

# VOLVO B9L RANGE



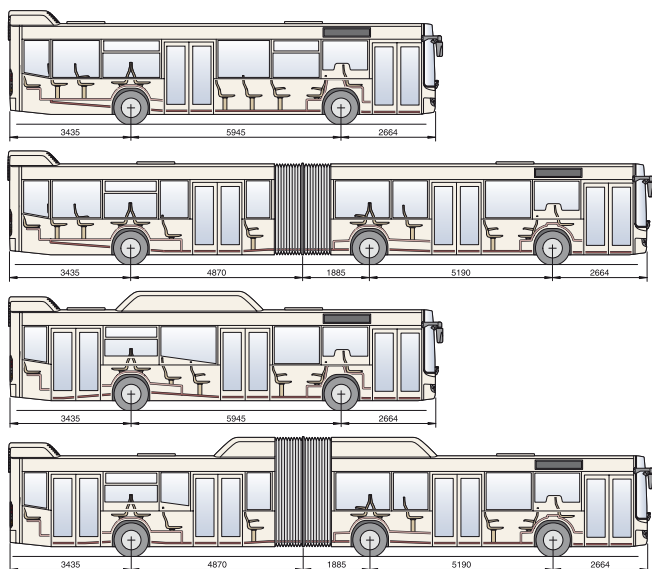
**VOLVO**

# DEVELOPED TO MAKE CITY TRAFFIC EFFICIENT

Volvo's latest range of city-bus chassis, the Volvo B9L and B9LA, offer all the properties needed for efficient transportation in city traffic. The low, flat floor is designed for convenient entry and exit and for quick passenger movement. The technical quality guarantees many years of trouble-free operation. The high-efficiency braking system offers you world-class safety. Now add two advanced 9-litre engines, one running on diesel and the other on gas, and you have the key to first-class driveability, low operating costs and low environmental impact. And finally, we'd also like to emphasise the sheer freedom of choice involved: the range encompasses both 2-axle and articulated chassis with capacity for up to 150 passengers.



## THE VOLVO B9L IS AVAILABLE IN THE FOLLOWING VARIANTS



### Diesel

**Volvo B9L:** Two-axle low-floor chassis with rear-mounted, vertical 9-litre diesel engine producing either 260 or 310 hp. Total length up to 12 m.

**Volvo B9LA:** Three-axle low-floor chassis with rear-mounted, vertical 9-litre diesel engine producing either 310 or 360 hp. Total length up to 18 m.

### Natural gas/biogas

**Volvo B9L:** Two-axle low-floor chassis with rear-mounted, vertical 9-litre gas-powered engine producing either 260 or 300 hp. Total length up to 12 m.

**Volvo B9LA:** Three-axle low-floor chassis with rear-mounted, vertical 9-litre gas-powered engine producing 300 hp. Total length up to 18 m.

## PART OF AN ECONOMICAL AND EFFICIENT WHOLE

### Frame made of high-strength steel

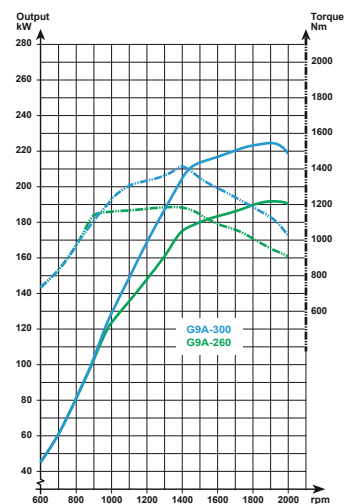
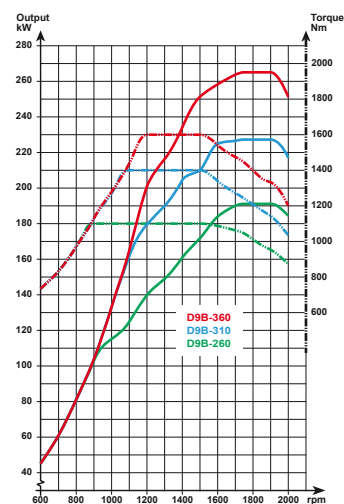
The high-strength steel frame combines good stability with low weight. The precise dimensions make bodybuilding simpler.

### Powerful engines running on diesel or gas

Volvo low-floor buses are available with a choice of diesel or gas power, both variants with new, powerful and economical engines.

### Diesel – Volvo D9B

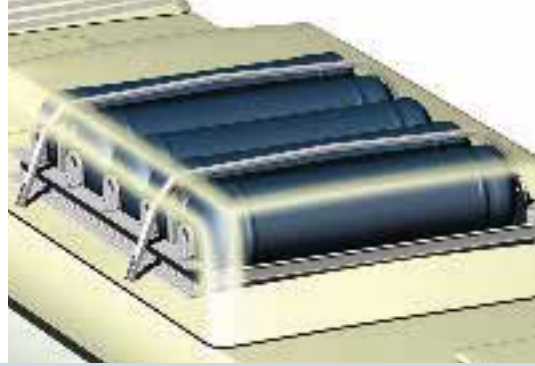
The diesel engine is called the Volvo D9B. The latest generation of Volvo's 9-litre engine offers superb driveability and excellent fuel economy. The Volvo D9B is available with a choice of 260, 310 and 360 hp and it offers high torque across a wide rev range. Maximum torque for the most powerful variant is a massive 1600 Nm. In practice this means instant response to the throttle, alert acceleration and excellent low-rev lugging ability. The Volvo D9B is also an environmentally optimised engine. It is designed from the ground up to produce extremely low particle emissions. In order to also reduce emissions of nitrogen oxides to extremely low levels, it uses SCR (Selective Catalytic Reduction) for aftertreatment of exhaust gases. In this process, a mixture of urea and water known as AdBlue is injected into the hot exhaust gases. As they pass through the catalytic converter, a chemical reaction takes place that transforms the nitrogen oxides into harmless nitrogen gas and water vapour. The technology is both simple and dependable, and makes it possible to meet both current and forthcoming emissions requirements. The Volvo D9B is certified for Euro 4 and is also available in a version that meets the emissions requirements for Euro 5 (incentive). Closed crankcase ventilation eliminates the risk of oil spillage.







The diesel-powered Volvo D9B is available with 260, 310 and 360 hp and offers high torque across a wide rev range.



The gas-powered Volvo G9A is available with a choice of two power outputs – 260 and 300 hp. The more powerful version has maximum torque of 1400 Nm.



The driven axle is a drop-centre axle available with a wide selection of ratios.

### **Gas – Volvo G9A**

Volvo's new engine for natural gas and biogas is designated the Volvo G9A. It is based on the Volvo D9B but is optimised for gas power. Unlike our previous gas engines, the Volvo G9A is a so-called Lambda 1 engine. This means that the blend of air and fuel is constantly regulated to meet the engine's current requirements at any given moment in time. This solution makes it possible to treat the exhaust gases in a three-way catalytic converter, which means that emissions are lowered to levels that are way below existing and planned legislated standards. The Volvo G9A has been developed to meet the EEV\* emissions standards, which halve particulate emissions compared with the Euro 4 requirements imposed on diesel engines. The nitrogen oxide emissions are a huge 50 percent lower than the level required for a Euro 5 diesel engine. The Volvo G9A is available with two power outputs, 260 and 300 hp. The more powerful variant offers maximum torque of 1400 Nm. The engine control unit automatically adjusts combustion to suit the quality of the fuel. As a result, performance is not affected by the quality of the gas.

### **Matching driveline**

Both engine variants are matched by the latest generation of automatic transmissions with either 4 or 6 gears and an integrated retarder. The rear axle is of drop-centre type and offers a wide range of alternative ratios: 6.21, 5.77 and 5.27:1.

### **Increased safety and less wear with EBS**

The Volvo B9L family is equipped with the latest generation of Volvo's electronically controlled braking system, Volvo EBS, which features a number of safety- and comfort-enhancing functions such as Brake Blending, Hill Start Aid and Emergency Braking Assistance. With Brake Blending, all the braking systems (wheel brakes, engine brake and retarder), can interact for best braking ability and minimum wear on the brake discs. Hill Start Aid helps the driver when starting on an uphill gradient by keeping the vehicle stationary or prolonging braking effect even after the driver

\* EEV stands for Environment Enhanced Vehicles and is the EU's special emissions class for environmentally optimised vehicles.



The front axle is of the drop-centre type, offering no less than 54 degrees of turning angle.



The instruments are designed to be simple, easy to overview and ergonomically suitable.



Volvo's electronically controlled braking system, Volvo EBS, with a number of safety- and comfort-enhancing functions.

lifts his foot off the brake pedal. Emergency Braking Assistance helps the driver maximise braking power in a panic braking situation.

Volvo EBS promotes increased safety and cuts stopping distances. With the help of electronics, the system reads off parameters such as acceleration, steering wheel angle and wheel rotation speed. With the help of this information, the system can adjust brake pressure individually for each axle. If the electronics fail, there is also a parallel backup system consisting of two pneumatic circuits. Volvo EBS is offered in packages with various functions; contact your Volvo representative for more information.

#### **An efficient and ergonomically designed workplace**

The instruments are designed for simplicity, clarity and ergonomic optimisation. One example is that many of the controls move with the steering wheel when it is adjusted. The driver has an excellent overview of all the instruments and considerable scope for finding a comfortable driving position.

#### **The brain in the Volvo B9L – BEA**

The Bus Electronic Architecture (BEA) has been upgraded in a new version and makes it possible to integrate many of the functions in EBS, for instance. The new BEA also provides more diagnostics functions than before, which further improves operating reliability. The quality of the coupling between the chassis and body electrical systems is better in the new BEA, which further aids bodybuilding.

#### **Easy to manoeuvre**

Manoeuvrability has been considerably improved thanks to a new front axle of drop-centre type, with a maximum axle load of 7.1 tonnes. The inner wheel lock angle is a generous 54 degrees. Air suspension and sturdy roll stabilisers provide excellent ride comfort and exceptional roll stability.

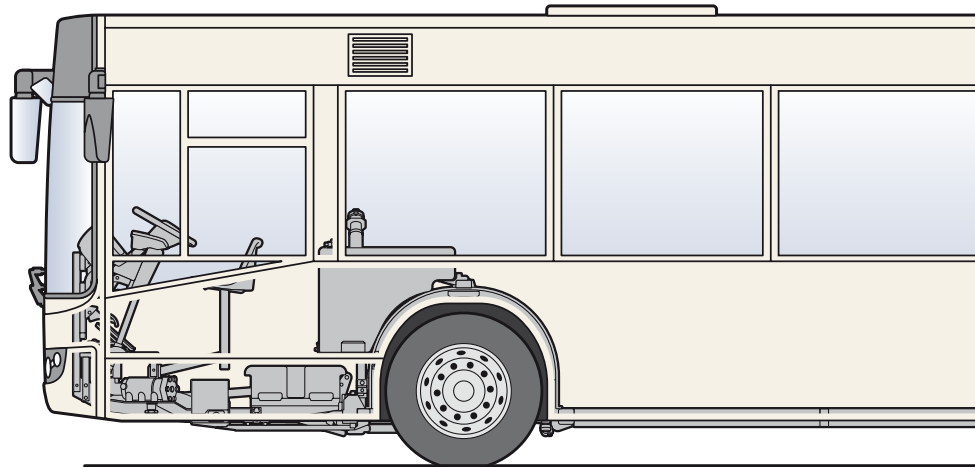
# VOLVO B9L

The Volvo B9L is a two-axle low-floor chassis capable of carrying about 100 passengers.

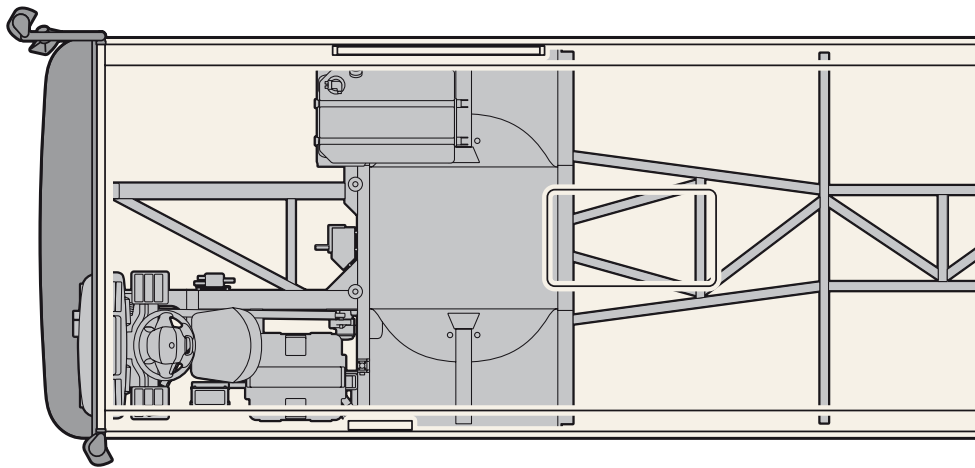
The new instruments in the Volvo B9L are designed for simplicity, clarity and optimum ergonomics.

The Volvo B9L has the newly developed conventional front suspension which with its low weight and minimal tyre wear is specially designed for city traffic.

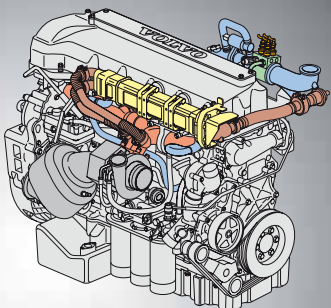
All-through low floor makes for quick passenger movement.



Entry height is 340 mm at all doors. With the kneeling function activated, the floor at the front door can be lowered to 250 mm. The Volvo B9L is also available in a variant where the entire side can be lowered to the same height.



Volvo's new gas-powered engine, the Volvo G9A, provides extremely low emissions and very quiet operation. On the Volvo B9L it is available with either 260 (1200 Nm) or 300 hp (1400 Nm).

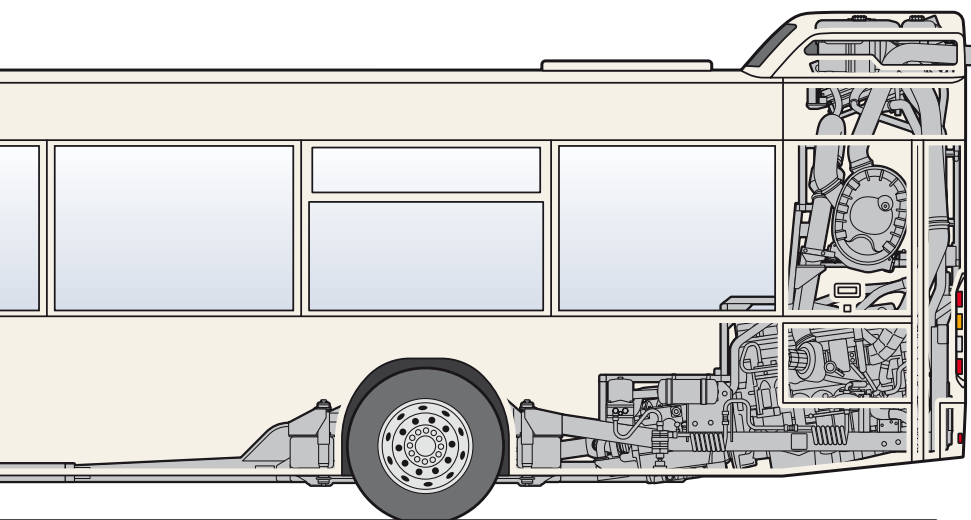


Closed crankcase ventilation eliminates the risk of oil spillage.

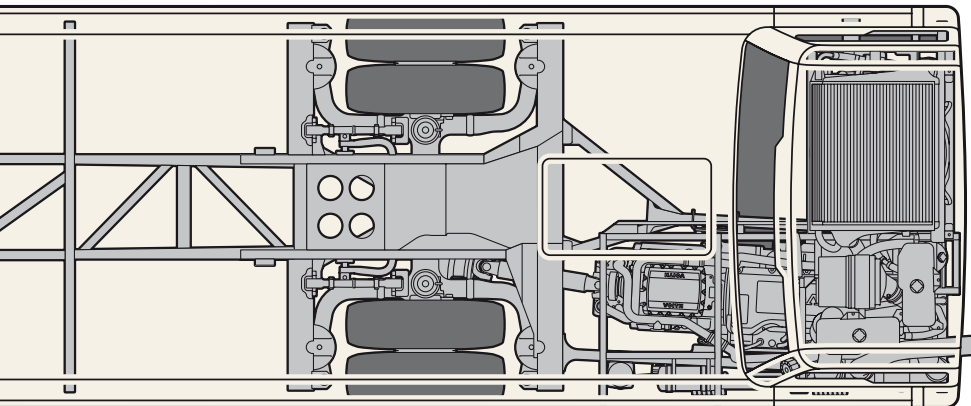


The exhaust gases from the diesel engine are treated with the help of SCR (Selective Catalytic Reduction) technology which transforms the nitrogen oxides into harmless nitrogen gas and water.





The engine is installed vertically in the left rear corner of the bus to intrude as little as possible into the passenger compartment and at the same time permit a low exit at the rear door.



The Volvo D9B is a newly developed 9-litre diesel engine offering superb driveability and excellent fuel economy. The Volvo B9L is available with engine outputs of 260 (1100 Nm) and 310 hp (1400 Nm).

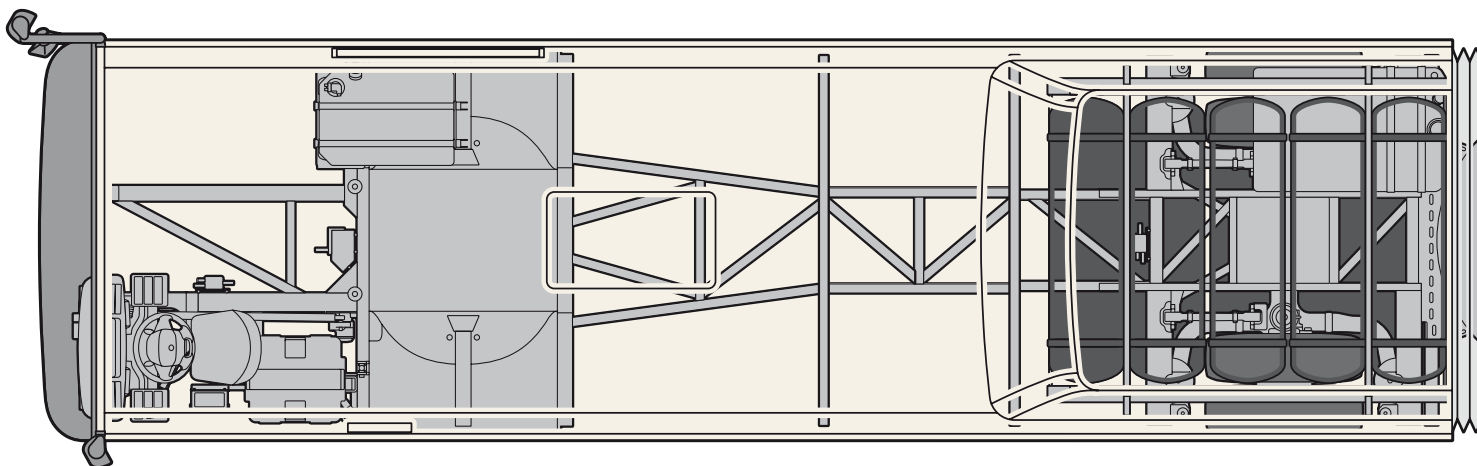
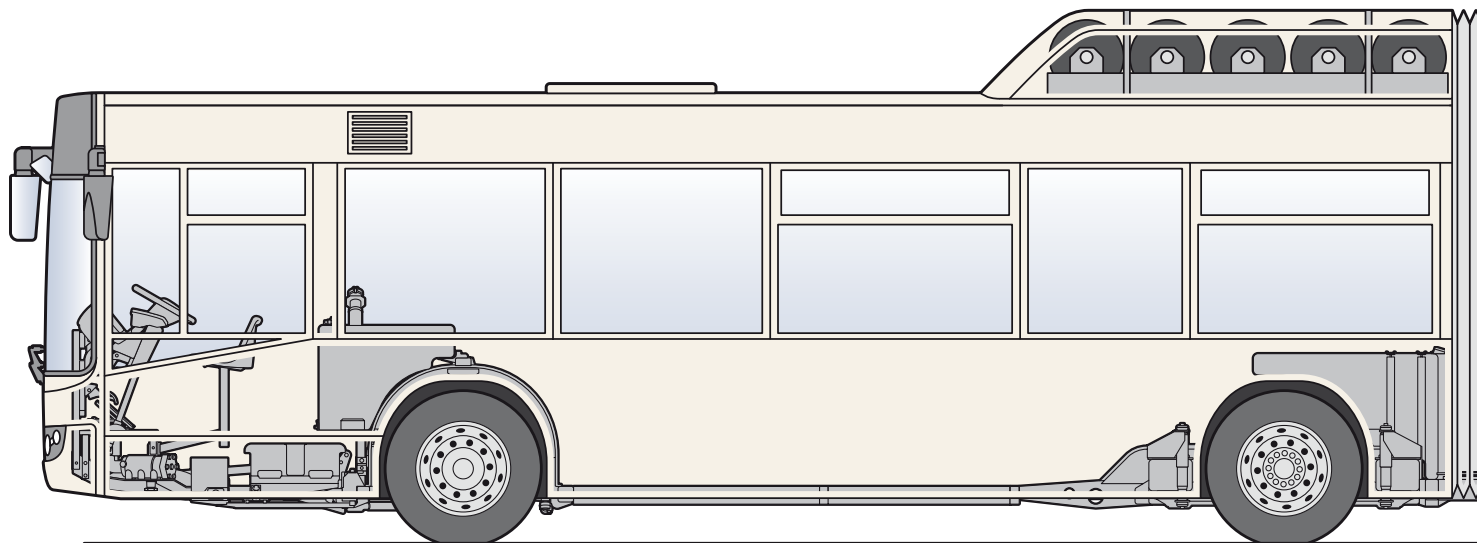
The service points are conveniently grouped and easily accessible.

The exhaust system and SCR catalytic converter made of stainless steel provide considerable corrosion resistance and a long service life.



# VOLVO B9LA

The Volvo B9LA is a three-axle low-floor chassis for articulated buses capable of carrying up to 150 passengers.

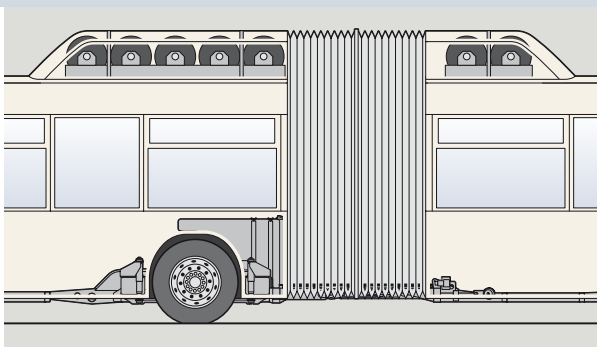


Volvo's components for gas power are certified according to the international ECE 110 R standard.

AdBlue is stored in a separate tank normally mounted on the same side as the fuel tank.



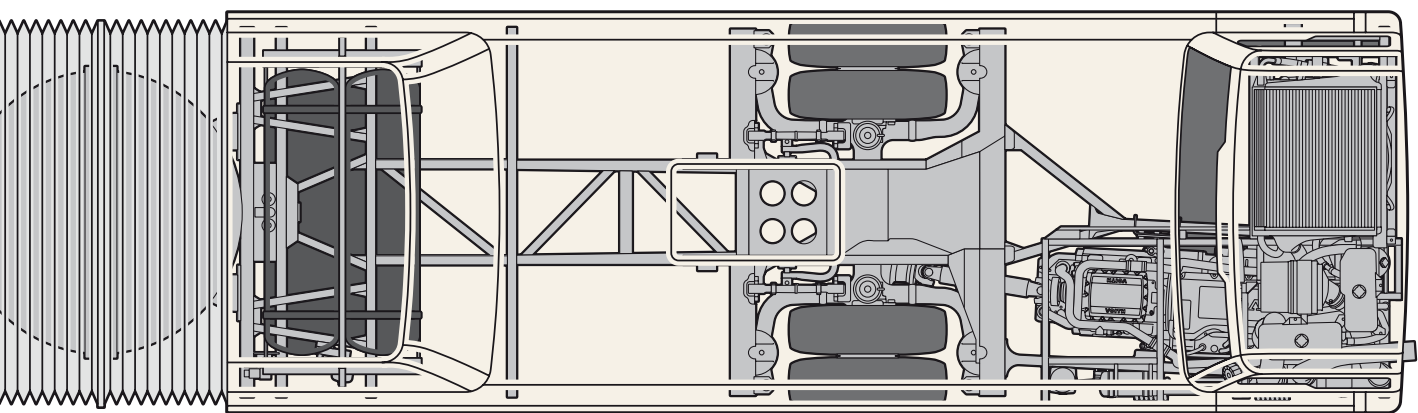
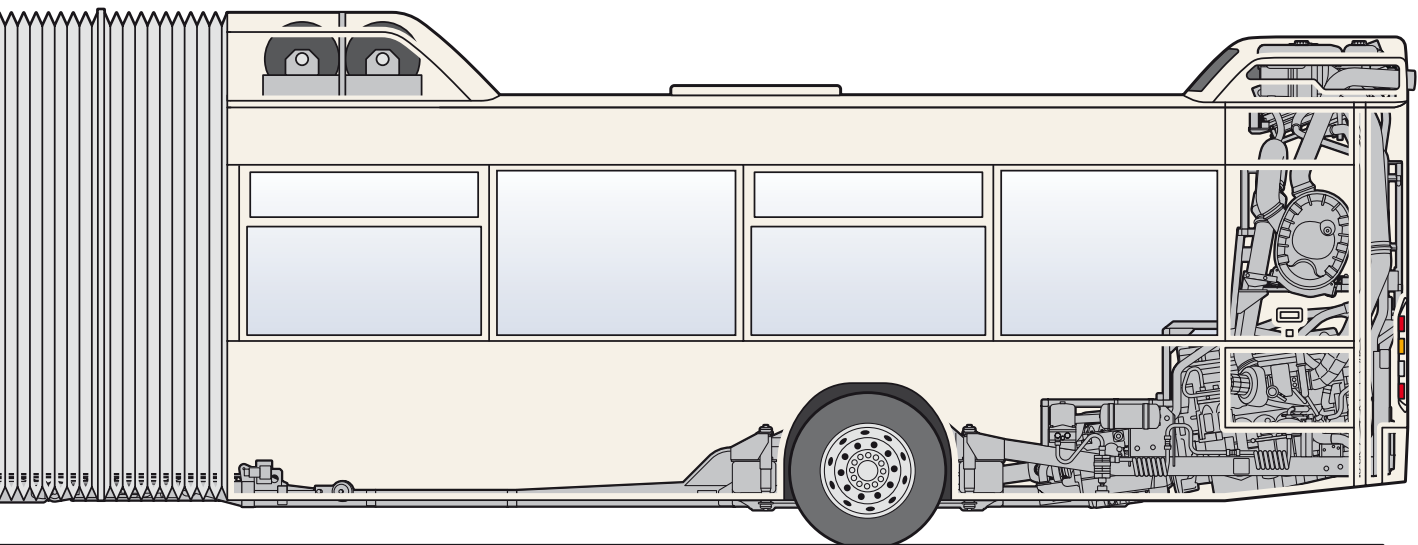
The Volvo Buses natural-gas system includes a complete tank module consisting of high-pressure tanks, shut-off valves and line-break indicators fitted to the bus roof. Tank capacity stretches from 1070 litres (two-axle bus) to 1498 litres (articulated bus).



Volvo's turntable makes it possible to provide a low floor throughout the entire bus.







The trailer axle is a drop-centre axle with a load capacity of up to 10 tonnes.

A new hydraulic fan system for roof mounting provides extremely effective engine cooling and minimum dirt accumulation.

All-round air suspension is standard. Available with kneeling function.

The Volvo B9L family is equipped with Volvo's electronically controlled disc brakes. The electronic system makes for an extremely short stopping distance and the brake discs are of a highly temperature-resistant design.





#### SERVICE

- One of the most widespread service networks in the industry
- Maintenance service
- Service and repair agreements
- Volvo Action Service
- Price parity
- Service workshops specialising in buses

#### FINANCING

- Hire-purchase
- Financial leasing
- Operational leasing
- Full-service leasing

## MAKE THE BEST OUT OF YOUR BUSINESS

If you choose a Volvo, you've got yourself a secure deal. Not just because the bus itself meets high standards concerning quality and availability, but because you also gain access to one of Europe's most comprehensive networks of service workshops, an efficient system of parts supply, round-the-clock assistance, financing, driver training and much more. Volvo Buses is one of the world's largest suppliers of large buses and is part of the Volvo Group. And that's something you'll benefit from.

#### Designed for simple service

No matter which basic variant of the Volvo B9L family you choose, you get a service-friendly bus. The oil-change intervals stretch up to 40,000 km provided you use oil that meets Volvo's VDS-3 standard. Many components such as the universal joints, support shafts in the rear axle and wheel bearings in the rear axle are entirely maintenance-free. This is possible thanks to the use of a new type of grease that never needs replacement. In addition, the BEA electronics can be said to serve as a sort of preventive maintenance system. The electronic system quite simply makes sure it limits engine revs and power output under certain risky situations.

#### Out on the road more quickly

The Volvo B9L family is well-prepared for bodybuilding. The flat upper chassis face makes it easier to attach the body to the frame. The chassis BEA is joined to the body's electronic system via a simple plug-and-play system. In order to make bodybuilding even easier, detailed, easy to understand instructions are provided. All this means that the operator gets a bus of the very highest quality that can quickly be put into operation, earning its living.

#### A secure deal

Volvo Buses offers not just vehicles but also a range of facilities within servicing and financing that allow you to tailor a transport solution that is perfectly suited to your operation. The aim is to give you higher vehicle availability, safeguard you from unexpected costs, put you in full control of your total economy and generate greater security in your operation. The range of services offered may vary between the different markets. For detailed information, please contact your Volvo representative.





## FACTS, VOLVO B9L RANGE

### Frame

Frame made of high-strength steel combines good stability with low weight. Dimensional precision makes bodybuilding easier.

### Engines

Diesel: Volvo D9B 260 hp (1100 Nm), 310 hp (1400 Nm), 360 hp (1600 Nm). (Two-axle chassis 260 or 310 hp. Three-axle chassis 310 or 360 hp.) All the engine variants are certified according to Euro 4. The Volvo D9B is also available in a Euro 5 (incentive) variant. Natural gas/biogas: Volvo G9A 260 hp (1200 Nm), 300 hp (1400 Nm). (Three-axle chassis 300 hp.) The Volvo G9A has been developed to meet the EEV emissions regulations.

### Transmissions

Automatic transmissions with 4 or 6 gears and integrated retarder.

### Driven axle

Drop-centre axle with a wide range of ratios: 6.21, 5.77 and 5.27:1. Designed for a rear axle load of up to 12 tonnes.

### Trailer axle

Drop-centre axle for axle loads of up to 10 tonnes.

### Front axle

Drop-centre axle with roll stabiliser. Front axle load up to 7.1 tonnes.

### Suspension

Air suspension with kneeling function.

### Braking system

Volvo electronically controlled disc brakes (EBS) all round. Hydraulically controlled integrated retarder. Brake Blending function.

### Driver's compartment

Ergonomically designed driver's compartment with a wide range of individual adjustments and detailed driver information.

### Fuel tanks

Volvo B9L (4x2) diesel: 220 l.  
Volvo B9LA (6x2) diesel: 380 l.  
Volvo B9L (4x2) gas: 1070 l.  
Volvo B9LA (6x2) gas: 1498 l.

### Total length

Two-axle chassis for up to 12 m.  
Articulated bus chassis for up to 18 m.

### Gross weight

Two-axle bus: 19 tonnes. Articulated bus: 28 tonnes.



# VOLVO

Volvo Bus Corporation

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