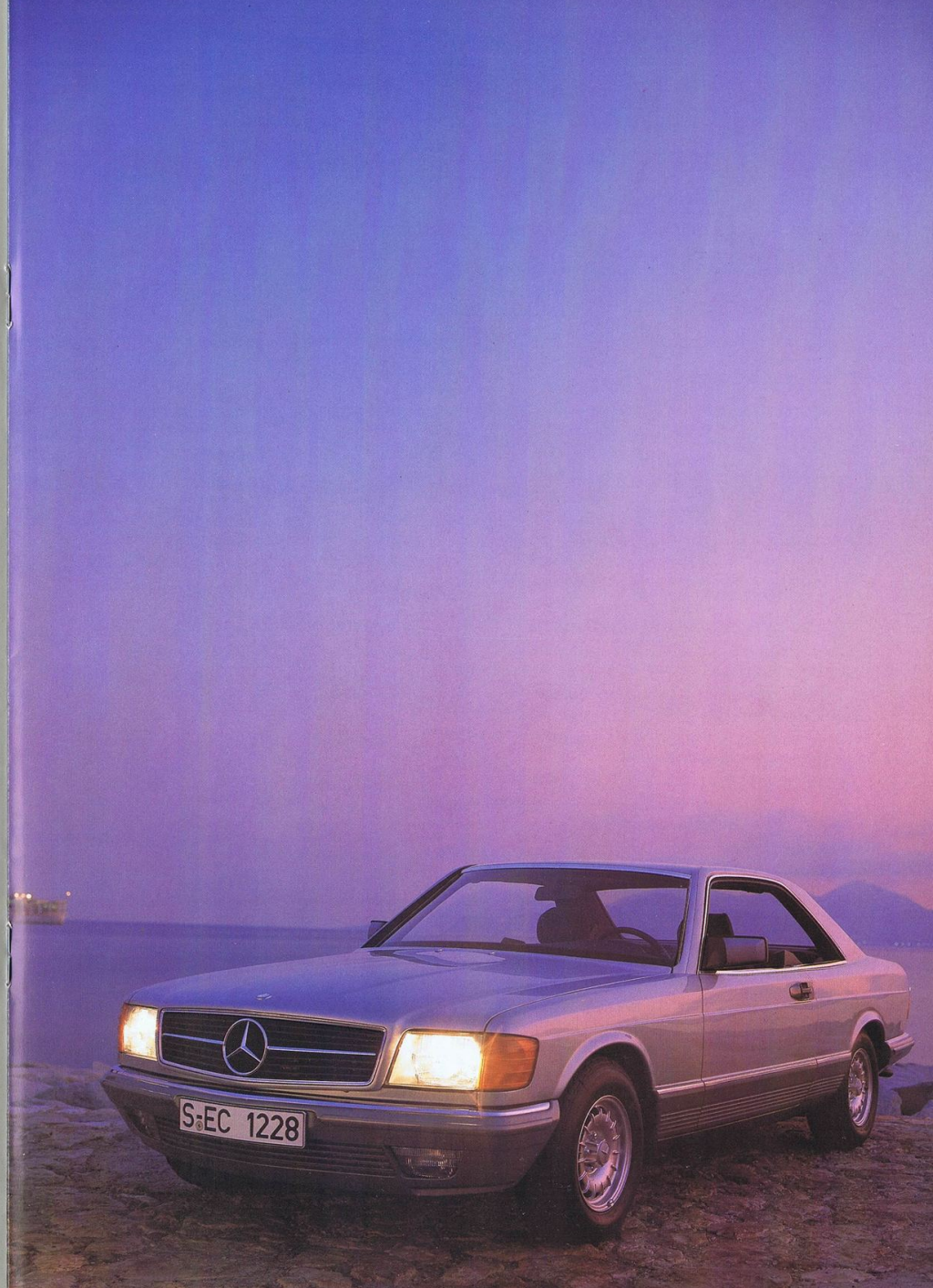
Intensive development of all components helps to compensate for the ever-increasing demands made on the driver.

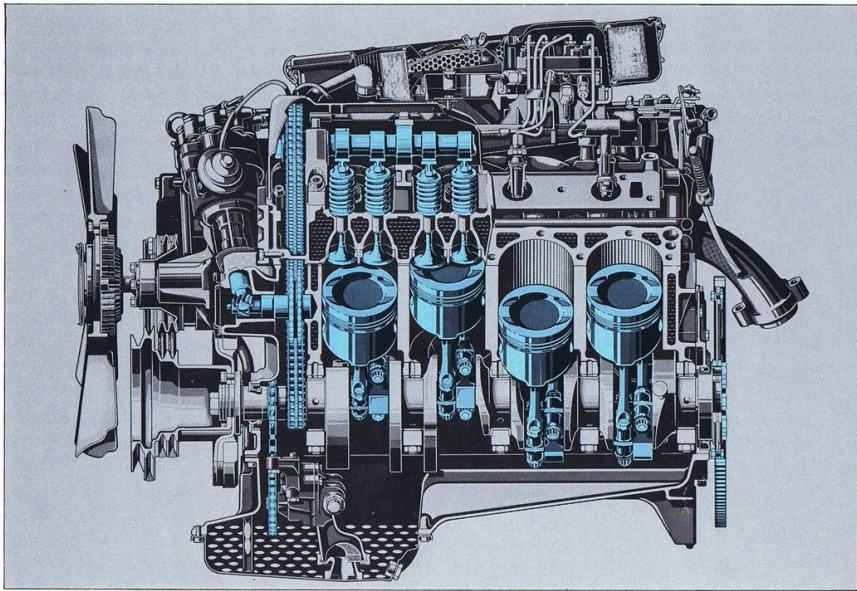
At the same time, reductions in the amount of energy required to build, and run, the car; harder-wearing materials, lower requirements in raw material.

In the new coupe, the distinctive shape is matched to the latest in high-quality engineering.

Both the 3.8 and 5-litre coupes incorporate, in every respect, all of the features of the Mercedes-Benz Energy Concept. For instance, the latest developments have resulted in a 24% reduction in fuel consumption in the 3.8 litre model.

Combined with the economies already achieved by the introduction of light-alloy V8 engines, the total savings amount to 26% in the 3.8 litre coupe and 28% in the 5-litre model; simultaneously, performance has been improved. (The above figures are average values, calculated to DIN 70 030 standards).





A balanced relationship between energy input and power output, the light-alloy V8 engine in the Mercedes 500 SEC.

The new coupe is offered with a choice of either 3.8 or 5-litre light-alloy power units.

These engines have been further developed, as part of the Mercedes-Benz Energy Concept, and include many trend-setting ideas.

#### Engines with new fuel-consumption characteristics

The 3.8 litre engine in the 380 SEC has different bore and stroke dimensions. The compression ratio has been raised and, with a modified camshaft, fuel consumption has been improved. Maximum torque is produced at only 3250/min (previously 4000/min). It develops 150 kW (204 DIN/hp) at 5250/min.

In the 500 SEC, the 5-litre engine, too, has a higher compression ratio and a modified camshaft, as well as other improvements. Maximum torque is produced at 3000/min (previously 3200/min), and it develops 170 kW (231 DIN/hp) at 4750/min.

The result of all these features is a lot of power at lower engine speeds, consequently smooth running, low noise levels and resistance to wear. Conversely, because of the engine characteristics, their reassuring reserves of power can be used very quickly.

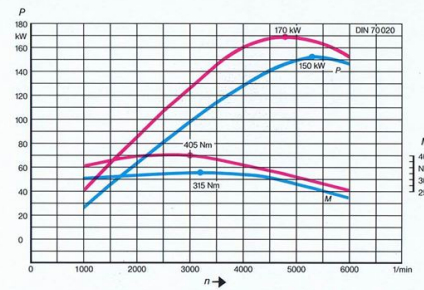
These common-sense economies have not been achieved at the expense of performance, nor of the pleasure you are entitled to expect from a Mercedes coupe.

The Mercedes-Benz Energy Concept consists of a large number of inter-related details; here are some further examples.

#### Modified cooling system

If an engine can reach its operating temperature more quickly, there is less emission of pollutants and fuel consumption is reduced.

To this end, the warming-up time has been shortened, because the coolant does not come into use until a higher temperature has been reached. When



Fuel consumption related to the gear selected by the four-speed automatic transmission.

the engine is cold, the coolant does not circulate at all. At a temperature of 84° C (183° F), the thermostat opens part of the circuit and only at over 100° C (212° F) is the coolant circuit to the radiator used.

#### Electronic idling-speed control

When driving in town, the engine idles, on the average, for 31% of the time.

Therefore, the new electronic idling-speed control goes a long way in reducing fuel consumption.

With a warm engine and the transmission in the "Drive" position, this control keeps idling speed down to about 500/min.

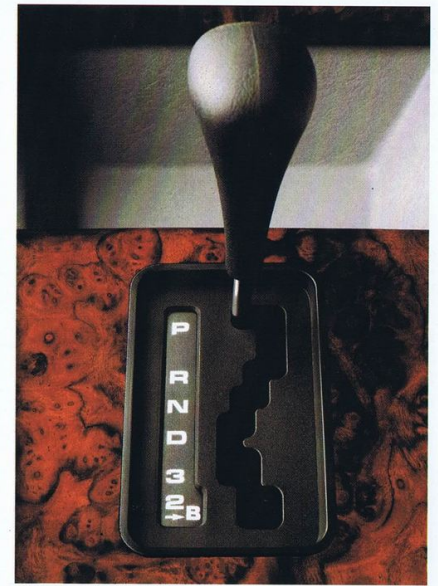
In combination with the modified camshaft and improved fuel atomisation, the new control reduces fuel consumption at idling speeds by more than 40%.

#### Hydraulic fan coupling

Because the fan coupling has a double control system, it comes into use less often, therefore reducing fuel consumption as well as lowering noise levels.

#### Automatic transmission with new ratios

Both coupes are fitted with proven four-speed, torque converter automatic transmission. The shift-pattern has, as part of the Mercedes-Benz Energy Concept, been modified to match the higher ratio of the rear axle.



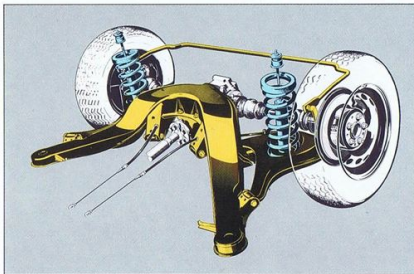
The new gear selector, with the additional "B" position.

As a result, the fourth gear has the effect of an overdrive.

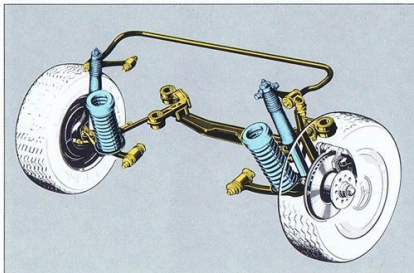
This makes the car even more economical, the ride even more comfortable, and eliminates jolting when gears are changed.

The 380 SEC always moves off in first gear, the 500 SEC pulls away in second, although first gear can be engaged by the kick-down.

A new feature on both models is the addition of position "B" on the gear selector. This enables the driver to remain in first gear at speeds up to 55-60 km/h (34-37 mph). This is a great advantage, for instance when going down steep hills with a trailer; it allows the driver to make full use of the engine braking effect, which would be reduced if the transmission shifted to a higher gear.



Higher rear axle ratios. One aspect of the Mercedes-Benz Energy Concept.



Front suspension, with zero-offset steering, larger-diameter springs and an improved system of wishbones and torsion bars.

**The manoeuvrability of a coupe,  
the comfort of a saloon**

In the new coupes, the suspension is similar to that of the S-class saloon.

It has been perfected to a degree that makes it difficult to visualise further fundamental changes.

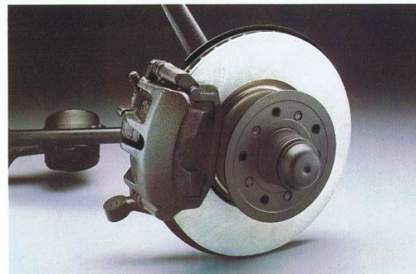
The wheelbase of the coupe is, of course, slightly shorter. This, together with the light, yet very accurate power-assisted steering, makes the car even more manoeuvrable.

A turning circle of only 11.53 metres (37.8 ft) is the practical benefit of the wide lock on the front wheels.

**Reduced fuel consumption,  
improved comfort**

To match the characteristics of the modified engines, the rear axle ratios are now higher. Ratios in the four-speed automatic transmission have, in turn, been changed, to suit the rear axle.

Because of these modifications, engine speeds are now lower, in every gear, for the same road speeds, than in



New, floating-caliper disc brakes.

the previous models. Lower by 24% in the 380 SEC and by 18% in the 500 SEC.

This, too, contributes to a reduction in fuel consumption and in noise-levels, and makes the car more comfortable.

**The brakes. Less heat,  
less chance of fading**

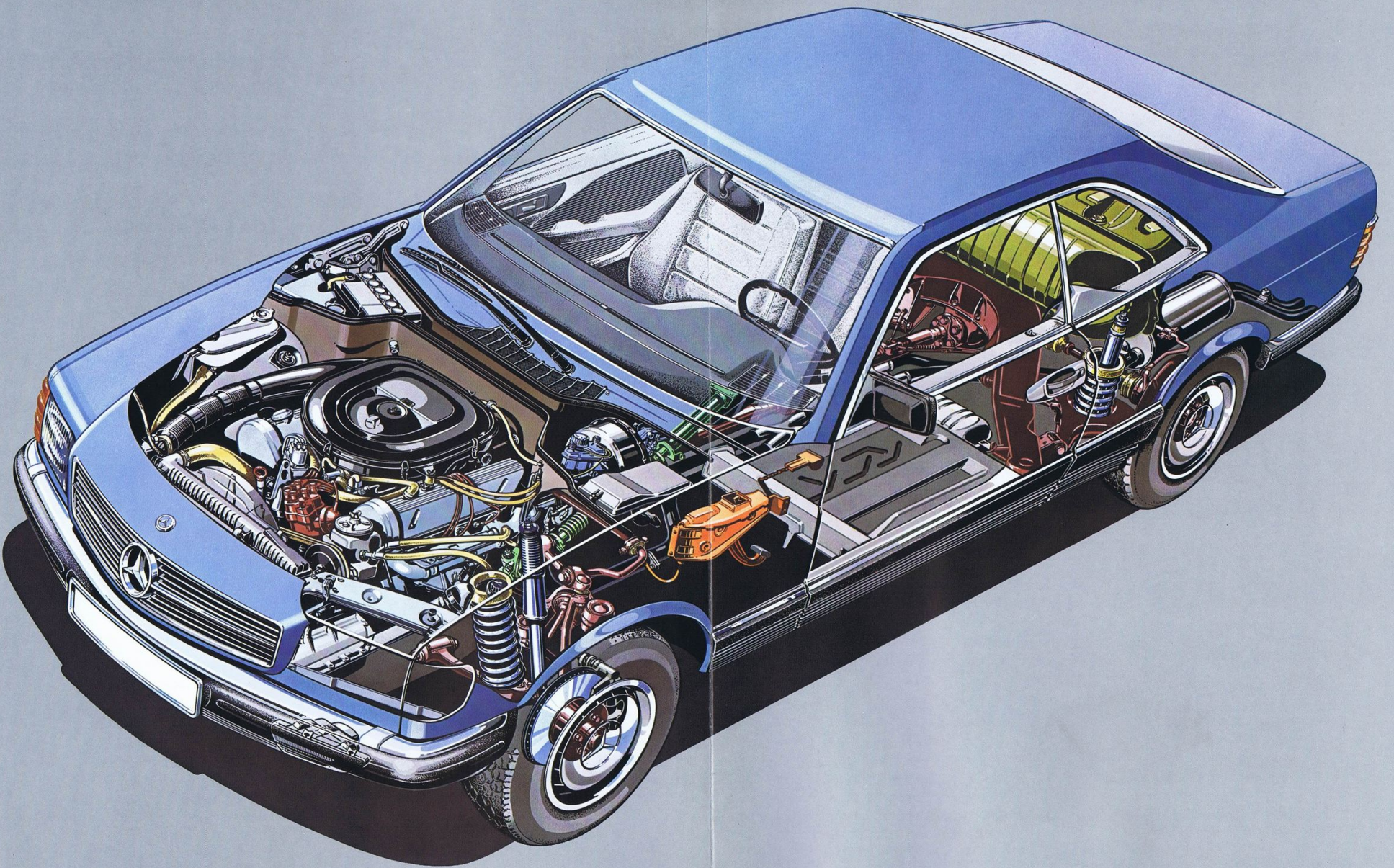
Both coupe models have a dual-circuit, servo-assisted braking system, with discs on all four wheels. At the front, newly-designed floating-caliper disc brakes.

Because the brake-fluid lines are positioned well away from the pads, the fluid is less likely to become hot.

Diameter of the front discs has been increased by 8 mm to provide even greater stability.

The front discs have interior ventilation and there are ventilation rings in the wheels to dissipate heat more quickly.





# Saving the most valuable of all energies - human energy

In the new Mercedes coupe, the demands on human energy are reduced to levels never before achieved, even in a Mercedes-Benz.

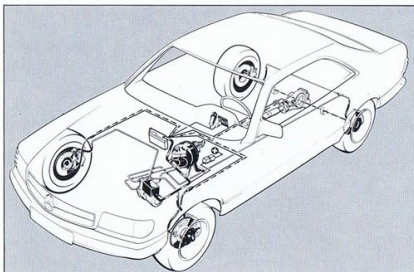
It's a car which, in spite of its high performance, does not tempt the driver to take it beyond its limits. On the contrary, it encourages the driver to adopt a considerate, responsible driving-style and so discourages him from taking avoidable risks.

The comprehensive range of active and passive safety features creates a relaxed atmosphere and helps the driver to cope calmly with even the most critical situations.





The electronically controlled restraint system which includes the airbag and the belt tensioner.



The anti-lock braking system (ABS), available as an optional extra.



Belt-guides automatically move the seat-belts towards the driver and front-seat passenger.

### Active safety

The mature suspension system, with its great reserves, is the basis of active safety.

Accurate straight-line stability, no excessive tendencies towards oversteer or understeer in corners, light yet positive steering, meticulously tuned suspension and damping enable the driver to react quickly, prevent the car from breaking away suddenly and ensure safe road-holding.

Another substantial contribution towards active safety is the anti-lock braking system, which is available as an optional extra.

Irrespective of road conditions, it prevents locking of the wheels under hard braking. So, steering response is retained, even while braking.

When used by a considerate driver, the power reserves of the eight-cylinder models can be activated within split seconds and serve as an element of active safety.

### Passive safety

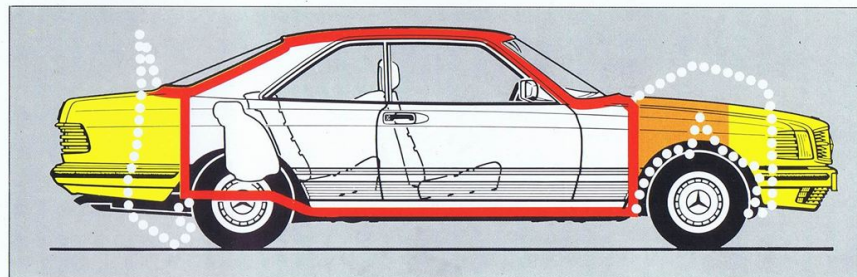
Mercedes-Benz have for more than forty years been pioneering the development and the further refinement of safety systems.

Further proof of their innovation in the vitally important field of passive safety is illustrated by the electronically-controlled restraint system, elements of which are the airbag and the belt tensioner.

Mercedes-Benz are the first manufacturers to offer, as optional extras, these two units, which further reduce the risk of injury to front-seat occupants in a head-on collision.

The airbag and belt tensioner are complementary to the inertia-reel three-point seat-belts.

The airbag inflates, cushions the driver and then deflates again — all within fractions of a second, even before the driver can register what is happening.



The longer crumple zone has progressive degrees of rigidity, giving the greatest possible protection in head-on and rear-end collisions.



A few milliseconds after a severe impact, the seat-belt tensioner pulls the belt tight against the passenger.

The front section gives protection against the effects of impacts in three progressive stages. The first zone yields most easily; it reduces the impact of the collision, sometimes for the occupants of the other car as well.

The second zone, the engine area, offers increasing resistance to deformation, and the third zone, the passenger safety-cell, has a very high degree of rigidity.

The roof pillars combine with the front section of the roof itself into a very strong, integrated unit which offers protection, should the car roll. The pillars are specially reinforced, there are tubes inside, a protective measure which is especially suitable for the coupe shape.

Floor and sides are extremely rigid. Door frames, doors, hinges and locks form an integrated protective shield which prevents excessive distortion in

the event of a lateral impact, as well as avoiding jamming of the doors.

The fuel-tank is located in a well-protected area, over the rear axle; there is a bulkhead between it and the passenger compartment.

Protection for other road users includes the driver-controlled headlamp beam adjustment, and the windscreen wipers which are recessed when not in use.

### **The new coupe Progressive engineering and traditional Mercedes virtues**

To drive the new coupe is to experience the quality of engineering and to enjoy the elegant styling which establish new standards for years to come.

The further development of significant concepts and their realisation in practical terms has been achieved responsibly and economically.

Continuous research on the Mercedes-Benz Energy Concept has resulted in appreciable reductions in the consumption of energy and materials.

And the traditional Mercedes virtues still remain; quality in design, materials and workmanship; durability and very high re-sale values.

### **Long life**

Contribution to value retention are the additional protection against corrosion and the use of light-alloy and plastic components that do not rust.

Plastic liners are fitted under the front wheel arches as protection against damage by salt and stones.

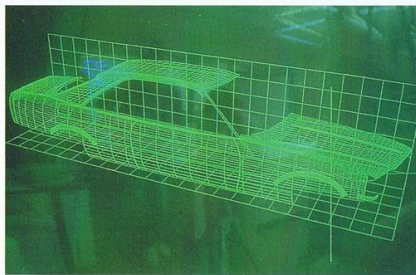
A protective coating on all front sections susceptible to damage from gravel, etc. The underside of the floor is coated with a lighter, but highly resistant material.

Efficiency and durability of the exhaust system have been generally improved. The sections between the silencers are in high-grade steel.

Hollow sections (which become inaccessible after assembly) receive a coating of adhesive wax with special "creeping" properties.

### **Safety and value-retention, through after-sales service**

By the utilisation of every possible technological process, Mercedes cars have become even more reliable, even easier to maintain, and repairs cost even less.



Quality is not a matter of chance: the latest in technical aids.



Quality is not a matter of chance: employees trained to perfection.

For example, brake master cylinder, battery, relays and fuses are protected in a compartment under the bonnet. Oil filter, all light bulbs, booster, cooler and piping of the heating system are readily accessible or easy to remove. Body panels, especially at the front, can be repaired individually, to save cost. Front wings are bolted on. Longitudinal profiles divide the roof into sections, to reduce the amount of re-spraying, should it be necessary.

### **Longer service intervals**

Major service only once every 20,000 km (12,500 miles). Proof of reliability, and a contribution to the economy of Mercedes cars.

Servicing can be carried out by any one of 1,200 dealers in Germany; there are 5,000 service points world-wide.

Mercedes-Benz.

