

# Chassis OC 500 LE

One basis. Many options.



Mercedes-Benz  
The standard for buses.

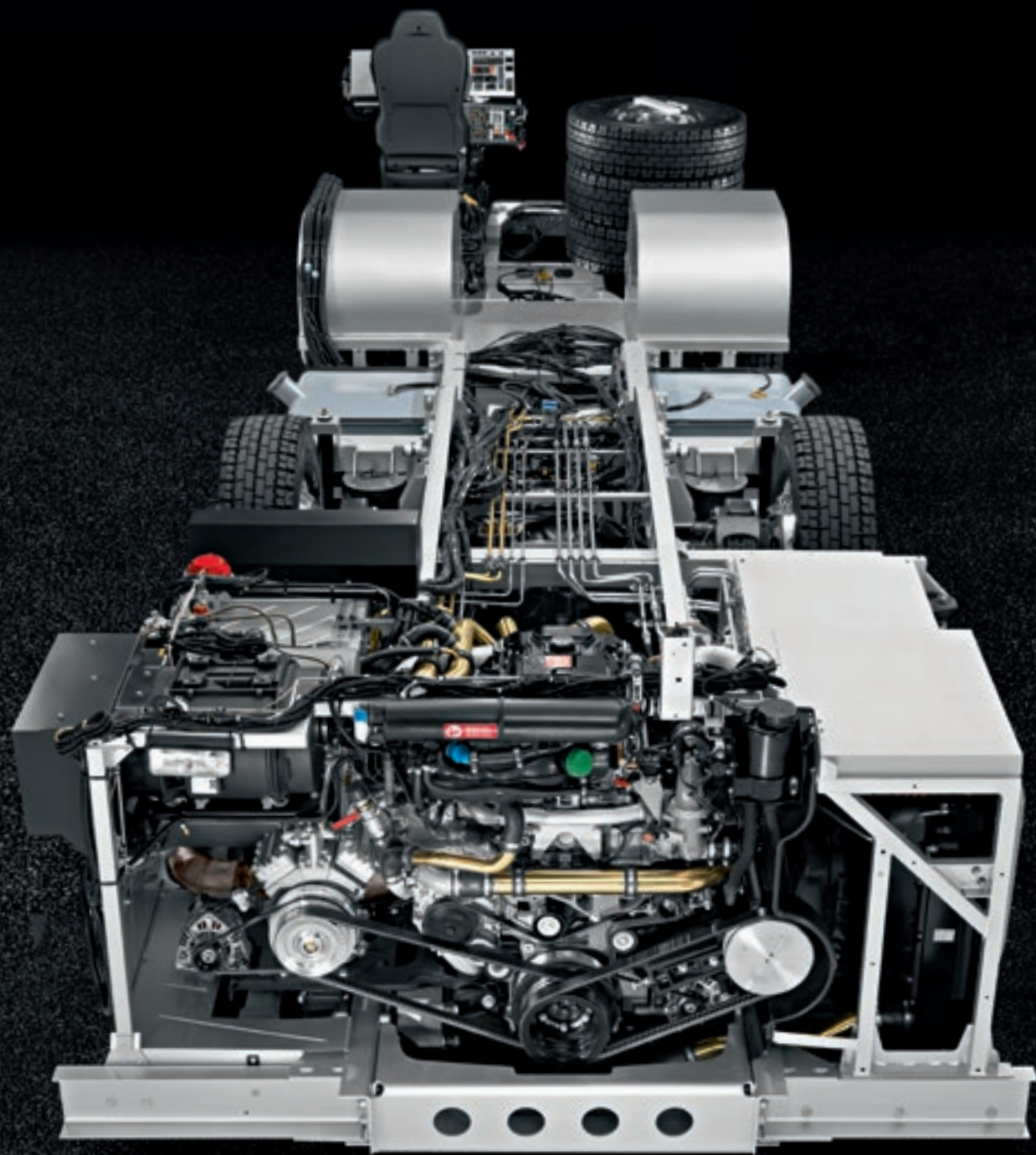




# What can you expect of a Mercedes-Benz? More.

There are chassis. And there are Mercedes-Benz chassis. In today's tough competition, the Star makes the difference. It gives you a decisive edge – and the good feeling of having made the best choice for your company.

**At the forefront of innovation.** Like no other manufacturer in the world, Mercedes-Benz has taken on responsibility for the bus and its technological development. Not only because Carl Benz constructed the world's first omnibus in 1895, but also because Mercedes-Benz has since then developed the bus into a high-performance, safe and environmentally friendly means of transport. This is why Mercedes-Benz Buses and Coaches offers practical and advanced solutions to meet the challenges of tomorrow – ensuring that you can remain one step ahead of the competition in future.



# OC 500 LE highlights.

Surprisingly flexible, superior quality throughout, consistently economical: designers throughout the world value the OC 500 LE chassis for public service buses as the basis of their ideas. With the Euro VI generation, there are now a few more convincing arguments too.

**The very best in technology.** Mercedes-Benz has traditionally been a pioneer in the development of environmentally friendly, innovative drive technologies. With the new BlueEFFICIENCY Power technology, Mercedes-Benz has once again set new standards. The top-class technology from complete bus development is now also being used in the OC 500 LE and ensures fewer emissions and greater economy, because thanks to the efficient, powerful BlueTec® engines, fuel consumption has not increased, despite Euro VI. For excellent overall economy – for the entire life of the bus.

**The basis for your ideas.** Passenger-friendly low-floor comfort from the front to the second entrance in connection with innovative Mercedes-Benz drive technology in the rising rear: The OC 500 LE enables you to implement low-entry concepts reliably in accordance with your individual plans. The secret to the practically unlimited options is the modularity of the chassis. As a result, you can have public service buses 2.50 to 2.60 m wide and up to 13.20 m in length. To realise your individual ideas, the engine is available in two performance levels and the drive axle with two transmission ratios. Even the driver's workstation, instrument panel and second door can be arranged in various ways. With the OC 500 LE, your ideas become reality.

**The result of good partnership.** The OC 500 LE is the result of a close partnership between Mercedes-Benz and body manufacturers. Their suggestions and requirements were incorporated in the development of the chassis and are reflected in a sophisticated vehicle concept. For example, uniformly defined interfaces ensure the straightforward and fast connection of the body electronics. And the newly designed transport module ensures easy and safe handling. It's often the little things that make day-to-day life easier. And if a problem should arise, the Mercedes-Benz body consultants are available to provide you with expert support.

# Ensure your competitive edge.

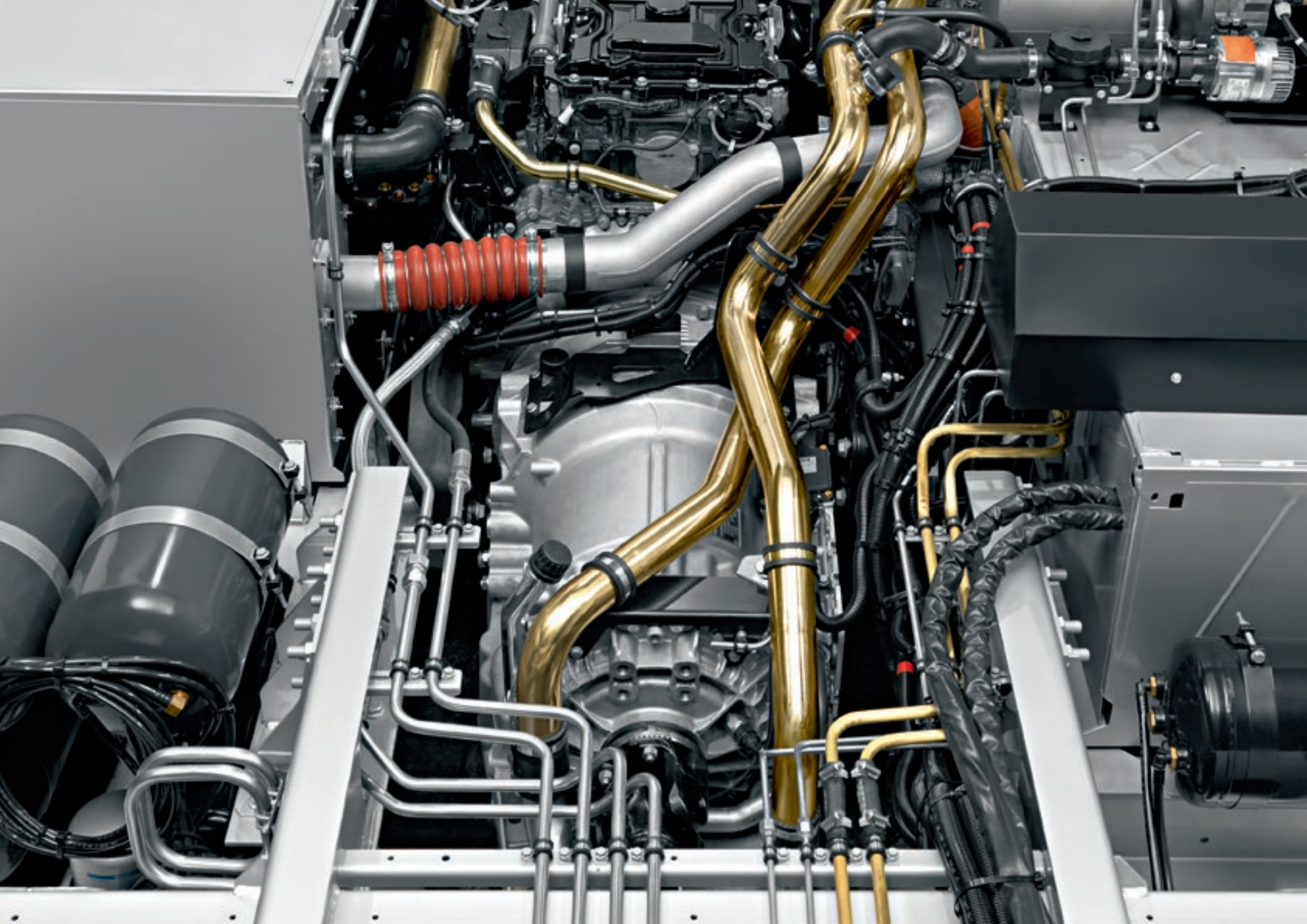
Now more than ever, economy is a key argument for bus operators. With the new OC 500 LE with Euro VI, you establish the foundation for maximum efficiency – and ensure your bus has a decisive competitive edge.

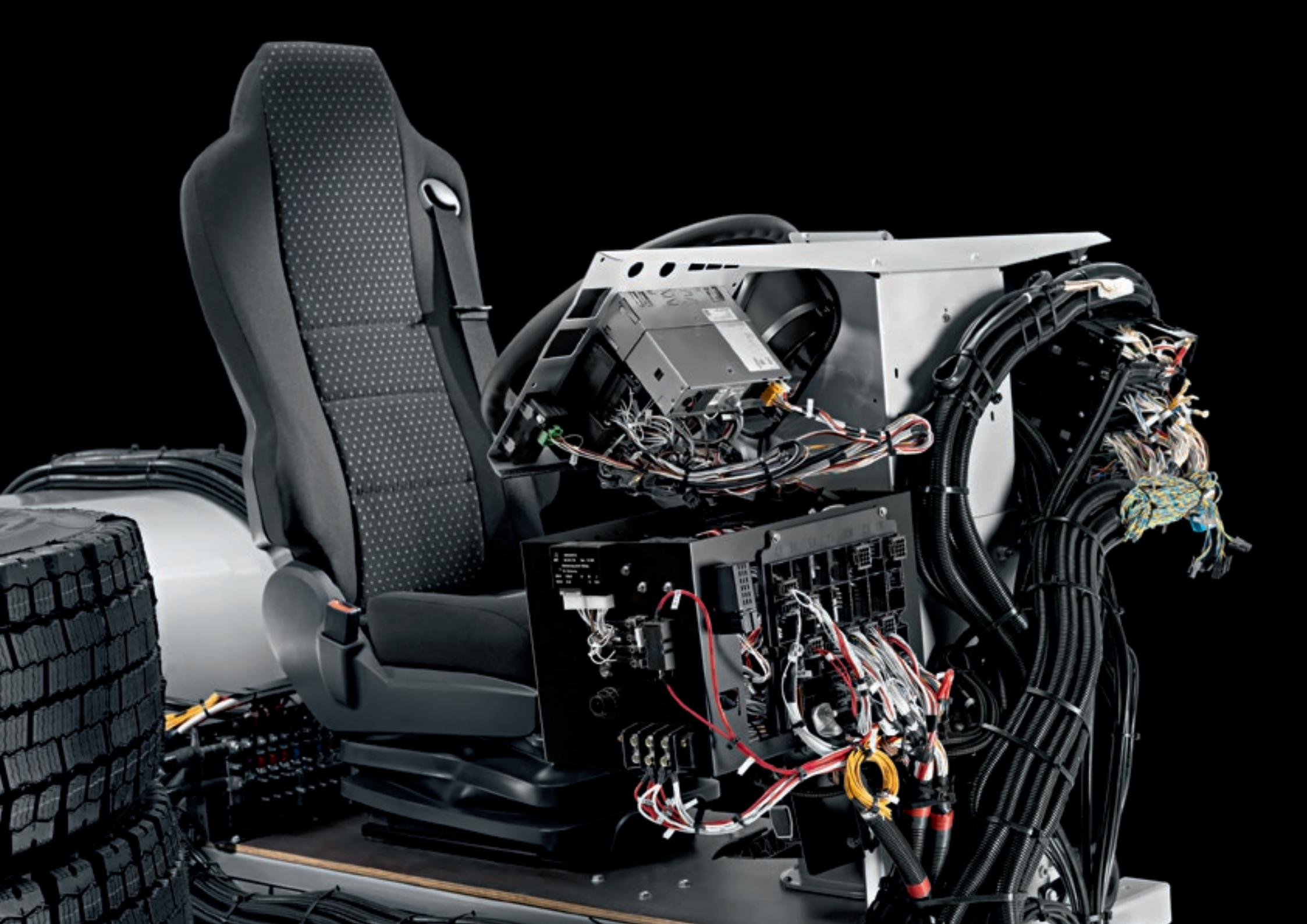
**A milestone in engine development.** Development of the new chassis generation focused on the new drive train for Euro VI, which was achieved with the new BlueEFFICIENCY Power engines from Mercedes-Benz. The new drive, which already meets the Euro VI emission class in all performance levels, does not just impress through its high environmental compatibility, but also through its extremely high economy. No additional consumption despite Euro VI – who but Mercedes-Benz would be able to offer that?

**Clean performance.** On the road, the new OM 936 is highly efficient with its 220 kW (299 bhp). The particularly compact and lightweight in-line six-cylinder engine combines impressive driving performance with forceful acceleration even at low speeds, and very quiet running with low consumption as well as exemplary protection of the environment. The strict requirements were achieved through combining Common Rail injection, on-demand exhaust gas recirculation, downstream oxidation catalytic converter, particulate filter and SCR technology with AdBlue® injection for exhaust gas treatment.

**Comfortable in all gears.** The OC 500 LE is equipped with the converter automatic transmission ZF EcoLife as standard. With its six gears and a topography-dependent shift program, it permits extremely comfortable, fuel-saving driving in urban and interurban services. The intelligent shift program recognises different driving resistances and selects the appropriate driving programs in a continuously variable manner. Gear shifts are fluid, and the transmission always operates in the optimum range. For a relaxed and smooth journey that driver and passenger can enjoy equally.

**Integrated brake on costs.** An integrated retarder with around 40 % more braking power is also included as standard. It is integrated in the transmission housing in a weight-saving manner. Depending on the topography it is switched automatically and continuously. It is completely sufficient for braking at low speeds. It reduces the load on the service brake, reduces wear and lowers maintenance costs. And by the way, it also spares the driver's nerves.







# Make no compromises.

The expectations on a public service bus are high, and rightly so. The new OC 500 LE makes it even easier to implement individual ideas exactly.

**A safe workplace.** The cockpit of the new chassis generation is now even more attractive. It has the same non-slip and aesthetic four-spoke steering wheel as the complete buses from Mercedes-Benz. The modern, easy-to-read instrument panel is also new. Adapted to the electronic structure and information requirements of Euro VI, it can, if required, also support the driver with enhanced information such as route data or fuel consumption. The driver therefore has everything safely under control at a glance.

**A host of options.** The driver's workstation in the OC 500 LE is fully functional and can be easily adapted to your own specific requirements. It can be variably set up in three levels. The height and inclination of the steering column and instrument panel can also be adjusted. The button switch for the automatic transmission is easy to reach and easy to operate. This makes things easier for the driver, who can then fully concentrate on the road – an important contribution for greater driving safety.

**Concentrated intelligence.** The OC 500 LE is also superior to other chassis with regard to the electronics, because it has a central "brain": an IES-CAN (integrated electronic system controller area network), in which all electronic components are integrated. With the help of the IES onboard diagnostic system, you can quickly check all the control units. In the event of maintenance or repair, faults can therefore be found quickly and in a targeted way, which later reduces the idle and maintenance times, and therefore costs, for the bus operator.

**Uniform interfaces.** The uniform interfaces for your electronic equipment and a modular electrical compartment on the driver's workstation with standardised slots are further advantages of the low-floor chassis. All systems are subdivided into code numbers so the chance of confusion is very low. You can therefore connect up the electrical equipment of your body flexibly and without difficulties – and at the same time have free rein with regard to the location and installation of your electronic components.



# Build on ride quality.

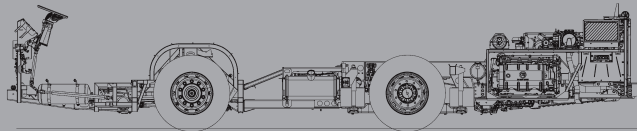
Ride quality is a top priority at Mercedes-Benz. The OC 500 LE provides you with an excellent basis for low-entry designs that impress both drivers and passengers.

**Progress on two axles.** With the OC 500 LE you ensure your customers have an advanced ride quality. The front axle provides discriminating low-floor comfort in the front end. It stabilises your body against rolling motion, keeps the bus safely on track and permits particularly large steering angles. An approximately 21 m turning circle on a 12 m long two-axle vehicle, depending on the structure, speaks for itself. The new rear axle is ideally matched to this, because thanks to a further improved axle location, it provides highly efficient drive power on the road, and with smooth and quiet running ensures top-class ride comfort.

**Free rein in design.** The combination of the low-floor concept in the front end with the raised-floor technology in the rear means the floor is higher after the second entrance. The OC 500 LE gives you largely free rein in balancing the height difference between the two areas in the floor design. Further proof of its extraordinary flexibility.

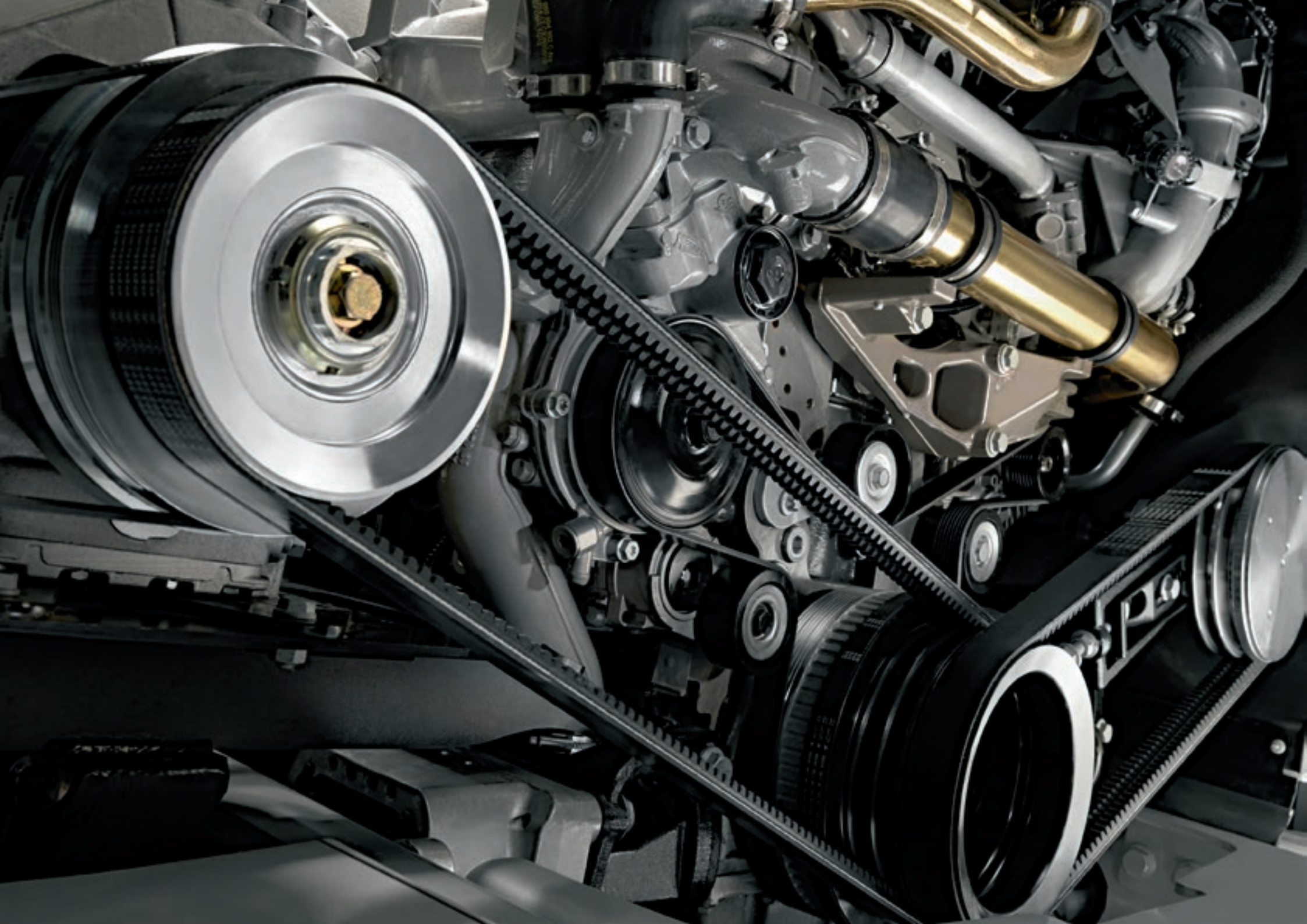
**Flexibility in driving.** En route to the destination, the bus driver needs to overcome a number of obstacles. To avoid damage to the underside of the vehicle, you can therefore additionally equip the chassis with a pneumatic lowering and lifting device. Driving over obstacles or sudden roadway transitions is therefore easy. The kneeling system that is also available makes it easier for passengers to enter and exit the vehicle by lowering the vehicle.

**Ease of steering.** Drivers prefer buses that make their job as easy as possible. The steering gear with variable steering ratio in the OC 500 LE meets this requirement. It reacts more effortlessly the more strongly the driver turns the steering wheel. As a result, the vehicle can be steered easily, directly and safely. This means greater driving safety, and particularly high economy, because the steering does not have to be lubricated, meaning it is practically maintenance-free.



Chassis CBC C634.422-11/C634.423-21





# Make savings at the right place.

Sometimes, less really is more. Mercedes-Benz has done everything to make savings at the right place to make the OC 500 LE even more valuable for you.

**Not one kilogramme too heavy.** Lower emissions do not need to mean added weight: Mercedes-Benz has been able to implement Euro VI without increasing the vehicle weight. The new rear axle is one of many measures taken by the development engineers to compensate for the unavoidable additional weight of Euro VI. Additional savings have been made in the new engine encapsulation, more lightweight and powerful alternators and, not least, the use of high strength steels for the optimised frame. The result: not one kilogramme too heavy – but just as stable.

**Less is more.** Mercedes-Benz has not only been able to keep fuel consumption at the usual low level, but to also reduce the AdBlue® consumption by up to 40 % as well as oil consumption by up to 50 %. With 280 litres of diesel and 45 litres of AdBlue® your customers will be able to travel even longer distances in the future. And the diesel particulate filter has a replacement interval of up to 240,000 km or every 2 years.

**Time is money.** The buggy centre section has also been improved further, so that you save valuable time and transfer costs even before the first work step. The newly designed transport module makes the OC 500 LE capable of being manoeuvred and steered with its own drive, protects the valuable components against damage during transportation and enables simple and safe handling. Quick release couplings on the cable lines ensure that you can start construction quickly.

# Bank on safety and comfort.

The bus is seen as one of the safest and most comfortable forms of transport in the world. Innovations from Mercedes-Benz have played a decisive part in this – and also make the OC 500 LE a pioneer on the roads.

**A safe brake system.** Safety has traditionally been a priority at Mercedes-Benz. A fast-reaction, electronically controlled brake system with disc brakes is just as natural for all bus chassis as the anti-lock braking system (ABS) and brake assist (BAS) as standard. In emergency braking situations, it builds up maximum braking power in fractions of a second and therefore leads to a shorter stopping distance. The Electronic Stability Program ESP® with ASR (acceleration slip regulation) helps you deal with critical driving situations. With guardian angels everywhere, your bus is safe in urban and interurban traffic.

**A good feeling.** Mercedes-Benz has already subjected the new chassis to intensive tests. These include endurance tests or the testing of components, such as axles or tanks, on the Hydropuls rig. And the new engines have also been tested under the hardest conditions, from the polar circle to the heat and dust of South Africa for use in complete buses and for operation in commercial vehicles with a total traction weight of up to 40 t. The tests also involved maximum loads that would never occur in actual public service bus use. All with one goal: Giving you a good feeling, a safe basis for your demanding, economic and environmentally friendly city and interurban buses.

**A real comfort zone.** In a public service bus, appearance is important, but inner qualities are even more crucial. The OC 500 LE has a lot to offer in this respect. For example, the electronic level control (ENR) means that passengers are comfortable the moment they start boarding, because it ensures that the entrance height of the vehicle is always the same, regardless of the load. And with the new low-noise drive axle, the journey itself is much more relaxing. It ensures the interior is pleasantly quiet. There is good reason why it has already earned top marks for use in the complete bus.



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