Guidelines for Rescue Services

Mercedes-Benz Buses
Edition 02.2021

Mercedes-Benz
The standard for buses.

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Publisher's information

1. Publisher's information

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Publisher's information

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Foreword

2. Foreword

Dear reader,

One of the overriding goals in the company tradition of EvoBus GmbH and the Mercedes-Benz Buses marque has been to ensure superlative safety.

This also extends to making information about our vehicles and their safety engineering available to emergency rescue services.

Despite intensive efforts to make our buses as safe as possible, the possibility of injuries being sustained “in a serious incident” cannot be entirely ruled out.

For this reason, a short, fast and effective rescue chain will continue to be essential. Emergency responders must be capable of gaining access to the injured as quickly as possible without further endangering the injured or themselves.

This requires that all rescue workers have in-depth training. With respect to the special circumstances presented by buses, e.g. physical design, special means of access and safety systems, this guide will assist you in your work at the scene and in the training of emergency responders.

While this guide was compiled based on the current state of knowledge and with the contribution of emergency rescue personnel, it makes no claims to completeness and in no way acts as a substitute for in-depth training and established specialist literature on the subject of “Technical Rescue”.

This guide is intended as a source of reference for emergency responders at incident scenes and in training. As every accident is an exceptional situation, particularly those involving buses, the information taken from this guide must be adapted accordingly to the individual scenario.

EvoBus GmbH

3. Tips for emergency rescue services

Rescuing accident victims from automobiles has become common practice for emergency rescue services. It is a process that is straightforward to practise with the use of retired cars.

In the case of buses, however, the situation is different. On account of their long service life and the high residual value that they continue to hold thereafter, it is almost impossible for rescue teams to practise the extrication of injured persons from modern-day vehicle models.

The casualty-centred extrication of persons from buses is, by comparison with motor car accidents, far more complex and not only because of the potentially high number of injured passengers. As these vehicles have a more robust construction and significantly greater dimensions and weights, the rescuing of trapped occupants is made more difficult and more complicated.

3.1. Medical aspects

Whereas until a few years ago the paramount concern was freeing accident victims as quickly as possible, the primary objectives today are the provision of initial medical care and a casualty-centred vehicle extrication.

Exceptions:

- Immediate danger due to fire or crash
- Snatch rescue required for medical reasons

In every case, a (frantic) dragging of the person out of the vehicle should be avoided whatever the circumstances. The accident victim should initially be left in the vehicle for the time being to the extent that no immediate danger to the person and rescuer exists.

The top priorities are the medical and psychological care of the casualties as well as a gentle and casualty-centred rescue from the vehicle.

The medical actions performed in the vehicle should not go beyond that which is absolutely necessary. For this purpose, the paramedic/rescue service has to be given access to the casualty so that life-saving measures can be carried out.

The most important immediate measures must be performed without delay and in accordance with the relevant medical standard.

Tips for emergency rescue services

The most important immediate measures are:

- Ensure vital functions (breathing/circulation)
- Keep airways clear and remedy breathing difficulties (with intubation if necessary)
- Prevent shock or assess shock states and take stabilisation measures
- Treat life-threatening injuries
- Stop heavy bleeding
- Immobilise certain parts of the body
- Psychological support of the casualty

As extremely high rates of acceleration act on the body in the event of a traffic accident, there is a high risk of spinal cord injury. Accident casualties should be immobilised before rescue is attempted, i.e. with appropriate splinting techniques (e.g. “Stifneck”, KED system, etc.).

3.2. Technical aspects

- Identification of the vehicle model
- Visual inspection of fitted restraint and safety systems
- Particular bodywork characteristics affecting the use of hydraulic rescue equipment

3.3. On-scene technical aspects

During rescue operations, numerous risks of injury for patients and rescuers exist, e.g. as a consequence of:

- running engines
- explosion of compressed-gas reservoirs and lines
- electronic devices and defective electrical lines
- hot water equipment
- coolant leakage
- air-conditioning equipment
- acid leakage
- sharp edges, metal parts, shards, etc.

Make absolutely sure that rescuers understand the importance of their own safety.

Tips for emergency rescue services

3.3.1. Response procedure

The goal of casualty-centred extrication is to ensure that the provision of care for patients is as seamless as possible from the time of the accident to the definitive care given in hospital.

The extrication of accident victims from buses can, as with cars, be subdivided into different phases:

1. Initial access
2. Space creation
3. Full access

By having medical and technical actions performed in parallel, it is possible to optimise time efficiency in the casualty-centred rescue.

To achieve this, constant communication between the fire crew and rescue team is absolutely essential.

Surveying and safeguarding the scene and the outside of accident vehicles always comes first in a rescue operation.

Survey

- Number of vehicles involved
- Number of injured and trapped persons
- Particular technical characteristics of the vehicle
- Possibilities for access and casualty removal
- Special hazards

Outer safety

- Protect the accident scene from moving traffic
- Ensure fire safety by providing appropriate extinguishing media
- Make safe luggage, skiboxes, trailers, etc.
- Illumination of the accident scene

Give your command post immediate feedback.

Request additional support promptly; do not forget about the personnel necessary for medical care, e.g. emergency physician in charge, incident commander, rapid response teams, etc.).

For tactical reasons (vehicle height), it is advisable to request vehicle-mounted aerial appliances, e.g. turntable ladder with cage and stretcher bracket.

Refer to Section 3.3.3 Mass casualty incident (MCI).

3.3.2. Fire safety

It only takes a few minutes for an incipient fire to grow into a fully developed fire. It is vital, therefore, to provide fire safety equipment offering fourfold protection for classes A, B, C and D.

A fire hazard exists during rescue operations primarily due to

- escaping operating fluids
- short circuit
- defective heaters

3.3.3. Mass casualty incident (MCI)

As bus accidents can result in a high number of injured persons, it is usually the case that a “Mass Casualty Incident” response unit will also be required in addition to the “Technical Rescue” response unit.

This calls for additional rules in respect of the emergency materials chain, spatial organisation and incident management system.

Particular attention must be paid to the following points, especially in the case of obscure and confined incident scenes:

- Wide cordon to be established around accident scene, road closure
- Alternative approach and exit routes for reinforcements
- Requesting of additional personnel
- Assembly staging areas for fire service, rescue service, disaster relief, police, etc.
- Deployment staging areas for fire service, rescue service, disaster relief, etc.
- Casualty collection point and treatment area

4. Technical information

Even in the bus industry, development never stops. In addition to vehicles with a conventional petrol or diesel engine, buses with alternative drives are increasingly common on the road. Gaseous fuel, battery cell and fuel cell drives are no longer a rarity.

By comparison with the physical design of a passenger car, there are also special considerations relating to the construction and materials used. Substantially larger dimensions and heavier weights are to be expected, for example. Another special case is the articulated bus, with which rescuers should familiarise themselves early on.

4.1. Diesel drive

The petrol- or diesel-fuelled drive is the oldest and also the most prevalent. This is probably where the fewest questions arise in fire safety management. However, there are some factors to consider that are not quite so relevant when dealing with a wrecked car.

4.1.1. Fuel tanks

The tanks could be integrated in the front passenger seats, in which case they place particularly challenging demands on rescuers. However, even the tanks in tourist coaches require meticulous handling of rescue equipment due to their position in the luggage compartments (underneath the passenger seats).

The exact position of the tanks can be found in the appendices.

During rescue operations, make absolutely sure that the location of the lines from the tank to the engine is known.

City bus - tank in bodyshell

City bus - tank with seat squab

Technical information

Interurban bus - tank in bodyshell

Tourist coach - tank in skeleton

4.1.2. Tank: materials, capacities

Material: - Plastic
- Sheet steel
- Aluminium

Capacity: - City bus up to 350 l,
- Tourist coach up to 1,000 l

Diesel is assigned to **fire class B** by European Standard EN2, which defines categories according to the type of material burning.

4.2. Natural gas drive

The Citaro CNG and Citaro G CNG models are low-floor city buses in the Mercedes-Benz Citaro series with natural gas drive.

The customary engine of diesel buses was further developed for natural gas combustion and converted to the operating principle of petrol engines with spark ignition.

Buses with natural gas drive could have the following features:

- “CNG” (Compressed Natural Gas) marking on the engine flap
- tank filler neck in the engine flap
- large roof shroud

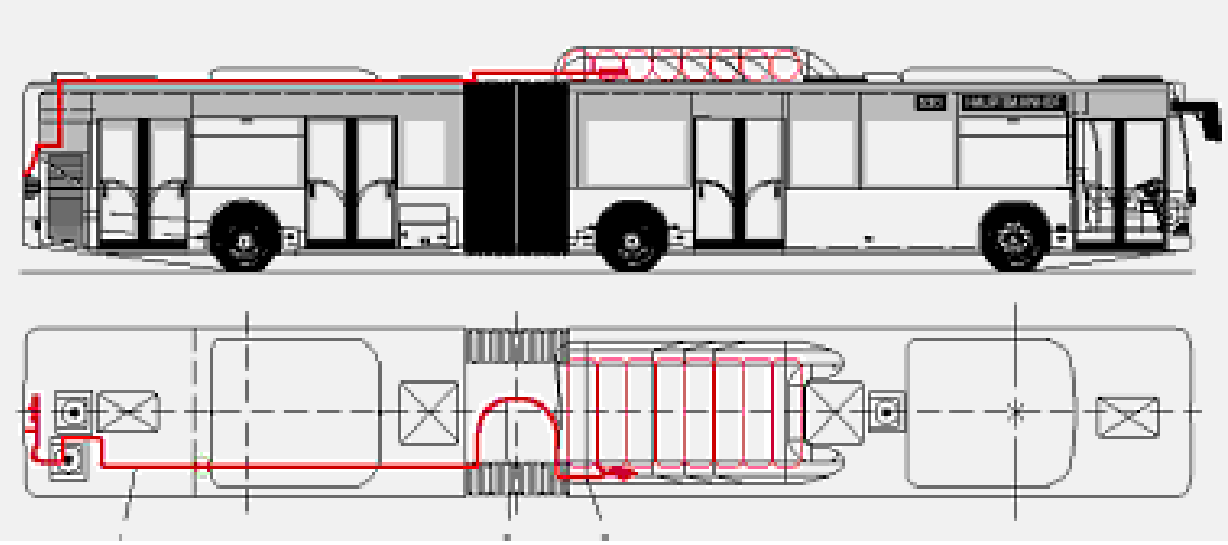
4.2.1. Engineering

The location of the natural gas components of the Citaro CNG was designed with maximum safety in mind.

The tanks are rated for pressures of over 500 bar and thereby offer 2.5-fold rupture safety. On each pressure reservoir, special safety devices, such as shut-off valves or safety fuses, help to meet maximum standards for safety.

As an additional safety factor, the gas reservoirs are mounted on the vehicle roof.

The gas line of the natural gas Citaro runs from the tank filler neck in the engine compartment directly to the compressed-gas reservoirs on the roof without affecting the passenger compartment. This prevents natural gas from being able to enter the vehicle interior.



Technical information

4.2.2. Materials

The gas shroud on the roof is made of glass-fibre-reinforced plastic.

On the top of the gas shroud are air slots that allow any escaping gas to dissipate.

In conjunction with these air slots, a 20 mm gap between the gas shroud and the bus roof satisfies the legal requirement for possible air exchange.

The gas reservoirs are made of solid plastic polyethylene with carbon fibres.

The reservoirs are secured to the roof frame in a high-strength steel frame.

Natural gas is assigned to **fire class C** by European Standard EN2, which defines categories according to the type of material burning.

Natural gas is lighter than air and dissipates upwards if released.

Comprehensive tests have shown that the high-strength tanks, lines, unions and all natural gas peripherals offer the greatest possible safety in accidents.

The risk of a fire in connection with a Mercedes-Benz bus operating on natural gas is no higher than with diesel vehicles.

4.2.3. Disconnecting the gas supply

The filler unit is accessible through the

- rear engine flap or through the
- fuel filler flap above the front axle.

Here, in some models, there is a main shut-off valve that can be used to interrupt the gas supply to the tanks.

In buses of more recent design, the gas supply is interrupted automatically by an electrically operated check valve at “ignition OFF”.

Danger.

Risk of poisoning and burns from activation of the gas auxiliary heating. Even with the engine switched off, the solenoid valves on the gas cylinders open when the gas auxiliary heating is activated!

➢ In addition to switching off the engine, also switch off the on-board power supply using the battery isolating switch (in the battery compartment).

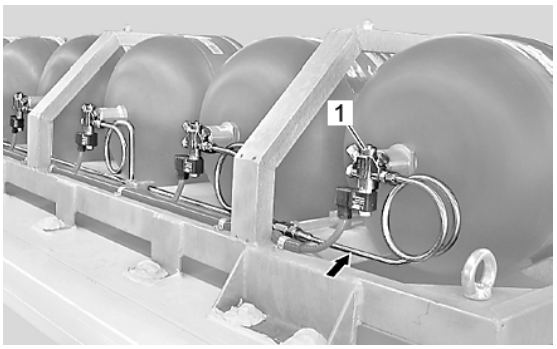
The gas reservoirs are equipped with safety devices on both sides.

On the left-hand side:

On the left-hand side of the vehicle, each gas cylinder has a combination valve (1) comprising:

electrical solenoid valve, non-return valve, pipe fracture safeguard (cross section reduction to 10%), fusible link (110 °C) and mechanical shut-off valve.

All combination valves are interlinked by a high-pressure line (arrowed).



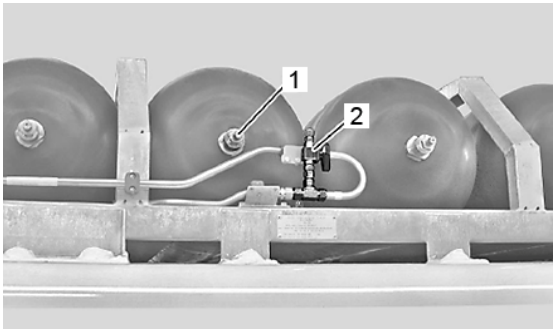
Technical information

On the right-hand side:

The following components are mounted on the right-hand side of the gas supply system:

- Pressure relief device.
  Each gas cylinder is fitted with a safety fuse (1) for limiting pressure.

- T-piece with drainage device.
  A drainage device (2) is fitted in the high-pressure line. It makes it possible to extract the gas.



All safety features are mechanical systems. No vehicle electrical power is necessary for their operation.

4.3.Citaro Compact Hybrid

4.3.1. Engineering

A robust electric motor, integrated between the internal combustion engine and the transmission, works as a generator under deceleration and converts overrun energy into electricity – under braking and coasting. The generated electricity is stored as electrical energy in the capacitors, known as supercaps, and boosts torque from a standing start. In this way, the internal combustion engine occasionally requires less power to pull away, which helps to save fuel. The electric motor also supports the engine idling mode. This improves the efficiency of the engine and makes a significant contribution to lowering fuel consumption and, therefore, to reducing emissions.

The Citaro Compact Hybrid is not a high-voltage vehicle, but it does contain a technical system categorised as a high-voltage system. All high-voltage-carrying parts are located in the housing between the engine and the transmission and transmit alternating voltages greater than 30 V only when the electric motor is operating.

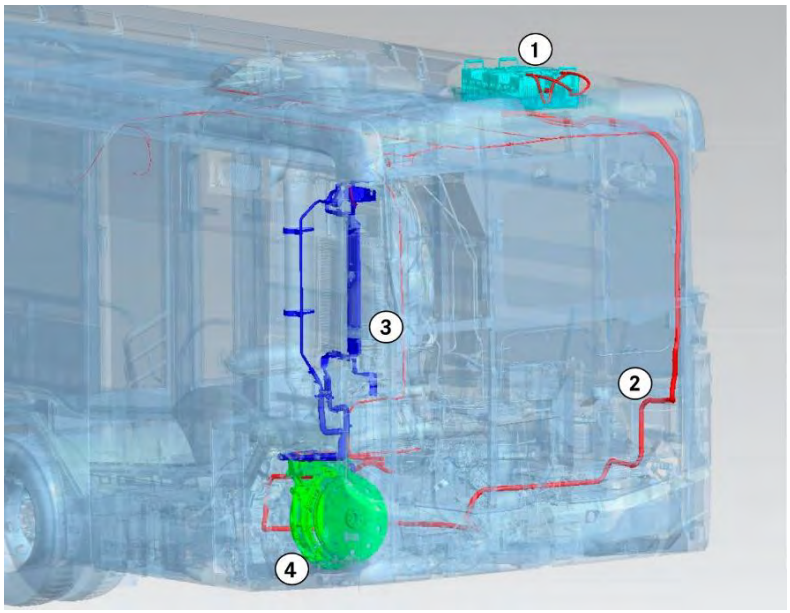
This electrical system is intended for propulsion and has been constructed in accordance with the international regulation ECE R 100 (Uniform provisions concerning the approval of vehicles with regard to specific requirements for the electric power train).

Thanks to structural measures as well as the system being designed to industry standards, the installation has fully comprehensive and extended contact protection.

The high-voltage components concerned are not directly accessible to the user. They are accessible only during maintenance work requiring the separation of the engine and transmission.

For emergency responders, the Citaro Hybrid does not have to be treated any differently from the regular Citaro Euro VI. There are no high-voltage-carrying lines that emergency responders need to be aware of or that will have to be cut for the purposes of extrication. The possibility of contact with high-voltage-carrying parts during an emergency response is therefore excluded.

Technical information



1	Capacitors (supercaps) for storing electrical energy
2	Electrical line with 48 V direct voltage
3	Cooler and cooling lines
4	Housing (with integrated electric motor) between engine and transmission

4.4. Hybrid or all-electric drives, basic information

Definitions:

Low voltage is the term used to describe AC voltages up to 1,000 volts and DC voltages up to 1,500 volts.

“High-voltage system” is, in the specific context of automotive engineering, a term for systems that operate on AC voltages in the range 30 V to 1, 000 V or DC voltages in the range 60 V to 1,500 V.

All buses listed below are classified as having a high-voltage system.

Protective measures for malfunctioning installations:

If a vehicle equipped with a high-voltage system has experienced an unexpected failure or defect, e.g. as a consequence of a traffic accident or fire, it should be assumed that electrical hazards now exist.

Damaged high-voltage systems must be safeguarded by physical barriers to keep live system parts inaccessible to passers-by.

First course of action for responders:

- In so far as this is possible, the vehicle must be de-energised immediately by means of one of the emergency-off switches. One is located in the driver's station, another is on the outside of the vehicle on the side opposite the driver's area (door side). Refer to the next section for bus-specific details.
- A safety distance of at least one metre must be maintained from damaged high-voltage systems or their parts.

High-voltage batteries (lithium-ion batteries, lithium polymer batteries)

These batteries are inherently flammable due to their material composition. The same applies, however, to other energy stores, e.g. fuel tanks. Additional measures implemented in the design of the battery housing and the installation location of the batteries are contributing to further improvements in the safety of high-voltage batteries. These safety measures mean that there is not likely to be any increased fire risk by comparison with conventional vehicles.

The high-voltage battery unit and its individual cells have mechanical safety devices. These are triggered in the event of a (e.g. fire-related) temperature or pressure increase inside the battery to assist purposeful degassing and the necessary pressure relief. In this way, the possibility of a Li-ion battery exploding can practically be eliminated.

Any contact with escaping battery fluid must be avoided because this could be an irritant or corrosive, depending on the battery type. The inhalation of electrolyte fumes must absolutely be avoided. Electrolyte can be soaked up with the use of any conventional binding agent. The possibility of the Li-ion battery also catching fire at a later time cannot be ruled out if the Li-ion battery has suffered mechanical damage as a result of an accident. For this reason, the condition of all Li-ion batteries must be assessed by a trained specialist and the Li-ion batteries should subsequently be stored correctly and under observation. This applies both to the

accident-damaged or burned-out vehicle as a whole and to a Li-ion battery that has been isolated from the vehicle.

Vehicle fire

As with conventional vehicles, a fire involving hybrid and electric vehicles can produce harmful fumes, depending on the materials that are burning, e.g. plastic. Emergency rescue services must wear the usual personal protective equipment.

During fire fighting, hazards could be present as a consequence of:

- live system parts,
- whirling parts,
- toxic decomposition products of particular plastics,
- formation of hydrogen or oxyhydrogen gas due to a possible electrolytic reaction with the fire-extinguishing water.

Use of extinguishing media:

Water is suitable as an extinguishing medium outdoors, provided the necessary safety distances are maintained. A great amount of water should be used, where possible. A continuous supply of extinguishing water helps to cool the Li-ion battery to such an extent that the fire no longer spreads and a controlled burn-out of the Li-ion battery can take place.

Class D dry powder, CO_2 and sand are suitable only under certain conditions due to their difficulty of deployment.

Extinguishing foam and powder are not suitable as they have conductive properties.

Extinguisher safety distances: Spray: at least 1 m
Jet: at least 5 m

These safety distances are derived from DIN VDE 0132 Table 5 and refer to standardised size C jet-spray branch pipes with nozzle attached and a delivery pressure of 5 bar. For higher pressures or high delivery rates, especially with the use of size B branch pipes or fire monitors, different distances will need to be ascertained and these are generally greater.

Recovery from water

In the recovery of submerged or partly submerged vehicles equipped with a high-voltage system, the same procedure applies as for conventional vehicles. A high-voltage system immersed in water might pose an increased risk of electric shock. Until the voltage has been proven dead by a trained professional, appropriate safety measures must therefore be taken (contact protection, protective clothing).

After the vehicle has been recovered from the water, the high-voltage system should be deactivated in accordance with the prescribed shutdown procedure.

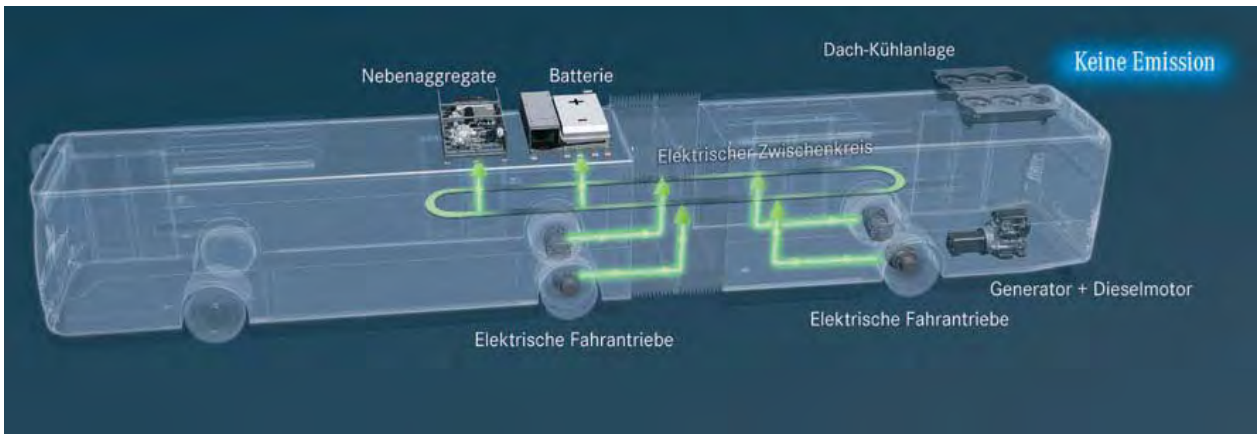
4.5. Diesel-electric drive (Citaro G BlueTec Hybrid)

Heavily polluted city centres or designated environmental zones require new drive technologies. The hybrid drive enables fully emission-free driving not only when the bus pulls away, but also over short distances.

4.5.1. Engineering

A hybrid is a combination of two energy storage systems (tank and battery) and two energy converters (electric motor and diesel engine).

The fundamental component parts of the diesel-electric hybrid are the wheel hub electric motors, batteries, diesel engine, electrically driven auxiliary assemblies and the alternator.



The diesel engine no longer works as a permanent propulsion unit, but operates as an alternator drive to generate electricity on demand.

The electric motor is used as an additional generator under braking or in overrun mode. Energy is recovered in the process. This energy is stored in the lithium-ion batteries and called on when necessary.

Technical information

The high-voltage batteries and the electrically driven auxiliary assemblies are mounted on the roof.

The roof-mounted cooling system on the rear car assists in the trouble-free operation of the motor, auxiliary assemblies and batteries.

Danger.

Risk of fatal injury from touching unprotected or damaged components of the high-voltage on-board power supply. Doing so could lead to burns, ventricular fibrillation or cardiac arrest caused by electric shock.

- Before components of the high-voltage on-board power supply are touched, the high-voltage on-board power supply must be de-energised, refer to section 4.3.3.

4.5.2. Materials

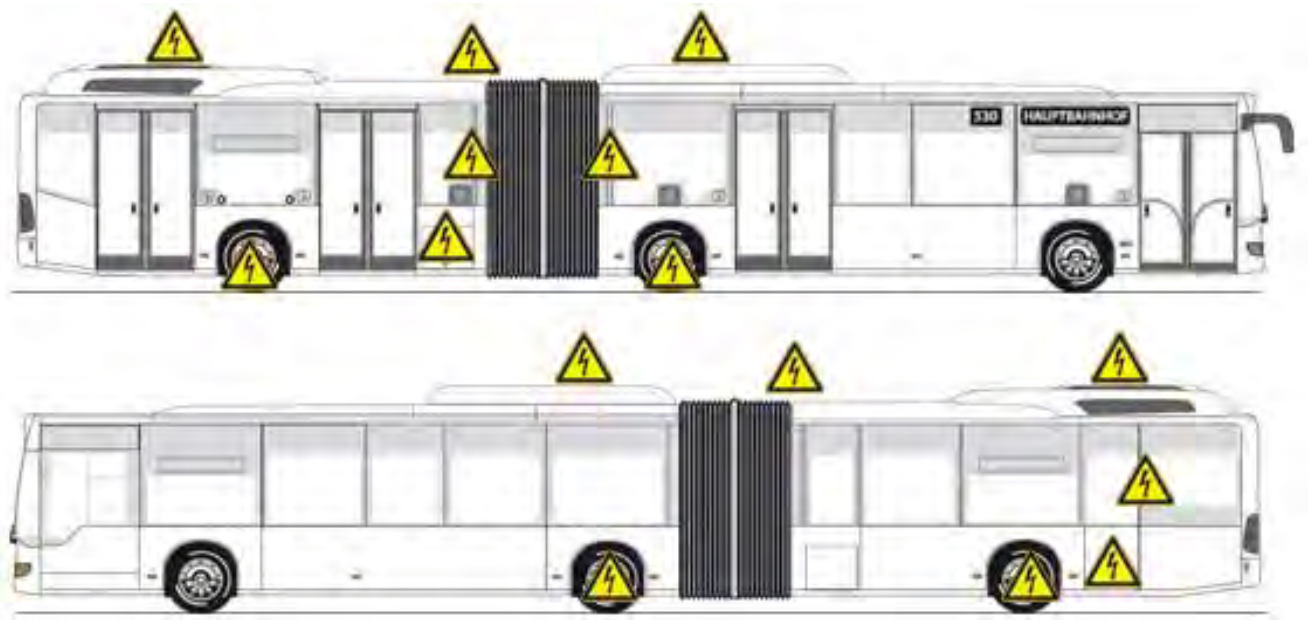
All power cables that carry a voltage of more than 60 volts are coloured orange or sheathed in an orange-coloured corrugated hose.

The components and lines of the high-voltage system (750 V) are located:

- on the vehicle roof (front car, articulation transition, rear car),
- in the engine compartment,
- on the centre axle and rear axle and
- on some window pillars.

The on-board electrical system batteries (24 V) are located on the right-hand side to the rear of the articulation.

All high-voltage components are identified by the warning sign for electricity.



The exact position of the high-voltage components can be found in the rescue cards in the appendix.

4.5.3. De-energising the high-voltage system

The high-voltage system of the vehicle can be de-energised by the following measures:

1. Turn the ignition key to position “0” or

2. Operate the emergency-off switch to the left of the driver’s station or

3. Operate the emergency-off switch in the battery compartment or

4. Operate the emergency-off switch at the front right behind the front flap.

The emergency-off switch in the front flap is optional equipment and not present in every bus.

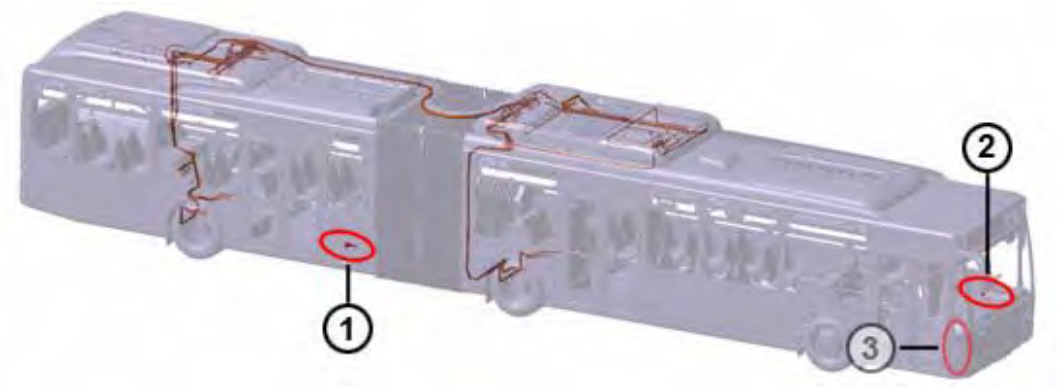
With all 4 variants, an active rapid discharge of the high-voltage system takes place within 5 seconds.

Danger.

Risk of fatal injury from touching unprotected or damaged components of the high-voltage on-board power supply. In the event of rapid discharge disruption, the high-voltage system is discharged passively within 6 minutes. After this time, the vehicle is safely de-energised. The high-voltage batteries still contain voltage!

- If the state of the high-voltage system is uncertain, wait 6 minutes after switch-off before you work on high-voltage components.
- If the use of extinguishing media is required, always maintain the appropriate safety distance (refer to DIN VDE 0132, “Firefighting and technical assistance in or near electrical installations”).

Position of the emergency-off switches (example):



1	Emergency-off switch in the battery compartment
2	Emergency-off switch in the driver's station, left
3	Emergency-off switch behind the front flap (option)

The exact position of the emergency-off switches and other high-voltage components can be found in the rescue cards in the appendix.

24 V on-board power supply

For safe isolation of the on-board battery, turn the battery isolating switch in the battery compartment to the “OFF” position, refer to section 5.2.1.

Always switch off the HV on-board power supply first (emergency-off switch), and then disconnect the 24 V on-board batteries. Otherwise, the 24 V on-board power supply remains active and the rapid discharging of the HV on-board power supply will not be possible.

4.6. Electric fuel-cell drive (Citaro FuelCell-Hybrid)

Mercedes-Benz vehicles with an electric fuel-cell drive have been available in Europe since the start of a small production of 30 vehicles in 2010. Various studies are putting to test the operation of these vehicles and the necessary infrastructure.

With ever stricter emission regulations and increasing scarcity of fossil fuels, however, demand for this alternative drive concept can be expected to increase.

4.6.1. Engineering

Fuel cells obtain energy from the reaction of hydrogen and oxygen. They work with high efficiency and emit only pure water vapour.

The drive train of the Citaro FuelCELL-Hybrid is designed as a series hybrid drive. This means that the fuel cell supplies the current that powers the electric wheel hub motors and the auxiliary assemblies. The energy management controls the energy distribution from the fuel cell systems (stacks) into and out of the battery and the distribution to consumers. Energy produced under braking (recuperation) or at idling speed is also stored in the battery.

The fuel cell system, the pressurised gas cylinders containing hydrogen under 350 bar compression and the high-voltage batteries are located on the roof of these vehicles.

Electricity is obtained from the hydrogen here, which is supplied to the wheel hub motors and the auxiliary assemblies.

The wheel hub motors are located on the driven axle, the auxiliary assemblies are in the engine tower at the rear left of the bus.

Vehicles with a fuel cell drive are equipped with hydrogen tanks. For these vehicles, the guidelines on the extinguishing of gas fires must be observed in particular.

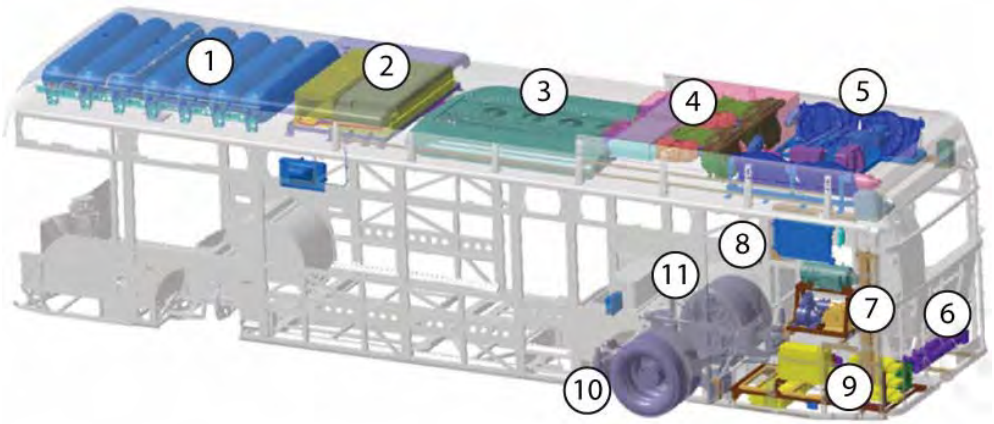
Hydrogen (H_2) is assigned to **fire class C** by European Standard EN2, which defines categories according to the type of material burning.

Danger.

Risk of fatal injury from touching unprotected or damaged components of the high-voltage on-board power supply. Doing so could lead to burns, ventricular fibrillation or cardiac arrest caused by electric shock.

- Before components of the high-voltage on-board power supply are touched, the high-voltage on-board power supply must be de-energised, refer to section 4.4.4.

Layout of components



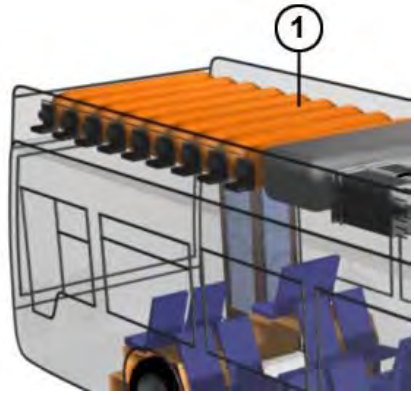
1	Hydrogen tanks (tank pressure max. 350 bar)
2	High-voltage battery
3	Roof-mounted air-conditioning system
4	Fuel cell system (stacks)
5	Roof-mounted cooling system (high-temperature cooling)
6	Heater
7	Auxiliary assemblies
8	Cooler (low-temperature cooling for power electronics)
9	Power electronics carrier
10	Wheel hub motor
11	24 V on-board electrical system battery (on the right-hand side to the front of the driven axle)

The exact position of the components can be found in the rescue cards in the appendix.

4.6.2. Safety features

The pressure reservoirs are equipped with glass bulb PRDs (pressure relief devices).

In the event of overheating in the hydrogen tank system (e.g. fire), the hydrogen is released by the PRDs at a central point (1) on the vehicle roof.



All safety features are mechanical systems. No vehicle electrical power is necessary for their operation.

4.6.3. Materials

All power cables that carry a voltage of more than 60 volts are coloured orange or sheathed in an orange-coloured corrugated hose.

The components and lines of the high-voltage system (up to 800 V) are located:

- on the vehicle roof (high-voltage lines on the left-hand side of the vehicle),
- in the engine compartment (engine tower and rear end) and
- on the rear axle.

All high-voltage components are identified by the warning sign for electricity.

The exact position of the high-voltage components can be found in the rescue cards in the appendix.

4.6.4. De-energising the high-voltage system

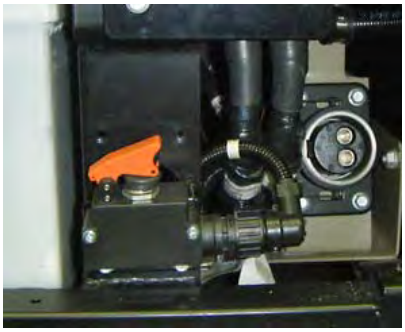
The bus is equipped with fuel cell systems in which electrical energy is generated by the reaction of hydrogen and oxygen. The danger zones for high voltages and currents exist primarily on the vehicle roof and in the engine compartment at the rear left.

The high-voltage system of the vehicle can be de-energised by the following measures:

1. Turn the ignition key to position “0” or

2. Operate the emergency-off switch to the left of the driver’s station or

3. Operate the emergency-off switch in the battery compartment or



4. Operate the emergency-off switch at the front right behind the front flap.

The emergency-off switch in the front flap is optional equipment and not present in every bus.

With all 4 variants, an active rapid discharge of the high-voltage system takes place within 5 seconds.

Technical information

Danger.

Risk of fatal injury from touching unprotected or damaged components of the high-voltage on-board power supply. In the event of rapid discharge disruption, the high-voltage system is discharged passively within 6 minutes. After this time, the vehicle is safely de-energised. The high-voltage batteries still contain voltage!

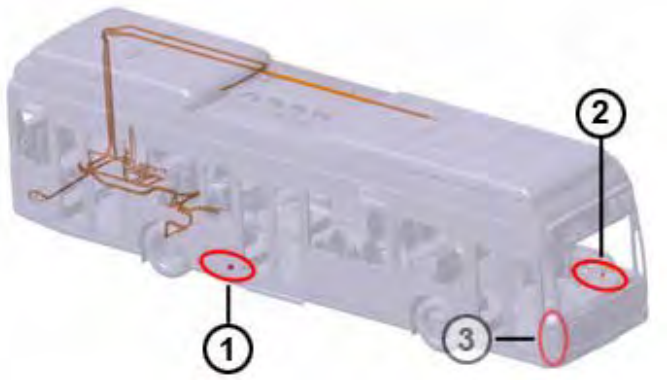
- If the state of the high-voltage system is uncertain, wait 6 minutes after switch-off before you work on high-voltage components.
- If the use of extinguishing media is required, always maintain the appropriate safety distance (refer to DIN VDE 0132, “Firefighting and technical assistance in or near electrical installations”).

Whenever the bus is de-energised, all electrical circuits are opened.

In the fuel cell stacks on the vehicle roof, the voltage is dissipated only gradually (capacitor effect).

At the same time, all hydrogen valves are closed and a continued flow of hydrogen into the pipes is prevented. The purposeful release from the central blow-off point above the cylinders is not affected.

Position of the emergency-off switches



The exact position of the emergency-off switches and other high-voltage components can be found in the rescue cards in the appendix.

1	Emergency-off switch in the battery compartment
2	Emergency-off switch in the driver's station, left
3	Emergency-off switch behind the front flap (option)

Technical information

24 V on-board power supply

For safe isolation of the on-board battery, turn the battery isolating switch in the battery compartment to the “OFF” position, refer to section 5.2.1.

Always switch off the HV on-board power supply first (emergency-off switch), and then disconnect the 24 V on-board batteries. Otherwise, the 24 V on-board power supply remains active and the rapid discharging of the HV on-board power supply will not be possible.

4.7. The all-electric eCitaro (rigid and articulated)

The Mercedes-Benz eCitaro with all-electric drive produces zero local emissions, near-zero noise emissions and raises the standard for electric mobility in the city bus segment to a new level.

With this city bus, Mercedes-Benz is tackling the increasing scarcity of fossil fuels and stricter emission regulations.

4.7.1. Engineering

The eCitaro is driven by electric wheel hub motors on the driven axle. The peak output of the motors amounts to 2 x 125 kW, with a total torque of 2 x 485 Nm. Thanks to system design, this is fully available from a standing start and ensures appreciable dynamic performance even with maximum occupancy.

Lithium-ion batteries with a total capacity of up to 440 kWh supply the power. These are integrated into a maximum of twelve modules. In addition to up to eight battery modules on the vehicle roof, four modules in the rear end also form part of the standard specification.

The energy consumption of an all-electric city bus is heavily influenced by the amount of power required to cool and, above all, to heat the large interior. For this reason, thermal management is one of the prominent features of the eCitaro: extraordinary energy performance provides the basis for the practical range that it can achieve.

To save energy, the passenger compartment of the eCitaro is heated by a heat pump. This is supplemented by the customary floor heater blowers and the front heater.

All components that give off heat are interconnected in order to reduce the amount of energy required to cool them to a minimum. In the cold periods of the year, the roof-mounted air-conditioning system also acts as a heat pump. The use of CO_2 refrigerant delivers further benefits, making an impressive contribution to the particularly efficient operation of the heat pump, even at very low temperatures.

Another plus: even while the batteries are charging in the depot, the interior can be preconditioned to the desired temperature or even overconditioned. In this way, the bus can start its route already heated or cooled.

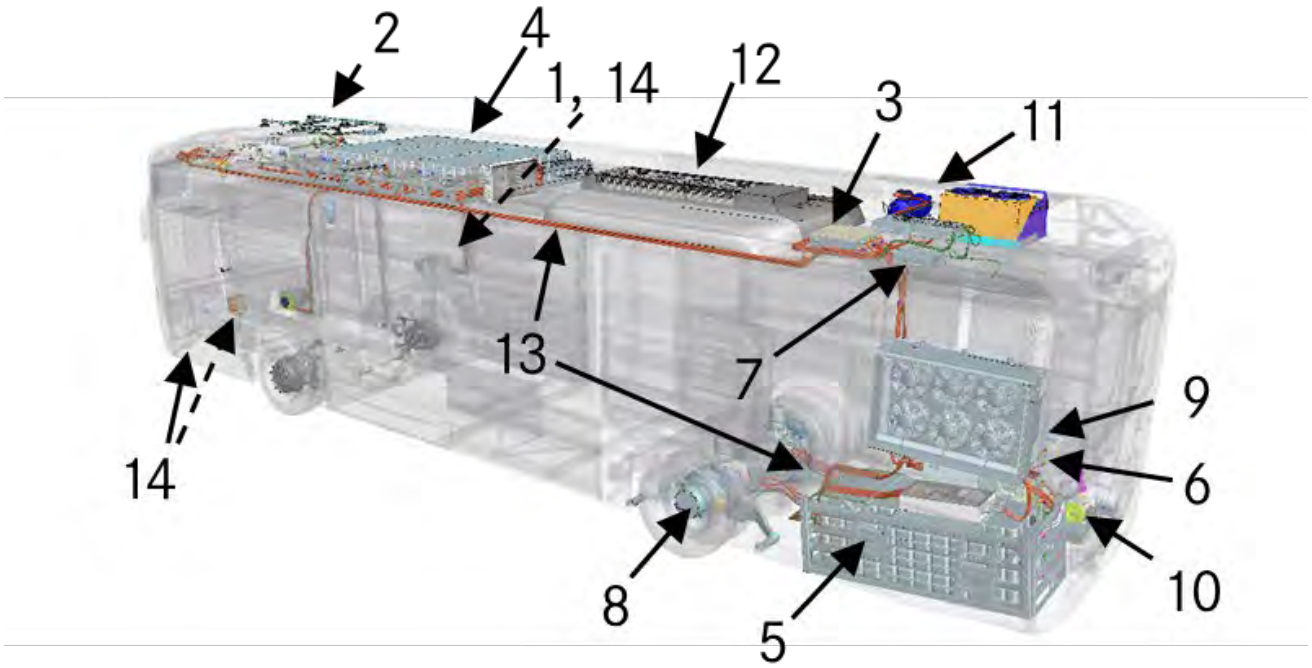
Danger.

Risk of fatal injury from touching unprotected or damaged components of the high-voltage on-board power supply. Doing so could lead to burns, ventricular fibrillation or cardiac arrest caused by electric shock.

- ➢ Before components of the high-voltage on-board power supply are touched, the high-voltage on-board power supply must be de-energised, refer to section 4.6.4.

Technical information

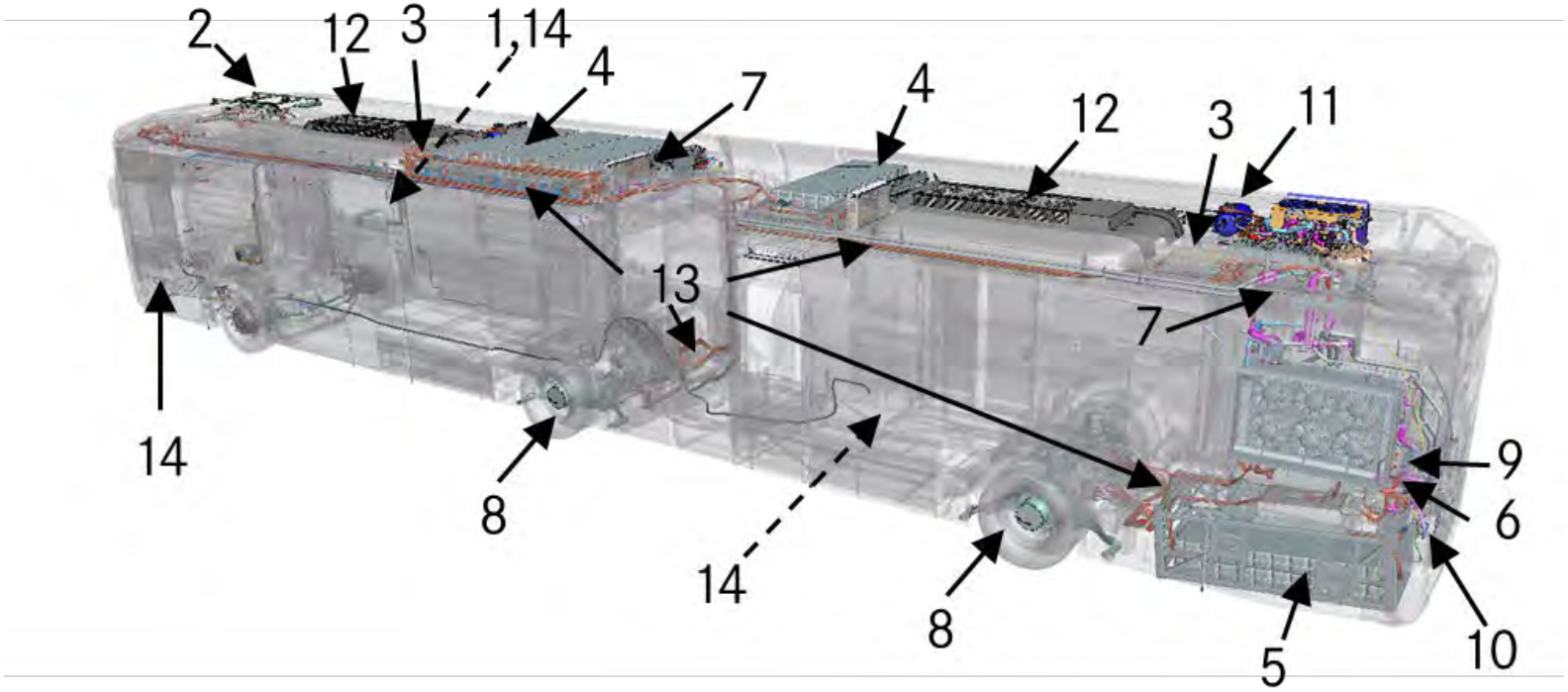
Layout of components, eCitaro



1	Charging socket (outside right)	6	Drive and braking resistor inverter-converter unit	11	Air-conditioning compressor
2	Charging contactors, charging rail (option)	7	Ancillaries power inverter	12	Air-conditioning system
3	HV fuse box	8	Electric wheel hub motors	13	HV lines (orange)
4	Roof-mounted HV batteries	9	Braking resistor	14	Emergency OFF switch on charging socket (optionally in the battery compartment)
5	Major assembly compartment HV batteries	10	Pneumatic compressor		

Technical information

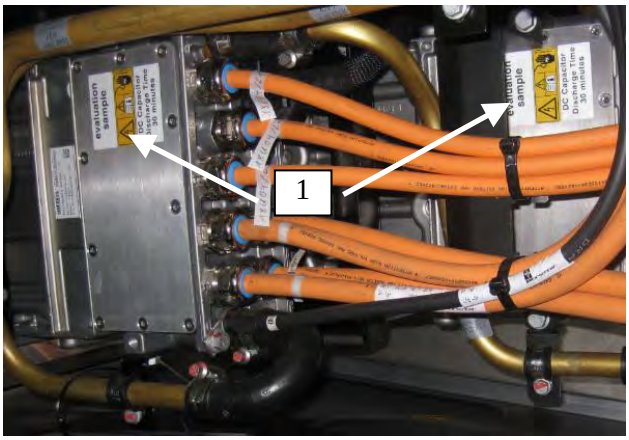
Layout of components, eCitaro G



1	Charging socket (outside right)	6	Drive and braking resistor inverter-converter unit	11	Air-conditioning compressor
2	Charging contactors, charging rail (option)	7	Ancillaries power inverter	12	Air-conditioning system
3	HV fuse box	8	Electric wheel hub motors	13	HV lines (orange)
4	Roof-mounted HV batteries	9	Braking resistor	14	Emergency OFF switch on charging socket (optionally in the battery compartment)
5	Major assembly compartment HV batteries	10	Pneumatic compressor		

4.7.2. Materials

All power cables that carry a voltage of more than 60 volts are coloured orange or sheathed in an orange-coloured corrugated hose.



The components and lines of the high-voltage system (up to 750 V) are located:

- on the vehicle roof (high-voltage lines on the left-hand side of the vehicle),
- in the major assembly compartment (formerly the engine compartment) and
- on the rear axle and, if applicable, the centre axle.

All high-voltage components are identified by the warning sign for electricity **(1)**.

4.7.3. De-energising the high-voltage system

The high-voltage system of the vehicle can be de-energised by the following measures:

1. Operate the emergency-off switch to the left of the driver's station (1) or

2. Operate the emergency-off switch behind the flap of the charging socket (2).

Caution!

Frequent deactivation of the HV system by emergency-off switch leads to premature ageing of HV components.

- ➢ Operate emergency-off switches only in emergencies (e.g. accidents with damaged HV parts).

With both variants, an active rapid discharge of the high-voltage system takes place within 5 seconds.

Danger.

Risk of fatal injury from touching unprotected or damaged components of the high-voltage on-board power supply. In the event of rapid discharge disruption, the high-voltage system is discharged passively within 7 minutes. After this time, the vehicle is safely de-energised. The high-voltage batteries still contain voltage!

- ➢ If the state of the high-voltage system is uncertain, wait 7 minutes after switch-off before you work on high-voltage components.
- ➢ If the use of extinguishing media is required, always maintain the appropriate safety distance (refer to DIN VDE 0132, "Firefighting and technical assistance in or near electrical installations").

Danger.

Risk of fatal injury from touching energy sources that could still be live.

- ➢ If applicable, interrupt the charging process using pushbutton (3) on the charging socket and pull the charging connector.
- ➢ If applicable, retract the roof-mounted collector.

24 V on-board power supply

For safe isolation of the on-board battery, turn the battery isolating switch in the battery compartment to the “OFF” position, refer to section 5.2.1.

Always switch off the HV on-board power supply first (emergency-off switch), and then disconnect the 24 V on-board batteries. Otherwise, the 24 V on-board power supply remains active and the rapid discharging of the HV on-board power supply will not be possible.

4.8. Vehicle construction

Knowledge of the physical design of any vehicle involved in an accident facilitates rescue operations enormously. It predetermines how effectively the technical options and available tools are put to use. This in turn forms the basis for a swift, gentle and successful extrication of trapped persons.

4.8.1. Skeleton

The frame structure can place demanding requirements on the power rating of the hydraulic rescue equipment!

The skeleton is of tubular construction.

- Semi-integral structure with ribs all round, connected to continuous angle sections at the roof edges and seams.
- Pillars, bows and beams made of large-volume square steel tubes.
- The sidewalls of city buses have a reinforced longitudinal member to provide side impact protection and support for the seating.

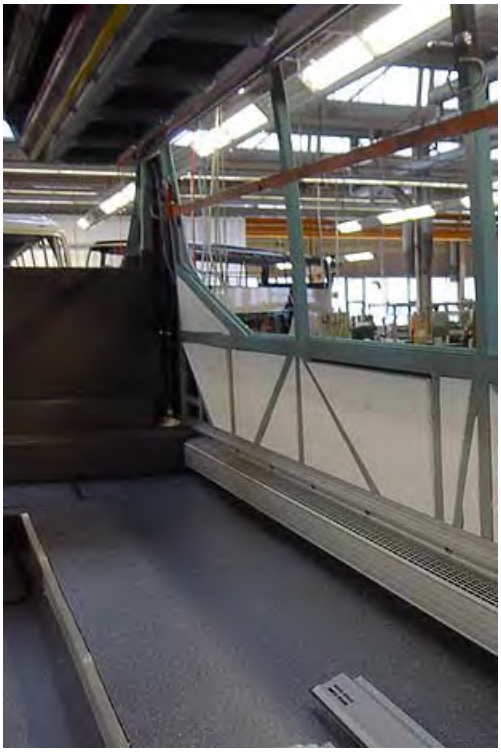
Skeleton of a low-floor bus

4.8.2. Materials

Skeleton material	Square steel tubes
Floor frame material	
Longitudinal and cross members	Large-volume square tubes, or folded and pressed parts
Transitions at the cross members (to the front and rear of the rear axle)	Cast steel nodes
Wheel arch area	Galvanised sheet steel or aluminium - 3 mm at the front axle - 4 mm at the rear axle
Panelling material	- Continuously hot-dip galvanised sheet steel or aluminium, thickness approximately 1.0 mm - GFRP mouldings - Aluminium sheets

The panelling is bonded, spot-welded or riveted to the skeleton.

The sidewalls and the roof are completely lined with insulating mats or polystyrene.



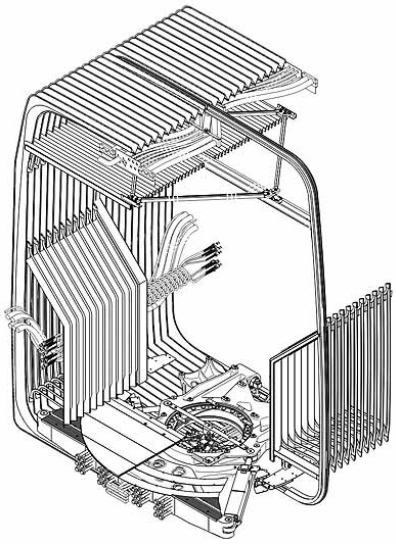
4.8.3. Articulation

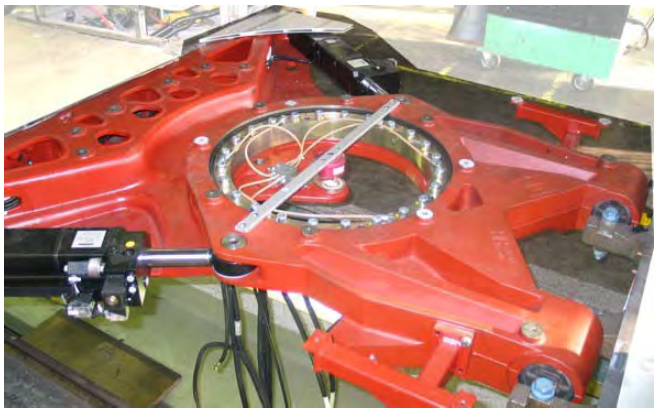
The front and rear cars are connected by an articulation system.

It consists of carrier units, a self-supporting turntable and a hydraulic unit.

The articulation is particularly robust due to the design of the cast parts (spheroidal graphite cast iron, SG iron).

The articulation area contains a bellows and the energy chain.





To accommodate the bending movements of the bus, the front and rear sections of the articulation are connected by a roller bearing. The pitch axis is situated at the connection between the front car and the articulation.

Danger.

Risk of injury from unforeseen movement of the front or rear car while the vehicle is being raised.

➢ If necessary, secure the front car and rear car to each other using tensioning straps.

4.8.4. Dimensions, weights

Mercedes-Benz buses are constructed in lengths of between 8 m (midibus) and 18 m (articulated bus).

Depending on the length and axle specification, a permissible gross vehicle weight of 12,600 kg to 28,000 kg is achieved.

4.9. Materials used

In accordance with legal requirements (EU and ECE) and based on the current state of knowledge, fire-retardant materials are used in the interior of the vehicle.

The provisions of EU Directives 95/28 and 2001/85 EC for the complete vehicle are deemed to have been fulfilled.

4.9.1. Magnesium, aluminium

In automotive engineering, there is an increasing use of light metals such as magnesium or aluminium. These metals are employed in the vehicle as part of engine blocks, cylinder head covers, intake manifolds, transmission and clutch housings, instrument brackets, seat backrest frames and door and flap structures in conjunction with other materials and structural parts of vehicle bodies.

For vehicle occupants, there is no increased danger from the use of magnesium and aluminium.

Magnesium and aluminium are assigned to **fire class D** under European Standard EN2, which defines categories according to the type of material burning.

Danger.

Risk of burns and of poisoning from burning magnesium or aluminium parts.
Magnesium and aluminium burn with a bright flame and reach temperatures of 2,000 - 3,000 °C in a fire.
During combustion at very high temperatures, some water molecules will split to form hydrogen and oxygen. The mixture of these two gases is the explosive oxyhydrogen gas.

- Avoid looking directly into the flames.
- For metal fires, use suitable extinguishing media to fight fires of fire class D.
- Keep another extinguishing hose ready for possible surrounding fires.

5. Technical rescue

Every technical rescue operation, especially the extrication of trapped and/or injured persons, requires knowledge of the physical design of the accident vehicle.

This section provides information on the standard equipment of Mercedes-Benz buses. However, as numerous items of optional equipment exist for all models, the actual design could differ significantly from vehicle to vehicle.

If possible, ask the driver about the exact equipment and operation of the vehicle.

5.1. Fire detection and extinguishing system

Mercedes-Benz buses have been equipped with a fire detection system as standard since 2011. A fire extinguishing system in the engine compartment is available as an option.

The temperature in the engine compartment is monitored by detection lines. As soon as the defined value (160 °C) is exceeded, an alarm is displayed on the driver's display screen together with the text: “Brandmeldung Motorraum” (Fire alarm engine compartment).

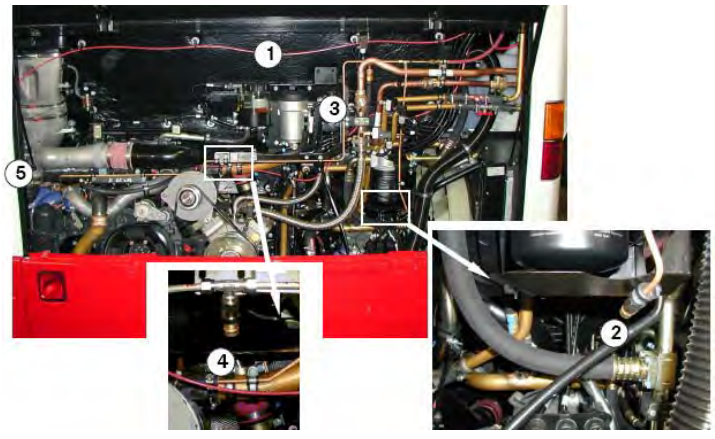
If the bus is also equipped with a fire extinguishing system, the extinguishing process is triggered. The extinguishing fluid is atomised to a fine mist and sprayed from the extinguisher nozzles in the engine compartment.

Warning.

Risk of injury from fluid escaping from the detection and extinguishing lines.
The fire detection lines in the engine compartment hold a pressure of approximately 15 bar. The extinguishing lines hold a pressure of 200 bar.

- Wear protective clothing if you are carrying out work in the area of the detection and extinguishing lines of a burning or accident-affected vehicle.

1	Detection line
2	Nozzle 1
3	Nozzle 2
4	Nozzle 3
5	Nozzle 4



5.2. 12 V and 24 V batteries

Most buses are equipped with two or more 12 V batteries. The batteries could be located to the front, above or to the rear of the axles.

Except in minibuses, there are two 12 V batteries connected in series to produce an on-board voltage of 24 V.

The exact position of the batteries in the individual model designations can be found in the appendices.

The battery location is not marked on the outside of the vehicle.

The batteries are mounted on pull-out carriages.

1. Open the retaining screws/split pins of the battery support frame.
2. Pull the carriage out by the handles.
3. Where batteries are mounted one above the other, loosen the retaining screws/split pins of the upper frame.
4. Swivel the upper battery to the right.

Public service bus

Public service/interurban bus

Tourist coach

5.2.1. Disconnecting the on-board electrical system batteries

Warning.

Risk of injury from restricted vehicle functions.
After the batteries have been disconnected, it is no longer possible to switch on electrical consumers, e.g. driver's power window, door openers, electric roof hatches, driver's seat adjuster, interior lighting, etc.. This could trigger panic among passengers and make further stages of the operation and the extrication of casualties considerably more difficult.

- Vehicles with internal combustion engine: First switch off the engine.
- Vehicles with electric drive: First switch off the high-voltage system.
- Do not disconnect the batteries until the vehicle has been completely evacuated.

Technical rescue

Warning.

Risk of explosion, poisoning and acid burns. Risk of explosion due to oxyhydrogen gas. Risk of poisoning and internal burning if battery acid is swallowed.

Risk of injury from burning of eyes and skin by battery acid or from the handling of damaged lead-acid batteries. A highly explosive mixture of gases is produced when lead-acid batteries are being charged.

If battery acid is swallowed, the victim is likely to suffer symptoms of poisoning, including headaches, dizziness, stomach pain, respiratory paralysis, loss of consciousness, vomiting, acid burns and cramps.

Battery acid fumes burn the eyes. If inhaled, these fumes burn mucous membranes and airways. Intake of lead into the body can result in damage to blood, nerves and kidneys; in addition, lead compounds are classified as being toxic to reproduction (may impair fertility).

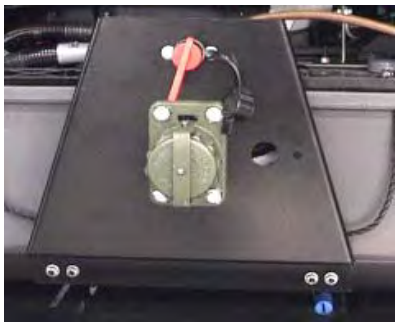
Acid batteries contain sulphuric acid, which can cause severe burns to the skin and eyes.

- Always disconnect the negative terminal first.
- Do not place any tools or other electrical conductors on the lead-acid battery (risk of short circuit).
- Fire, sparks, naked flames and smoking are prohibited.
- Wear acid-proof protective clothing, especially safety goggles, protective gloves and an apron.
- In case of contact with the eyes or skin, carry out first-aid measures immediately.

Measures:

- Contact with the eyes: Rinse eyes immediately with plenty of water.
- Contact with the skin: Remove affected clothing. Neutralise acid splashes on skin or clothing immediately using an acid neutraliser or a soap solution and then rinse with plenty of water.
- Inhalation of battery acid fumes: Bring affected person into the fresh air.
- Swallowing of battery acid: Have the affected person drink plenty of water containing an activated charcoal additive.
- As a rule, a medical service or doctor should always be consulted once first-aid measures have been taken.

Instead of disconnecting the battery, it is advisable to use the battery isolating switch.



Disconnect the on-board electrical system batteries:

1. Switch off the ignition.
2. Disconnect the negative terminal.
3. Disconnect the positive terminal.
4. Hold the positive and negative cables together to discharge voltages stored by capacitors.
5. Prove dead, e.g. by switching on the hazard warning lamps.
6. Secure the cables against re-energisation or contact, e.g. using cable ties.

5.3. Switching off the engine

Diesel engines could continue to run after an accident. After the vehicle has been made safe, the engine must be switched off.

The engine can be switched off in various ways.

5.3.1. Removing the ignition key

The ignition lock is located on the right-hand side of the steering column. Before you can remove the key, the following prerequisites must be fulfilled:

- Accelerator pedal not depressed
- Parking brake applied
- Transmission pushbutton switch “N” pressed

5.3.2. Start/Stop pushbutton in the driver's station

Some buses are equipped with a Start/Stop pushbutton. This is found either

- on the console on the left-hand side of the driver's station or
- on the instrument panel

5.3.3. Start/Stop pushbutton in the engine compartment

In addition to the ignition lock and the driver's Start/Stop pushbutton, there could be an additional Start/Stop pushbutton (1) in the engine compartment.

5.3.4. Master safety switch

In some models, a master safety switch is fitted. This is located on the console to the left of the driver and is marked in red.

Operating the master safety switch switches off the engine. Depending on country-specific regulations, the tachograph, instrument cluster, central locking, interior lighting and roof hatches could remain operational.

Pull up the flap, pull up the yellow switch

Unlock the red switch by turning it anti-clockwise

Press the red switch

5.3.5. Covering the air intake

Another proven way to stop the engine is to cover the air intake with plastic film. As a consequence of the reduced oxygen supply, a vacuum forms and the engine cuts out.

Engine air intake (1) is located in the rear end, on the right- or left-hand side of the vehicle.

Air intake, upper

Air intake, centre

5.3.6. Introducing CO_2

The engine can be made to stop by introducing carbon dioxide (CO_2) into the air cleaner.

5.3.7. Interrupting the fuel supply

To stop the engine, you could interrupt the fuel supply at the fuel filter in the engine compartment.

Close handwheel (1) on the fuel filter or unscrew the fuel filter.

5.4. Immobilising and stabilising the vehicle

Trapped persons are held in direct contact with the vehicle. For this reason, safety measures must be implemented to eliminate the possibility of uncontrolled movements of the vehicle or its parts. A casualty-centred extrication of accident victims cannot take place until the vehicle has been adequately stabilised.

Danger.

Risk of injury from unforeseen vehicle movement during the raising process. This could lead to further injuries to accident casualties and rescuers.

- If necessary, secure the vehicle against uncontrolled movements.
- Use only suitable immobilisation equipment, such as chains and high-capacity endless slings, appropriate to the weight of the vehicle.
- The safe immobilisation of the vehicle must be maintained throughout the entire rescue operation and must not impede the use of fire service rescue equipment.

If the bus has not already been secured against rollaway by the driver, this must be done using the parking brake (handbrake valve).

Located on the side compartment panel to the left of the driver.

The stabilisation of upright buses or buses lying on their side is relatively unproblematic. In this situation, the vehicle can be secured against tilting and sliding by use of chocks, support struts, ropes and webbing.

An unstable bus or a bus lying on its roof requires extensive supporting materials and possibly the use of a mobile crane.

5.4.1. Stabilising

The vehicle can be stabilised with cribbing blocks or beams.

5.4.2. Chocks

Chocks can be used to secure the bus against rolling away.

5.4.3. Support struts

Buses lying on their side can be secured against tilting and sliding by means of support struts or special support systems.

5.4.4. Endless slings

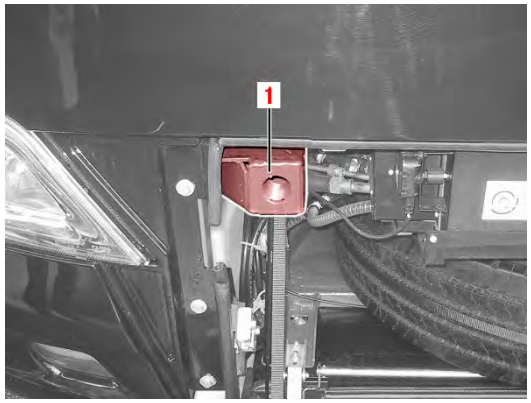
If the vehicle is resting on sloping or uneven ground, e.g. a road embankment, securement can be achieved with the endless slings suitable for the load and, depending on the lie, a mobile crane.

Suitable slinging points are:

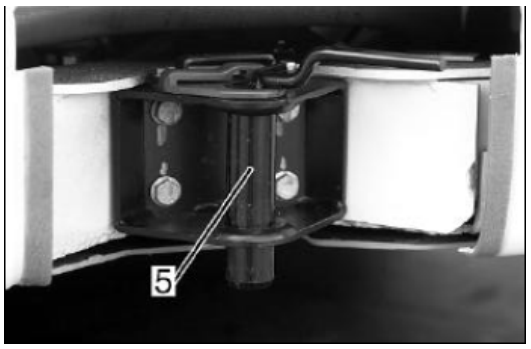
Front coupling jaw. Located behind the flap in the bumper centre section.

The detachable coupling jaw must be screwed into locating bore (1).

The coupling jaw is stored in the vehicle toolkit or attached behind the front flap at the front right.

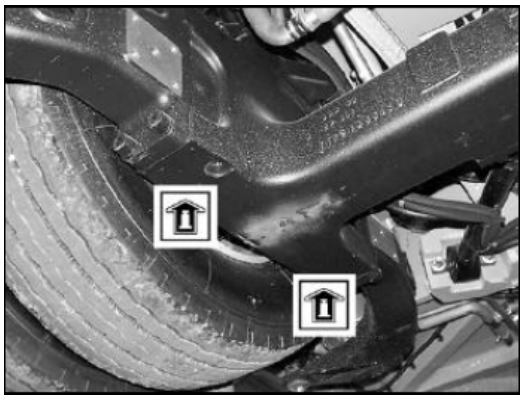


Rear coupling jaw (option). Located behind a flap in the bumper centre section underneath the number plate.



Technical rescue

Driven axle and suspension air bag carrier.



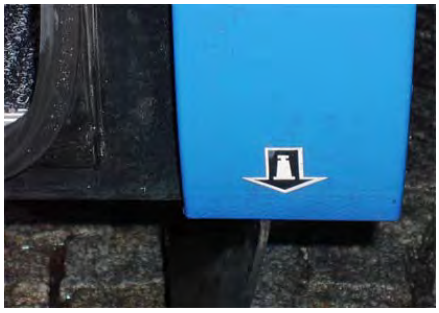
5.4.5. Raising the vehicle

Danger.

Risk of injury from unforeseen vehicle movement during the raising process. This could lead to further injuries to accident casualties and rescuers.

- Raising of the complete vehicle must always be carried out at all axles.
- Do NOT raise the vehicle underneath the sidewall between axles.
- Use only suitable immobilisation equipment, such as chains and high-capacity endless slings, appropriate to the weight of the vehicle.
- The safe immobilisation of the vehicle must be maintained throughout the entire rescue operation and must not impede the use of fire service rescue equipment.
- Underpin the raised vehicle progressively using suitable materials until raising is complete.
- Do not work on vehicles until underpinned/secured.
- Do NOT pull a sling/chain through two opposite windows.
- Do NOT raise the bus by the roof. The roofs are not designed to support the weight of a bus. If the bus is turned by the roof or if the sling is run over the roof, the roof will suffer serious deformation and reduce the space above the seats.

The jacking points on the skeleton are marked on the outside of the bus by symbols. These points are also suitable as lifting points for the lifting equipment used by the fire service.



Important note for twin axles:

The driven axle and trailing axle are interconnected by the suspension. It is prohibited to raise an individual axle to such a height that the wheels on the second axle would be lifted from the ground.

If the vehicle is lying on its roof or side, the reinforced vertical struts next to the doors and on the opposite side of the vehicle can act as slinging points for webbing and endless slings or as jacking points for column lifts and air lifting bags.

5.4.6. Raising/lowering system

Some Mercedes-Benz buses are equipped with an air-sprung raising/lowering system. Its purpose is to allow the vehicle to drive over obstacles on the ground or pass under obstacles overhead. Depending on the model designation, the raising/lowering system is operated by rotary switch or by pushbutton.

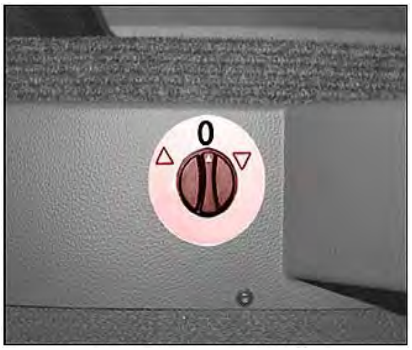
It might be possible to free a person trapped under the vehicle using this function.

The raising/lowering system is active only with the engine running and the electrical system functioning correctly.

Rotary switch:

The rotary switch is located to the left of the driver's station.

- Turn the switch clockwise out of centre position to raise the vehicle.
- Turn the switch anti-clockwise to lower the vehicle.
- The vehicle is raised or lowered 70 mm respectively.



Pushbutton:

The pushbutton for the raising/lowering system is located on the instrument panel (Citaro as example).

- Press the upper section of the pushbutton to raise the vehicle.
- Press the lower section of the pushbutton to lower the vehicle.
- The vehicle is raised or lowered 70 mm respectively.

In modern buses with steering wheel buttons, the bus can be raised or lowered as follows:

To raise:

- Pull and hold the left-hand combination switch towards the steering wheel (“headlamp flasher” function).
- Press the “+” button on the left of the steering wheel.

To lower:

- Pull and hold the left-hand combination switch towards the steering wheel (“headlamp flasher” function).
- Press the “-” button on the left of the steering wheel.

5.4.7. Kneeling

The kneeling function, particularly in city buses, makes it possible to lower the boarding side to enable passengers to board more easily. The suspension air bags on the boarding side are vented of air until the vehicle body reaches the bottom suspension limit.

It might be possible to free a person trapped under the vehicle using this function.

The kneeling system is active only with the engine running and the electrical system functioning correctly.

This function is controlled by a pushbutton on the instrument panel.

- Press the upper section of the pushbutton to raise the vehicle on the boarding side.
- Press the lower section of the pushbutton to lower the vehicle on the boarding side.

5.5. Access to the vehicle

There are various ways to create access to the vehicle.

You should first check whether access is possible through the doors. Where possible, this should be done without substantial use of rescue equipment.

Other access solutions include entering through the roof hatches or articulation bellows (initial access) or removing the vehicle windows.

The last way would be to enlarge the existing opening for full access using rescue equipment. However, this should be used only as the absolute last resort because there would be an inestimable risk posed by concealed wiring, etc.

As the usable space inside a bus is so optimally versatile, there is a diverse range of equipment and usage variants, e.g. library bus, conference bus, blood donor bus, etc.

This guideline refers exclusively to the equipment of buses for passenger transport.

5.5.1. Vehicle doors

The doors fitted to Mercedes-Benz buses can be classified into three systems:

Inwards opening doors:

Outwards opening doors:

Hinged and sliding doors:

On export vehicles, an emergency door may also be fitted at the rear right:

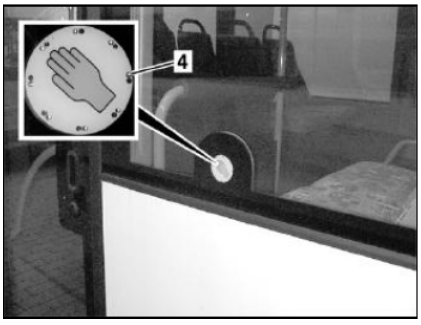
5.5.2. Opening vehicle doors from the outside

First try to open the doors normally using the pneumatic or electric controls. If this does not work, use the emergency valve next to the respective door in accordance with the instructions.

Only then should you attempt to open or remove the doors using mechanical aids.

Pushbuttons on the rear doors:

In the case of city and interurban buses, you might be able to open the rear doors using the “Open door” pushbutton (4) on the outside of the respective door.



Door opening pushbutton in the front end:

On city buses, there is a pushbutton for opening door 1 behind a flap in the front end.

On some vehicles (including tourist coaches), this pushbutton is located in the fuel filler flap or below the right-side windscreen wiper.

On tourist coaches, this pushbutton is on the door leaf of door 1

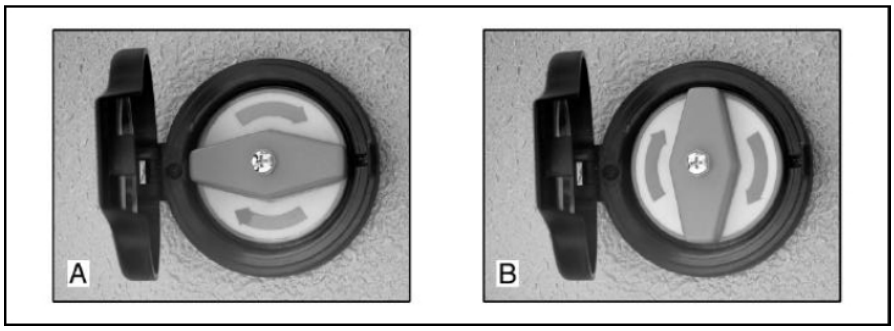
Technical rescue

Exterior emergency valve

On buses from model year 2005 onwards, an emergency valve is fitted on the outside at each door.

The emergency valves open the doors mechanically, i.e. no on-board voltage is required.

Depending on the equipment specification, the emergency valves could be protected by a plastic cover with tamper-evident seal.



1. Remove the tamper-evident seal from the emergency valve, if applicable.
2. Open the emergency valve cover.
3. Turn the emergency valve from drive position (A) to emergency position (B).
4. The door system is vented of air and is now depressurised. The door leaves can be opened by hand.

Pushing opening by hand

With some buses, it is possible to push the doors open by hand against the resistance of the pneumatics. In this case, the closing pressure that is still present means that the doors will need to be secured with wedges or similar to prevent closing.

Opening with a spreader

If the doors do not open in the normal way, they can be opened with a hydraulic implement.

1. Insert the spreader between the door rubbers.
2. Open the door.
3. Secure the door against closing again.

5.5.3. Opening vehicle doors from the inside

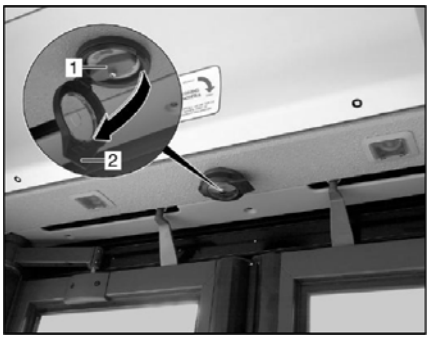
Door pushbuttons

Open the doors using the pushbuttons on the instrument panel in the driver's station if you have access to the vehicle and the vehicle has not yet been de-energised.

City bus door pushbuttons

Tourist coach door pushbuttons

Interior emergency valve



An emergency valve is fitted on the inside at each door.

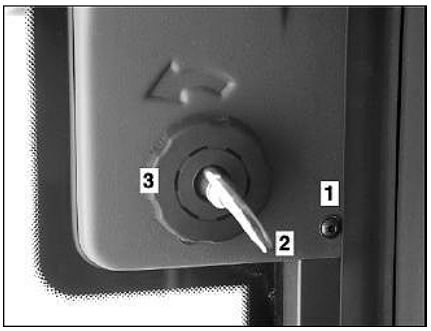
Open the doors in the same way as described in the “Exterior emergency valve” section.

Like the exterior emergency valves, the interior emergency valves open the doors mechanically, i.e. no on-board voltage is required.

Square key or handwheel

EU Directive 2001/85 EC stipulates that it must always be possible to open a door from the inside (means of escape) even when it has been locked mechanically from the outside.

To open the doors, turn lock (1) in the direction of the arrow using a square key (2) or handwheel (3).



In some cases, it could be necessary to remove the doors completely in order to rescue occupants. Also remove the handrails in the entrance if necessary.

Warning.

Risk of fire from the use of angle grinders or flame cutters in the interior.

- ➢ Where possible, use hydraulic rescue equipment for the removal of handrails, doors, etc.
- ➢ If the use of angle grinders or flame cutters is necessary, cool the area around the cutting points with water.

5.5.4. Driver's door

Some vehicles are equipped with a driver's door. This enables direct access to the driver's station.

The door is fitted with a simple lockable pull handle.

5.5.5. Opening the emergency exits (roof hatches)

The roof hatches are ejectable and designed as an emergency exit. They are opened manually from the inside and outside.

The effective internal width is 505 x 807 mm (legal minimum 500 x 700 mm).

Opening from the outside

Pull the red handle. The roof hatch is opened.

Technical rescue

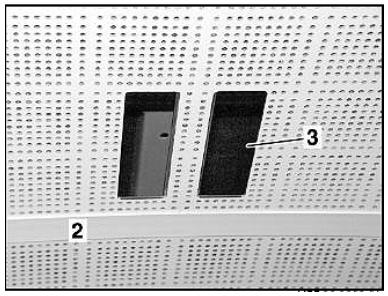
Opening from the inside

Many buses are equipped with a false ceiling. For this reason, you will need to remove the internal cover of the roof hatch to be able to open the hatch.

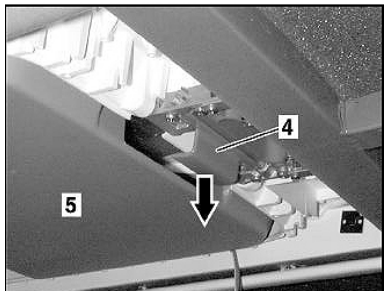
City bus

1. Press security foil (1) inwards. Behind the security foil is a handle.

2. Remove ceiling panel (2) with handle (3). Safety catch (4) and roof hatch (5) are now accessible and can be opened.

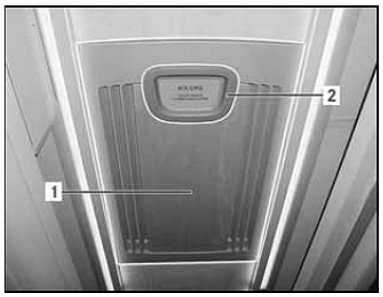


3. Pull safety catch (4) down. Roof hatch (5) is unlocked and can be opened.
4. Push roof hatch (5) upwards. The emergency exit is opened.



Tourist coach

1. Remove cover (1) by pulling on handle (2) (Velcro fastener).



2. Turn interior twist handle (1) in the direction of the arrow (clockwise).
   Emergency exit cover (2) can now be placed to one side outside the bus. The cover is secured by a retention strap.

5.5.6. Removing vehicle glass

As a general rule, the windscreen is made of laminated safety glass (LSG), the door windows, side windows and rear window are made of toughened safety glass (TSG). The panes are bonded onto the frame.

Laminated safety glass

Remove the windscreen or parts of it using the glass saw.

Warning.

Risk of injury from glass splinters, glass fragments or glass dust. The windscreen made of laminated safety glass could weigh up to 120 kg. Glass cutting produces fine particles of glass dust, which must not be allowed to enter wounds or the airways.

- ➢ During windscreen removal, prevent it from falling down, e.g. by breaking it into “manageable” pieces.
- ➢ Before the work, cover persons who cannot be removed from the area near the glass with a protective cover.
- ➢ Wear mouth protection.
- ➢ Keep the number of cuts to the bare minimum.

Toughened safety glass

1. Cover panes of toughened safety glass with self-adhesive film.
2. Smash the glass using the spring-loaded centre punch.
3. Remove the glass from the frame.

Warning.

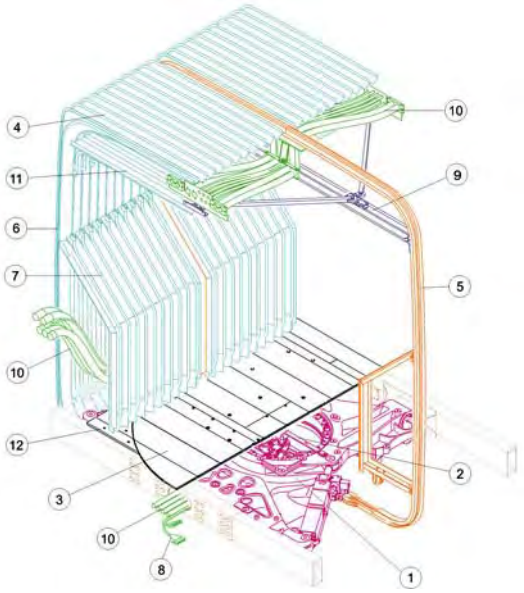
Risk of injury from falling from great height. The waistline height could be over 2 m, especially on tourist coaches.

- ➢ Provide sufficient scaffolding to rescue accident victims.

There could be two TSG panes fitted as a double glazing (insulating) unit with interstice and interstitial film.

5.5.7. Cutting open the articulation bellows

With articulated buses, it is possible to create access to the vehicle by cutting through the articulation bellows.



1. Low-floor articulation
2. Controller potentiometer
3. Platform
4. Articulation bellows
5. Centre frame
6. Mounting profiles
7. Floor cover
8. Wiring harness
9. Centre frame stabiliser
10. Drag chain system
11. Roof panelling
12. Accessories

Warning.

Risk of injury from live or pressurised lines (electrical, compressed air, gas and oil lines). The bottom half and upper region of the articulation bellows contain service installation shafts. In these areas, lines are routed from the forward section of the bus to the rear.

- ➢ Do NOT cut the articulation bellows in the area of the service installation shafts.
- ➢ In vehicles with gas or electric drive system, do NOT cut gas or electrical lines.

5.6. Passenger compartment

After an accident, many kinds of problems are likely to be faced in the passenger compartment. For example, there are various types of passenger seat mountings and designs, numerous adjustment features and, in some cases, restraint systems.

As the bus is fitted with handrails, partition walls and luggage racks, some objects present obstacles to rescue work.

5.6.1. Occupant restraint systems

Except for journeys on which the carriage of standing passengers is approved, seat belts are a mandatory requirement even in buses. In general, passenger seats have 2-point belts, while the majority of driver's and co-driver's seats have 3-point belts.

5.6.2. Passenger seat adjustment features

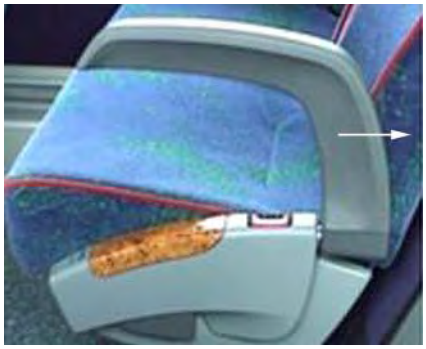
City bus	Interurban bus	Tourist coach
No adjustment of seats possible, no armrests	Seat and backrest adjustment possible, armrests adjustable	Seat and backrest adjustment possible, armrests adjustable

Aisle-side seat lateral adjustment

Pull lever (1) upwards and, at the same time, slide-adjust the seat towards the centre aisle or back to its initial position.

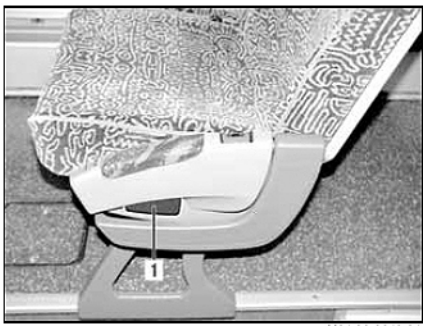
Armrest

The centre armrests and aisle-side armrests can be folded upwards.
Aisle-side armrest: To fold the armrest down, pull it back (opposite the direction of travel) and fold it down.



Adjusting the backrest (aisle-side)

Pull lever (1) upwards and simultaneously push back on the backrest. Release lever (1) in the desired position.



Adjusting the backrest (window-side)

Pull back the lever between the seat squab and vehicle wall. At the same time, push back on the backrest. Release lever (1) in the desired position.

5.6.3. Removing passenger seat mountings, passenger seats

As buses generally have a relatively narrow centre aisle, which restricts rescue operations enormously, it may be necessary to remove passenger seats.

In Mercedes-Benz buses, three different seat mounting systems are fitted. These can be roughly differentiated by type of service:

- City bus
- Interurban bus
- Tourist coach

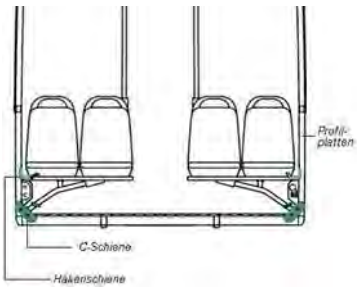
However, crossovers could also exist, e.g. the mounting system from the interurban bus fitted in a city bus.

City bus

Seat material: glass-fibre-reinforced thermoplastic, plywood

Mounting material: tubular steel

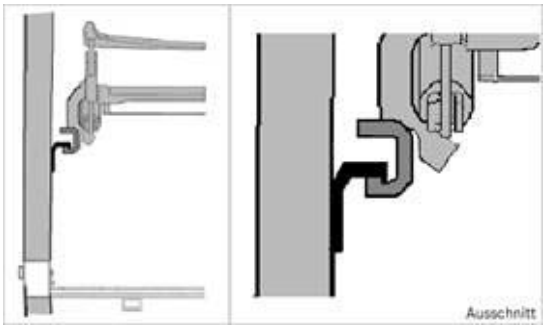
Cantilever seating mounted by means of slide pieces in the C-rail or hook rail.



Interurban bus, tourist coach

Seat and backrest frame material: tubular steel

Mounted in C-rails, window-side and platform-side



5.6.4. Handrails, partition walls

Handrails

Material: coated tubular steel.

Mounted in a C-rail on the ceiling and on the seat backrests or on the floor.

City bus partition walls

The partition walls are made of toughened safety glass (TSG). The panes are clamped by rubber inserts in a frame of tubular steel.

Tourist coach partition walls

The partition walls are made of plastic. Mounted by screws in the wall and floor.

5.6.5. Luggage racks

The luggage racks are made of extruded aluminium profiles, the base of the rack is made of plastic or perforated aluminium plate.

Warning.

Risk of injury from loose items of luggage in the luggage racks.

- ➢ Secure the luggage against dropping or clear the luggage racks before you begin rescue work.

5.7. Separate rooms

In tourist coaches in particular, there are separate rooms in which further casualties could be trapped or that could potentially endanger rescue efforts.

5.7.1. Lavatory

In most vehicles, the lavatory cabin is located to the front of the entrance of door 2.

Less often, the lavatory cabin is positioned in the rear end of the vehicle.

Warning.

Risk of injury from chemicals. Some toilet systems work with chemical agents.

- Avoid skin and eye contact, wear gloves and safety goggles.
- Keep binding agents ready to absorb spilled chemicals.

5.7.2. On-board kitchenette

The on-board kitchenette is, like the lavatory, situated near the entrance of door 2 or in the rear end.

In the illustration: on-board kitchenette with coffee machine, sausage heater and boiler

On-board kitchenettes are also equipped with appliances operated on low voltage (230 V).

Warning.

Risk of scalding from hot water in the coffee machine, boiler and sausage heater.

Risk of burns and risk of fatal injury from electric shock and cardiac arrest.

- ➢ Do not reach into escaping water.
- ➢ Cut electrical lines using insulated tools only.

5.7.3. Luggage compartment

The side luggage compartment flaps could be secured by various systems:

- Square-drive locks
- Lock cylinder
- Central locking

The control for the central locking is located on the instrument panel in the driver's station. It can be operated only with the ignition switched on.

With the remote control, it can be operated without the ignition switched on.

If none of the above unlocking methods is working, open the luggage compartment flaps using a hydraulic spreader.

Check the luggage compartments for possible origin of fire. In case of fire in the luggage compartment, remove all items of luggage to prevent the fire from spreading to the passenger compartment.

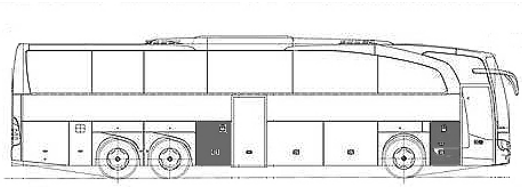
Remove the luggage and move it to a secure collection point (role of the police).

Warning.

Risk of injury from unexpected opening of the luggage compartment flaps. Jammed flaps could pop open during rescue operations.

➢ Keep well clear or secure the flaps against unexpected opening.

5.7.4. Driver's rest area



The driver's rest area could be located to the rear of the entrance at door 1 or door 2.

Access

- from the outside via flaps right and left
- from the inside via roller shutter in the entrance of the doors

The driver's rest area is marked with a pictogram on the outside and at the access point inside the vehicle.

Always check all separate rooms and open all flaps. In individual custom models, there could be separate rooms in different places from those of the standard specification.

5.7.5. Skiboxes

Skiboxes may be fitted to the rear end of tourist coaches. These boxes partly obscure the rear window and hinder access to the vehicle.

Warning.

Risk of injury from the potentially heavy weight of the skibox (up to 650 kg).

➢ Unload the skibox before you raise the bus and make the contents safe.

6. Features

Each bus model has specific features that place different requirements on emergency responders.

6.1. Bus definition

A bus or coach is defined in law as a category M2 or M3 vehicle, i.e. a vehicle designed for the carriage of persons comprising more than 8 passenger seats (in addition to the driver's seat).

6.2. Classification

In general, category M2 or M3 vehicles can be classified as follows according to type of service:

- City buses
- Interurban buses
- Tourist coaches (including midibuses)

City buses	Interurban bus	Tourist coach
City/public bus services	Interurban/public bus services outside towns	Touring
Vehicles constructed with areas for standing passengers, to allow frequent passenger movement at defined bus stops.	Vehicles constructed principally for the carriage of seated passengers and designed to allow the carriage of standing passengers, with or without luggage compartments.	Vehicles for the carriage of seated passengers, with luggage compartments.

6.3. Distinguishing features

	City bus	Interurban bus	Tourist coach
Entrances, doors	2 - 4x, double-leaf, width approx. 1.25 m	2 - 4x, single- and double-leaf, width approx. 0.70 m - 1.25 m	2x, single-leaf, width approx. 0.70 m - 0.90 m
Entry height	low, without steps	with steps	high, with multiple steps
Waistline height	low	low to medium high	high
Height (above ground)	approx. 1.30 m	approx. 1.30 - approx. 1.90 m	approx. 2.20 m
Luggage compartments	none	some, in the underbody	in the underbody
Seats	not adjustable	some adjustable	adjustable
Backrest	low	high	high
Length	8.00 - 18.00 m	12.00 - 18.00 m	9.50 - 14.00 m
Width	2.35 - 2.55 m	2.50 - 2.55 m	2.40 - 2.55 m
Height	approx. 3.20 m	approx. 3.40 m	approx. 3.60 - approx. 4.00 m
Tank capacities	approx. 210 - 400 l	approx. 300 - 400 l	up to 1.000 l
Tank capacities	approx. 210 - 400 l	approx. 300 - 400 l	up to 1.000 l
Transport capacity	< 170 persons	< 130 persons	< 60 persons
Axles	2 - 3	2 - 3	2 - 3
Type	Rigid and articulated buses	Rigid and articulated buses	Rigid buses
Weight	up to 28 t	up to 28 t	up to 24 t
Models	Citaro, Conecto	Citaro, Conecto, Integro	Tourino, Tourismo, Tourismo

6.4. Euro emission standards

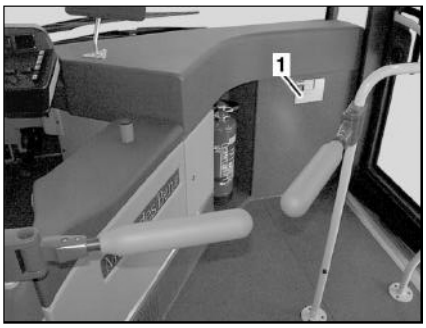
Since the Euro I standard came into force in 1992, lawmakers have been introducing ever more stringent emission standards.

The current standard is Euro VI, which sets emission limits for specific pollutants.

The EEV standard is a voluntary standard that is even stricter than today's legally enforced requirements.

These guidelines for rescue services cover buses that fall under the scope of the Euro standards from Euro III onwards. These vehicles are currently the most widely used.

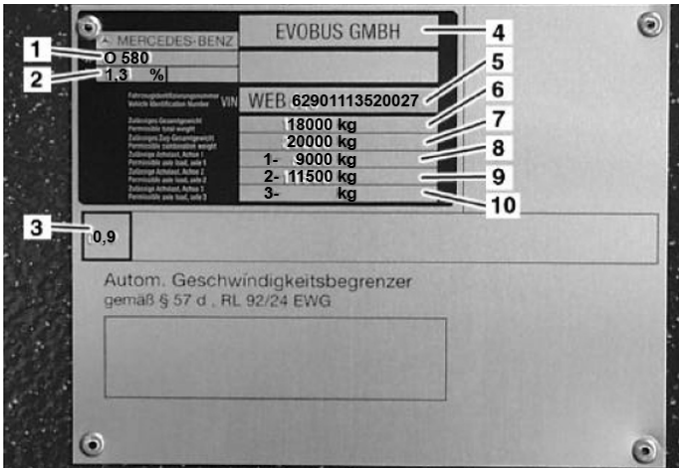
6.5. Identification plate



The identification plate contains information for the exact identification of a particular bus.

Identification plate (1) is located in the front right entrance.

1. Vehicle model
2. Headlamp basic adjustment
3. Exhaust gas coefficient
4. Vehicle manufacturer
5. Vehicle identification number (VIN)
6. Permissible gross vehicle weight
7. Permissible gross combination weight
8. Permissible axle load for front axle
9. Permissible axle load for 2nd axle
10. Permissible axle load for 3rd axle



The important data for identification here are the numbers 1 (vehicle model) and 5 (vehicle identification number).

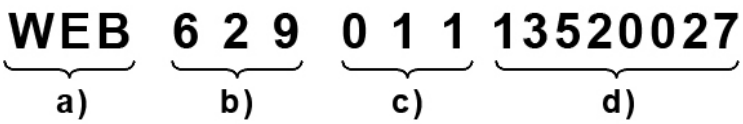
The vehicle identification number (VIN) is also stamped in the vehicle frame at the front end.

In the illustration: city bus, VIN in the frame behind the front flap.

6.5.1. Vehicle models

City buses	Interurban buses	Tourist coaches
Citaro	Integro	Tourino
Conecto	Intouro	Travego
		Tourismo

6.5.2. Vehicle identification number (VIN)



a)	World manufacturer code
b)	Model designation
c)	Model
d)	Vehicle identification end number

a) World manufacturer code

WDB	Daimler-Benz AG
WEB	EvoBus GmbH
NMB	Mercedes-Benz Turkey

b) Model designation

410	Tourismo from model year 2017
455	Tourino
627	Integro
628	Citaro, Conecto and eCitaro
632	Tourismo and Travego
633	Integro and Intouro

c) Model

The three-digit model number defines the model designation more precisely, e.g. vehicle length, right-/left-hand drive, number of doors.

d) Vehicle identification number

The end number enables exact identification of the vehicle.

Appendix: Euro III vehicles

7. Appendices

7.1. Euro III vehicles

7.1.1. Model designation overview

Designation	Model designation	Model	Length	Door no.	Drive
O 405 N2	612.400	City bus	12.00 m	2	Diesel engine
CITARO CNG	628.010	City bus	12.00 m	2	Natural gas engine
CITARO	628.043	City bus	12.00 m	2	Horizontal engine
CITARO	628.045	City bus	12.00 m	3	Horizontal engine
CITARO	628.050	City bus	12.00 m	3	Upright engine
CITARO L	628.143	City bus	15.00 m	2	Horizontal engine
CITARO L	628.145	City bus	15.00 m	3	Horizontal engine
CITARO G CNG	628.210	City bus	18.00 m	3	Natural gas engine
CITARO G	628.243	City bus	18.00 m	3	Horizontal engine
CITARO G	628.245	City bus	18.00 m	4	Horizontal engine
CITARO G	628.250	City bus	18.00 m	4	Upright engine
CITO	666.030	City bus	8.10 m	2	Diesel-electric
CITO	666.130	City bus	8.90 m	2	Diesel-electric
CITO	666.230	City bus	9.60 m	2	Diesel-electric
Conecto M	671.021	City bus	13.00 m	2	Upright engine
Conecto H	671.042	City bus	12.00 m	2	Upright engine
Integro	627.001	Interurban bus	12.00 m	2	
Integro L	627.011	Interurban bus	15.00 m	2	
Integro M	627.031	Interurban bus	13.00 m	2	
CITARO Ü	628.047	Interurban bus	12.00 m	2	Horizontal engine
CITARO Ü	628.048	Interurban bus	12.00 m	3	Horizontal engine
CITARO LÜ	628.147	Interurban bus	15.00 m	2	Horizontal engine
CITARO LÜ	628.148	Interurban bus	15.00 m	3	Horizontal engine
CITARO GÜ	628.247	Interurban bus	18.00 m	3	Horizontal engine
CITARO GÜ	628.248	Interurban bus	18.00 m	4	Horizontal engine
CITARO MÜ	628.447	Interurban bus	13.00 m	2	Horizontal engine
Conecto Ü	671.020	Interurban bus	12.00 m	2	Upright engine
Tourino	444.203	Tourist coach	9.35 m	2	Midibus
Tourismo RHD	613.358	Tourist coach	12.00 m	2	
Tourismo SHD	613.388	Tourist coach	12.00 m	2	
O 404	618.215	Tourist coach	12.00 m	2	
Travego RH	629.001	Tourist coach	12.00 m	2	
Travego	629.011	Tourist coach	12.00 m	2	
Travego L	629.012	Tourist coach	15.00 m	2	
Travego M	629.015	Tourist coach	13.00 m	2	

Appendix: Euro III city buses

7.1.2. City buses

Features

General information, engineering features

- Wide variety of drives - diesel, gas, fuel cell
- Passenger capacity: up to 170 persons
- Mainly standing

Exterior view

- Multiple wide entrances
- Low entry height
- Low waistline height

Doors

- Inwards opening doors
- Outwards opening doors
- Double-leaf
- Pneumatically or electrically driven
- Width 1.25 m

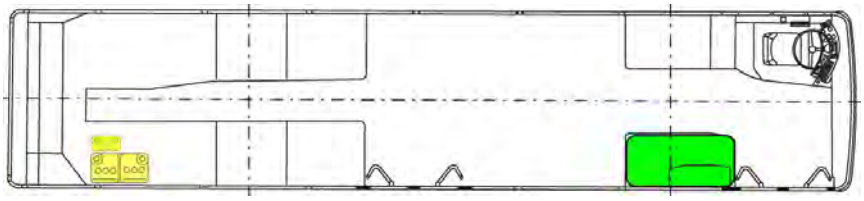
Interior equipment, seats

- Low backrests
- No seat adjustment
- No passenger restraint systems
- Numerous handrails
- Seat-free floor space for wheelchair passengers and pushchairs

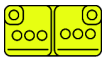
Appendix: Euro III city buses

O 405 N2

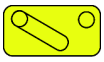
Model designation	Length	Door no.	Axles	Drive
612.400	12 m	2	2	Diesel engine



Fuel tank



On-board electrical system batteries

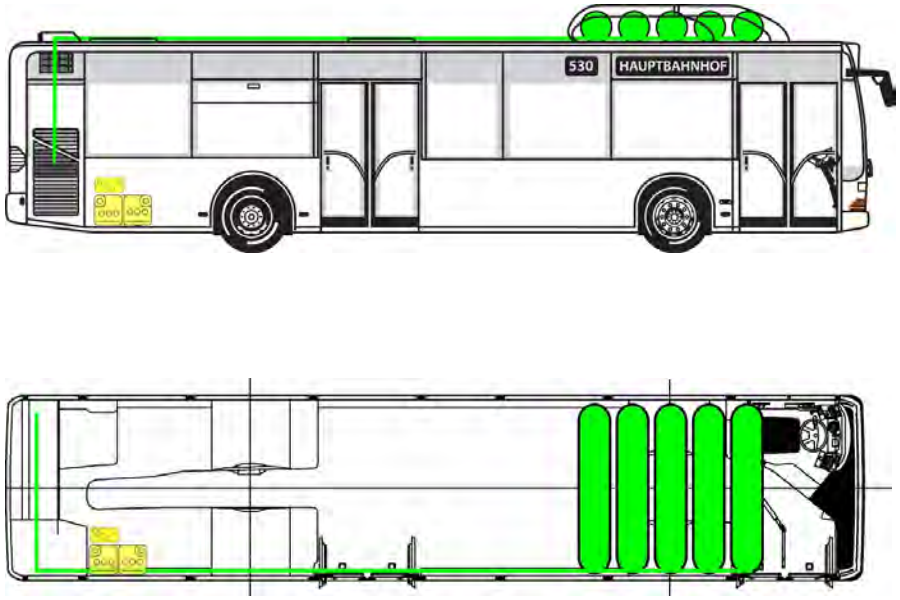


Battery isolating switch (in battery compartment)

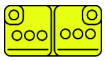
Appendix: Euro III city buses

Citaro CNG

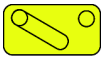
Model designation	Length	Door no.	Axles	Drive
628.010	12 m	2 or 3	2	Natural gas engine



Fuel tank (with lines)



On-board electrical system batteries

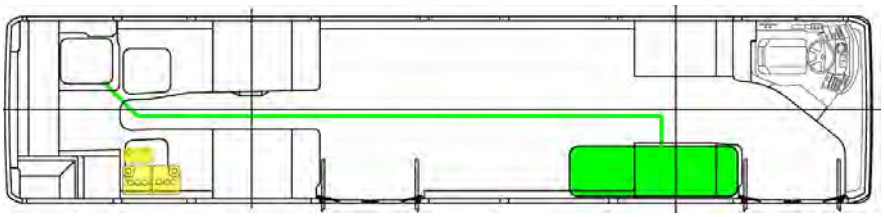


Battery isolating switch (in battery compartment)

Appendix: Euro III city buses

Citaro

Model designation	Length	Door no.	Axles	Drive
628.043	12.00 m	2	2	Diesel engine, horizontal



Fuel tank (with lines), additional/heating-oil tank*

On-board electrical system batteries

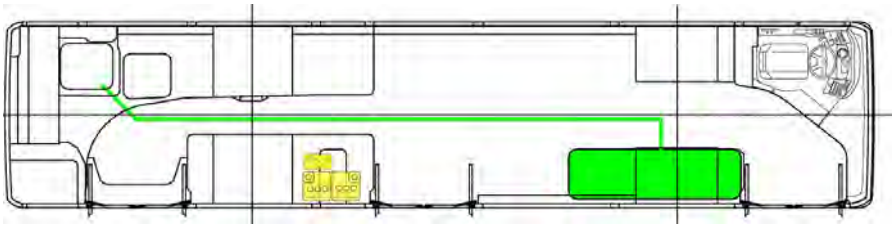
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro III city buses

Citaro

Model designation	Length	Door no.	Axles	Drive
628.045	12.00 m	3	2	Diesel engine, horizontal



Fuel tank (with lines), additional/heating-oil tank*

On-board electrical system batteries

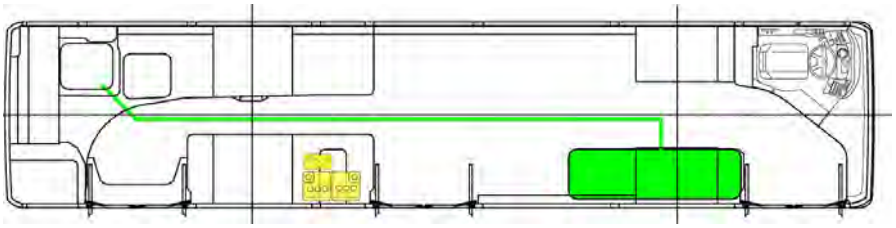
Battery isolating switch (in battery compartment)

*: Option

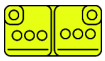
Appendix: Euro III city buses

Citaro

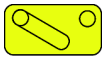
Model designation	Length	Door no.	Axles	Drive
628.050	12.00 m	3	2	Diesel engine, upright



Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



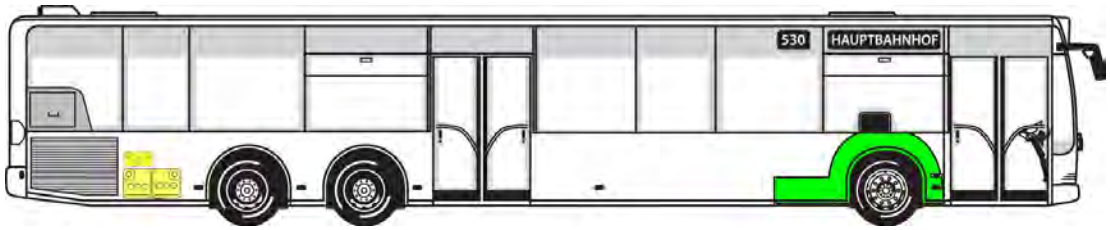
Battery isolating switch (in battery compartment)

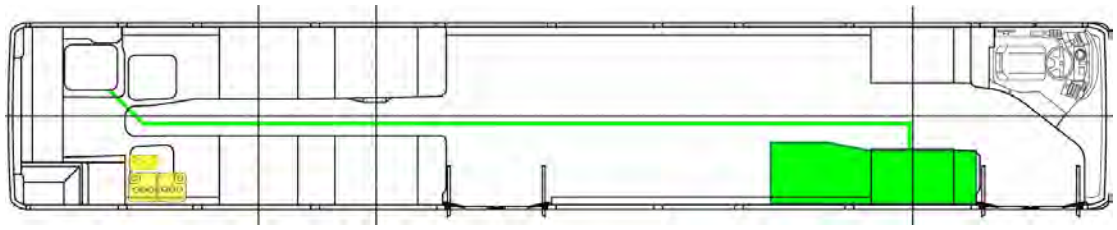
*: Option

Appendix: Euro III city buses

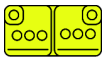
Citaro L

Model designation	Length	Door no.	Axles	Drive
628.143	15.00 m	2	3	Diesel engine, horizontal

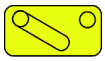




Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



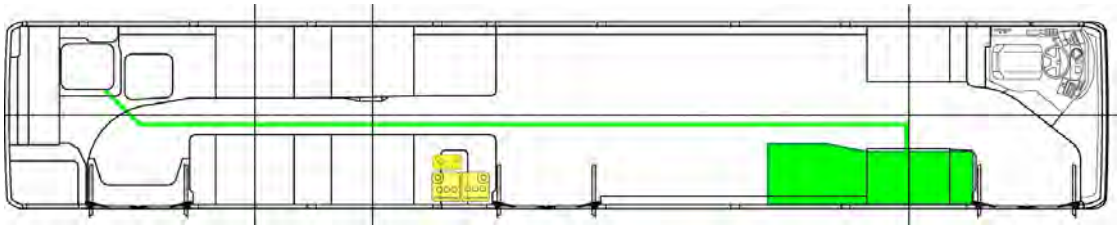
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro III city buses

Citaro L

Model designation	Length	Door no.	Axles	Drive
628.145	15 m	3	3	Diesel engine, horizontal



Fuel tank (with lines), additional/heating-oil tank*

On-board electrical system batteries

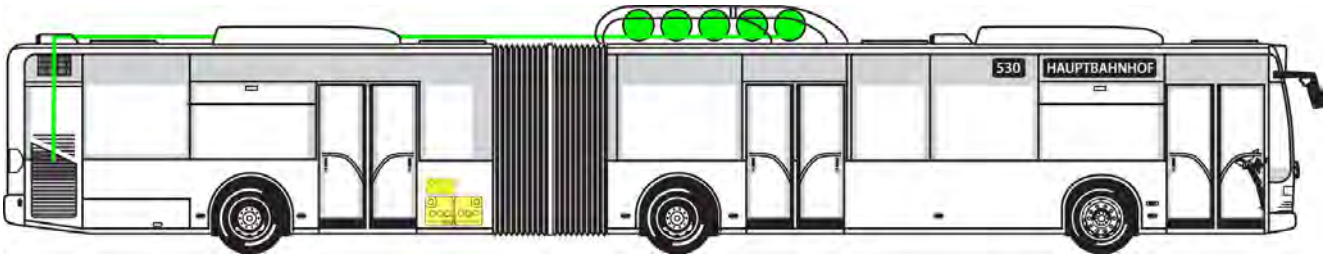
Battery isolating switch (in battery compartment)

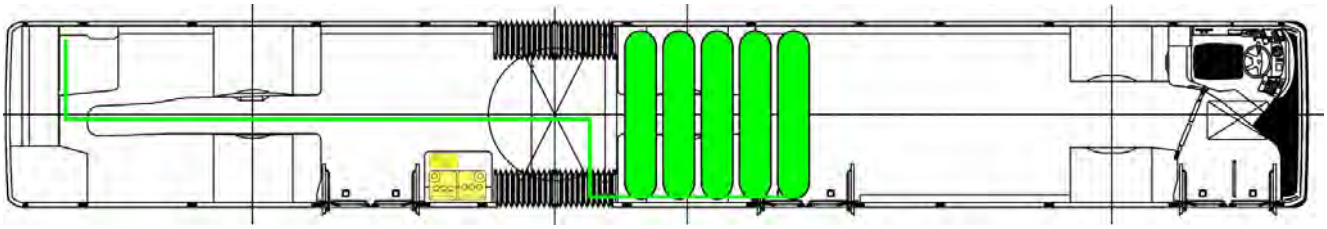
*: Option

Appendix: Euro III city buses

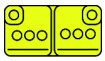
Citaro G CNG

Model designation	Length	Door no.	Axles	Drive
628.210	18 m	3 or 4	3	Natural gas engine

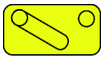




Fuel tank (with lines)



On-board electrical system batteries

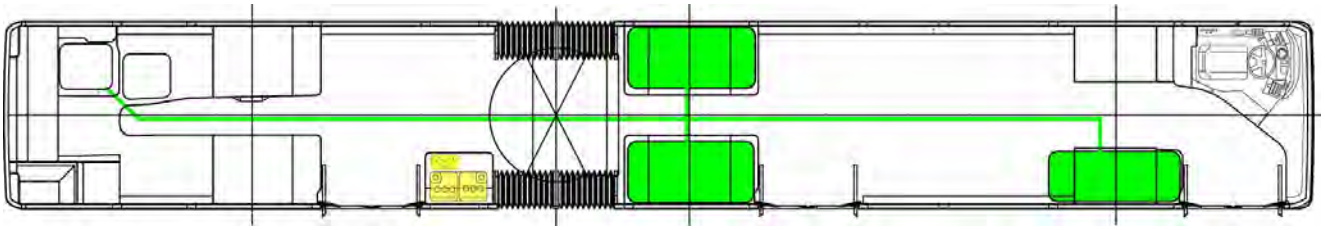


Battery isolating switch (in battery compartment)

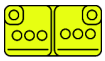
Appendix: Euro III city buses

Citaro G

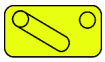
Model designation	Length	Door no.	Axles	Drive
628.243	18 m	3	3	Diesel engine, horizontal



Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



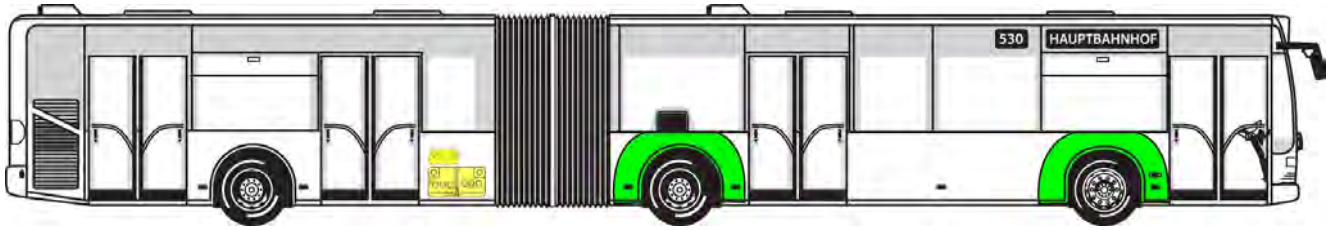
Battery isolating switch (in battery compartment)

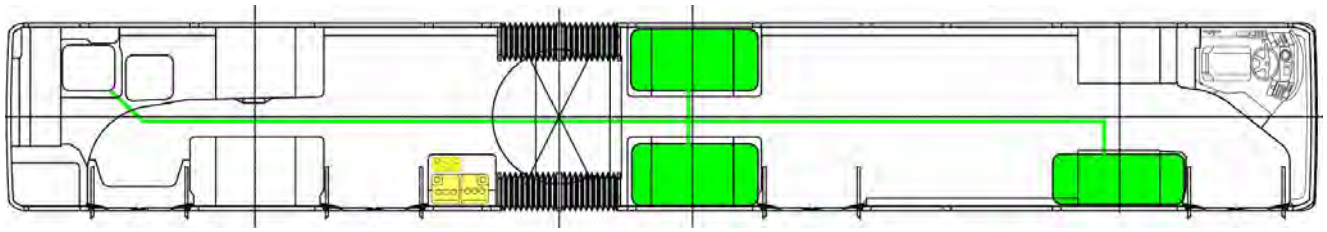
*: Option

Appendix: Euro III city buses

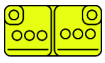
Citaro G

Model designation	Length	Door no.	Axles	Drive
628.245	18 m	4	3	Diesel engine, horizontal

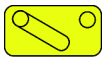




Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



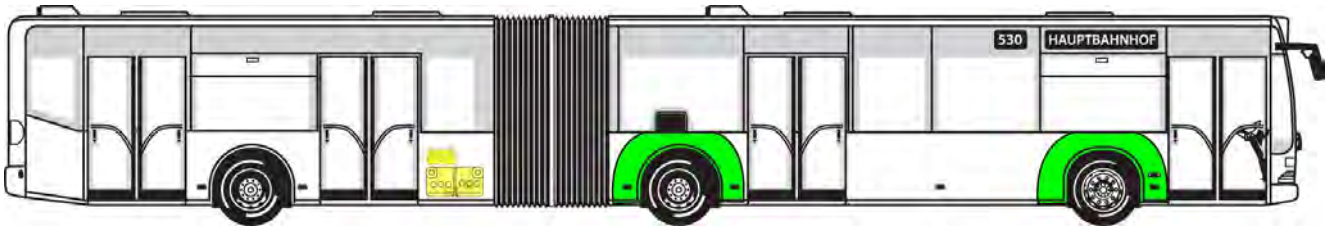
Battery isolating switch (in battery compartment)

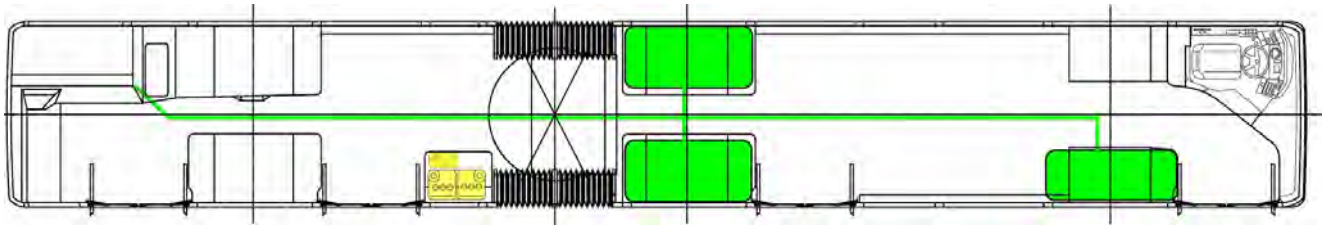
*: Option

Appendix: Euro III city buses

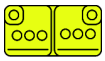
Citaro G

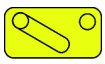
Model designation	Length	Door no.	Axles	Drive
628.250	18 m	4	3	Diesel engine, upright






Fuel tank (with lines), additional/heating-oil tank*


On-board electrical system batteries

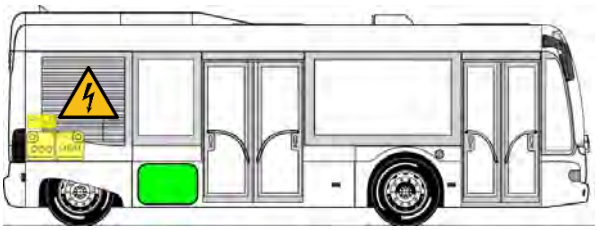

Battery isolating switch (in battery compartment)

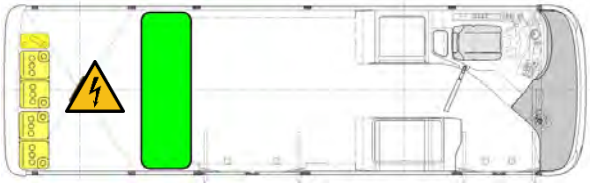
*: Option

Appendix: Euro III city buses

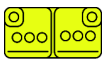
Cito

Model designation	Length	Door no.	Axles	Drive
660.030	8.10 m	2	2	Diesel-electric

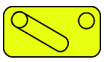




Fuel tank



On-board electrical system batteries



Battery isolating switch

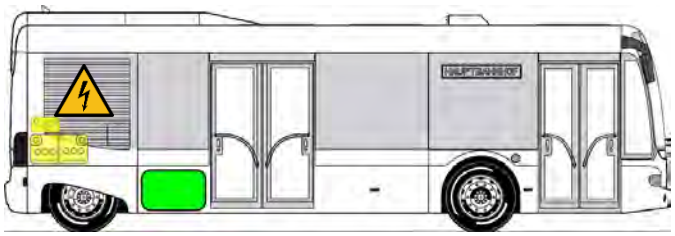
Risk of fatal injury.

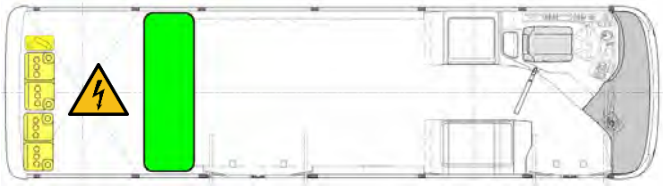
The diesel engine of the Cito drives an alternator, which supplies the electric drive motor with current. The on-board power supply has a voltage of up to 600 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

Appendix: Euro III city buses

Cito

Model designation	Length	Door no.	Axles	Drive
660.130	8.90 m	2	2	Diesel-electric





Fuel tank

On-board electrical system batteries

Battery isolating switch

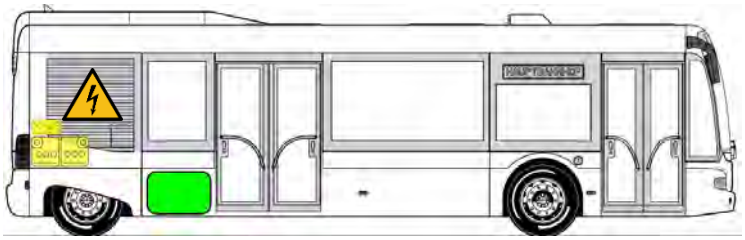
Risk of fatal injury.

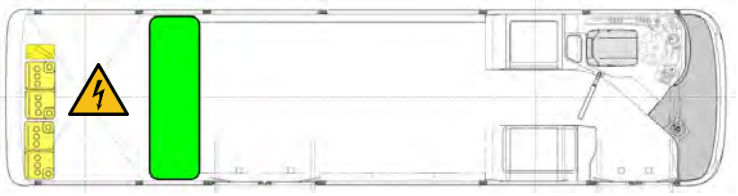
The diesel engine of the Cito drives an alternator, which supplies the electric drive motor with current. The on-board power supply has a voltage of up to 600 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

Appendix: Euro III city buses

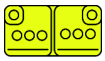
Cito

Model designation	Length	Door no.	Axles	Drive
660.230	9.60 m	2	2	Diesel-electric

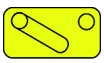




Fuel tank



On-board electrical system batteries



Battery isolating switch

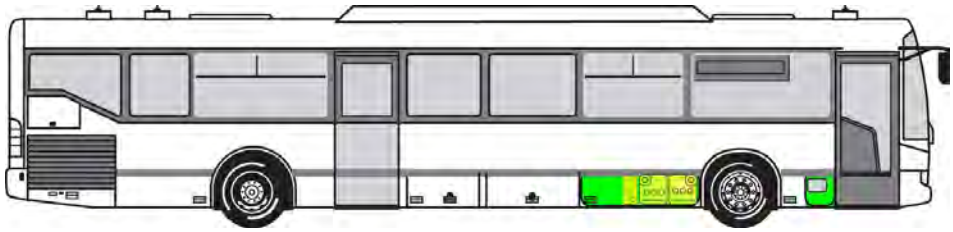
Risk of fatal injury.

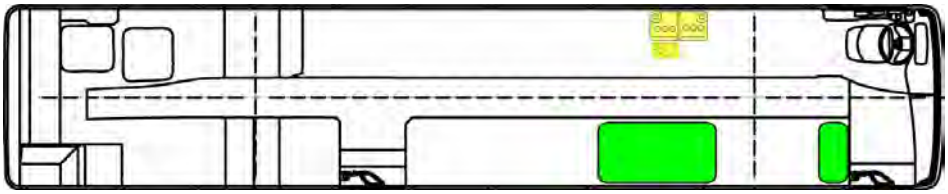
The diesel engine of the Cito drives an alternator, which supplies the electric drive motor with current. The on-board power supply has a voltage of up to 600 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

Appendix: Euro III city buses

Conecto M

Model designation	Length	Door no.	Axles	Drive
671.021	13 m	2	2	Diesel engine, upright





Fuel tank, additional/heating-oil tank*

On-board electrical system batteries

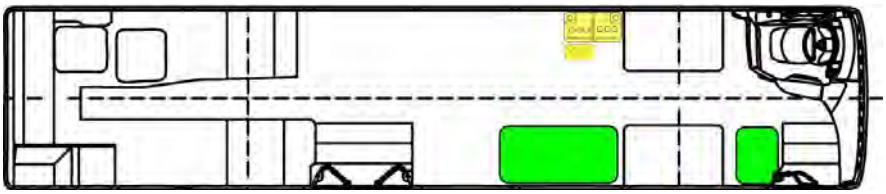
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro III city buses

Conecto H

Model designation	Length	Door no.	Axles	Drive
671.042	12 m	2	2	Diesel engine, upright



Fuel tank, additional/heating-oil tank*

On-board electrical system batteries

Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro III interurban buses

7.1.3. Interurban buses

Features

General information, engineering features

- Drive: Diesel
- Passenger capacity: up to 130 persons
- Mainly seated

Exterior view

- Multiple entrances
- Entrances with steps
- Low to medium height window sill

Doors

- Outwards opening door, single- and double-leaf
- Double-leaf
- Pneumatically driven
- Width approx. 0.70 to 1.25 m

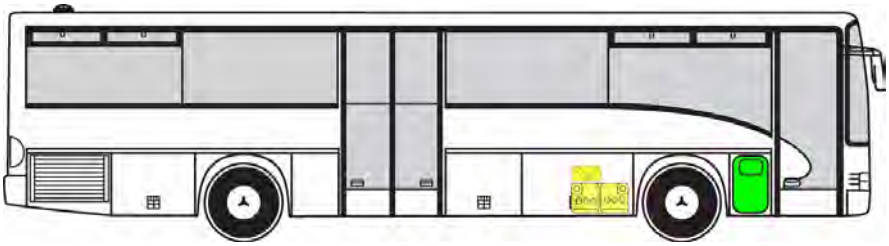
Interior equipment, seats

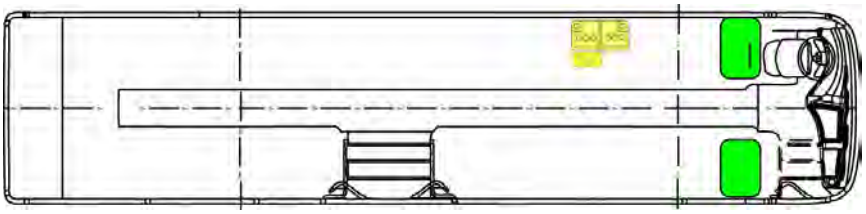
- Low and high backrests
- Seat adjustment possible
- Passenger restraint systems possible
- Handrails possible
- Luggage compartments/luggage space possible
- Seat-free floor space for wheelchair passengers and pushchairs

Appendix: Euro III interurban buses

Integro

Model designation	Length	Door no.	Axles	Drive
627.001	12 m	2	2	Diesel engine





Fuel tank

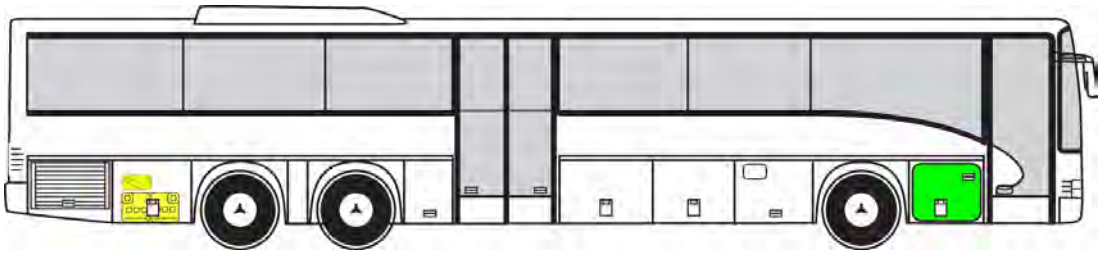
On-board electrical system batteries

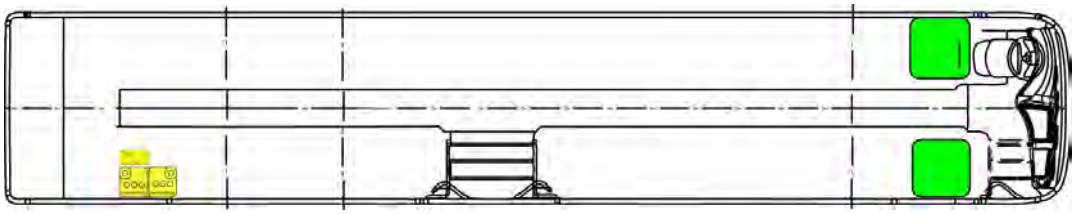
Battery isolating switch (in battery compartment)

Appendix: Euro III interurban buses

Integro L

Model designation	Length	Door no.	Axles	Drive
627.011	15 m	2	3	Diesel engine





Fuel tank

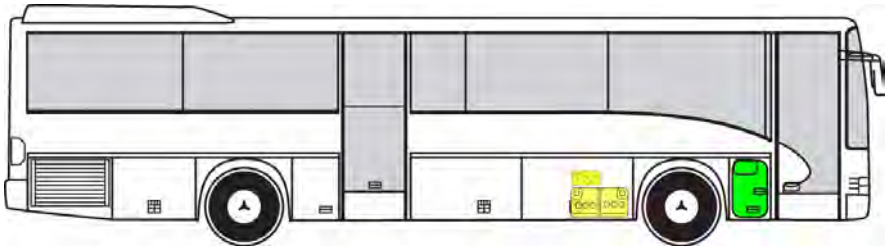
On-board electrical system batteries

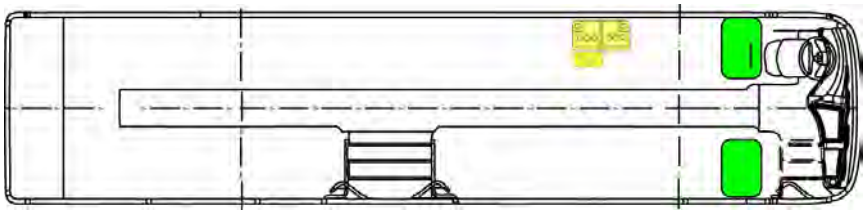
Battery isolating switch (in battery compartment)

Appendix: Euro III interurban buses

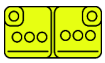
Integro H

Model designation	Length	Door no.	Axles	Drive
627.021	12 m	2	2	Diesel engine

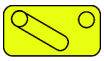




Fuel tank



On-board electrical system batteries

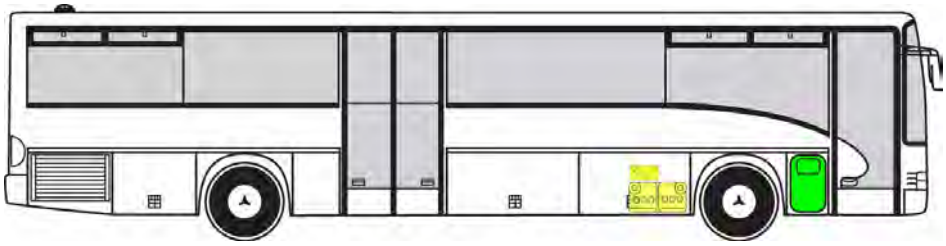


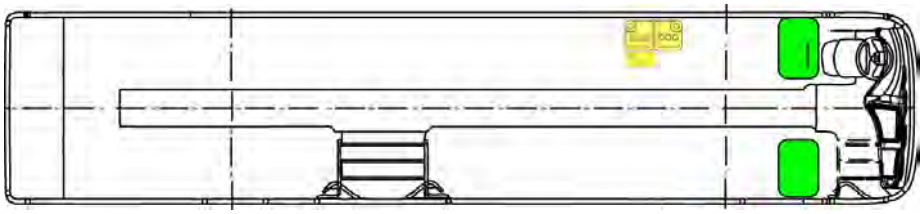
Battery isolating switch (in battery compartment)

Appendix: Euro III interurban buses

Integro M

Model designation	Length	Door no.	Axles	Drive
627.031	13 m	2	2	Diesel engine





Fuel tank

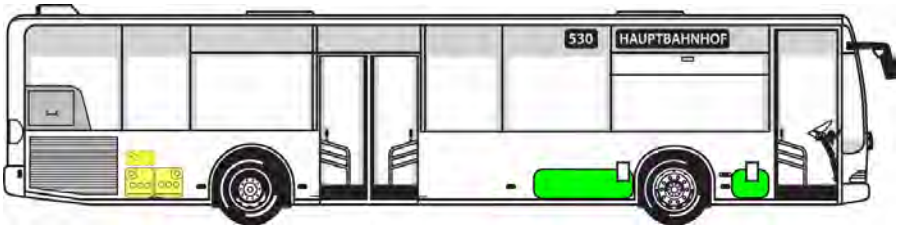
On-board electrical system batteries

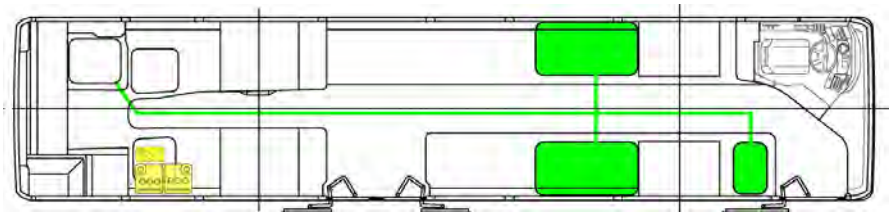
Battery isolating switch (in battery compartment)

Appendix: Euro III interurban buses

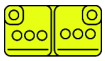
Citaro Ü

Model designation	Length	Door no.	Axles	Drive
628.047	12 m	2	2	Diesel engine, horizontal

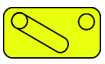




Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



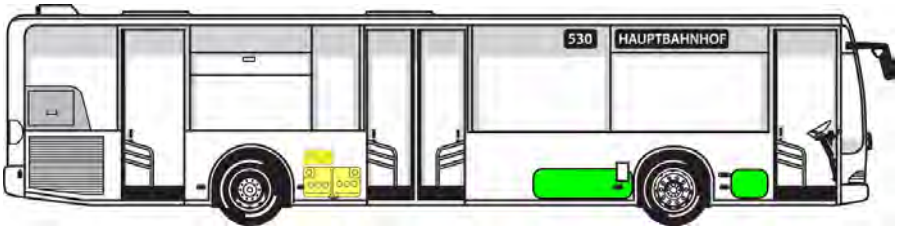
Battery isolating switch (in battery compartment)

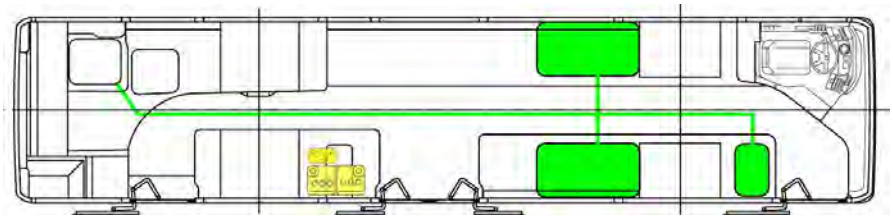
*: Option

Appendix: Euro III interurban buses

Citaro Ü

Model designation	Length	Door no.	Axles	Drive
628.048	12 m	3	2	Diesel engine, horizontal





Fuel tank (with lines), additional/heating-oil tank*

On-board electrical system batteries

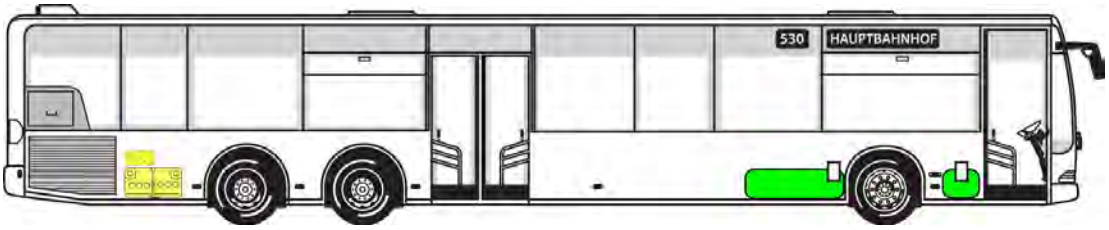
Battery isolating switch (in battery compartment)

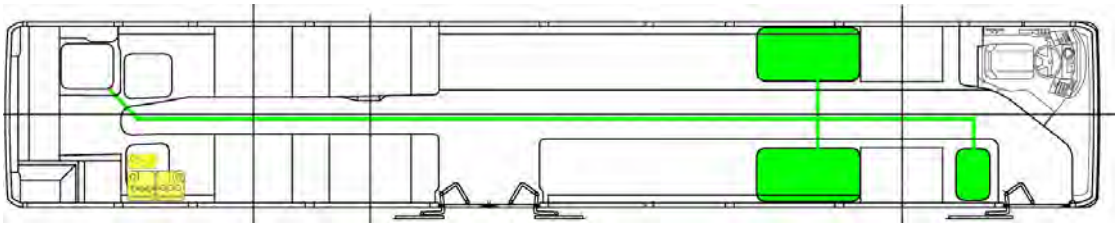
*: Option

Appendix: Euro III interurban buses

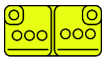
Citaro LÜ

Model designation	Length	Door no.	Axles	Drive
628.147	15 m	2	3	Diesel engine, horizontal

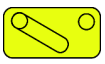




Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



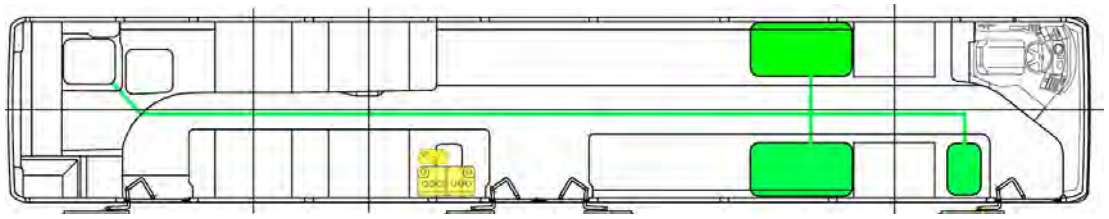
Battery isolating switch (in battery compartment)

*: Option

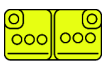
Appendix: Euro III interurban buses

Citaro LÜ

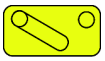
Model designation	Length	Door no.	Axles	Drive
628.148	15 m	3	3	Diesel engine, horizontal



Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



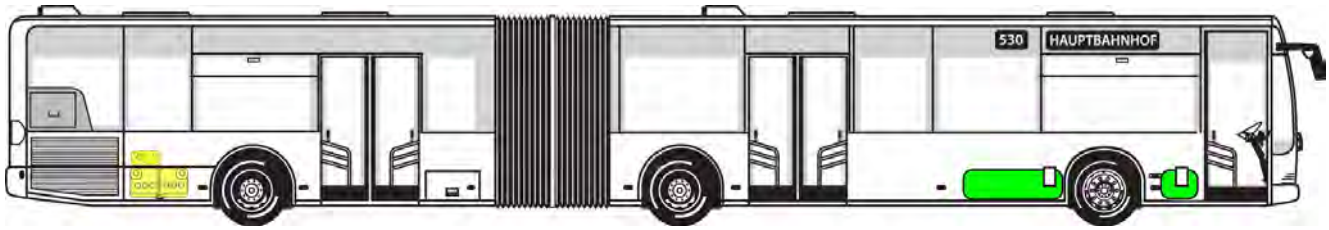
Battery isolating switch (in battery compartment)

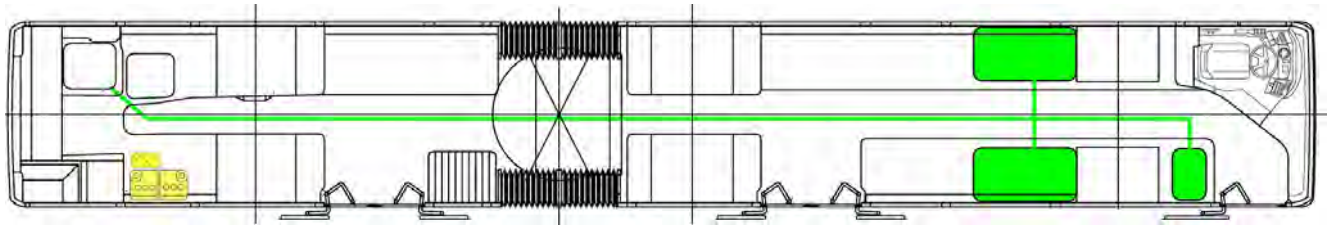
*: Option

Appendix: Euro III interurban buses

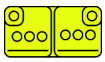
Citaro GÜ

Model designation	Length	Door no.	Axles	Drive
628.247	18 m	3	3	Diesel engine, horizontal

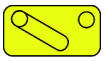




Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



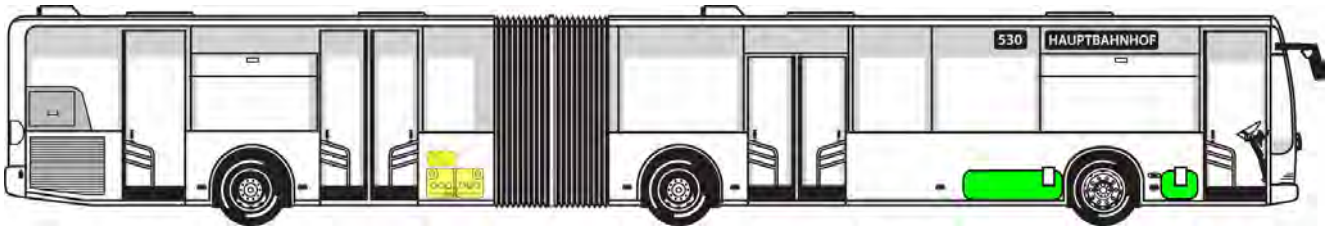
Battery isolating switch (in battery compartment)

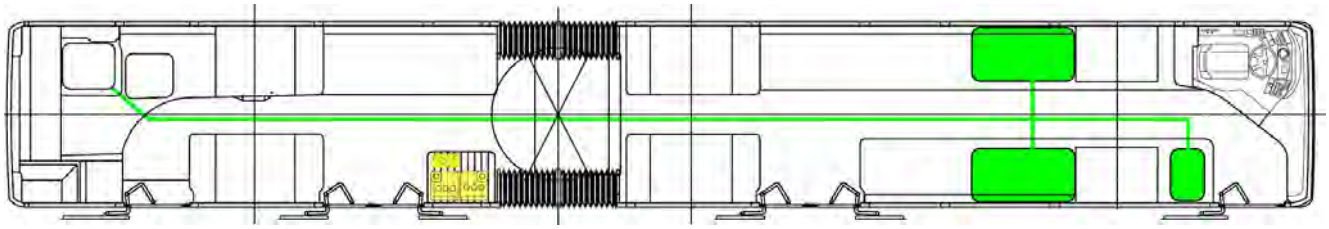
*: Option

Appendix: Euro III interurban buses

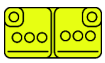
Citaro GÜ

Model designation	Length	Door no.	Axles	Drive
628.248	18 m	4	3	Diesel engine, horizontal

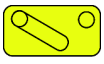




Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



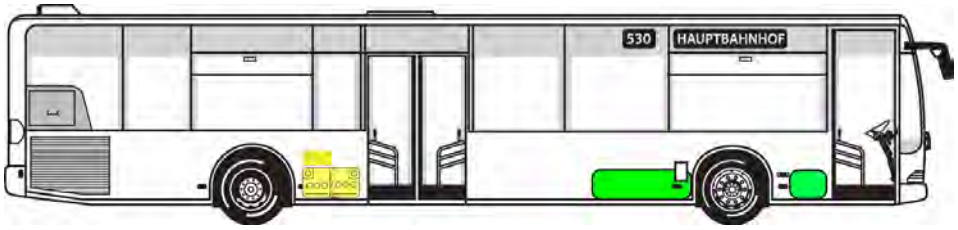
Battery isolating switch (in battery compartment)

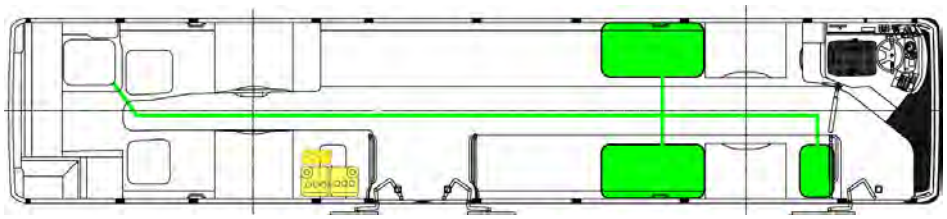
*: Option

Appendix: Euro III interurban buses

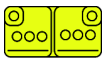
Citaro MÜ

Model designation	Length	Door no.	Axles	Drive
628.447	13 m	2	3	Diesel engine, horizontal

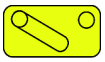




Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



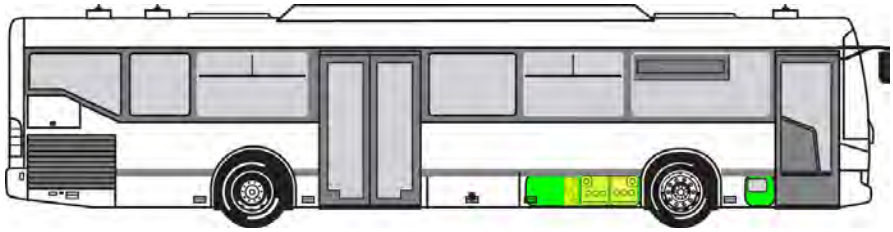
Battery isolating switch (in battery compartment)

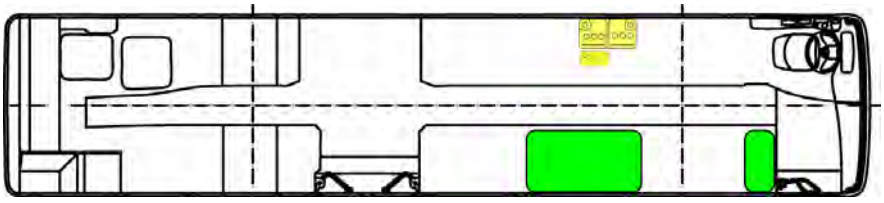
*: Option

Appendix: Euro III interurban buses

Conecto Ü

Model designation	Length	Door no.	Axles	Drive
671.020	12 m	2	2	Diesel engine, upright





Fuel tank (with lines), additional/heating-oil tank*

On-board electrical system batteries

Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro III tourist coaches

7.1.4. Tourist coaches

Features

General information, engineering features

- Drive: Diesel
- Passenger capacity: up to 60 persons
- Seats only

Exterior view

- Two passenger entrances
- Entrances with multiple steps, floor height approx. 1.35 m (above ground)
- High waistline height, approx. 2.20 m (above ground)

Doors

- Outwards opening doors, single-leaf
- Pneumatically driven
- Width approx. 0.70 m (internal width)

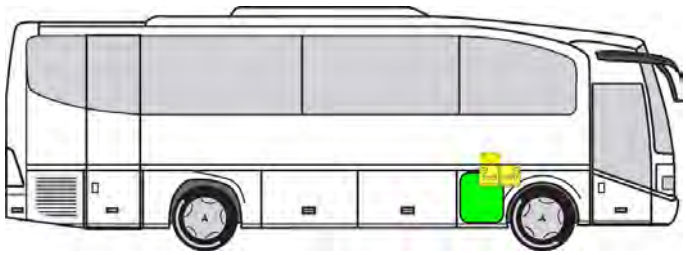
Interior equipment, seats

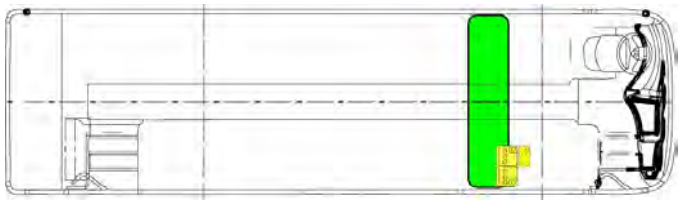
- High backrests
- Lateral seat adjustment and backrest adjustment
- Passenger restraint systems compulsory
- Luggage compartments with handrail
- Luggage compartment
- Lavatory, kitchenette, driver's rest area possible/probable

Appendix: Euro III tourist coaches

Tourino

Model designation	Length	Door no.	Axles	Drive
444.203	9.35 m	2	2	Diesel engine





Fuel tank

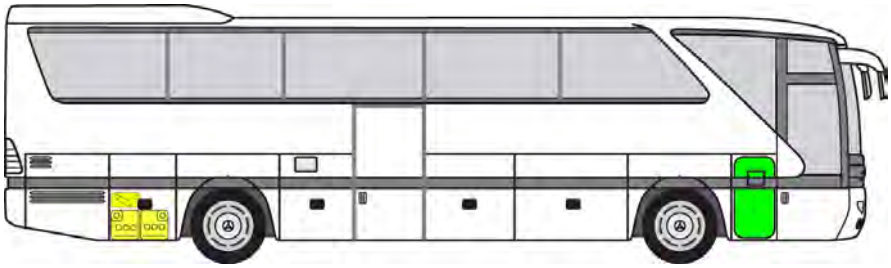
On-board electrical system batteries

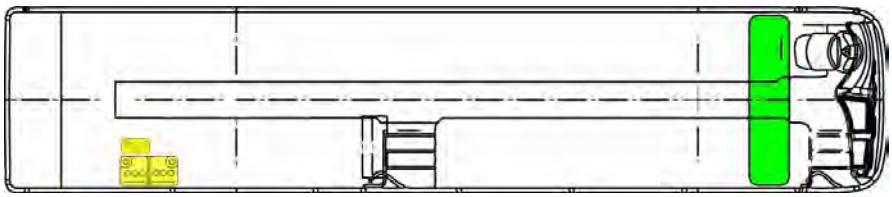
Battery isolating switch (in battery compartment)

Appendix: Euro III tourist coaches

Tourismo RHD

Model designation	Length	Door no.	Axles	Drive
613.358	12 m	2	2	Diesel engine





Fuel tank

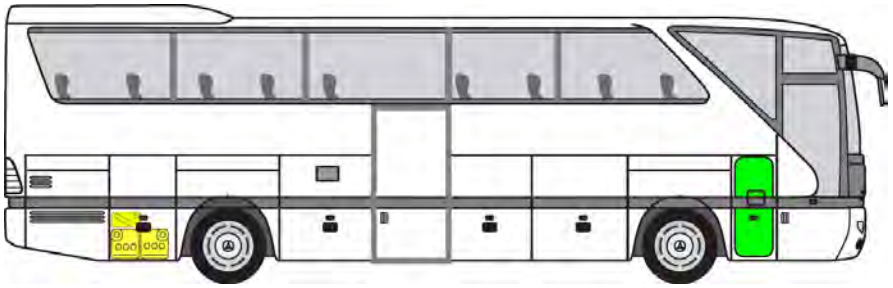
On-board electrical system batteries

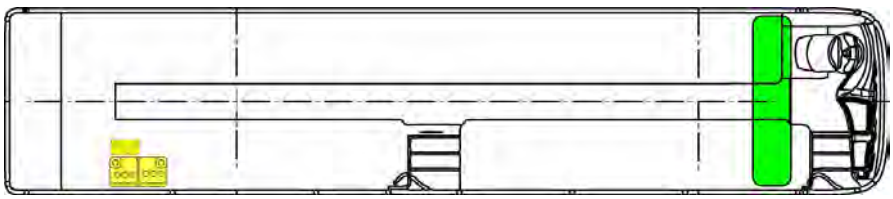
Battery isolating switch (in battery compartment)

Appendix: Euro III tourist coaches

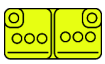
Tourismo SHD

Model designation	Length	Door no.	Axles	Drive
613.388	12 m	2	2	Diesel engine

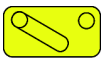




Fuel tank



On-board electrical system batteries

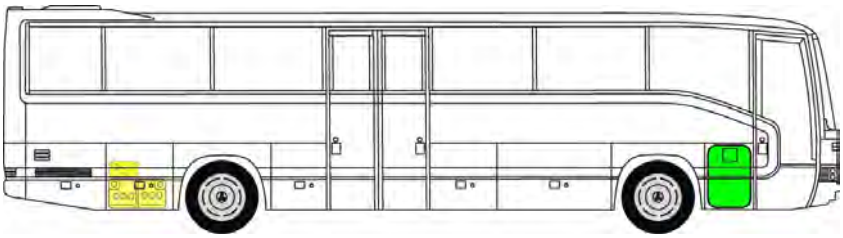


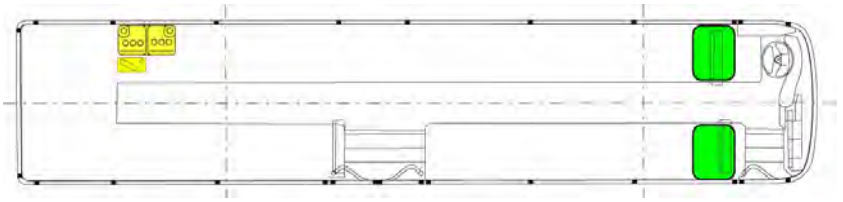
Battery isolating switch (in battery compartment)

Appendix: Euro III tourist coaches

O 404

Model designation	Length	Door no.	Axles	Drive
618.215	12 m	2	2	Diesel engine





Fuel tank

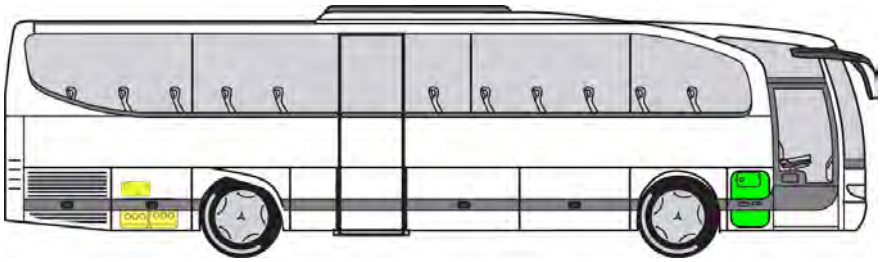
On-board electrical system batteries

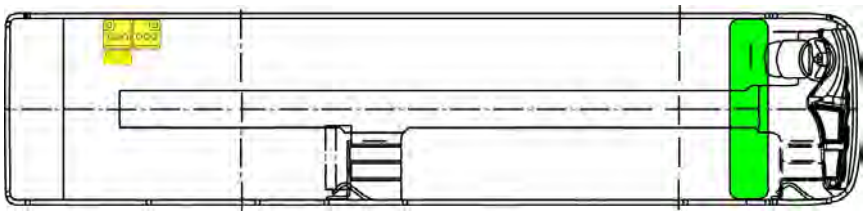
Battery isolating switch (in battery compartment)

Appendix: Euro III tourist coaches

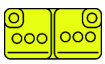
Travego RH

Model designation	Length	Door no.	Axles	Drive
629.001	12 m	2	2	Diesel engine

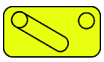




Fuel tank



On-board electrical system batteries

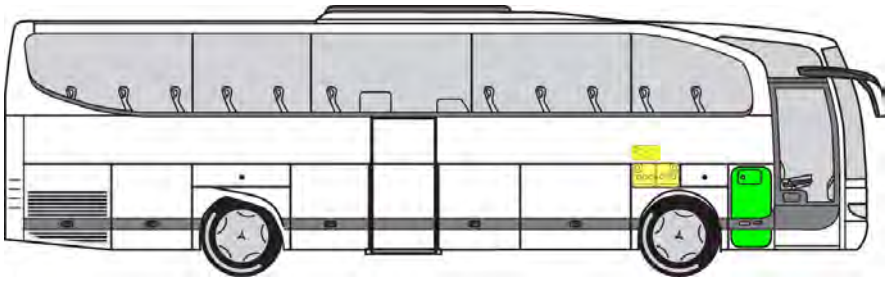


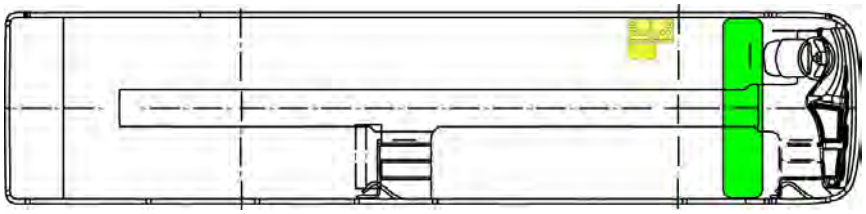
Battery isolating switch (in battery compartment)

Appendix: Euro III tourist coaches

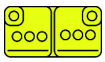
Travego

Model designation	Length	Door no.	Axles	Drive
629.011	12 m	2	2	Diesel engine

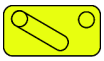




Fuel tank



On-board electrical system batteries

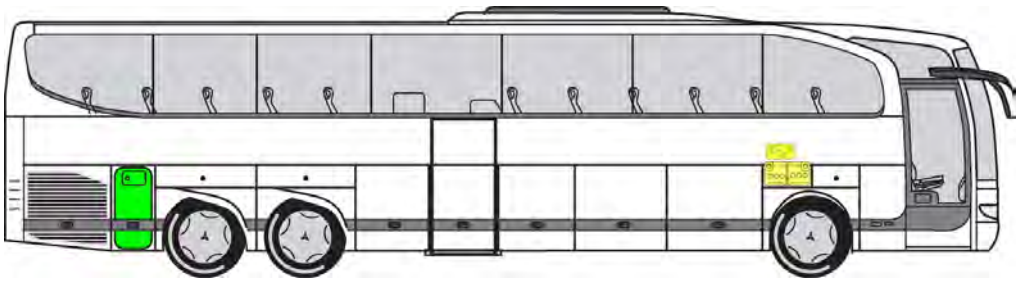


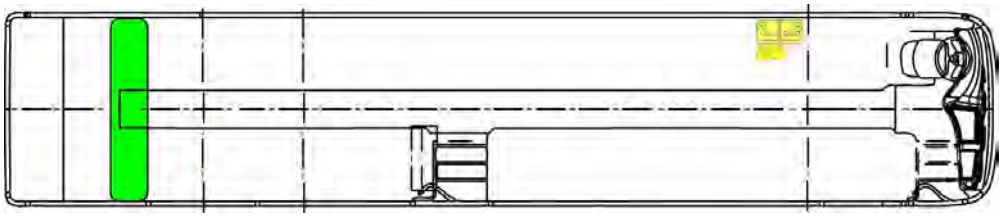
Battery isolating switch (in battery compartment)

Appendix: Euro III tourist coaches

Travego L

Model designation	Length	Door no.	Axles	Drive
629.012	15 m	2	3	Diesel engine





Fuel tank

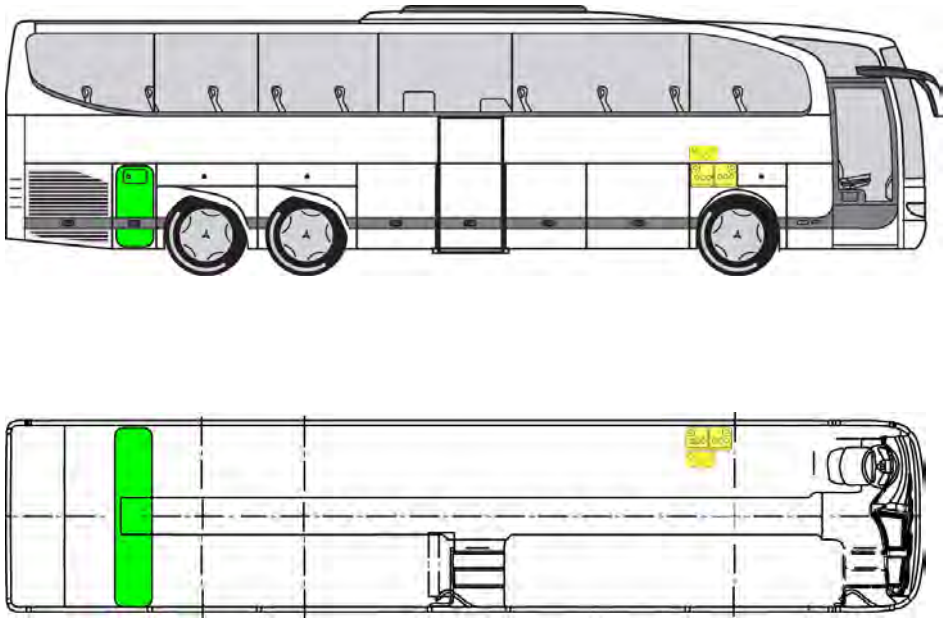
On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro III tourist coaches

Travego M

Model designation	Length	Door no.	Axles	Drive
629.015	13 m	2	3	Diesel engine



Fuel tank

On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro IV and V vehicles

7.2. Euro IV and V vehicles

7.2.1. Model designation overview

Designation	Model designation	Model	Length	Door no.	Drive
CITARO CNG	628.020	City bus	12.00 m	3	Natural gas engine
CITARO	628.031	City bus	12.00 m	2	Horizontal engine
CITARO	628.032	City bus	12.00 m	3	Horizontal engine
CITARO	628.052	City bus	12.00 m	3	Upright engine
CITARO FuelCell	628.073	City bus	12.00 m	3	Fuel cell hybrid drive
CITARO RL	628.080-23	City bus	12.00 m	1	Right-hand-drive vehicle
CITARO	628.083	City bus	12.00 m	2	Horizontal engine
CITARO RL	628.083-23	City bus	12.00 m	2	Right-hand-drive vehicle
CITARO	628.085	City bus	12.00 m	3	Horizontal engine
CITARO	628.090	City bus	12.00 m	3	Upright engine
CITARO L	628.185	City bus	15.00 m	3	Horizontal engine
CITARO G CNG	628.220	City bus	18.00 m	4	Articulated bus, natural gas engine
CITARO G RL	628.280-23	City bus	18.00 m	2	Articulated bus, right-hand drive
CITARO G	628.231	City bus	18.00 m	3	Articulated bus
CITARO G	628.232	City bus	18.00 m	4	Articulated bus
CITARO G	628.283	City bus	18.00 m	3	Articulated bus
CITARO G RL	628.283-23	City bus	18.00 m	3	Articulated bus, right-hand drive
CITARO G	628.285	City bus	18.00 m	4	Articulated bus
CITARO G	628.290	City bus	18.00 m	4	Articulated bus
CITARO G DEH	628.293	City bus	18.00 m	3	Articulated bus, diesel hybrid drive
CITARO G DEH	628.294	City bus	18.00 m	4	Articulated bus, diesel hybrid drive
Conecto	628.310	City bus	12.00 m	3	Upright engine
Conecto G	628.320	City bus	18.00 m	4	Upright engine
CITARO K	628.483	City bus	10.40 m	2	Horizontal engine
CapaCity	628.486	City bus	19.54 m	4	Horizontal engine
CITARO LE	628.583	City bus	12.00 m	2	Horizontal engine
CITARO LE	628.584	City bus	12.00 m	3	Horizontal engine

Appendix: Euro IV and V vehicles

Designation	Model designation	Model	Length	Door no.	Drive
CITARO Ü	628.087	Interurban bus	12.00 m	2	Horizontal engine
CITARO LÜ	628.187	Interurban bus	15.00 m	2	Horizontal engine
CITARO GÜ	628.287	Interurban bus	18.00 m	3	Articulated bus
CITARO MÜ	628.487	Interurban bus	13.00 m	2	Horizontal engine
CITARO LE Ü	628.587	Interurban bus	12.00 m	2	Horizontal engine
CITARO LE MÜ	628.687	Interurban bus	13.00 m	2	Horizontal engine
Integro	633.001	Interurban bus	12.14 m	2	High-floor
Integro M	633.002	Interurban bus	12.98 m	2	High-floor
Integro L	633.004	Interurban bus	14.92 m	2	High-floor
Intouro	633.051	Interurban bus	12.14 m	2	
Intouro M	633.052	Interurban bus	12.98 m	2	
Intouro E	633.251	Interurban bus	12.14 m	2	School bus
Intouro ME	633.252	Interurban bus	12.98 m	2	School bus
Tourino	444.303	Tourist coach	9.35 m	2	Midibus
Tourino RL	444.303-23	Tourist coach	9.35 m	2	Midibus, right-hand drive
Travego M	632.005	Tourist coach	12.96 m	2	High-decker touring
Travego	632.006	Tourist coach	12.14 m	2	High-decker touring
Travego L	632.007	Tourist coach	13.99 m	2	High-decker touring
Tourismo RH	632.025	Tourist coach	12.14 m	2	High-decker touring
Tourismo RH-M	632.026	Tourist coach	12.96 m	2	High-decker touring
Tourismo M	632.035	Tourist coach	12.96 m	2	High-decker touring, 3-axle
Tourismo	632.036	Tourist coach	12.14 m	2	High-decker touring
Tourismo RL	632.036-23	Tourist coach	12.14 m	2	High-decker tourist coach, right-hand drive
Tourismo L	632.037	Tourist coach	13.99 m	2	High-decker touring
Tourismo M/2	632.038	Tourist coach	12.96 m	2	High-decker touring, 2-axle
Travego	632.245	Tourist coach	12.18 m	2	High-decker touring
Travego M	632.246	Tourist coach	13.00 m	2	High-decker touring
Travego L	632.247	Tourist coach	14.03 m	2	High-decker touring

Appendix: Euro IV and V city buses

7.2.2. City buses

Features

General information, engineering features

- Wide variety of drives - diesel, gas, fuel cell
- Passenger capacity: up to 170 persons
- Mainly standing

Exterior view

- Multiple wide entrances
- Low entry height
- Low waistline height

Doors

- Inwards opening doors
- Outwards opening doors
- Double-leaf
- Pneumatically or electrically driven
- Width 1.25 m

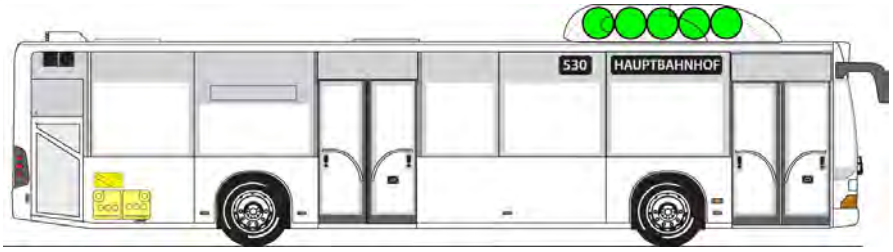
Interior equipment, seats

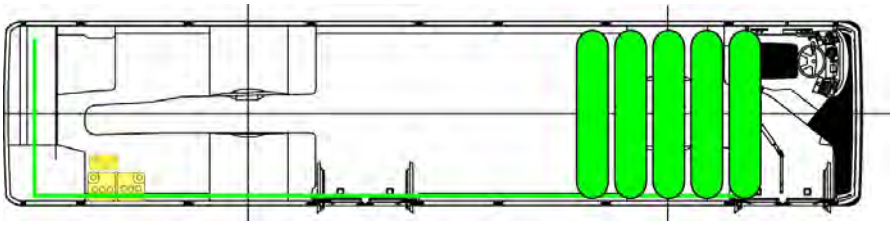
- Low backrests
- No seat adjustment
- No passenger restraint systems
- Numerous handrails
- Seat-free floor space for wheelchair passengers and pushchairs

Appendix: Euro IV and V city buses

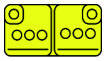
Citaro CNG

Model designation	Length	Door no.	Axles	Drive
628.020	12 m	2	2	Natural gas engine

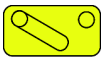




Fuel tank



On-board electrical system batteries



Battery isolating switch (in battery compartment)

Appendix: Euro IV and V city buses

Citaro

Model designation	Length	Door no.	Axles	Drive
628.031	12.14 m	2	2	Diesel engine, horizontal

Fuel tank (with lines), additional/heating-oil tank*

On-board electrical system batteries

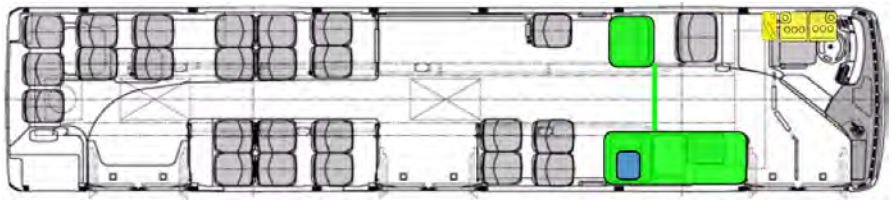
Battery isolating switch (in battery compartment)

*: Option

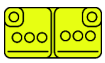
Appendix: Euro IV and V city buses

Citaro

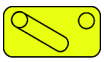
Model designation	Length	Door no.	Axles	Drive
628.032	12.14 m	3	2	Diesel engine, horizontal



Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



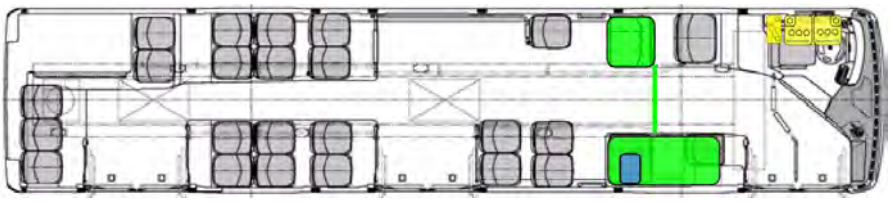
Battery isolating switch (in battery compartment)

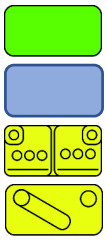
*: Option

Appendix: Euro IV and V city buses

Citaro

Model designation	Length	Door no.	Axles	Drive
628.052	12 m	3	2	Diesel engine, upright





Fuel tank (with lines), additional/heating-oil tank*

On-board electrical system batteries

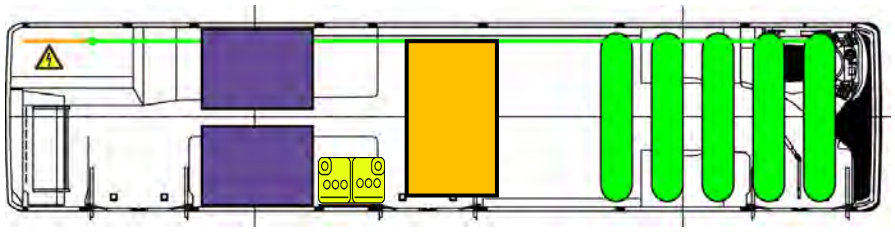
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro IV and V city buses

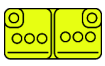
Citaro FuelCell Hybrid

Model designation	Length	Door no.	Axles	Drive
628.073	12 m	3	2	Fuel cell



Hydrogen tank (with lines)

High-voltage batteries (with lines)



On-board electrical system batteries

Fuel cell system

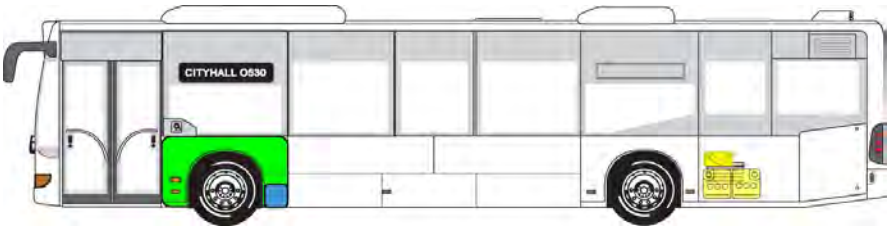
Risk of fatal injury.

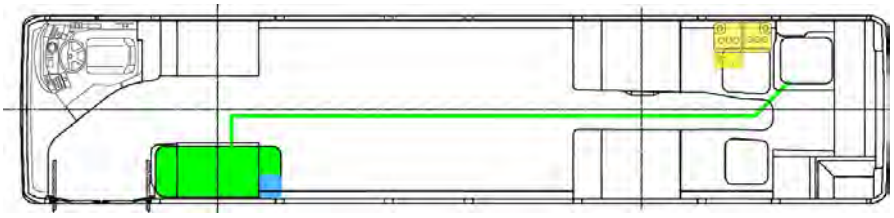
The on-board power supply has a voltage of up to 650 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

Appendix: Euro IV and V city buses

Citaro right-hand drive

Model designation	Length	Door no.	Axles	Drive
628.080-23	12 m	1	2	Diesel engine





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

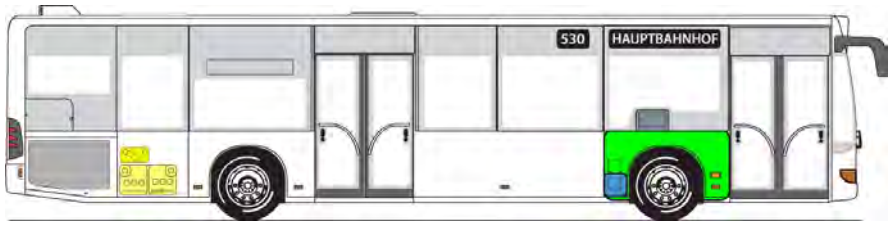
Battery isolating switch (in battery compartment)

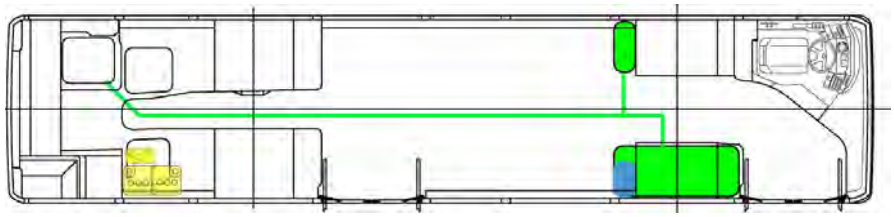
*: Option

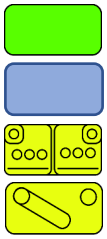
Appendix: Euro IV and V city buses

Citaro

Model designation	Length	Door no.	Axles	Drive
628.083	12 m	2	2	Diesel engine







Fuel tank (with lines), additional/heating-oil tank*

On-board electrical system batteries

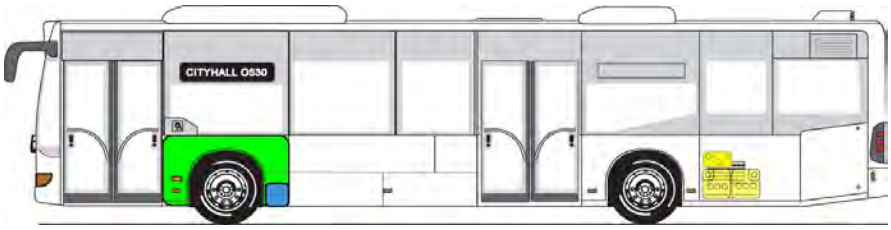
Battery isolating switch (in battery compartment)

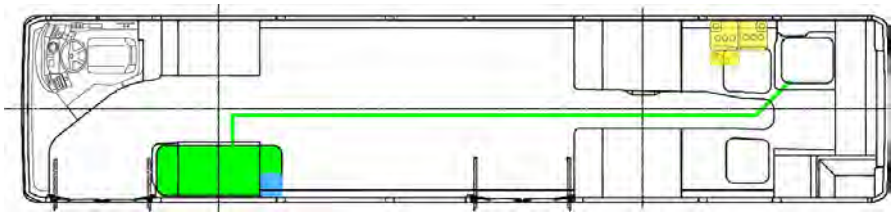
*: Option

Appendix: Euro IV and V city buses

Citaro right-hand drive

Model designation	Length	Door no.	Axles	Drive
628.083-23	12 m	2	2	Diesel engine





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

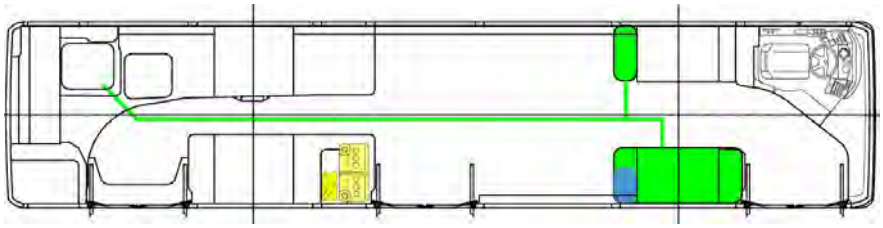
Battery isolating switch (in battery compartment)

*: Option

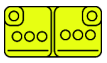
Appendix: Euro IV and V city buses

Citaro

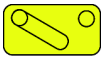
Model designation	Length	Door no.	Axles	Drive
628.085	12 m	3	2	Diesel engine, horizontal



Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



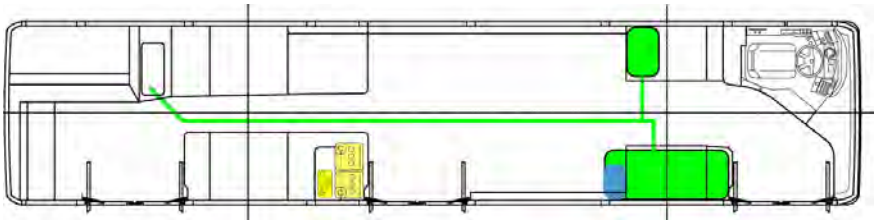
Battery isolating switch (in battery compartment)

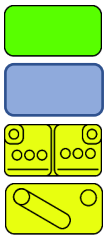
*: Option

Appendix: Euro IV and V city buses

Citaro

Model designation	Length	Door no.	Axles	Drive
628.090	12 m	3	2	Diesel engine, upright





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

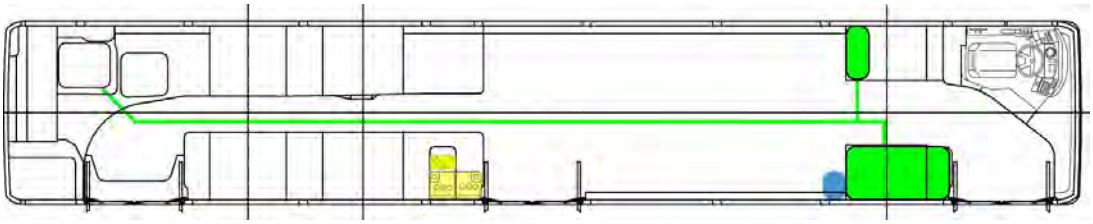
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro IV and V city buses

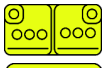
Citaro L

Model designation	Length	Door no.	Axles	Drive
628.185	15 m	3	3	Diesel engine, horizontal

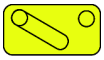


Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



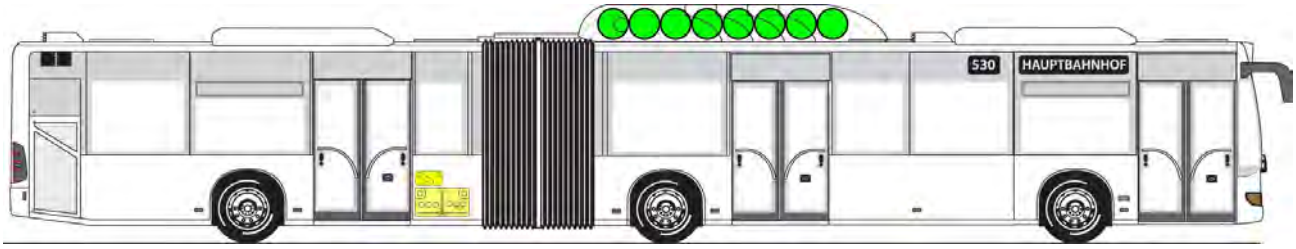
Battery isolating switch (in battery compartment)

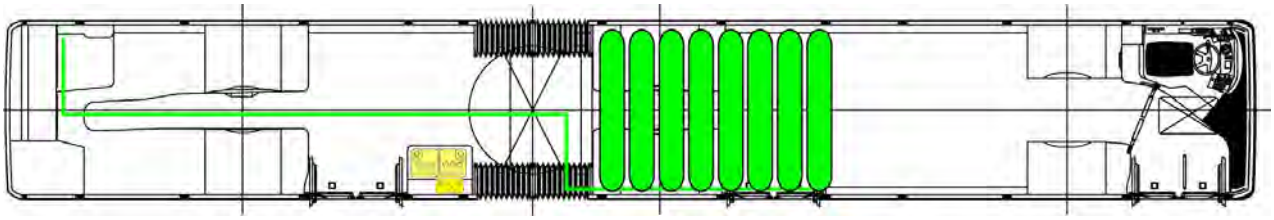
*: Option

Appendix: Euro IV and V city buses

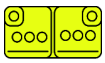
Citaro G CNG

Model designation	Length	Door no.	Axles	Drive
628.220	18 m	3	3	Natural gas engine

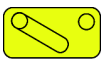




Fuel tank (with lines), additional/heating-oil tank*



On-board electrical system batteries



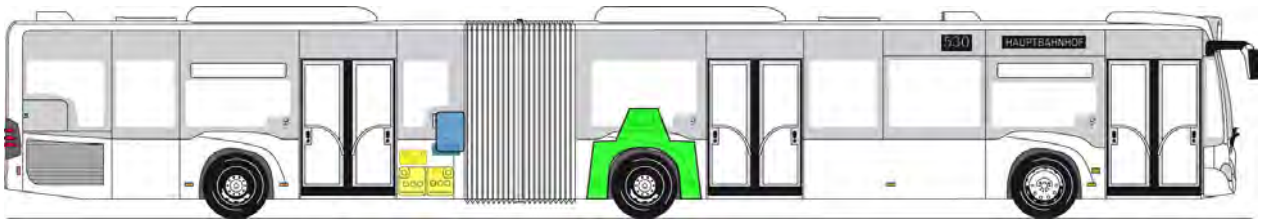
Battery isolating switch (in battery compartment)

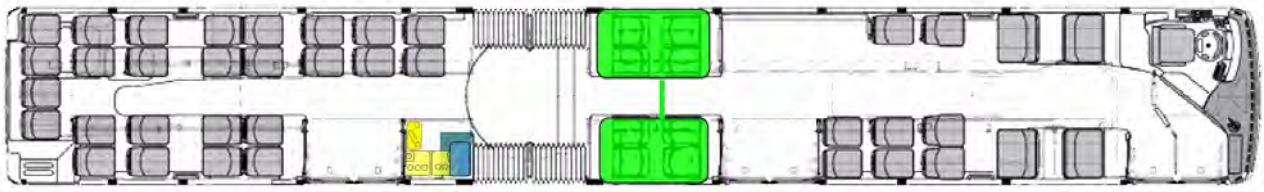
*: Option

Appendix: Euro IV and V city buses

Citaro G

Model designation	Length	Door no.	Axles	Drive
628.231	18 m	3	3	Diesel engine, horizontal





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

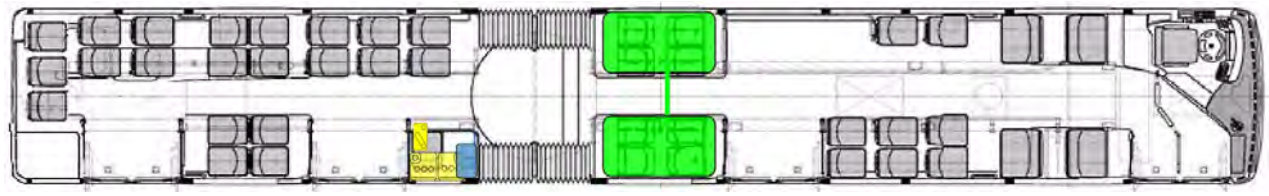
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro IV and V city buses

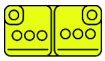
Citaro G

Model designation	Length	Door no.	Axles	Drive
628.232	18 m	4	3	Diesel engine, horizontal

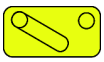


Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



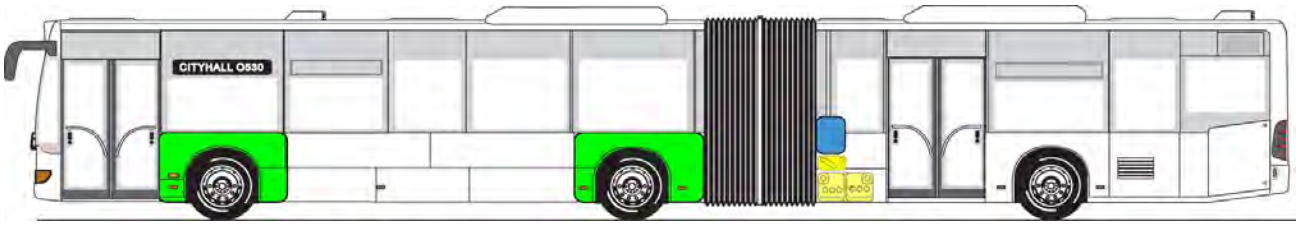
Battery isolating switch (in battery compartment)

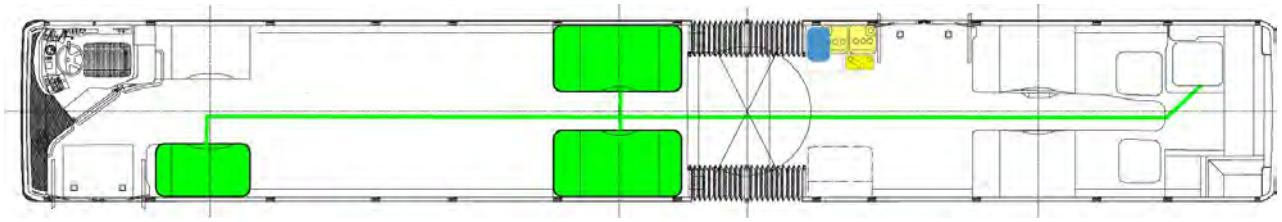
*: Option

Appendix: Euro IV and V city buses

Citaro G right-hand drive

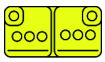
Model designation	Length	Door no.	Axles	Drive
628.280-23	18 m	2	3	Diesel engine, horizontal

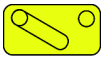





Fuel tank (with lines), additional/heating-oil tank*


AdBlue tank


On-board electrical system batteries

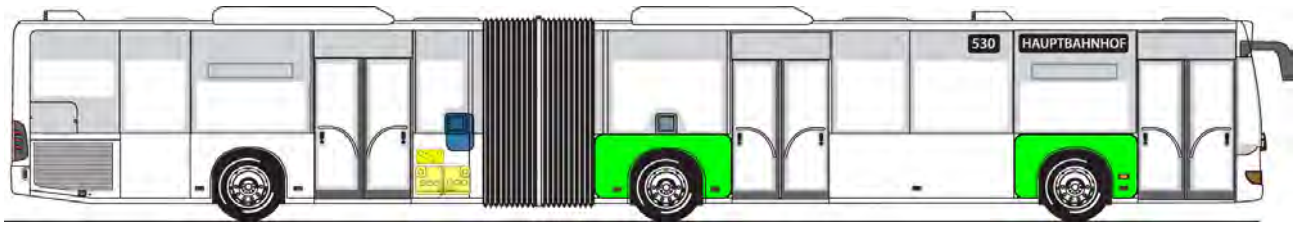

Battery isolating switch (in battery compartment)

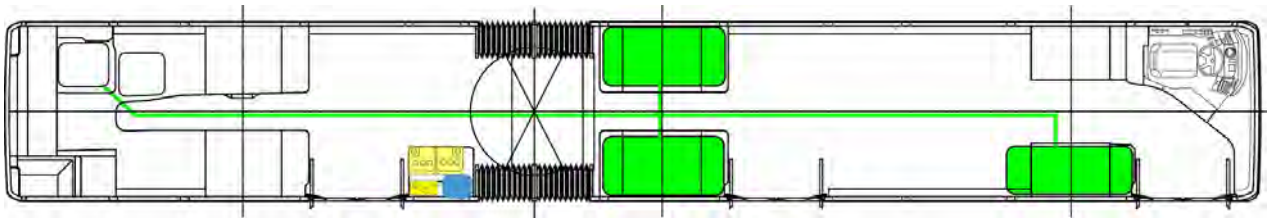
*: Option

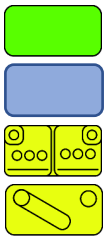
Appendix: Euro IV and V city buses

Citaro G

Model designation	Length	Door no.	Axles	Drive
628.283	18 m	3	3	Diesel engine, horizontal







Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

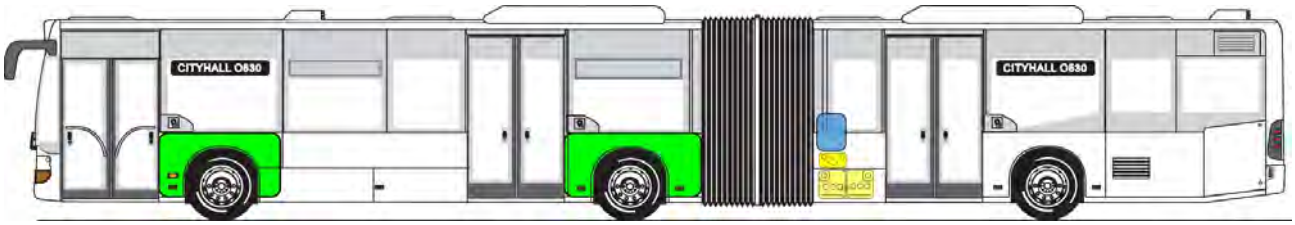
Battery isolating switch (in battery compartment)

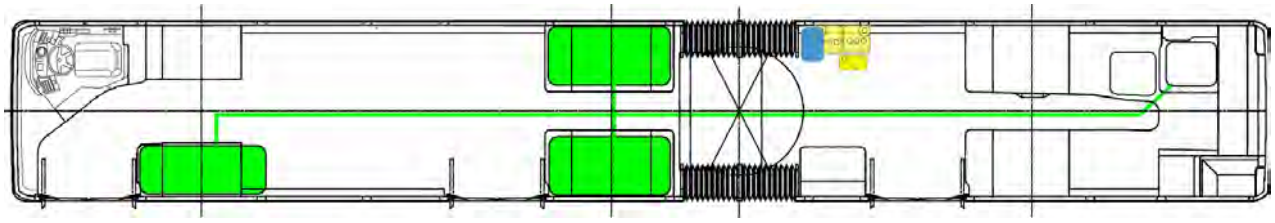
*: Option

Appendix: Euro IV and V city buses

Citaro G right-hand drive

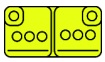
Model designation	Length	Door no.	Axles	Drive
628.283-23	12 m	3	2	Diesel engine, horizontal

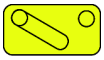





Fuel tank (with lines), additional/heating-oil tank*


AdBlue tank


On-board electrical system batteries

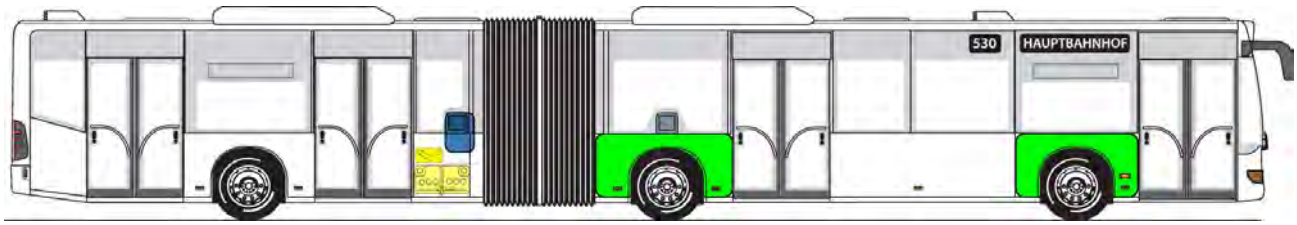

Battery isolating switch (in battery compartment)

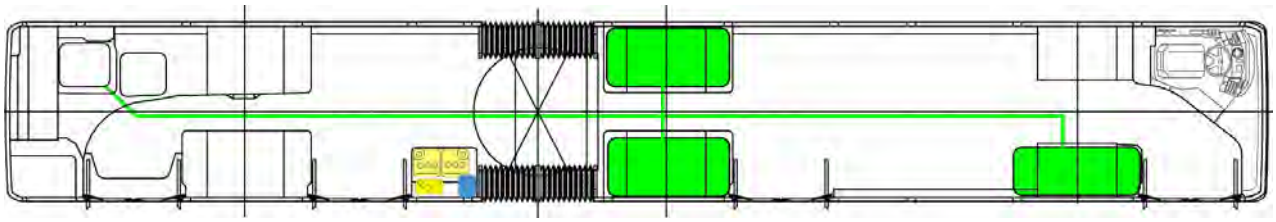
*: Option

Appendix: Euro IV and V city buses

Citaro G

Model designation	Length	Door no.	Axles	Drive
628.285	18 m	4	3	Diesel engine, horizontal





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

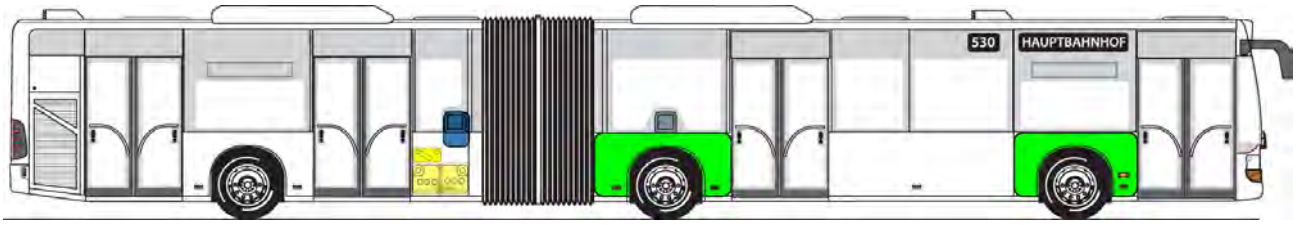
Battery isolating switch (in battery compartment)

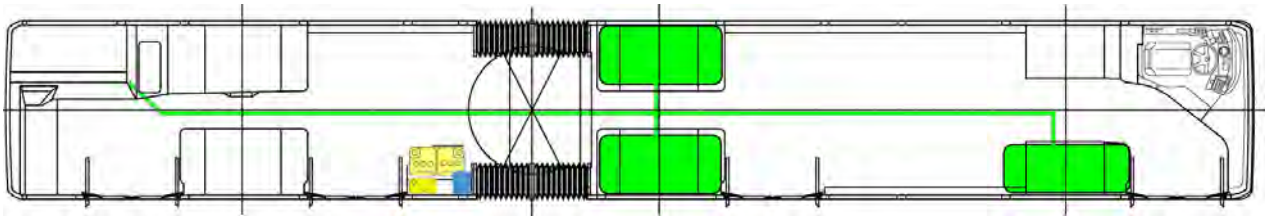
*: Option

Appendix: Euro IV and V city buses

Citaro G

Model designation	Length	Door no.	Axles	Drive
628.290	18 m	4	3	Diesel engine, upright





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

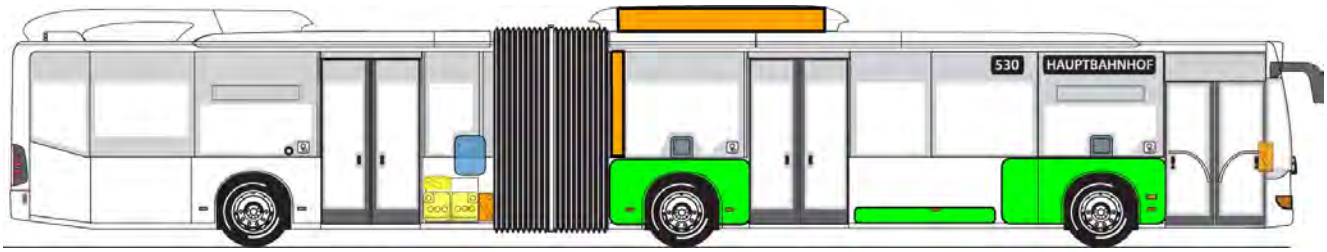
Battery isolating switch (in battery compartment)

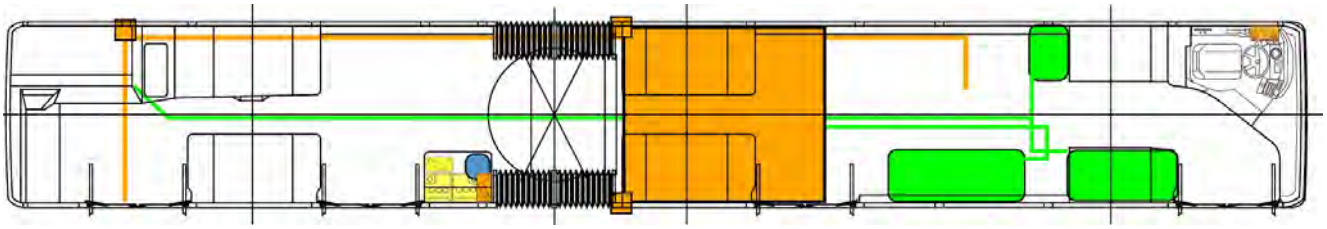
*: Option

Appendix: Euro IV and V city buses

Citaro G BlueTec Hybrid

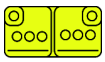
Model designation	Length	Door no.	Axles	Drive
628.293	18 m	3	3	Diesel-electric

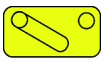





Fuel tank (with lines), additional/heating-oil tank*


AdBlue tank


On-board electrical system batteries


Battery isolating switch (in battery compartment)


High-voltage batteries (with lines)


Emergency off switch

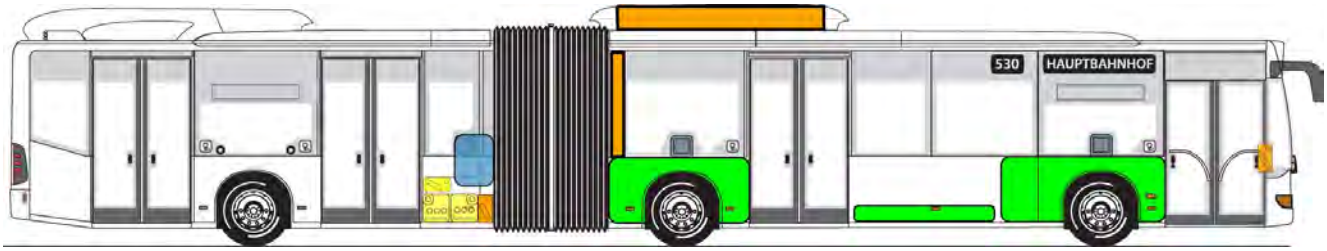

Risk of fatal injury.
The on-board power supply has a voltage of up to 750 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

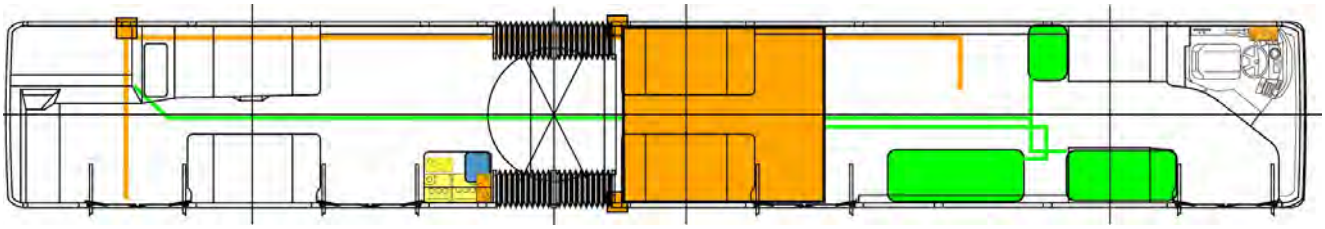
*: Option

Appendix: Euro IV and V city buses

Citaro G BlueTec Hybrid

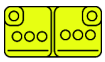
Model designation	Length	Door no.	Axles	Drive
628.294	18 m	4	3	Diesel-electric



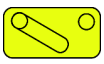


Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



Battery isolating switch (in battery compartment)

High-voltage batteries (with lines)

Emergency off switch

Risk of fatal injury.

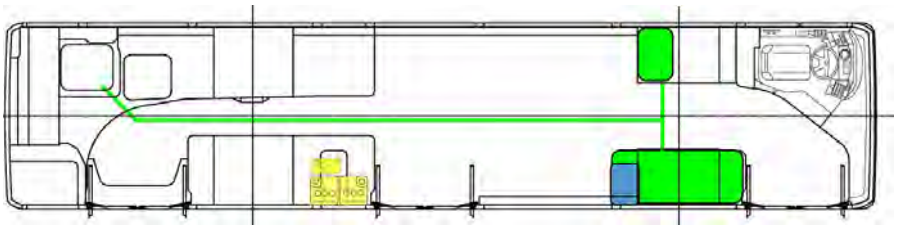
The on-board power supply has a voltage of up to 750 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

*: Option

Appendix: Euro IV and V city buses

Conecto

Model designation	Length	Door no.	Axles	Drive
628.310	12 m	2	2	Diesel engine, upright



Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

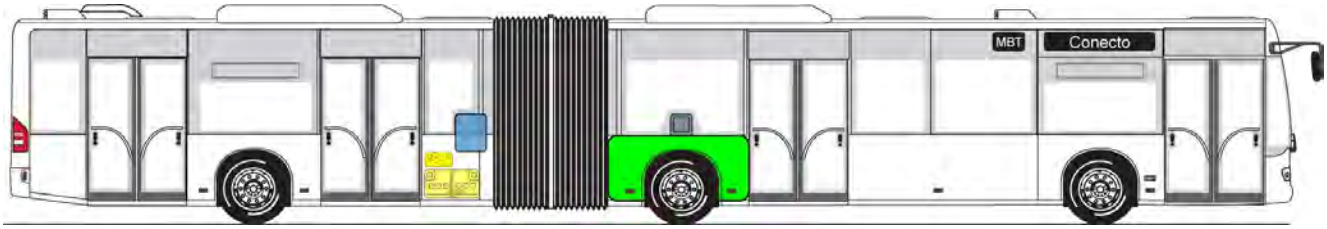
Battery isolating switch (in battery compartment)

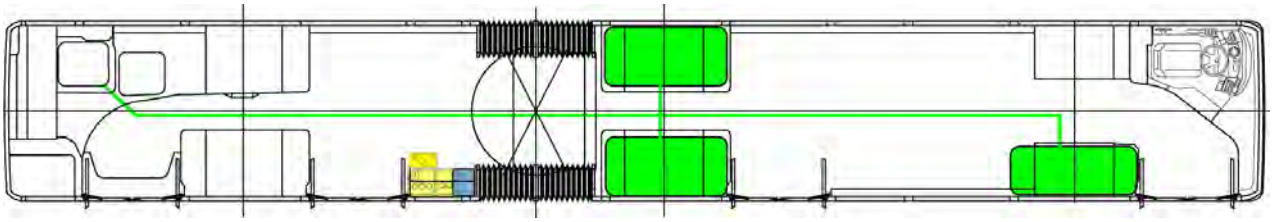
*: Option

Appendix: Euro IV and V city buses

Conecto G

Model designation	Length	Door no.	Axles	Drive
628.320	18 m	4	3	Diesel engine, upright





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

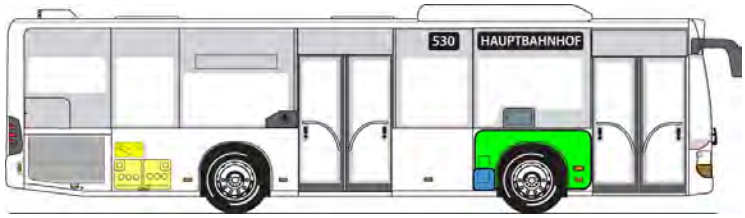
Battery isolating switch (in battery compartment)

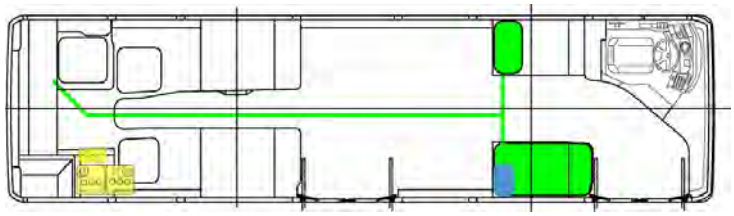
*: Option

Appendix: Euro IV and V city buses

Citaro K

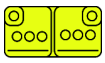
Model designation	Length	Door no.	Axles	Drive
628.483	10 m	2	2	Diesel engine, horizontal



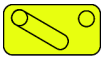


Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



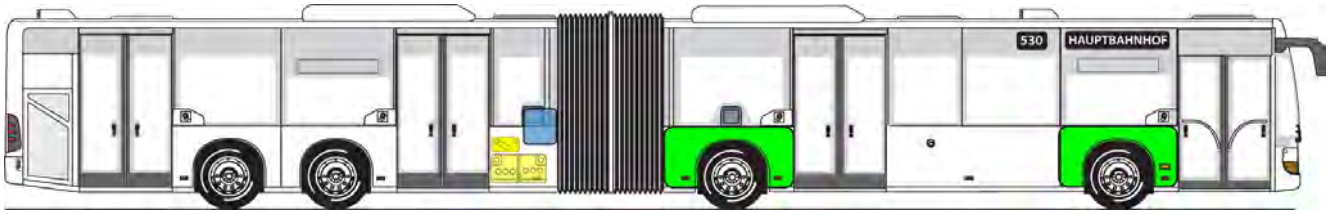
Battery isolating switch (in battery compartment)

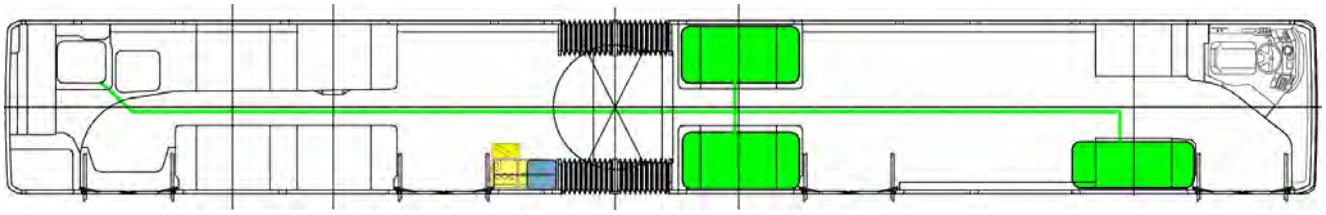
*: Option

Appendix: Euro IV and V city buses

CapaCity

Model designation	Length	Door no.	Axles	Drive
628.486	19.54 m	4	4	Diesel engine, horizontal





Fuel tank (with lines)

AdBlue tank

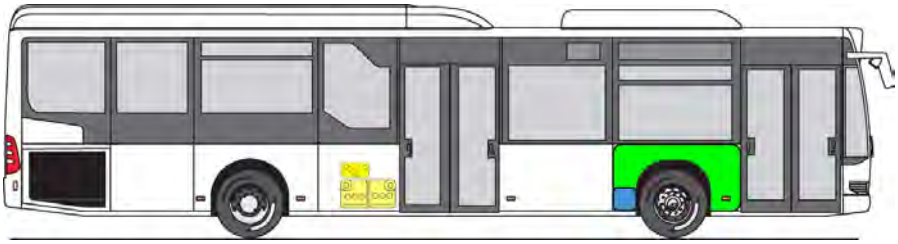
On-board electrical system batteries

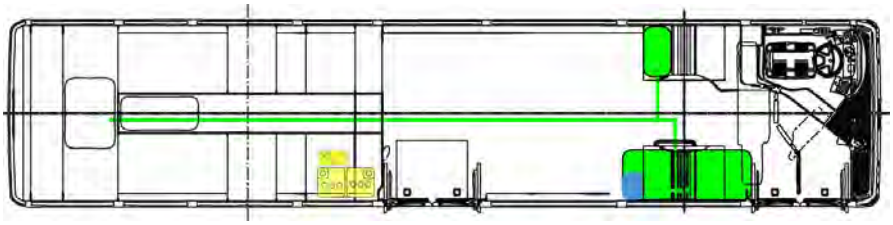
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V city buses

Citaro LE

Model designation	Length	Door no.	Axles	Drive
628.583	12 m	2	2	Diesel engine, horizontal





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

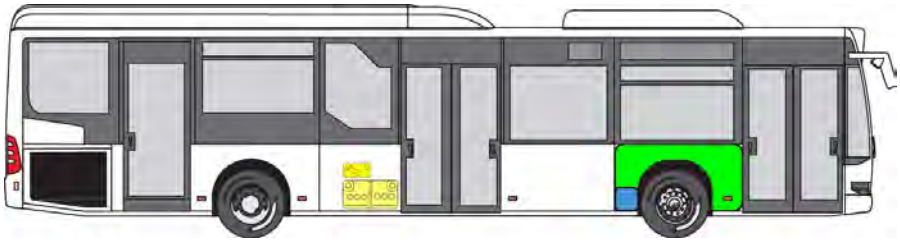
Battery isolating switch (in battery compartment)

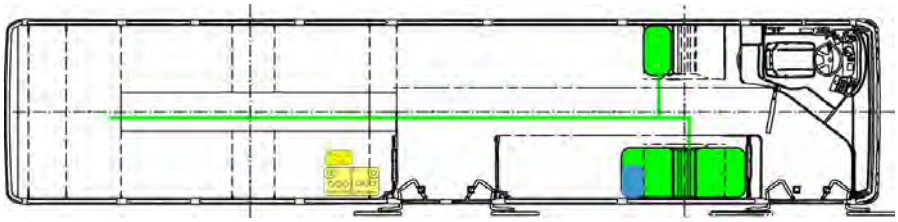
*: Option

Appendix: Euro IV and V city buses

Citaro LE

Model designation	Length	Door no.	Axles	Drive
628.584	12 m	3	2	Diesel engine, horizontal





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro IV and V interurban buses

7.2.3. Interurban buses

Features

General information, engineering features

- Drive: Diesel
- Passenger capacity: up to 130 persons
- Mainly seated

Exterior view

- Multiple entrances
- Entrances with steps
- Low to medium height window sill

Doors

- Outwards opening door, single- and double-leaf
- Double-leaf
- Pneumatically driven
- Width approx. 0.70 to 1.25 m

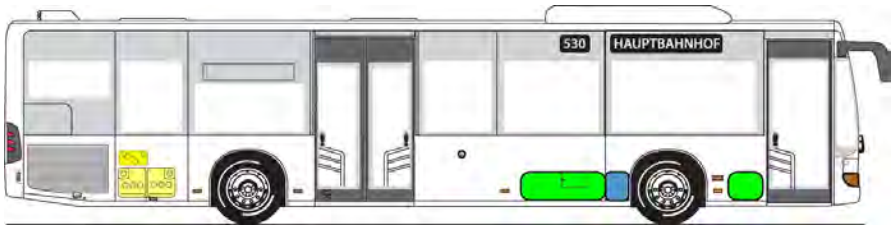
Interior equipment, seats

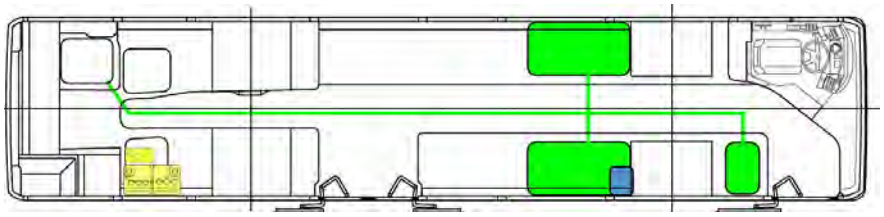
- Low and high backrests
- Seat adjustment possible
- Passenger restraint systems possible
- Handrails possible
- Luggage compartments/luggage space possible
- Seat-free floor space for wheelchair passengers and pushchairs

Appendix: Euro IV and V interurban buses

Citaro Ü

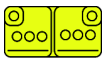
Model designation	Length	Door no.	Axles	Drive
628.087	12 m	2	2	Diesel engine, horizontal



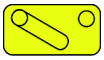


Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



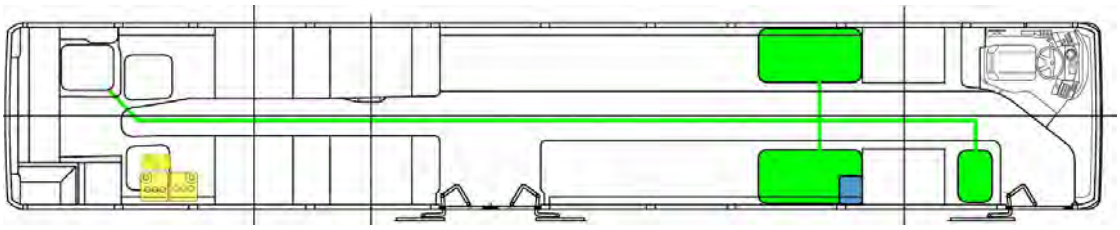
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro IV and V interurban buses

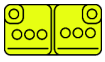
Citaro LÜ

Model designation	Length	Door no.	Axles	Drive
628.187	15 m	2	3	Diesel engine, horizontal

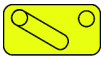


Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



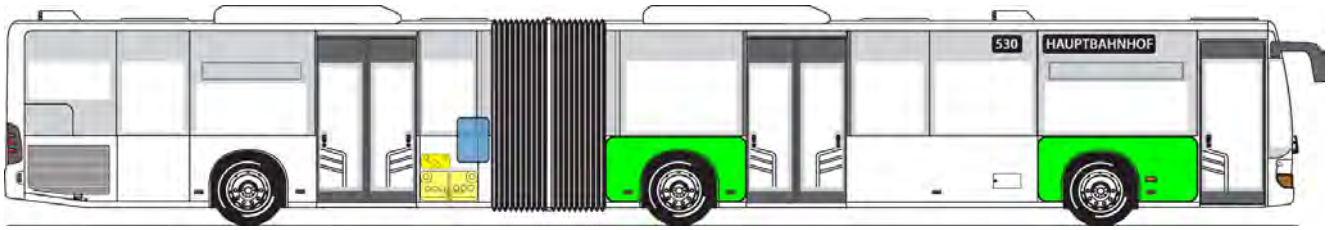
Battery isolating switch (in battery compartment)

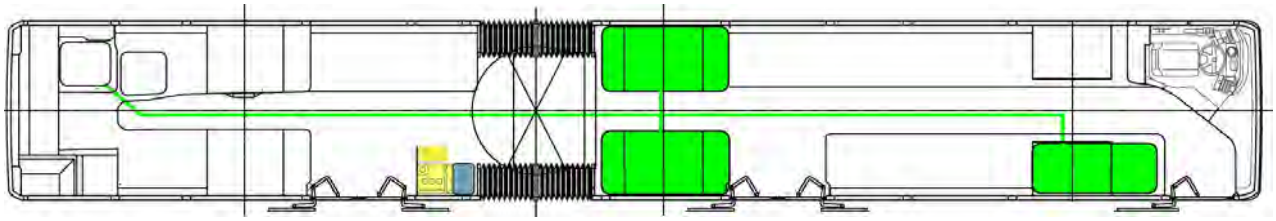
*: Option

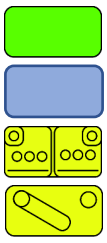
Appendix: Euro IV and V interurban buses

Citaro GÜ

Model designation	Length	Door no.	Axles	Drive
628.287	18 m	3	3	Diesel engine, horizontal







Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

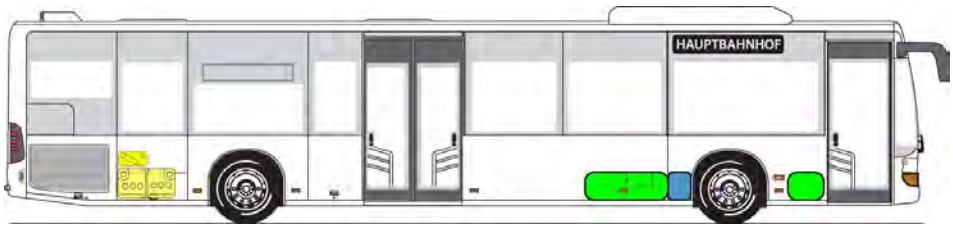
Battery isolating switch (in battery compartment)

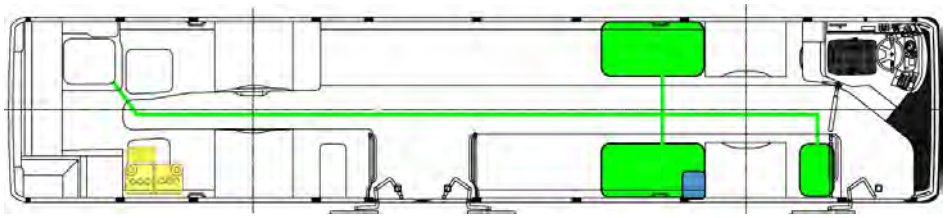
*: Option

Appendix: Euro IV and V interurban buses

Citaro MÜ

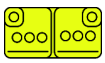
Model designation	Length	Door no.	Axles	Drive
628.487	13 m	2	2	Diesel engine, horizontal



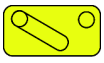


Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



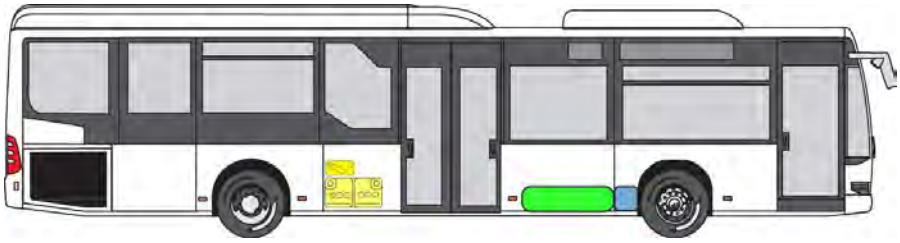
Battery isolating switch (in battery compartment)

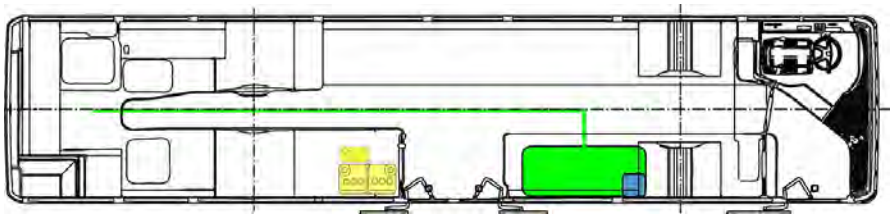
*: Option

Appendix: Euro IV and V interurban buses

Citaro LE Ü

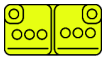
Model designation	Length	Door no.	Axles	Drive
628.587	12 m	2	2	Diesel engine, horizontal

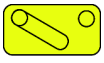





Fuel tank (with lines)


AdBlue tank

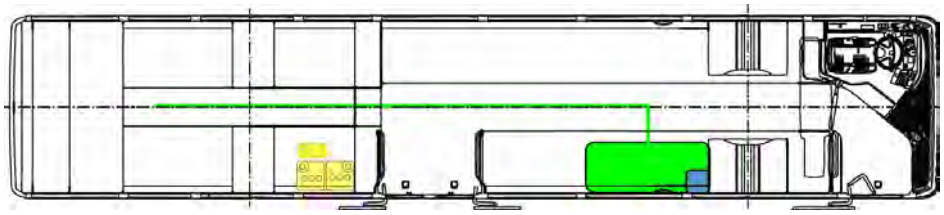

On-board electrical system batteries


Battery isolating switch (in battery compartment)

Appendix: Euro IV and V interurban buses

Citaro LE MÜ

Model designation	Length	Door no.	Axles	Drive
628.687	13 m	2	2	Diesel engine, horizontal



Fuel tank (with lines)

AdBlue tank

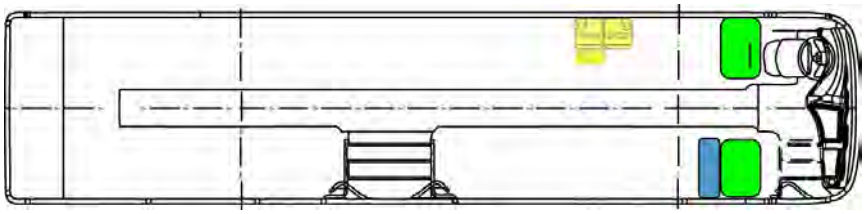
On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro IV and V interurban buses

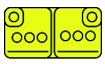
Integro

Model designation	Length	Door no.	Axles	Drive
633.001	12.14 m	2	2	Diesel engine

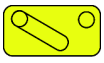


Fuel tank

AdBlue tank



On-board electrical system batteries

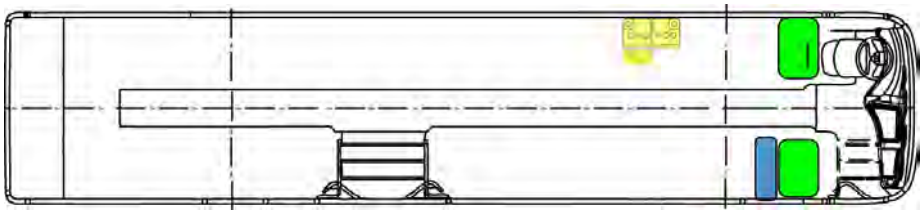


Battery isolating switch (in battery compartment)

Appendix: Euro IV and V interurban buses

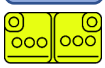
Integro M

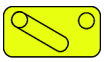
Model designation	Length	Door no.	Axles	Drive
633.002	12,98	2	2	Diesel engine




Fuel tank


AdBlue tank

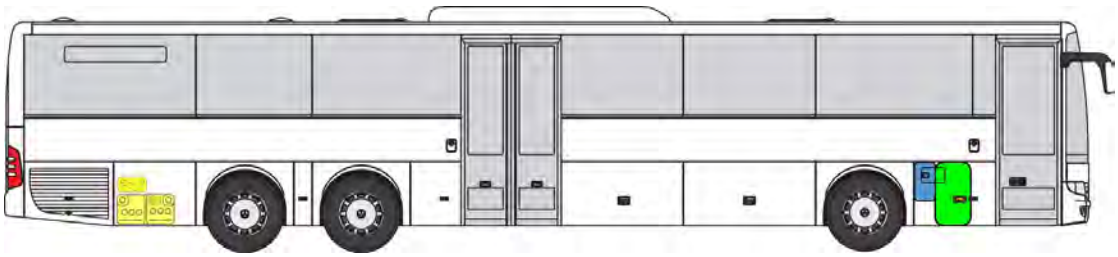

On-board electrical system batteries

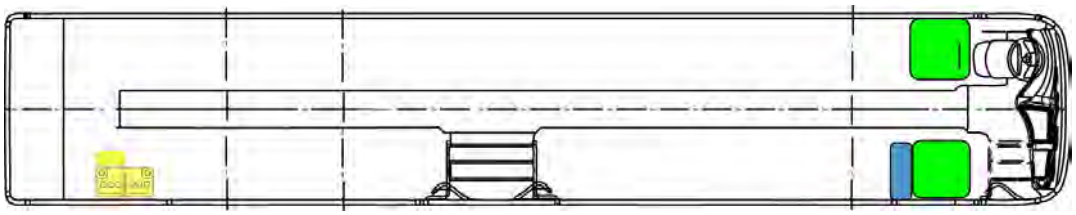

Battery isolating switch (in battery compartment)

Appendix: Euro IV and V interurban buses

Integro L

Model designation	Length	Door no.	Axles	Drive
633.004	14.92 m	2	3	Diesel engine





Fuel tank

AdBlue tank

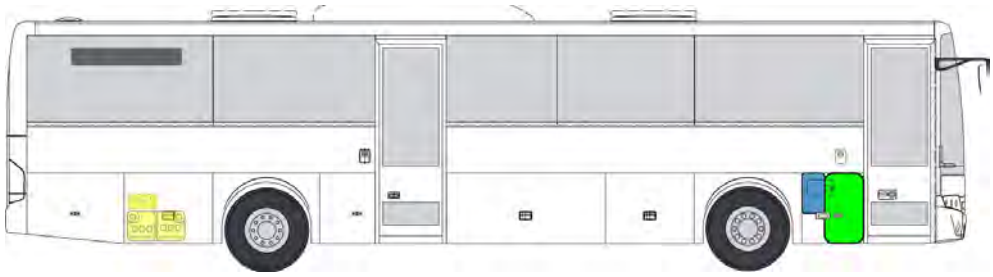
On-board electrical system batteries

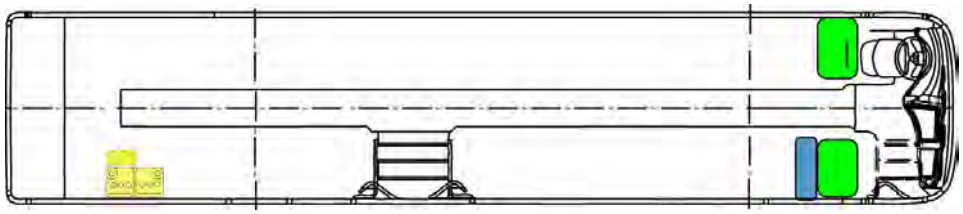
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V interurban buses

Intouro

Model designation	Length	Door no.	Axles	Drive
633051	12 m	2	2	Diesel engine





Fuel tank

AdBlue tank

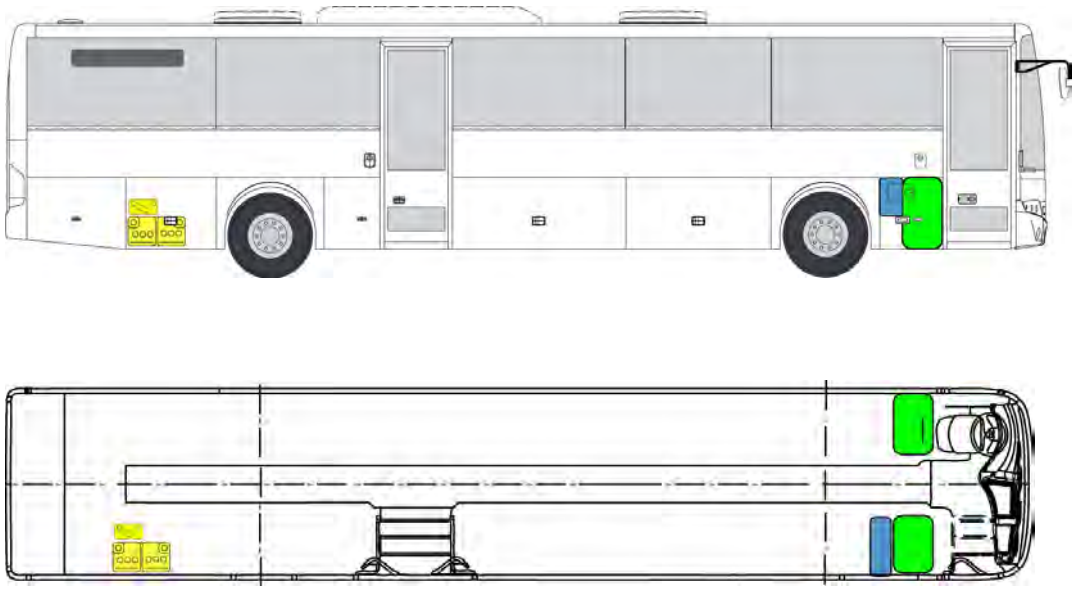
On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro IV and V interurban buses

Intouro M

Model designation	Length	Door no.	Axles	Drive
633.052	12.98 m	2	2	Diesel engine



Fuel tank

AdBlue tank

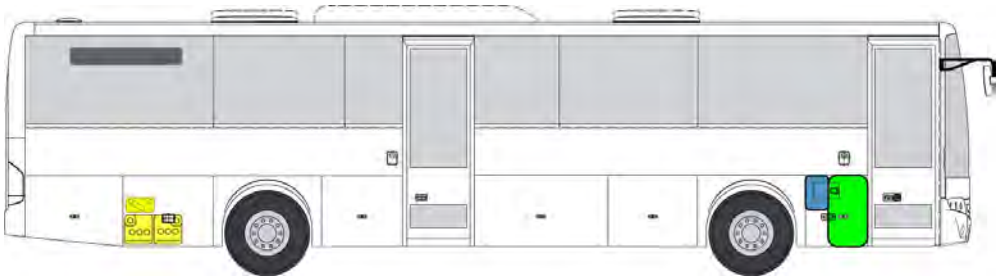
On-board electrical system batteries

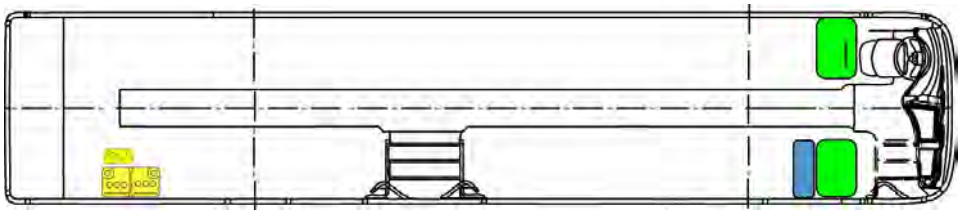
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V interurban buses

Intouro E

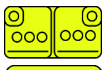
Model designation	Length	Door no.	Axles	Drive
633.251	12.14 m	2	2	Diesel engine



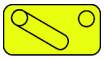


Fuel tank

AdBlue tank



On-board electrical system batteries

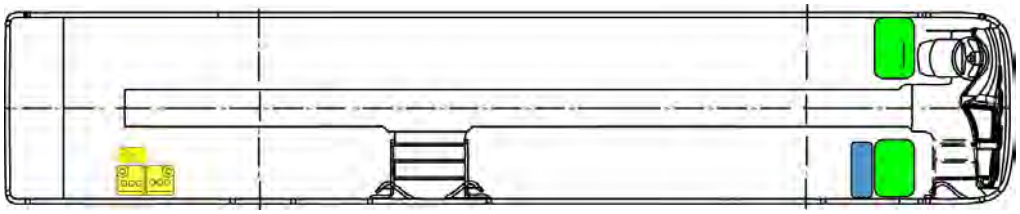


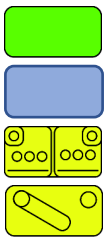
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V interurban buses

Intouro ME

Model designation	Length	Door no.	Axles	Drive
633.252	12.98 m	2	2	Diesel engine





Fuel tank

AdBlue tank

On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

7.2.4. Tourist coaches

Features

General information, engineering features

- Drive: Diesel
- Passenger capacity: up to 60 persons
- Seats only

Exterior view

- Two passenger entrances
- Entrances with multiple steps, floor height approx. 1.35 m (above ground)
- High waistline height, approx. 2.20 m (above ground)

Doors

- Outwards opening doors, single-leaf
- Pneumatically driven
- Width approx. 0.70 m (internal width)

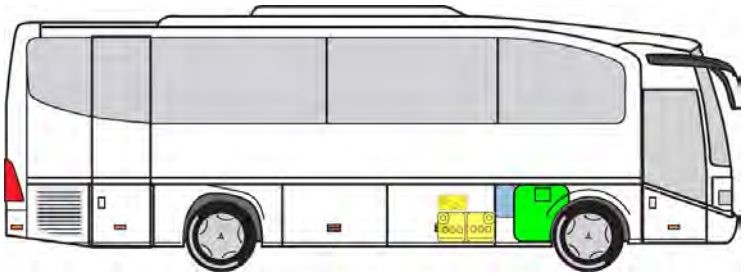
Interior equipment, seats

- High backrests
- Lateral seat adjustment and backrest adjustment
- Passenger restraint systems compulsory
- Luggage compartments with handrail
- Luggage compartment
- Lavatory, kitchenette, driver's rest area possible/probable

Appendix: Euro IV and V tourist coaches

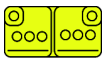
Tourino

Model designation	Length	Door no.	Axles	Drive
444.303	9.35 m	2	2	Diesel engine

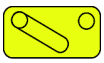


Fuel tank

AdBlue tank



On-board electrical system batteries

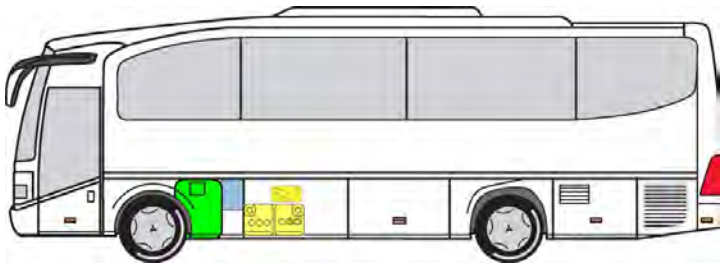


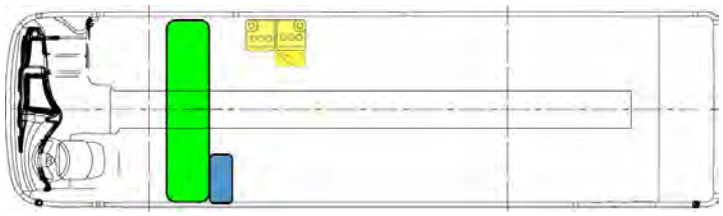
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Tourino RL

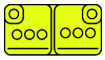
Model designation	Length	Door no.	Axles	Drive
404.303-23	9.35 m	2	2	Diesel engine



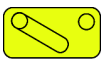


Fuel tank

AdBlue tank



On-board electrical system batteries

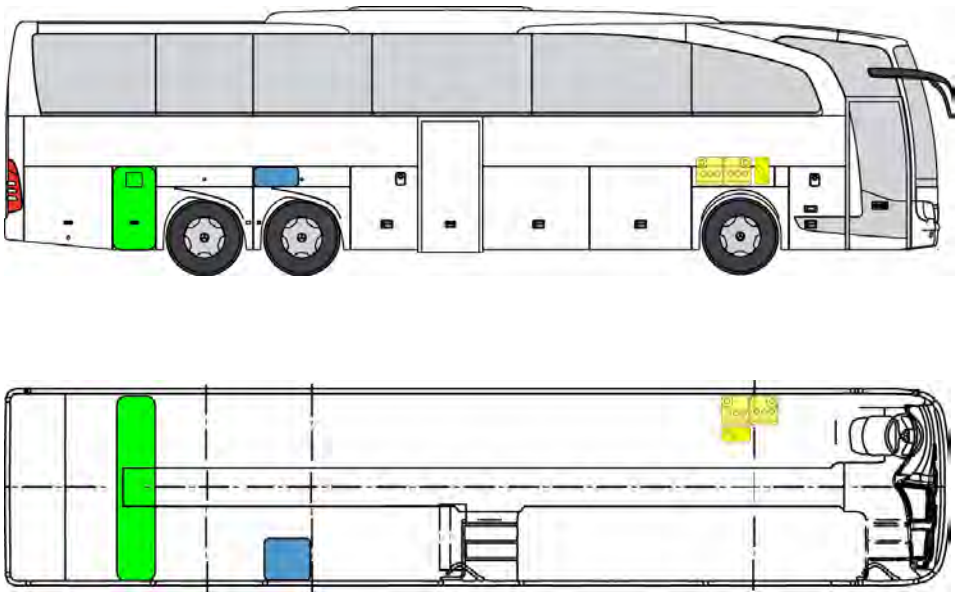


Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Travego M

Model designation	Length	Door no.	Axles	Drive
632.005	12.96 m	2	3	Diesel engine
632.246	13.0 m	2	3	Diesel engine



Fuel tank

AdBlue tank

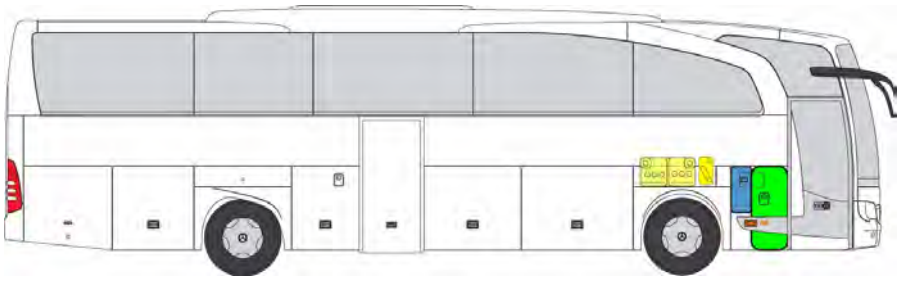
On-board electrical system batteries

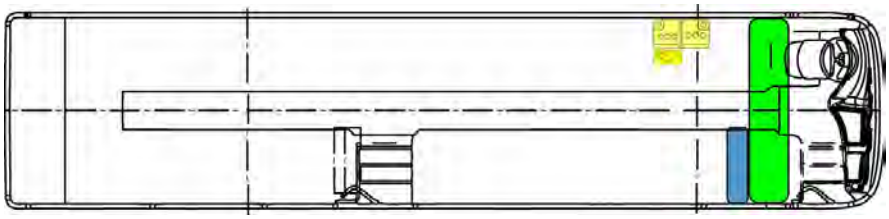
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Travego

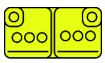
Model designation	Length	Door no.	Axles	Drive
632.006	12.14 m	2	2	Diesel engine
632.245	12,18	2	2	Diesel engine



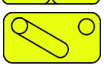


Fuel tank

AdBlue tank



On-board electrical system batteries

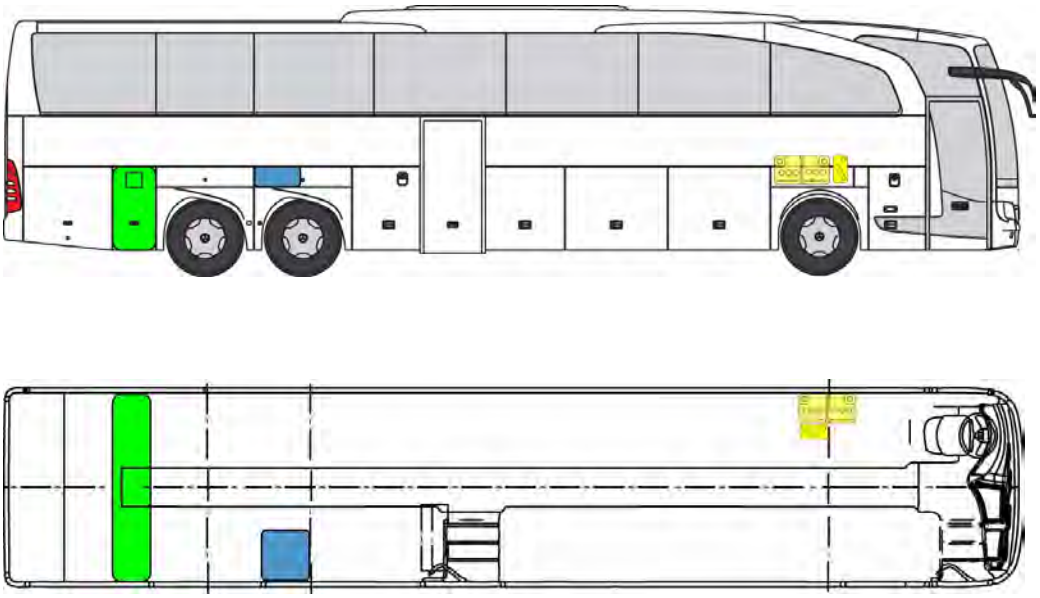


Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Travego L

Model designation	Length	Door no.	Axles	Drive
632.007	13.99 m	2	2	Diesel engine
632.247	14.03 m	2	3	Diesel engine



Fuel tank

AdBlue tank

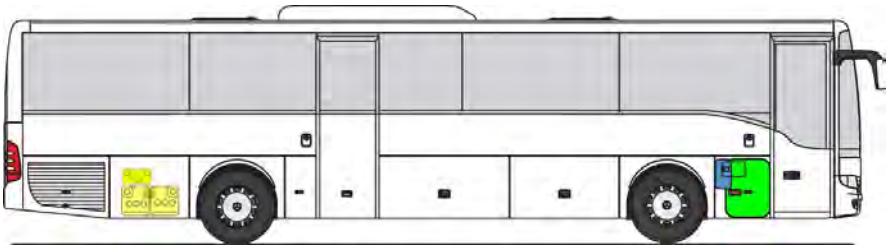
On-board electrical system batteries

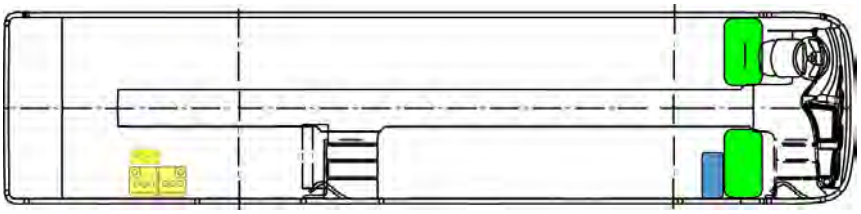
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Tourismo RH

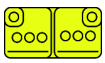
Model designation	Length	Door no.	Axles	Drive
632.025	12.14 m	2	2	Diesel engine



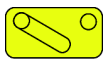


Fuel tank

AdBlue tank



On-board electrical system batteries

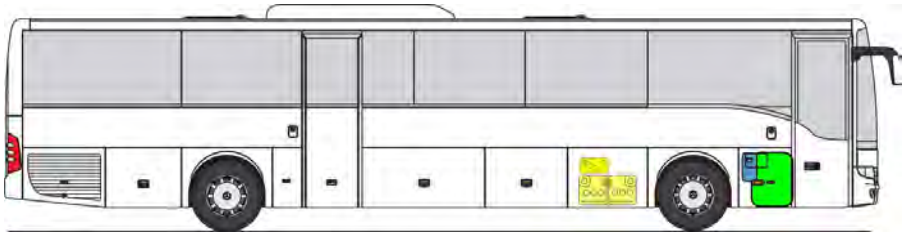


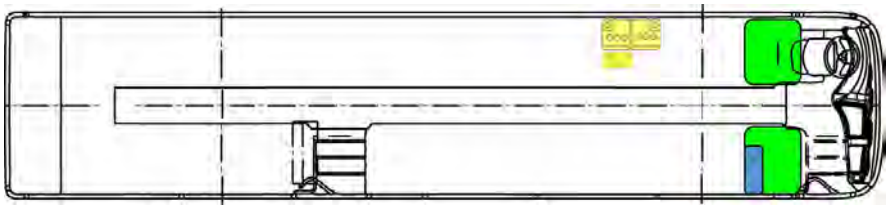
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Tourismo RH-M

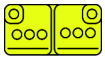
Model designation	Length	Door no.	Axles	Drive
632.026	12.96 m	2	3	Diesel engine



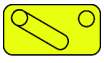


Fuel tank

AdBlue tank



On-board electrical system batteries

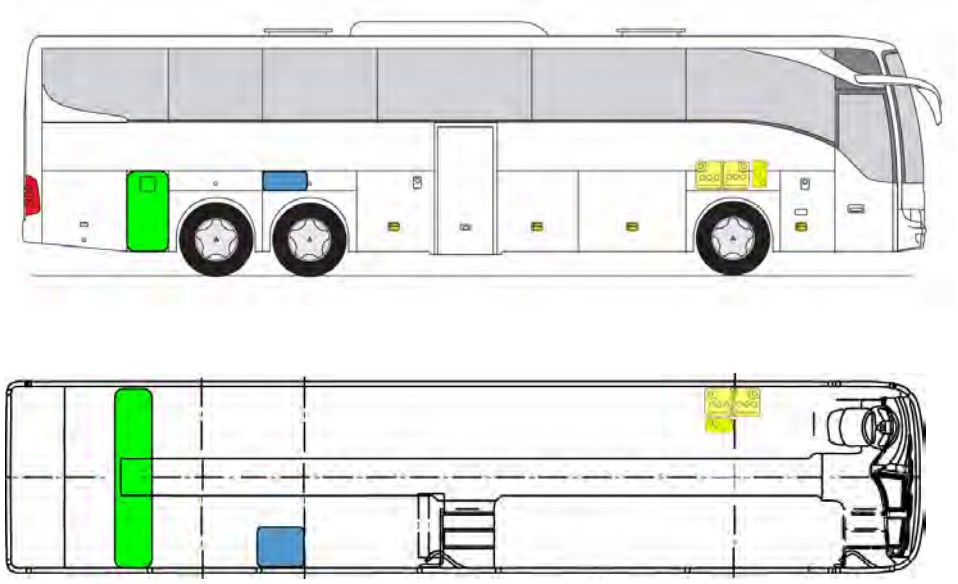


Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Tourismo M

Model designation	Length	Door no.	Axles	Drive
632.035	12.96 m	2	3	Diesel engine



Fuel tank

AdBlue tank

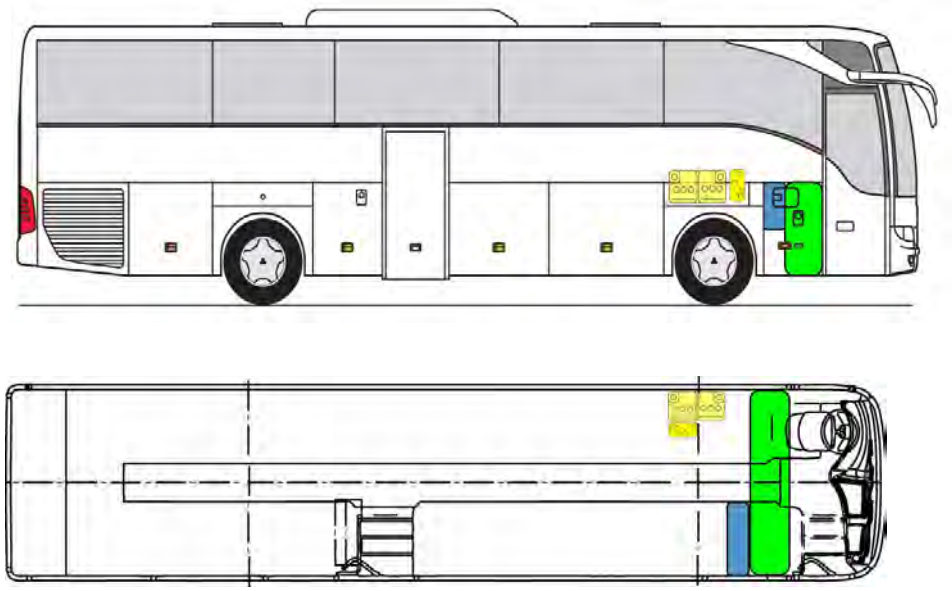
On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Tourismo

Model designation	Length	Door no.	Axles	Drive
632.036	12.14 m	2	2	Diesel engine



Fuel tank

AdBlue tank

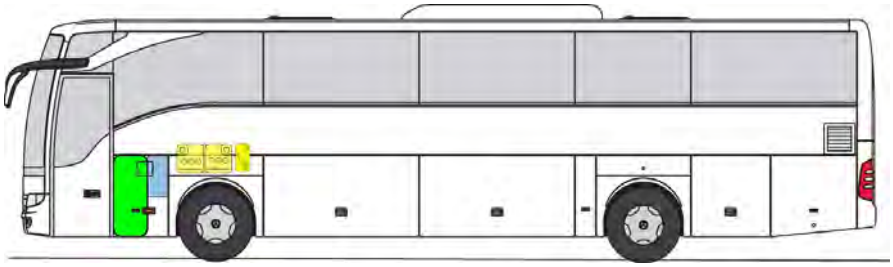
On-board electrical system batteries

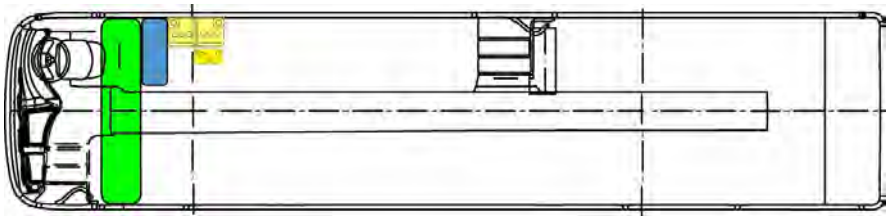
Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Tourismo RL

Model designation	Length	Door no.	Axles	Drive
632.036-23	12.14 m	2	2	Diesel engine





Fuel tank

AdBlue tank

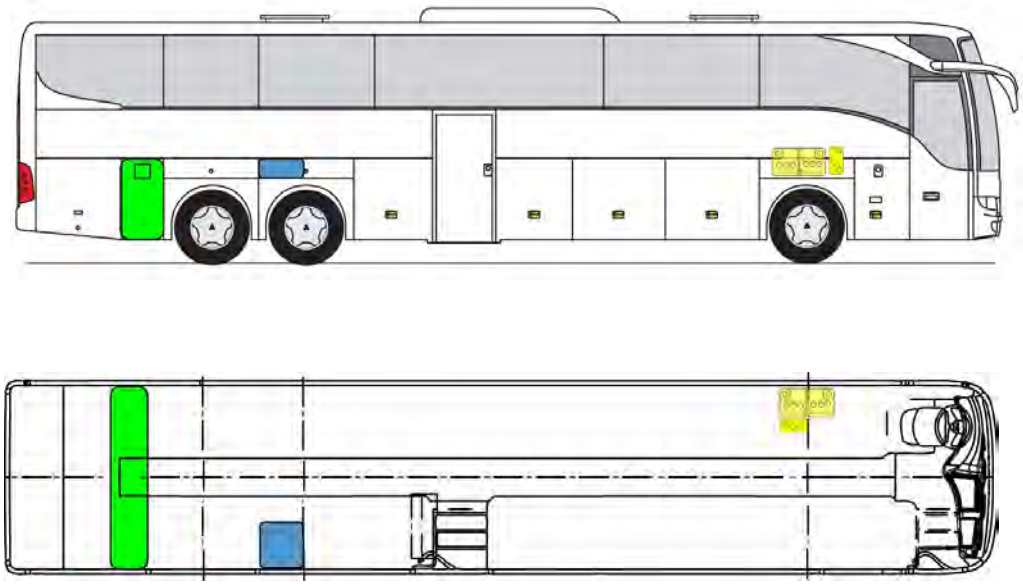
On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro IV and V tourist coaches

Tourismo L

Model designation	Length	Door no.	Axles	Drive
632.037	12.99 m	2	3	Diesel engine



Fuel tank

AdBlue tank

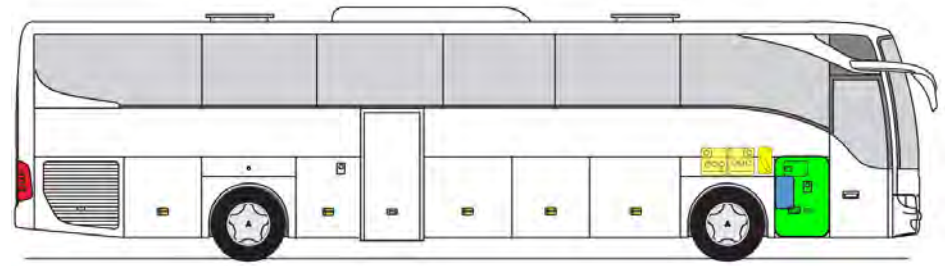
On-board electrical system batteries

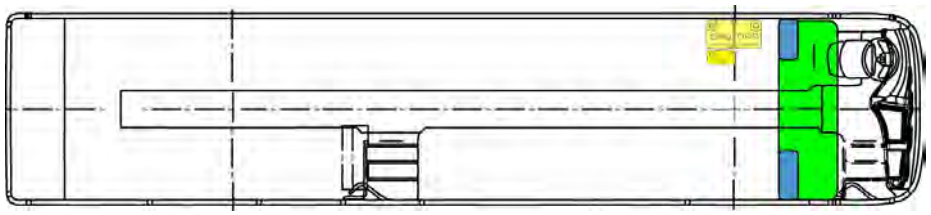
Battery isolating switch (in battery compartment)

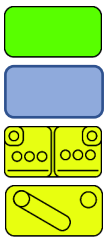
Appendix: Euro IV and V tourist coaches

Tourismo M/2

Model designation	Length	Door no.	Axles	Drive
632.038	12.96 m	2	2	Diesel engine







Fuel tank

AdBlue tank

On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro VI vehicles

7.3. Euro VI vehicles

7.3.1. Model designation overview

Designation	Model designation	Model	Length	Door no.	Drive
CITARO RL	628.015-23	City bus	12.1 m	1	Diesel engine
CITARO RL	628.016-23	City bus	12.1 m	1	Diesel engine
CITARO RL	628.018-23	City bus	12.1 m	2	Diesel engine
CITARO RL	628.019-23	City bus	12.1 m	2	Diesel engine
CITARO NGT	628.023	City bus	12.1 m	2	Natural gas engine
CITARO NGT	628.024	City bus	12.1 m	3	Natural gas engine
CITARO	628.033	City bus	12.1 m	2	Horizontal engine
CITARO	628.034	City bus	12.1 m	3	Horizontal engine
CITARO	628.035	City bus	12.1 m	2	Horizontal engine
CITARO	628.036	City bus	12.1 m	3	Horizontal engine
CITARO	628.054	City bus	12.1 m	3	Upright engine
CITARO	628.056	City bus	12.1 m	3	Upright engine
CITARO G RL	628.218-23	City bus	18.1 m	3	Right-hand-drive vehicle
CITARO G NGT	628.223	City bus	18.1 m	3	Natural gas drive
CITARO G NGT	628.224	City bus	18.1 m	4	Natural gas engine
CITARO G	628.233	City bus	18.1 m	3	Articulated bus, upright engine
CITARO G	628.235	City bus	18.1 m	3	Articulated bus, horizontal engine
CITARO G	628.236	City bus	18.1 m	4	Articulated bus, horizontal engine
CITARO G	628.254	City bus	18.1 m	4	Articulated bus, upright engine
CITARO G	628.255	City bus	18.1 m	3	Articulated bus, upright engine
CITARO G	628.256	City bus	18.1 m	4	Articulated bus, upright engine
Conecto	628.314	City bus	12.0 m	3	Upright engine
Conecto G	628.324	City bus	18.0 m	4	Upright engine
Conecto	628.331	City bus	12.0 m	3	Upright engine
Conecto G	628.341	City bus	18.0 m	4	Upright engine
Conecto NGT	628.351	City bus	12.0 m	3	Natural gas engine
Conecto G NGT	628.361	City bus	18.0 m	4	Natural gas engine
CITARO K	628.403	City bus	10.6 m	2	Horizontal engine
CITARO K	628.405	City bus	10.6 m	2	Horizontal engine
CITARO K RL	628.415-23	City bus	10.6 m	1	Right-hand-drive vehicle
CITARO K RL	628.416-23	City bus	12.1 m	1	Right-hand-drive vehicle
CITARO K RL	628.418-23	City bus	10.6 m	2	Right-hand-drive vehicle
CITARO K RL	628.419-23	City bus	10.6 m	2	Right-hand-drive vehicle
CapaCity	628.446	City bus	19.7 m	4	Upright engine
CapaCity L	628.448	City bus	21.0 m	4	Upright engine
CITARO K	628.454	City bus	10.6 m	3	Upright engine
CITARO K	628.456	City bus	10.6 m	3	Upright engine
CITARO LE	628.503	City bus	12.2 m	2	Upright engine
CITARO LE	628.504	City bus	12.2 m	3	Upright engine

Appendix: Euro VI vehicles

CITARO LE	628.505	City bus	12.2 m	2	Upright engine
CITARO LE	628.506	City bus	12.2 m	3	Upright engine
CITARO Ü	628.038	Interurban bus	12.1 m	2	Horizontal engine
CITARO Ü	628.039	Interurban bus	12.1 m	2	Horizontal engine
CITARO GÜ	628.238	Interurban bus	18.1 m	3	Articulated bus, upright engine
CITARO GÜ	628.259	Interurban bus	18.1 m	3	Articulated bus, upright engine
CITARO LE Ü	628.513	Interurban bus	12.2 m	2	Upright engine
CITARO LE Ü	628.515	Interurban bus	12.2 m	2	Upright engine
CITARO LE MÜ	628.523	Interurban bus	13.2 m	2	Upright engine
CITARO LE MÜ	628.524	Interurban bus	13.2 m	3	Upright engine
CITARO LE MÜ	628.525	Interurban bus	13.2 m	2	Upright engine
CITARO LE MÜ	628.526	Interurban bus	13.2 m	3	Upright engine
Integro	633.620	Interurban bus	12.1 m	2	
Integro M	633.640	Interurban bus	13.0 m	2	
Integro L	633.660	Interurban bus	15.0 m	2	
Intouro	633.720	Interurban bus	12.1 m	2	
Intouro M	633.723	Interurban bus	12.6 m	2	
Intouro L	633.743	Interurban bus	13.3 m	2	
Travego	632.400	Tourist coach	12.2 m	2	High-decker touring
Tourismo	632.410	Tourist coach	12.2 m	2	High-decker touring
Tourismo RH	632.420	Tourist coach	12.1 m	2	High-decker touring
Travego M	632.430	Tourist coach	13.0 m	2	High-decker touring
Tourismo M/2	632.431	Tourist coach	13.0 m	2	High-decker touring
Tourismo RH M	632.440	Tourist coach	13.0 m	2	High-decker touring
Travego L	632.450	Tourist coach	14.0 m	2	High-decker touring
Tourismo L	632.451	Tourist coach	14.0 m	2	High-decker touring
Tourismo K	632.460	Tourist coach	10.3 m	2	High-decker touring
Tourismo M/3	632.470	Tourist coach	13.0 m	2	High-decker touring

Appendix: Euro VI city buses

7.3.2. City buses

Features

General information, engineering features

- Wide variety of drives - diesel, gas, fuel cell
- Passenger capacity: up to 170 persons
- Mainly standing

Exterior view

- Multiple wide entrances
- Low entry height
- Low waistline height

Doors

- Inwards opening doors
- Outwards opening doors
- Double-leaf
- Pneumatically or electrically driven
- Width 1.25 m

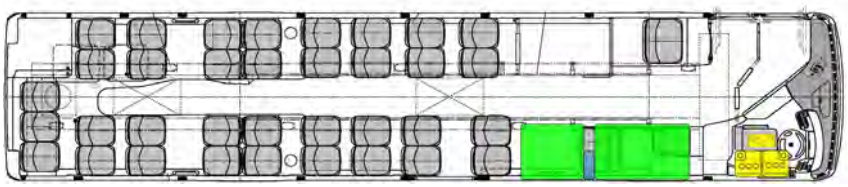
Interior equipment, seats

- Low backrests
- No seat adjustment
- No passenger restraint systems
- Numerous handrails
- Seat-free floor space for wheelchair passengers and pushchairs

Appendix: Euro VI city buses

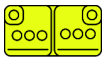
Citaro right-hand drive

Model designation	Length	Door no.	Axles	Drive
628.015-23	12.1 m	1	2	Diesel engine
628.016-23	12.1 m	1	2	Diesel engine

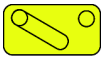


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



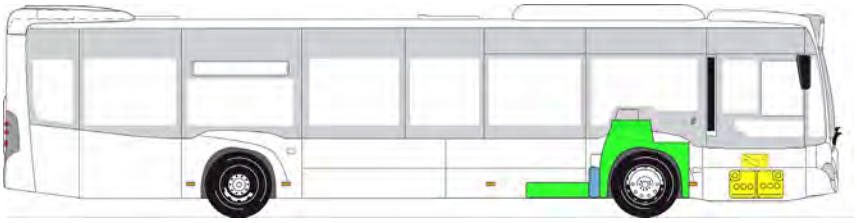
Battery isolating switch (in battery compartment)

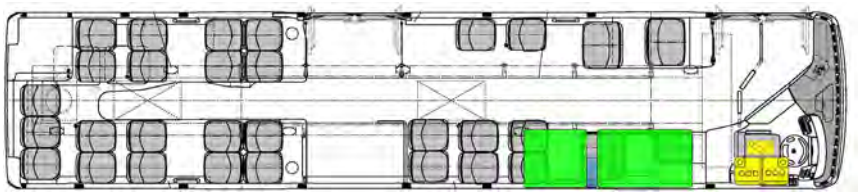
*: Option

Appendix: Euro VI city buses

Citaro right-hand drive

Model designation	Length	Door no.	Axles	Drive
628.018-23	12.1 m	2	2	Diesel engine
628.019-23	12.1 m	2	2	Diesel engine





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

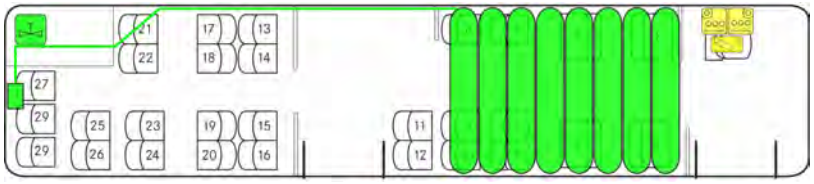
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

Citaro NGT

Model designation	Length	Door no.	Axles	Drive
628.023	12.1 m	2	2	Natural gas engine



NG tank (with lines), filler connection in the engine compartment

--------- Filler connection, side*

Manual gas shut-off valve

On-board electrical system batteries

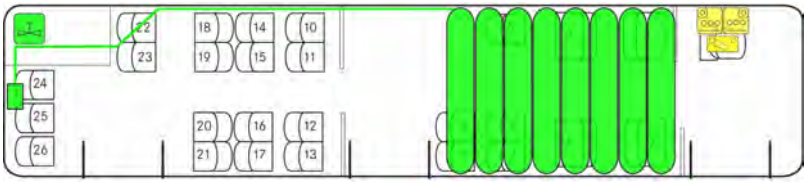
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

Citaro NGT

Model designation	Length	Door no.	Axles	Drive
628.024	12.1 m	3	2	Natural gas engine



NG tank (with lines), filler connection in the engine compartment

--------- Filler connection, side*

Manual gas shut-off valve

On-board electrical system batteries

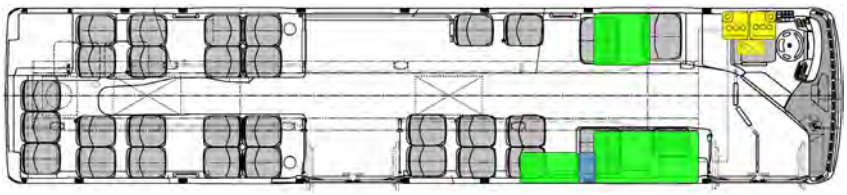
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

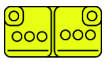
Citaro

Model designation	Length	Door no.	Axles	Drive
628.033	12.1 m	2	2	Diesel engine, horizontal
628.035	12,1	2	2	Diesel engine, horizontal

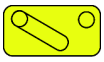


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



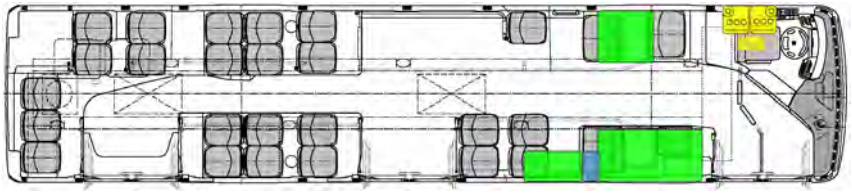
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

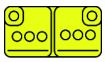
Citaro

Model designation	Length	Door no.	Axles	Drive
628.034	12.1 m	3	2	Diesel engine, horizontal
628.036	12,1	3	2	Diesel engine, horizontal

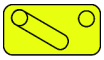


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



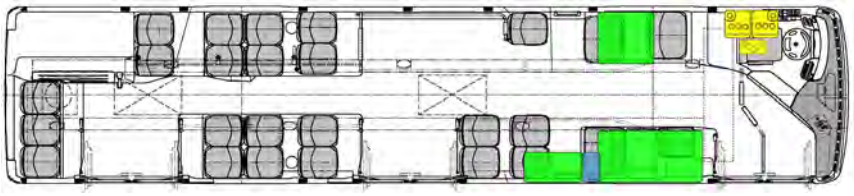
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

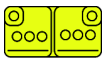
Citaro

Model designation	Length	Door no.	Axles	Drive
628.054	12.1 m	3	2	Diesel engine, upright
628.056	12.1 m	3	2	Diesel engine, upright

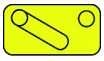


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



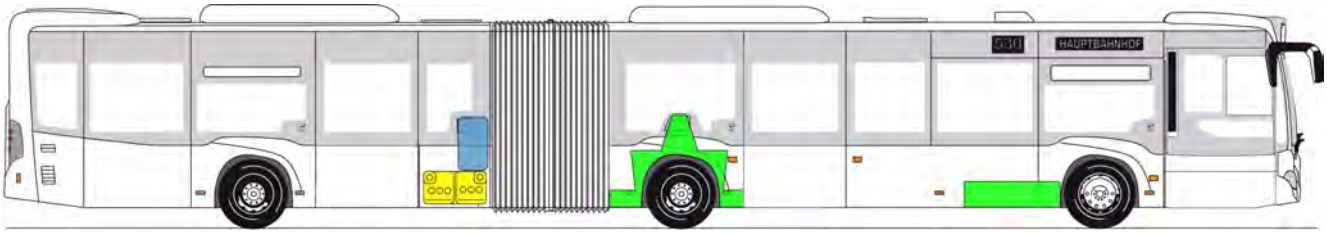
Battery isolating switch (in battery compartment)

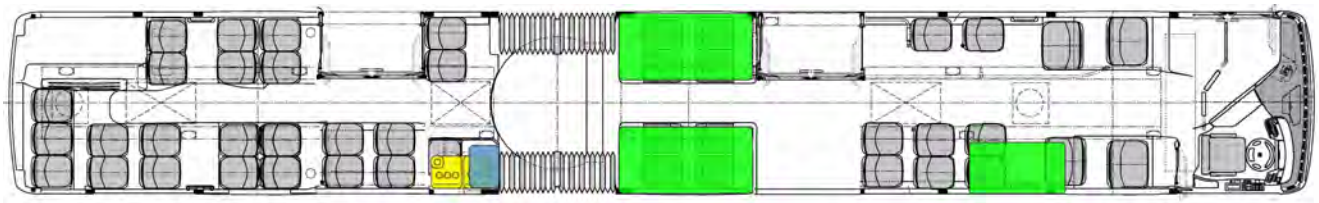
*: Option

Appendix: Euro VI city buses

Citaro G right-hand drive

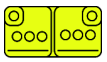
Model designation	Length	Door no.	Axles	Drive
628.218-23	18.1 m	3	3	Diesel engine, upright



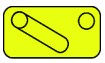


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



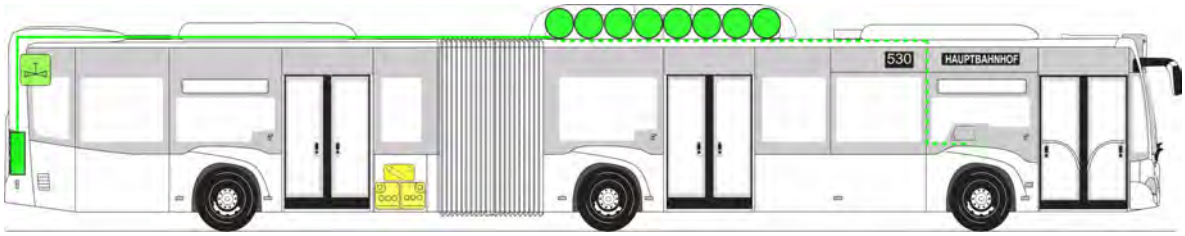
Battery isolating switch (in battery compartment)

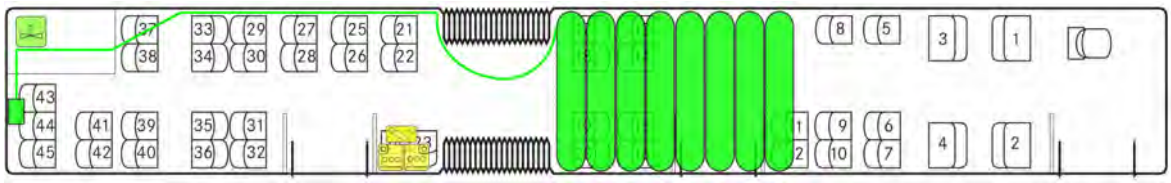
*: Option

Appendix: Euro VI city buses

Citaro G NGT

Model designation	Length	Door no.	Axles	Drive
628.223	18.1 m	3	3	Natural gas engine





NG tank (with lines), filler connection in the engine compartment

Filler connection, side*

Manual gas shut-off valve

On-board electrical system batteries

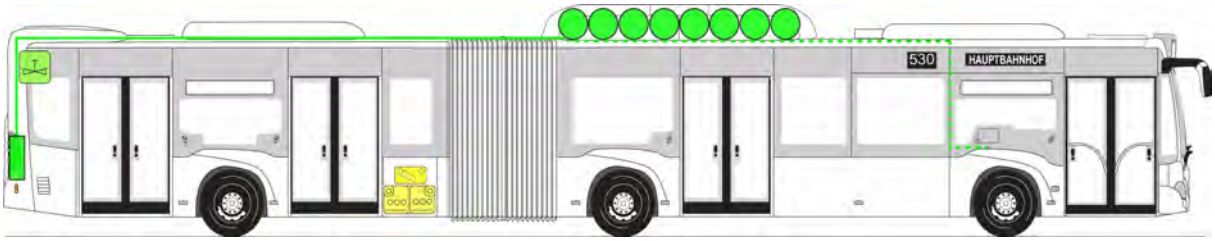
Battery isolating switch (in battery compartment)

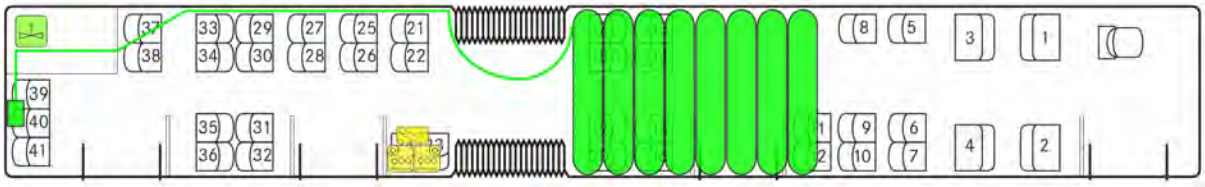
*: Option

Appendix: Euro VI city buses

Citaro G NGT

Model designation	Length	Door no.	Axles	Drive
628.224	18.1 m	4	3	Natural gas engine





NG tank (with lines), filler connection in the engine compartment

--------- Filler connection, side*

Manual gas shut-off valve

On-board electrical system batteries

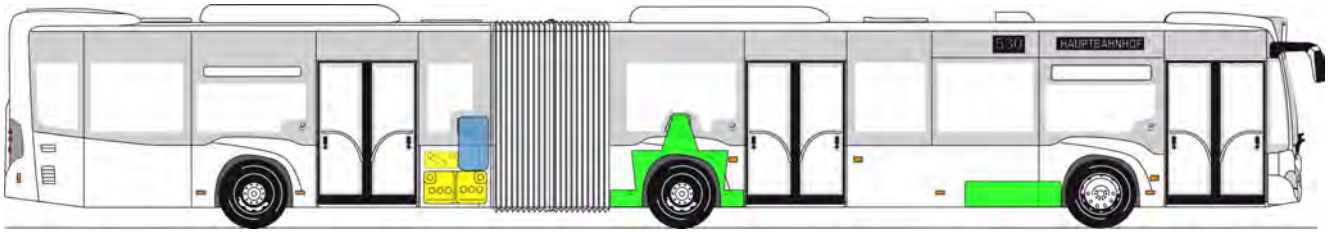
Battery isolating switch (in battery compartment)

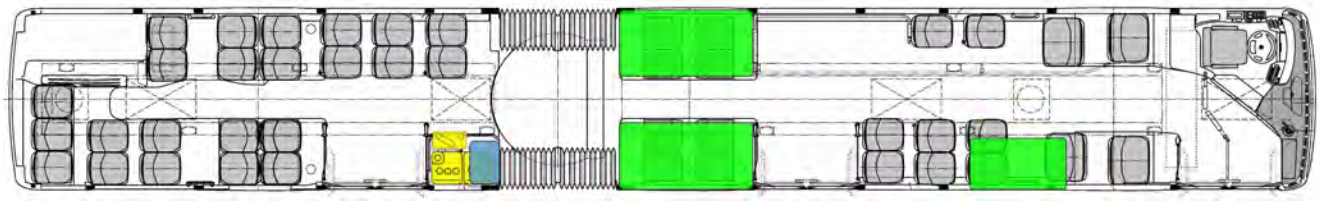
*: Option

Appendix: Euro VI city buses

Citaro G

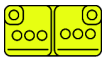
Model designation	Length	Door no.	Axles	Drive
628.233	18.1 m	3	3	Diesel engine, upright
628.255	18.1 m	3	3	Diesel engine, upright

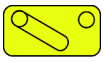





Fuel tank, additional/heating-oil tank*


AdBlue tank


On-board electrical system batteries

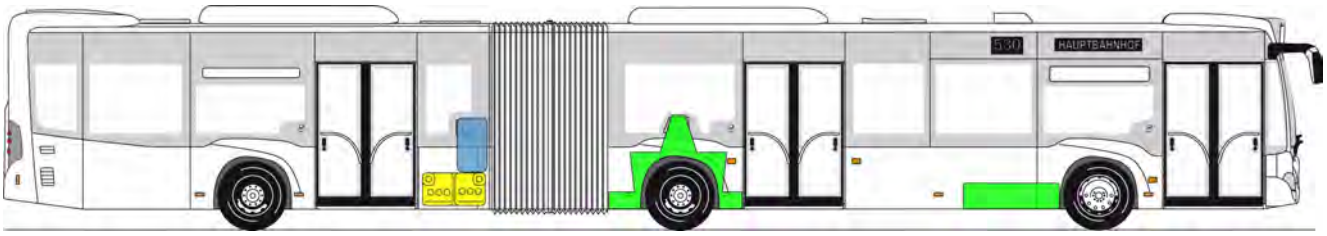

Battery isolating switch (in battery compartment)

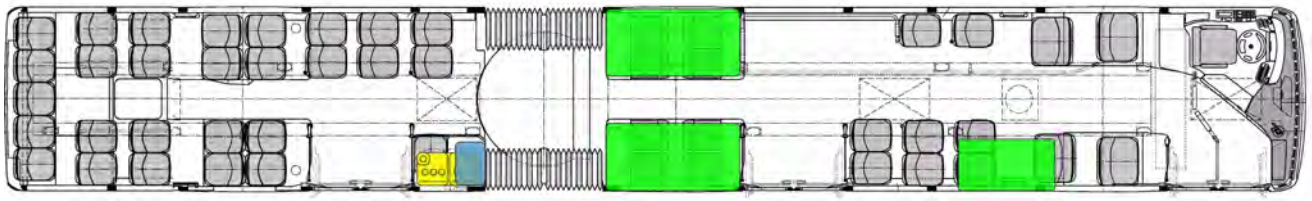
*: Option

Appendix: Euro VI city buses

Citaro G

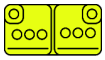
Model designation	Length	Door no.	Axles	Drive
628.235	18.1 m	3	3	Diesel engine, horizontal



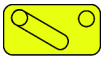


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



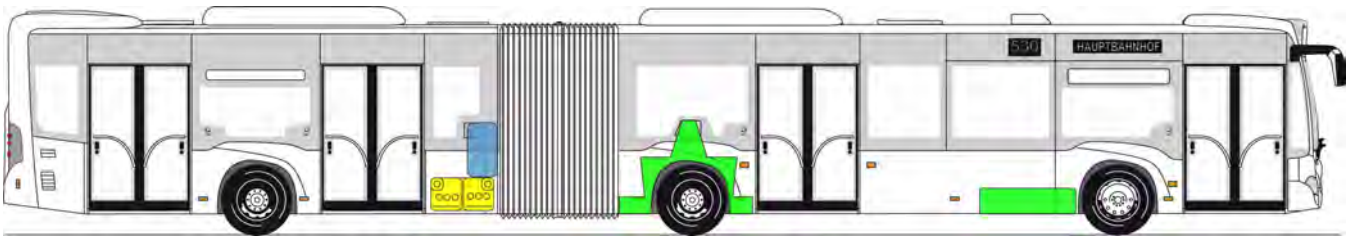
Battery isolating switch (in battery compartment)

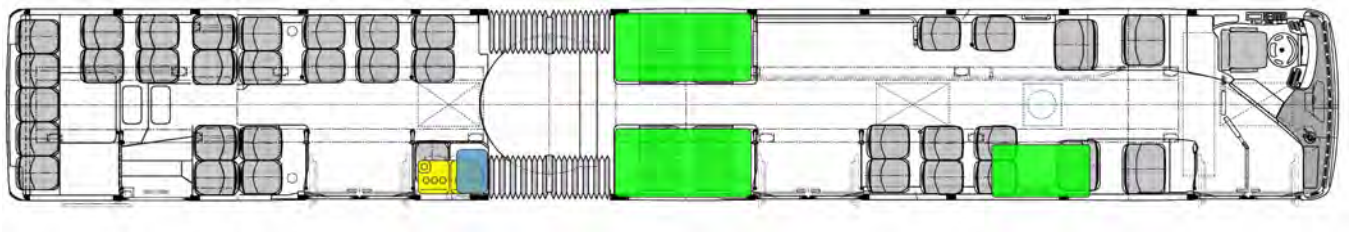
*: Option

Appendix: Euro VI city buses

Citaro G

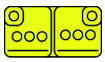
Model designation	Length	Door no.	Axles	Drive
628.236	18.1 m	4	3	Diesel engine, horizontal



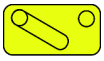


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



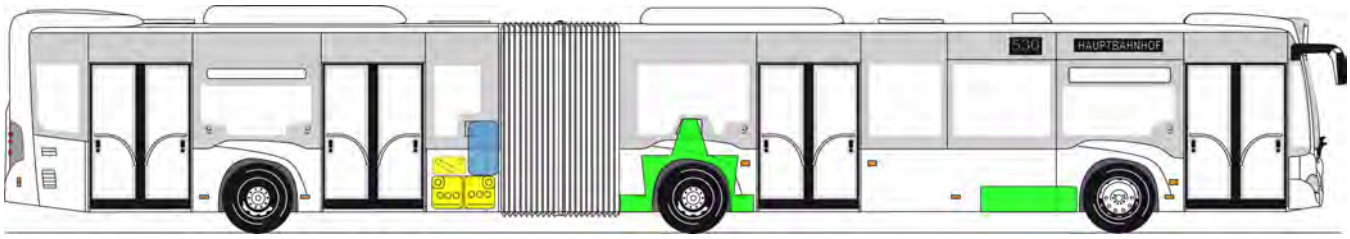
Battery isolating switch (in battery compartment)

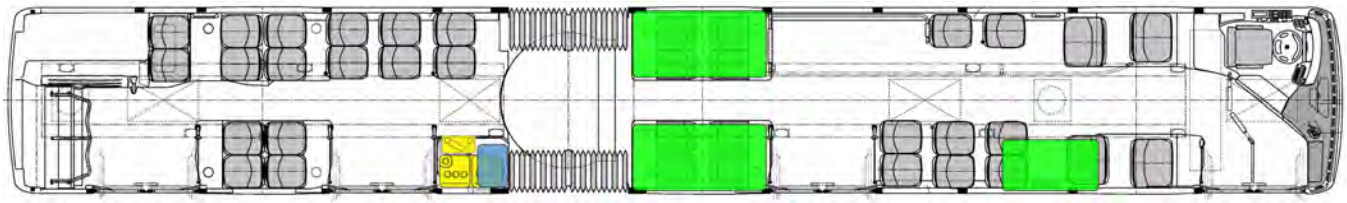
*: Option

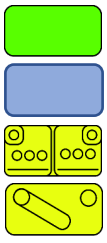
Appendix: Euro VI city buses

Citaro G

Model designation	Length	Door no.	Axles	Drive
628.254	18.1 m	4	3	Diesel engine, upright
628.256	18.1 m	4	3	Diesel engine, upright







Fuel tank, additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

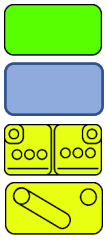
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

Conecto

Model designation	Length	Door no.	Axles	Drive
628.314	12 m	3	2	Diesel engine, upright
628.331	12 m	3	2	Diesel engine, upright



Fuel tank, additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

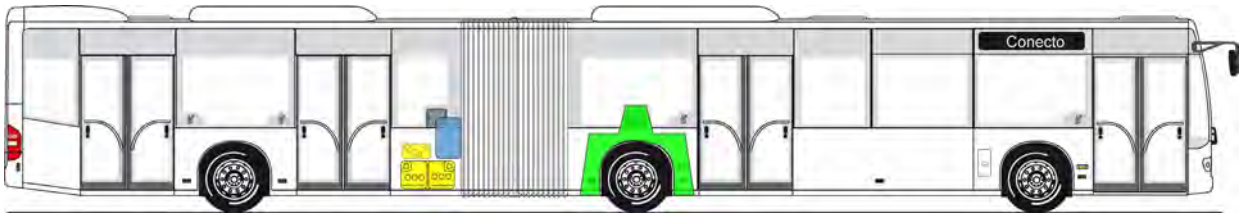
Battery isolating switch (in battery compartment)

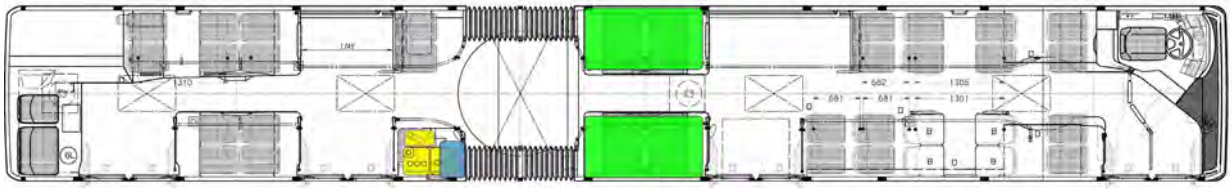
*: Option

Appendix: Euro VI city buses

Conecto G

Model designation	Length	Door no.	Axles	Drive
628.324	18 m	4	3	Diesel engine, upright
628.341	18 m	4	3	Diesel engine, upright





Fuel tank, additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

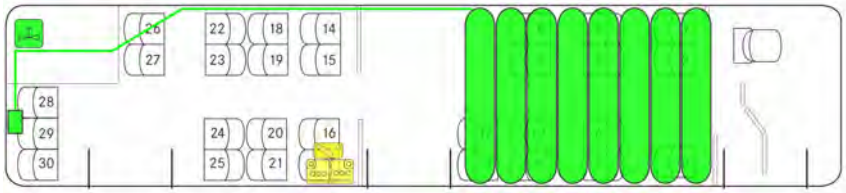
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

Conecto NGT

Model designation	Length	Door no.	Axles	Drive
628.351	12 m	3	2	Natural gas engine



NG tank (with lines), filler connection in the engine compartment

--------- Filler connection, side*

Manual gas shut-off valve

On-board electrical system batteries

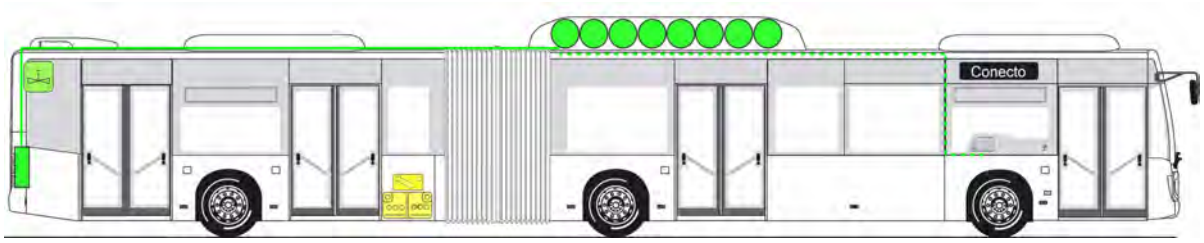
Battery isolating switch (in battery compartment)

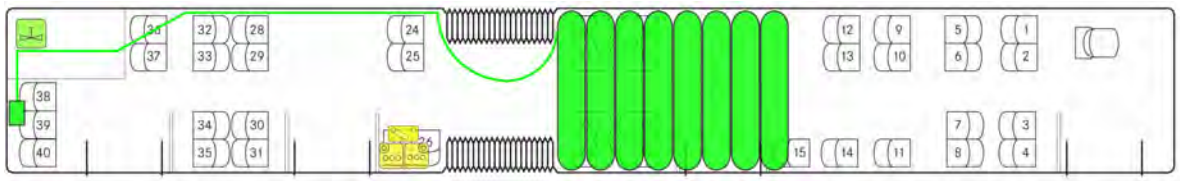
*: Option

Appendix: Euro VI city buses

Conecto G NGT

Model designation	Length	Door no.	Axles	Drive
628.361	18 m	4	3	Natural gas engine





NG tank (with lines), filler connection in the engine compartment

--------- Filler connection, side*

Manual gas shut-off valve

On-board electrical system batteries

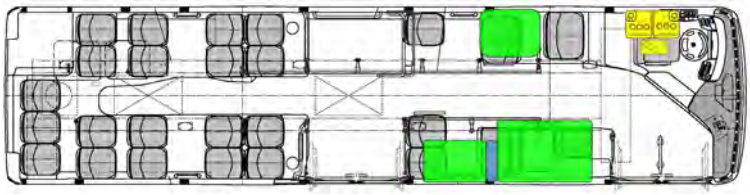
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

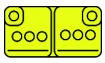
Citaro K

Model designation	Length	Door no.	Axles	Drive
628.403	10.6 m	2	2	Diesel engine, horizontal
628.405	10.6 m	2	2	Diesel engine, horizontal

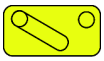


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



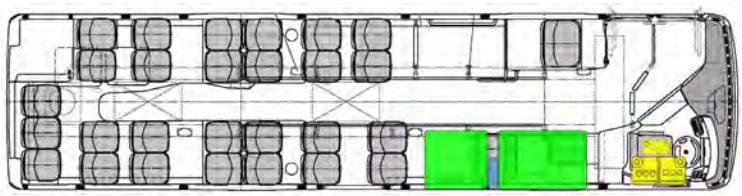
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

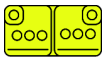
Citaro K right-hand drive

Model designation	Length	Door no.	Axles	Drive
628.415-23	10.6 m	1	2	Diesel engine
628.416-23	10.6 m	1	2	Diesel engine

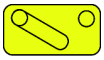


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



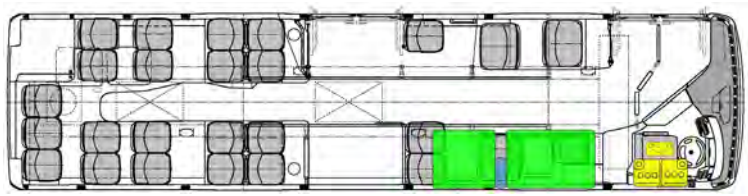
Battery isolating switch (in battery compartment)

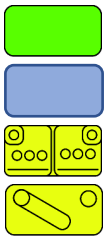
*: Option

Appendix: Euro VI city buses

Citaro K right-hand drive

Model designation	Length	Door no.	Axles	Drive
628.418-23	10.6 m	2	2	Diesel engine
628.419-23	10.6 m	2	2	Diesel engine





Fuel tank (with lines), additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

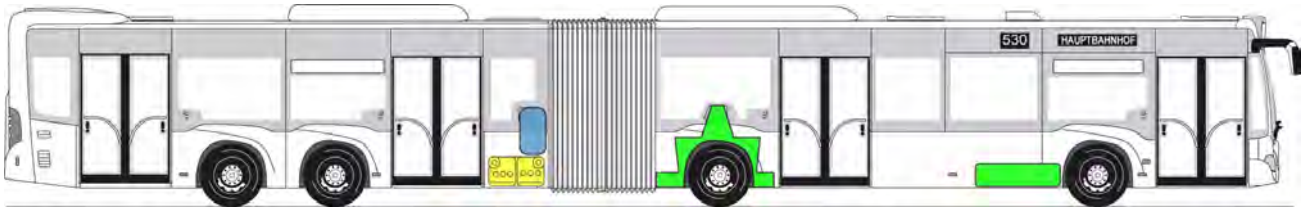
Battery isolating switch (in battery compartment)

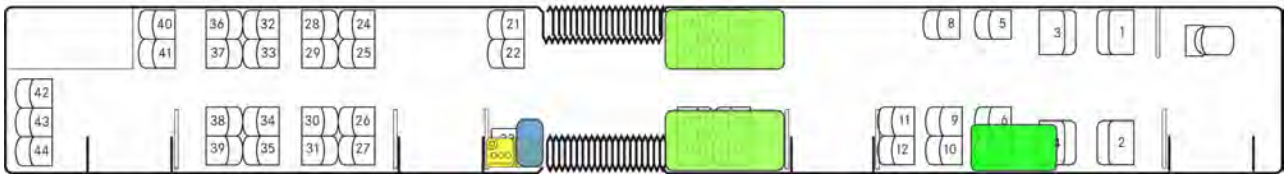
*: Option

Appendix: Euro VI city buses

CapaCity

Model designation	Length	Door no.	Axles	Drive
628.446	19.7 m	4	4	Diesel engine, upright





Fuel tank, additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

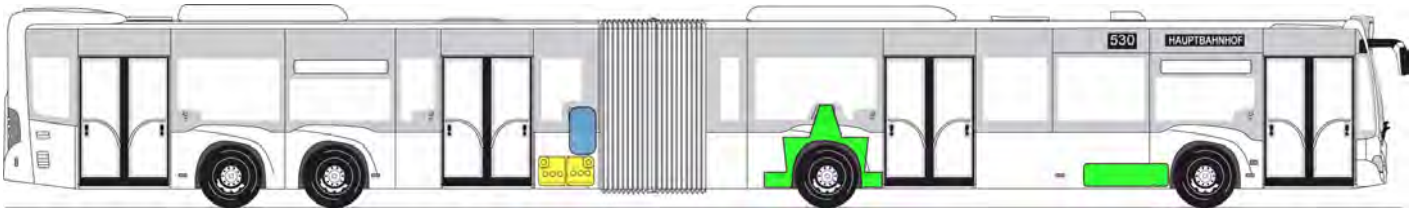
Battery isolating switch (in battery compartment)

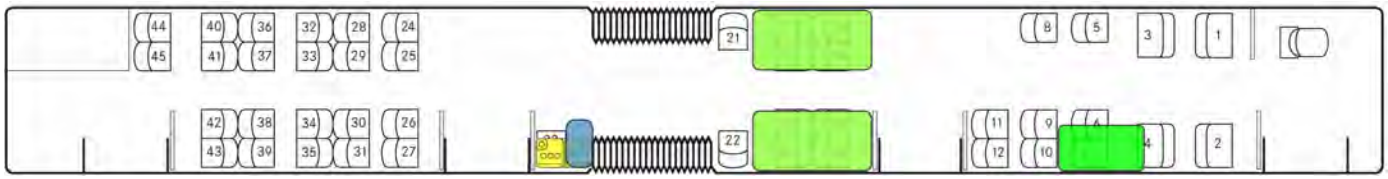
*: Option

Appendix: Euro VI city buses

CapaCity L

Model designation	Length	Door no.	Axles	Drive
628.448	21.0 m	4	4	Diesel engine, upright





Fuel tank, additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

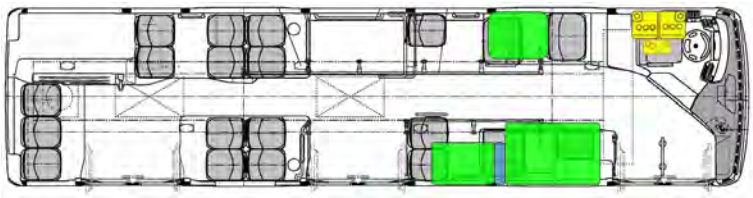
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

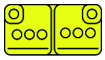
Citaro K

Model designation	Length	Door no.	Axles	Drive
628.454	10.6 m	3	2	Diesel engine, upright
628.456	10.6 m	3	2	Diesel engine, upright

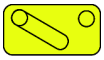


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



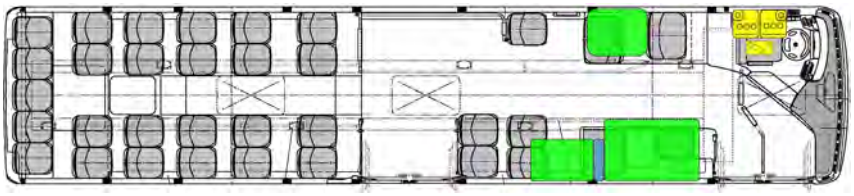
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

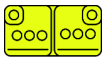
Citaro LE

Model designation	Length	Door no.	Axles	Drive
628.503	12.2 m	2	2	Diesel engine, upright
628.505	12.2 m	2	2	Diesel engine, upright

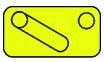


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



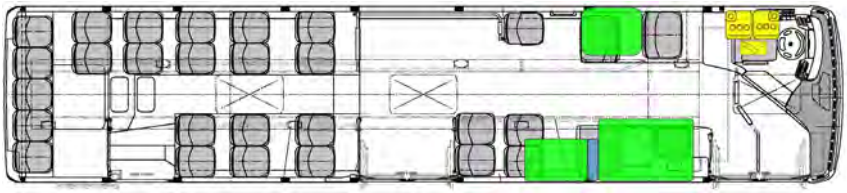
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI city buses

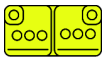
Citaro LE

Model designation	Length	Door no.	Axles	Drive
628.504	12.2 m	3	2	Diesel engine, upright
628.506	12.2 m	3	2	Diesel engine, upright

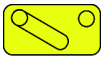


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI interurban buses

7.3.3. Interurban buses

Features

General information, engineering features

- Drive: Diesel
- Passenger capacity: up to 130 persons
- Mainly seated

Exterior view

- Multiple entrances
- Entrances with steps
- Low to medium height window sill

Doors

- Outwards opening door, single- and double-leaf
- Double-leaf
- Pneumatically driven
- Width approx. 0.70 to 1.25 m

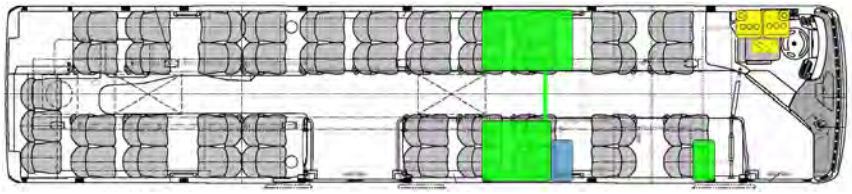
Interior equipment, seats

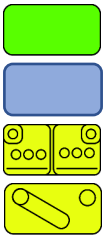
- Low and high backrests
- Seat adjustment possible
- Passenger restraint systems possible
- Handrails possible
- Luggage compartments/luggage space possible
- Seat-free floor space for wheelchair passengers and pushchairs

Appendix: Euro VI interurban buses

Citaro Ü

Model designation	Length	Door no.	Axles	Drive
628.038	12.1 m	2	2	Diesel engine, horizontal
628.039	12.1 m	2	2	Diesel engine, horizontal





Fuel tank, additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

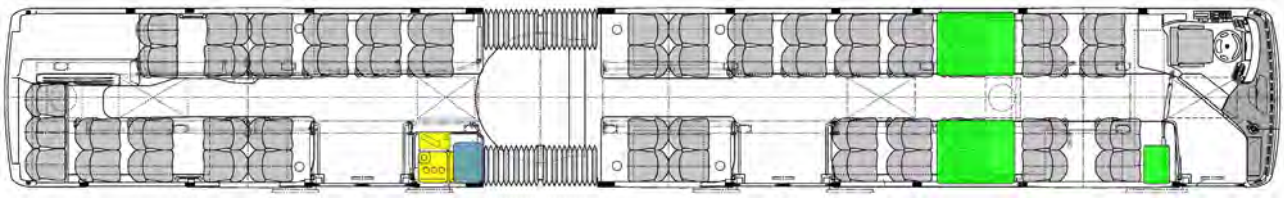
Battery isolating switch (in battery compartment)

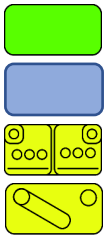
*: Option

Appendix: Euro VI interurban buses

Citaro GÜ

Model designation	Length	Door no.	Axles	Drive
628.238	18.1 m	3	3	Diesel engine, upright
628.259	18.1 m	3	3	Diesel engine, upright





Fuel tank, additional/heating-oil tank*

AdBlue tank

On-board electrical system batteries

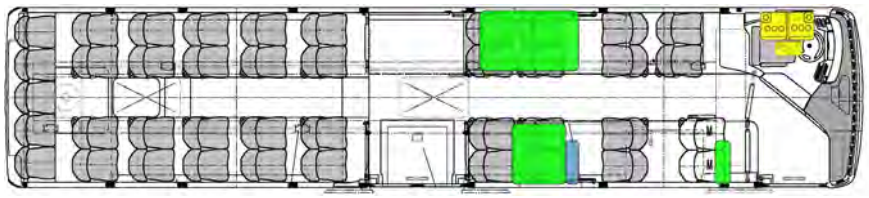
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI interurban buses

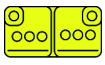
Citaro LE Ü

Model designation	Length	Door no.	Axles	Drive
628.513	12.2 m	2	2	Diesel engine, upright
628.515	12.2 m	2	2	Diesel engine, upright

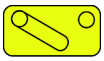


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



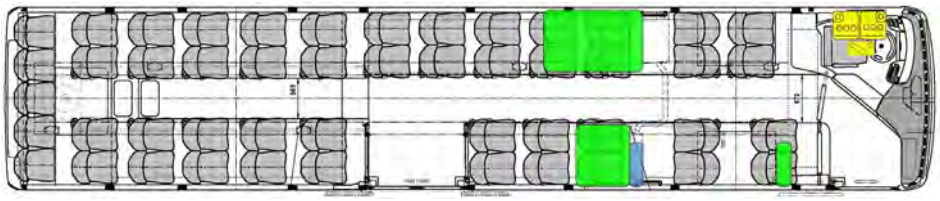
Battery isolating switch (in battery compartment)

*: Option

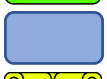
Appendix: Euro VI interurban buses

Citaro LE MÜ

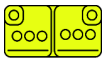
Model designation	Length	Door no.	Axles	Drive
628.523	13.2 m	2	2	Diesel engine, upright
628.525	13.2 m	2	2	Diesel engine, upright



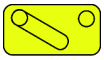
Fuel tank, additional/heating-oil tank*



AdBlue tank



On-board electrical system batteries



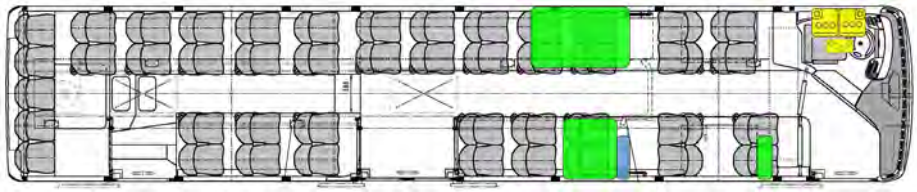
Battery isolating switch (in battery compartment)

*: Option

Appendix: Euro VI interurban buses

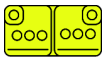
Citaro LE MÜ

Model designation	Length	Door no.	Axles	Drive
628.524	13.2 m	3	2	Diesel engine, upright
628.526	13.2 m	3	2	Diesel engine, upright

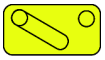


Fuel tank, additional/heating-oil tank*

AdBlue tank



On-board electrical system batteries



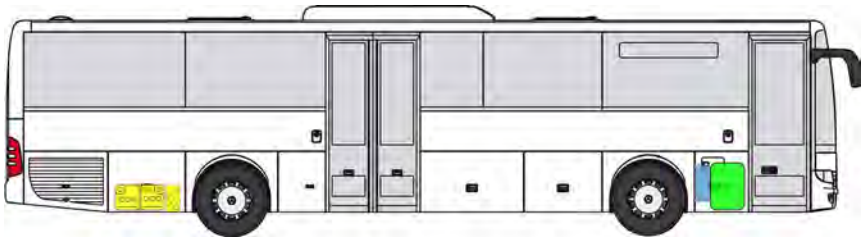
Battery isolating switch (in battery compartment)

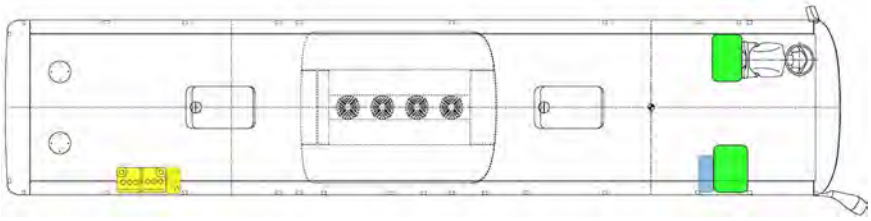
*: Option

Appendix: Euro VI interurban buses

Integro

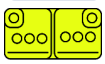
Model designation	Length	Door no.	Axles	Drive
633.620	12.1 m	2	2	Diesel engine



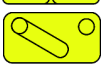


Fuel tank

AdBlue tank



On-board electrical system batteries

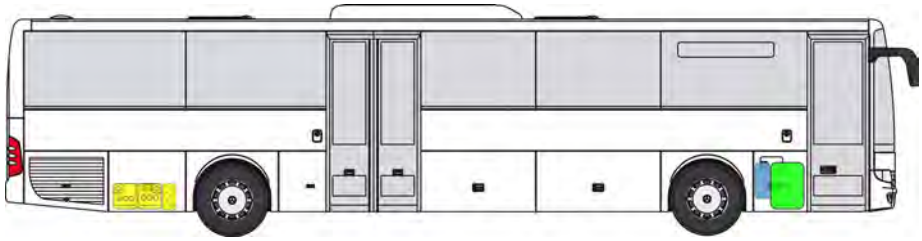


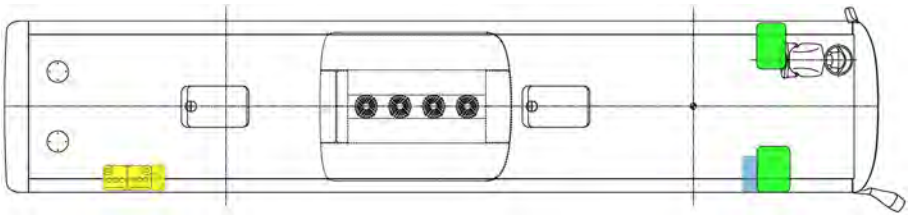
Battery isolating switch (in battery compartment)

Appendix: Euro VI interurban buses

Integro M

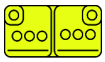
Model designation	Length	Door no.	Axles	Drive
633.640	13 m	2	2	Diesel engine



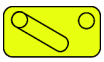


Fuel tank

AdBlue tank



On-board electrical system batteries

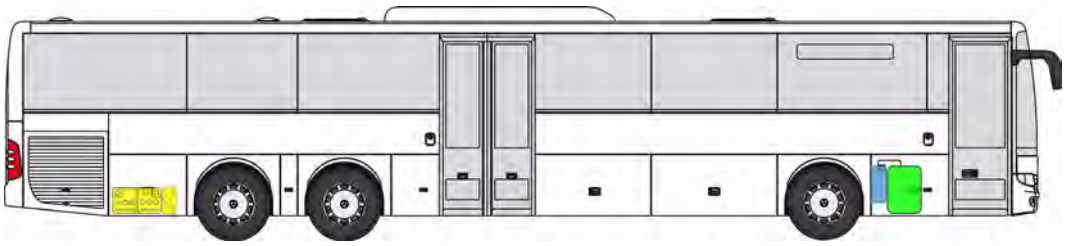


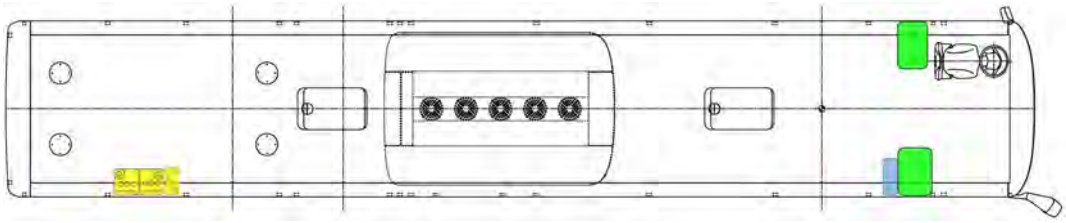
Battery isolating switch (in battery compartment)

Appendix: Euro VI interurban buses

Integro L

Model designation	Length	Door no.	Axles	Drive
633.660	15 m	2	2	Diesel engine





Fuel tank

AdBlue tank

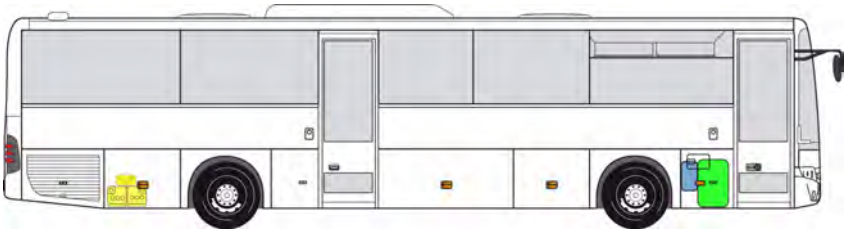
On-board electrical system batteries

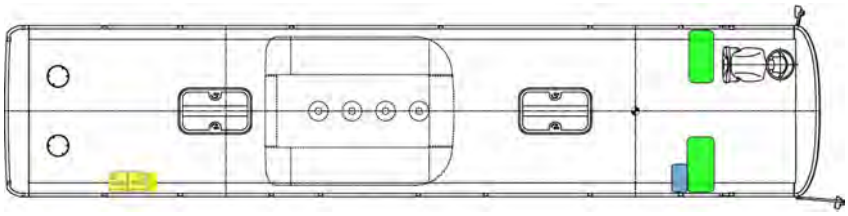
Battery isolating switch (in battery compartment)

Appendix: Euro VI interurban buses

Intouro

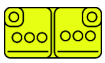
Model designation	Length	Door no.	Axles	Drive
633.720	12.1 m	2	2	Diesel engine



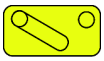


Fuel tank

AdBlue tank



On-board electrical system batteries

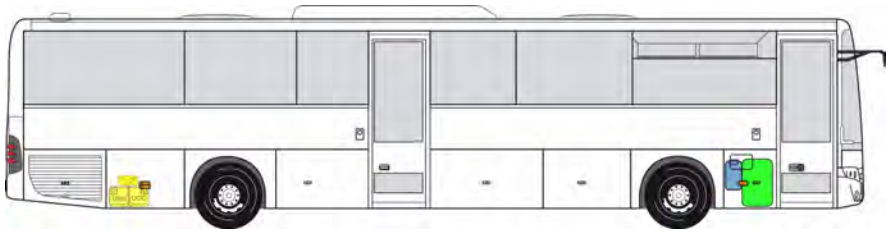


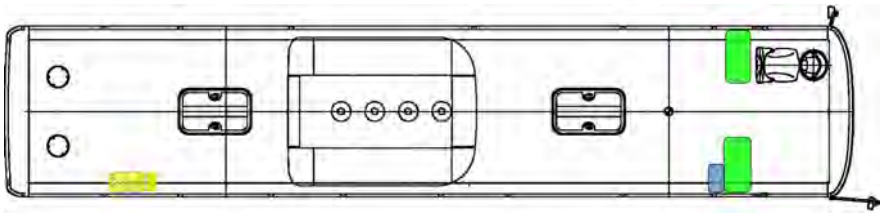
Battery isolating switch (in battery compartment)

Appendix: Euro VI interurban buses

Intouro M

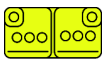
Model designation	Length	Door no.	Axles	Drive
633.723	12.6 m	2	2	Diesel engine



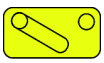


Fuel tank

AdBlue tank



On-board electrical system batteries

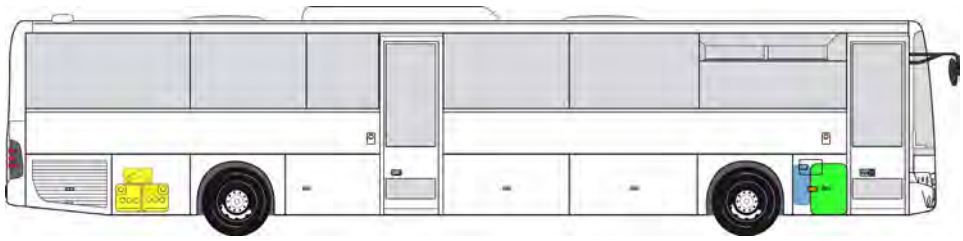


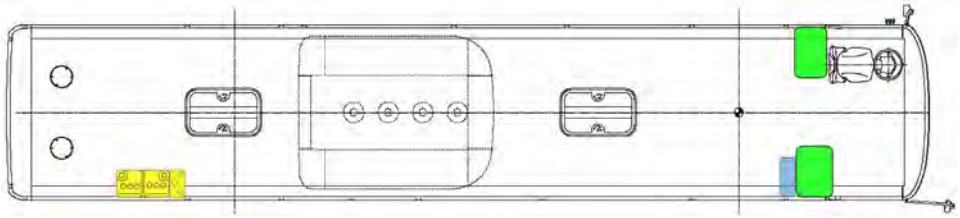
Battery isolating switch (in battery compartment)

Appendix: Euro VI interurban buses

Intouro M

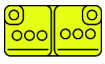
Model designation	Length	Door no.	Axles	Drive
633.743	13.3 m	2	2	Diesel engine



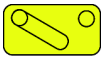


Fuel tank

AdBlue tank



On-board electrical system batteries



Battery isolating switch (in battery compartment)

Appendix: Euro VI tourist coaches

7.3.4. Tourist coaches

Features

General information, engineering features

- Drive: Diesel
- Passenger capacity: up to 60 persons
- Seats only

Exterior view

- Two passenger entrances
- Entrances with multiple steps, floor height approx. 1.35 m (above ground)
- High waistline height, approx. 2.20 m (above ground)

Doors

- Outwards opening doors, single-leaf
- Pneumatically driven
- Width approx. 0.70 m (internal width)

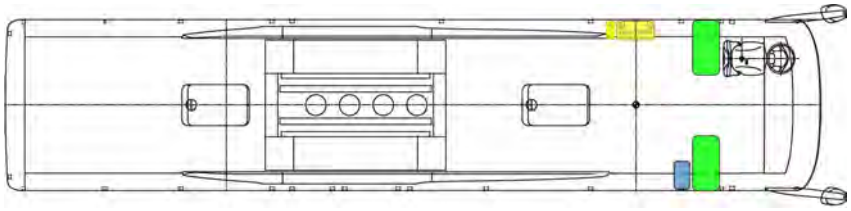
Interior equipment, seats

- High backrests
- Lateral seat adjustment and backrest adjustment
- Passenger restraint systems compulsory
- Luggage compartments with handrail
- Luggage compartment
- Lavatory, kitchenette, driver's rest area possible/probable

Appendix: Euro VI tourist coaches

Travego

Model designation	Length	Door no.	Axles	Drive
632.400	12.2 m	2	2	Diesel engine



Fuel tank

AdBlue tank

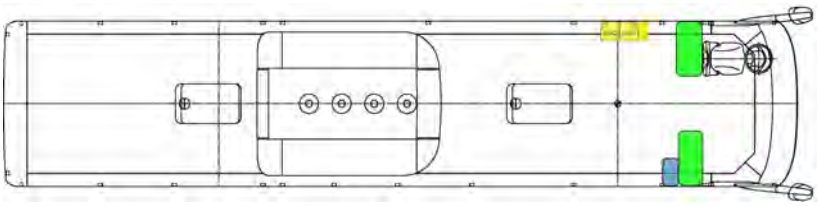
On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro VI tourist coaches

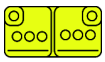
Tourismo

Model designation	Length	Door no.	Axles	Drive
632.410	12.1 m	2	2	Diesel engine

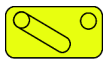


Fuel tank

AdBlue tank



On-board electrical system batteries

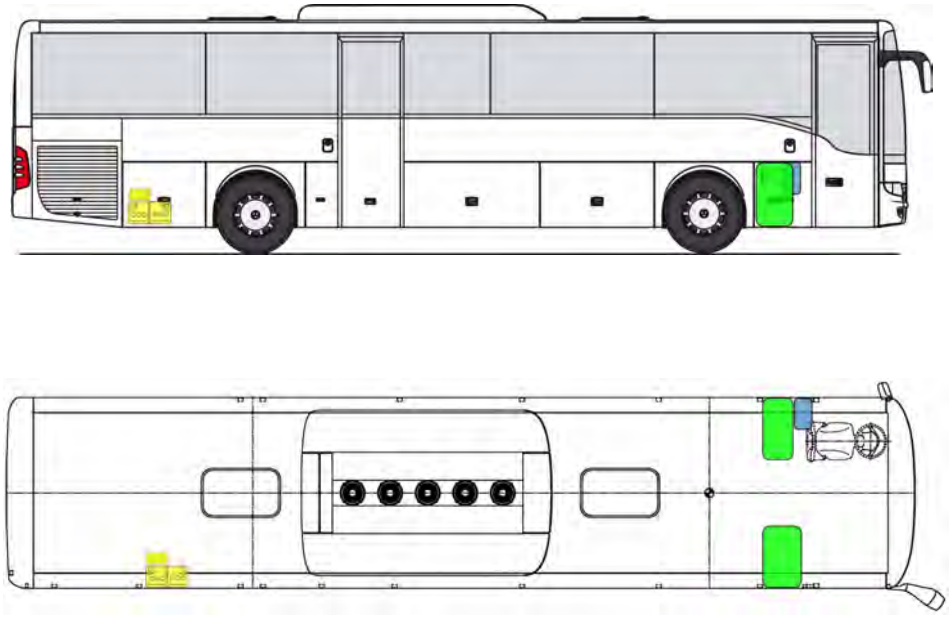


Battery isolating switch (in battery compartment)

Appendix: Euro VI tourist coaches

Tourismo

Model designation	Length	Door no.	Axles	Drive
632.420	12.1 m	2	2	Diesel engine



Fuel tank

AdBlue tank

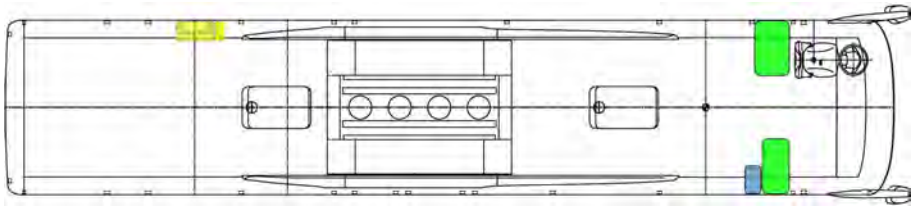
On-board electrical system batteries

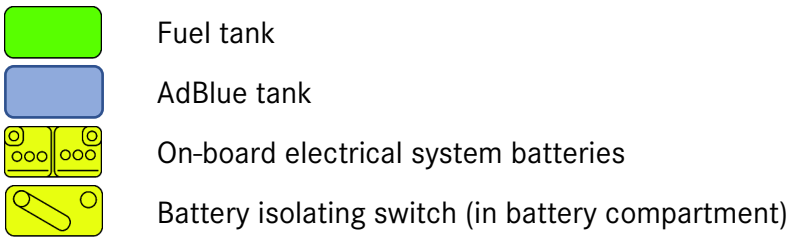
Battery isolating switch (in battery compartment)

Appendix: Euro VI tourist coaches

Travego M

Model designation	Length	Door no.	Axles	Drive
632.430	13 m	2	3	Diesel engine

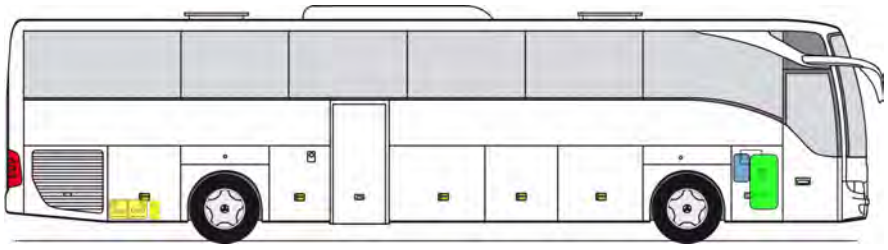


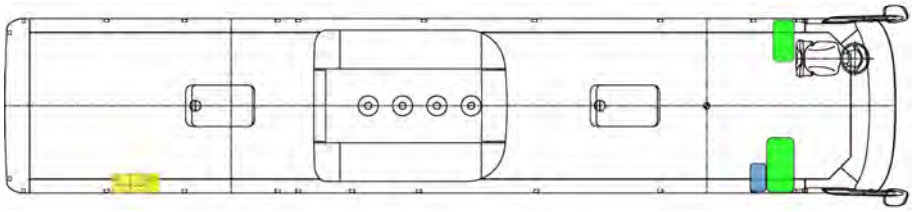


Appendix: Euro VI tourist coaches

Tourismo M 2-axle

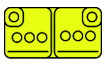
Model designation	Length	Door no.	Axles	Drive
632.431	13 m	2	2	Diesel engine



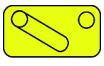


Fuel tank

AdBlue tank



On-board electrical system batteries

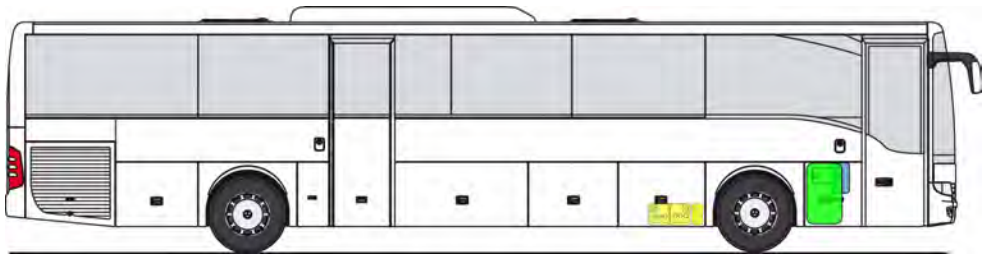


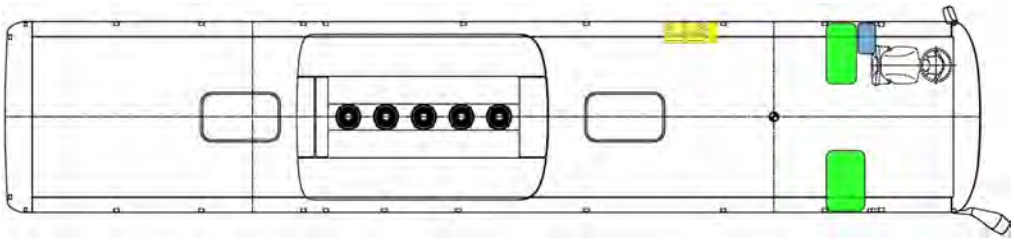
Battery isolating switch (in battery compartment)

Appendix: Euro VI tourist coaches

Tourismo RH M

Model designation	Length	Door no.	Axles	Drive
632.440	13 m	2	2	Diesel engine





Fuel tank

AdBlue tank

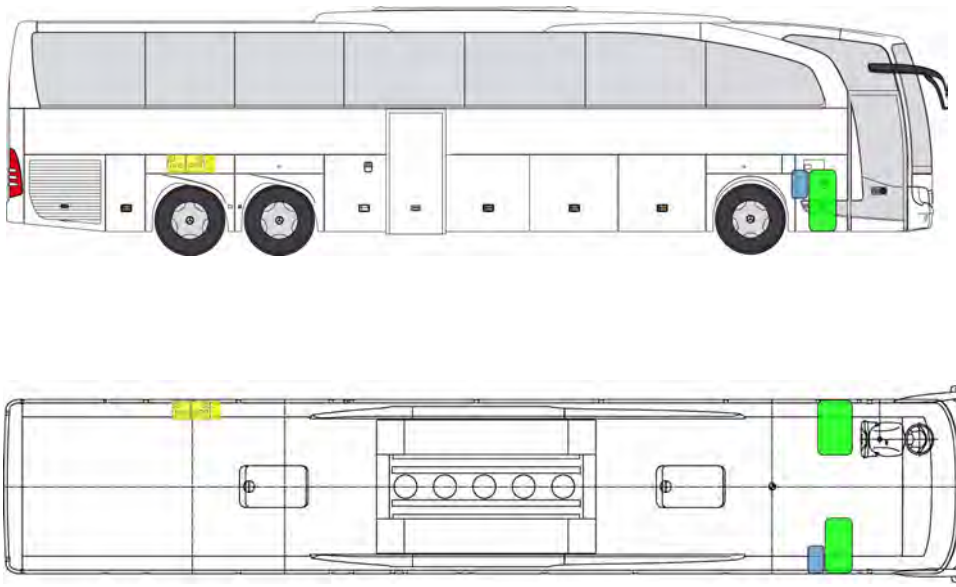
On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro VI tourist coaches

Travego L

Model designation	Length	Door no.	Axles	Drive
632.450	14 m	2	3	Diesel engine



Fuel tank

AdBlue tank

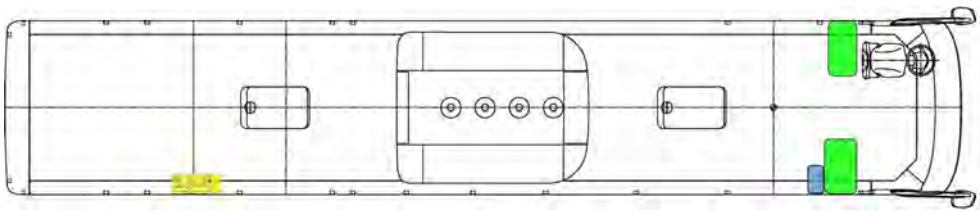
On-board electrical system batteries

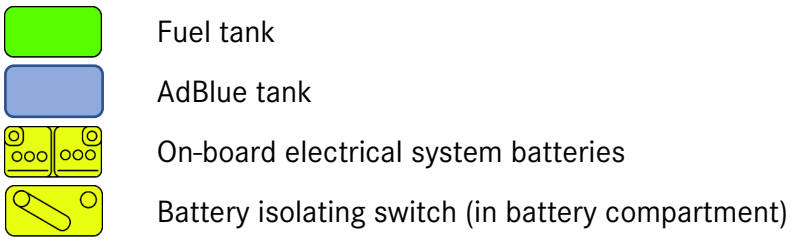
Battery isolating switch (in battery compartment)

Appendix: Euro VI tourist coaches

Tourismo L

Model designation	Length	Door no.	Axles	Drive
632.451	14 m	2	3	Diesel engine

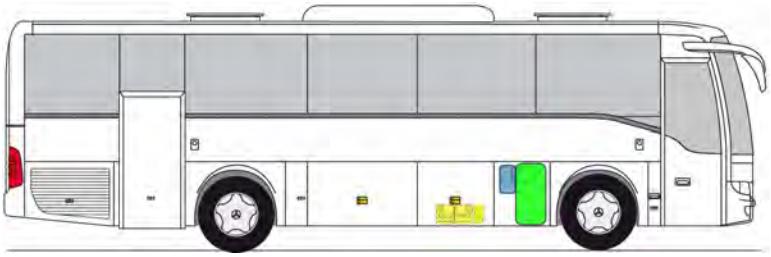


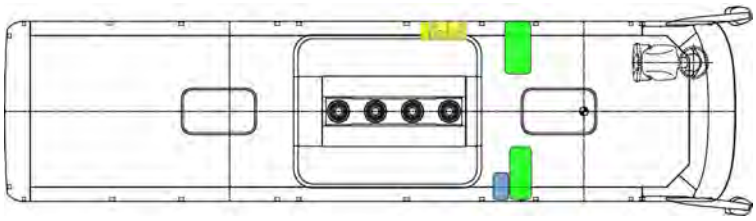


Appendix: Euro VI tourist coaches

Tourismo K

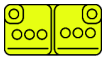
Model designation	Length	Door no.	Axles	Drive
632.460	10.3 m	2	2	Diesel engine



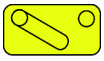


Fuel tank

AdBlue tank



On-board electrical system batteries

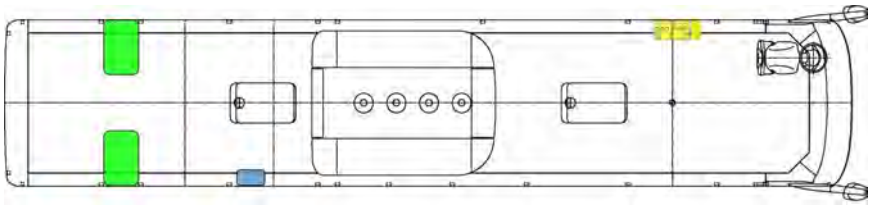


Battery isolating switch (in battery compartment)

Appendix: Euro VI tourist coaches

Tourismo M 3-axle

Model designation	Length	Door no.	Axles	Drive
632.470	13 m	2	3	Diesel engine



Fuel tank

AdBlue tank

On-board electrical system batteries

Battery isolating switch (in battery compartment)

Appendix: Euro VI minibuses

7.3.5. Minibuses

The basis for Mercedes-Benz minibuses are the chassis of the Mercedes-Benz Sprinter model series NCV 3 (model year 2006 – 2018) and VS 30 (since 2018). These minibuses are available in a range of variants for many applications.

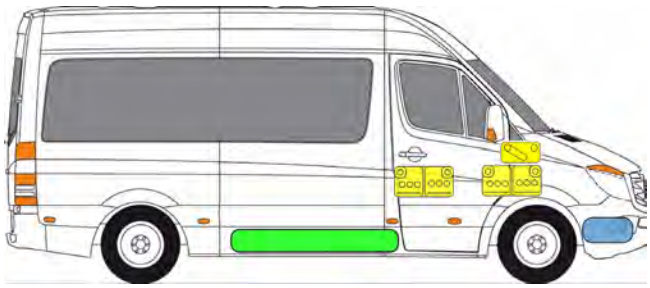
Model designation overview

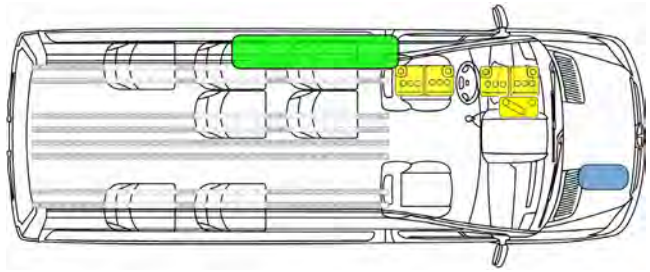
Designation	Model designation	Model	Length	Door no.	Basis
Mobility 23	612.750	Minibus	5.93 m	5	NCV 3
Mobility 33	612.760	Minibus	6.96 m	5	NCV 3
Mobility 35	612.763	Minibus	6.96 m	5	NCV 3
Mobility 45	612.773	Minibus	7.36 m	5	NCV 3
Transfer 23	612.751	Minibus	5.93 m	5	NCV 3
Transfer 34	612.762	Minibus	6.96 m	4	NCV 3
Transfer 35	612.763	Minibus	6.96 m	5	NCV 3
Transfer 45	612.773	Minibus	7.36 m	5	NCV 3
Transfer 55	612.783	Minibus	7.68 m	3	NCV 3
Travel 45	612.773	Minibus	7.36 m	4	NCV 3
Travel 55	612.783	Minibus	7.68 m	2	NCV 3
Travel 65	612.794	Minibus	7.72 m	2	NCV 3
City 35	612.765	Minibus	6.96 m	5	NCV 3
City 45	612.775	Minibus	7.36 m	5	NCV 3
City 65K	612.767	Minibus	7.06 m	4	NCV 3
City 65	612.797	Minibus	7.72 m	4	NCV 3
City 77	612.708	Minibus	8.72 m	5	NCV 3
Mobility 23 RL	612.850	Minibus	5.93 m	5	NCV 3
Mobility 35 RL	612.863	Minibus	6.96 m	5	NCV 3
Mobility 45 RL	612.873	Minibus	7.36 m	5	NCV 3
Transfer 23 RL	612.851	Minibus	5.93 m	5	NCV 3
Transfer 34 RL	612.862	Minibus	6.96 m	5	NCV 3
Transfer 35 RL	612.863	Minibus	6.96 m	5	NCV 3
Transfer 45 RL	612.873	Minibus	7.36 m	5	NCV 3
Travel 45 RL	612.873	Minibus	7.36 m	4	NCV 3
City 45 RL	612.875	Minibus	7.36 m	5	NCV 3
Mobility 23	613.701	Minibus	5.93 m	5	VS 30
Mobility 45	613.704	Minibus	7.37 m	5	VS 30
Transfer 35	613.713	Minibus	6.97 m	5	VS 30
Transfer 45	613.714	Minibus	7.37 m	5	VS 30
Travel 45	613.724	Minibus	7.37 m	4	VS 30
City 45	613.734	Minibus	7.37 m	5	VS 30
City 75	613.738	Minibus	8.49 m	4	VS 30
Transfer 23 RL	613.811	Minibus	5.93 m	5	VS 30
Transfer 35 RL	613.813	Minibus	6.97 m	5	VS 30
City 45 RL	613.834	Minibus	7.37 m	5	VS 30

Appendix: Euro VI minibuses

Mobility 23

Model designation	Length	Passenger door no.	Drive	Basis
612.750	5.93 m	1 side, 1 rear	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

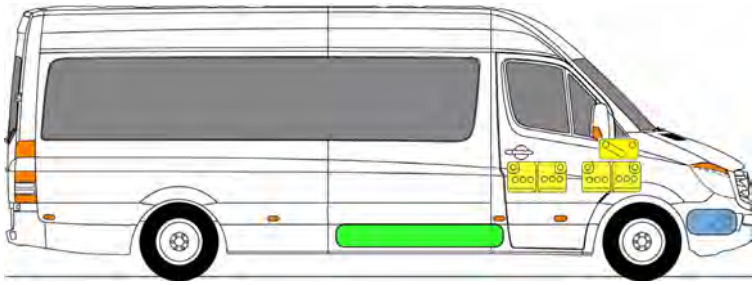
Battery isolating switch
(in footwell next to accelerator pedal)

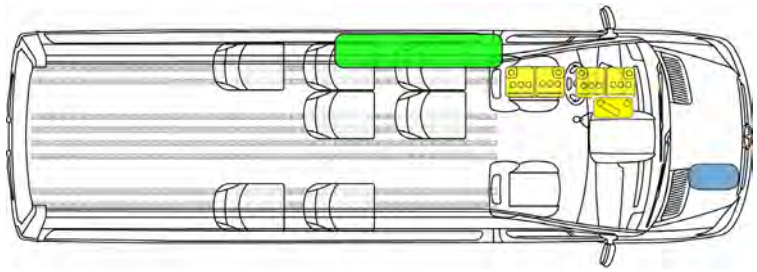
*: Option

Appendix: Euro VI minibuses

Mobility 33

Model designation	Length	Passenger door no.	Drive	Basis
612.760	6.96 m	1 side, 1 rear	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

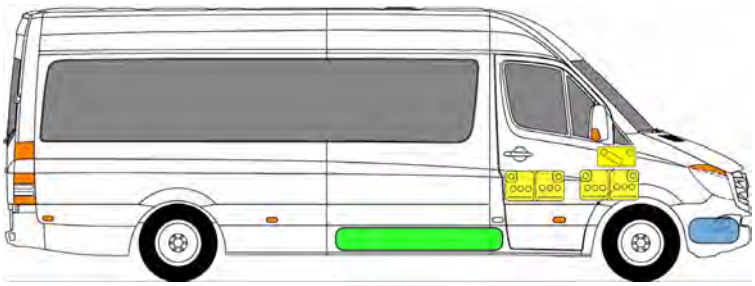
Battery isolating switch
(in footwell next to accelerator pedal)

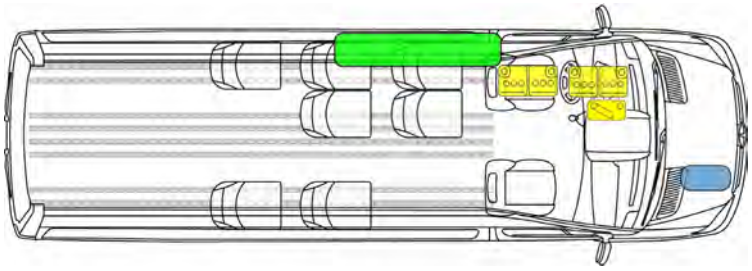
*: Option

Appendix: Euro VI minibuses

Mobility 35

Model designation	Length	Passenger door no.	Drive	Basis
612.763	6.96 m	1 side, 1 rear	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

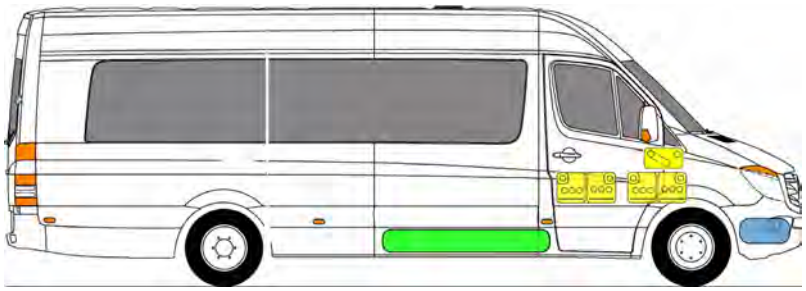
Battery isolating switch
(in footwell next to accelerator pedal)

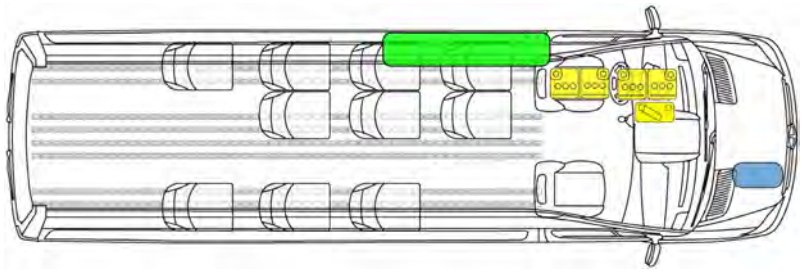
*: Option

Appendix: Euro VI minibuses

Mobility 45

Model designation	Length	Passenger door no.	Drive	Basis
612.773	7.36 m	1 side, 1 rear	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

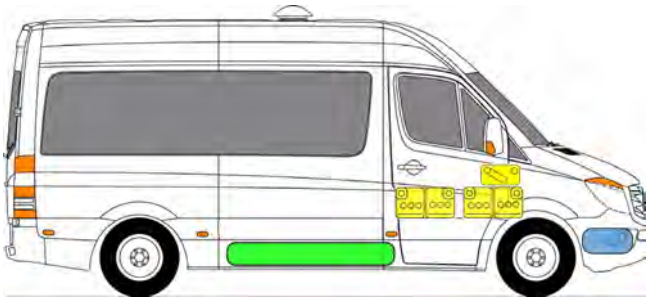
Battery isolating switch
(in footwell next to accelerator pedal)

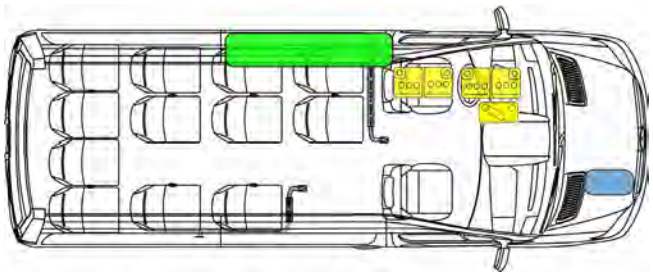
*: Option

Appendix: Euro VI minibuses

Transfer 23

Model designation	Length	Passenger door no.	Drive	Basis
612.751	5.93 m	1	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

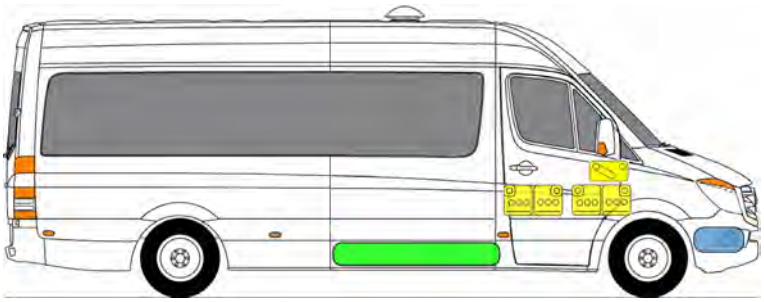
Battery isolating switch
(in footwell next to accelerator pedal)

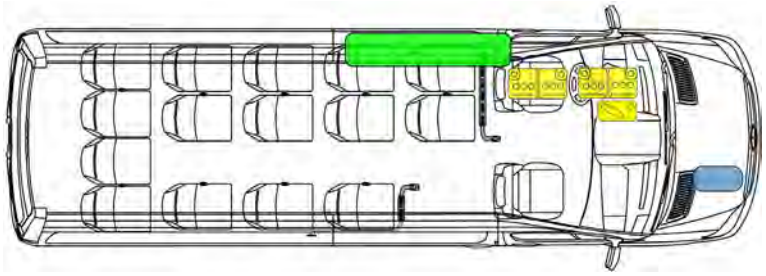
*: Option

Appendix: Euro VI minibuses

Transfer 34

Model designation	Length	Passenger door no.	Drive	Basis
612.762	6.96 m	1	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

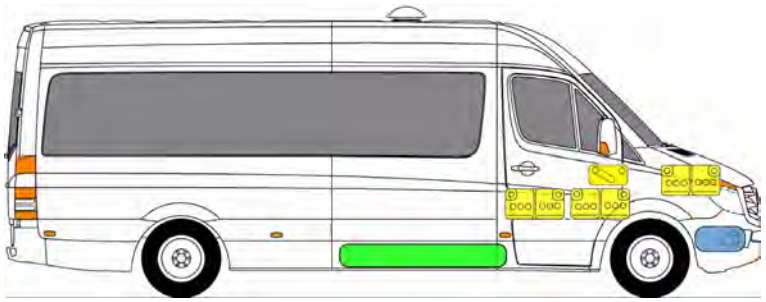
Battery isolating switch
(in footwell next to accelerator pedal)

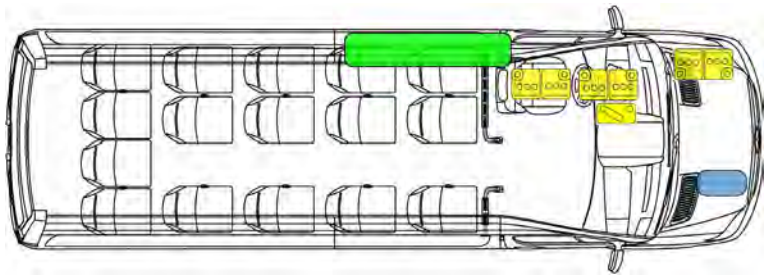
*: Option

Appendix: Euro VI minibuses

Transfer 35

Model designation	Length	Passenger door no.	Drive	Basis
612.763	6.96 m	1	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

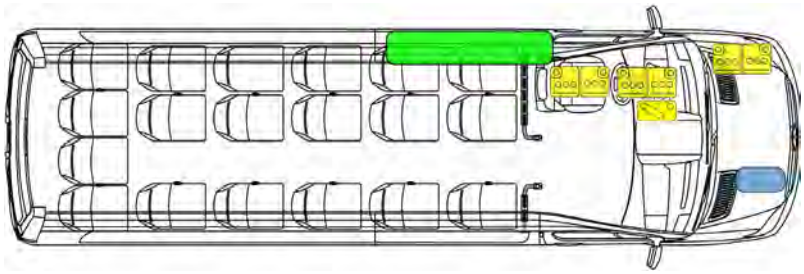
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

Transfer 45

Model designation	Length	Passenger door no.	Drive	Basis
612.773	7.36 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

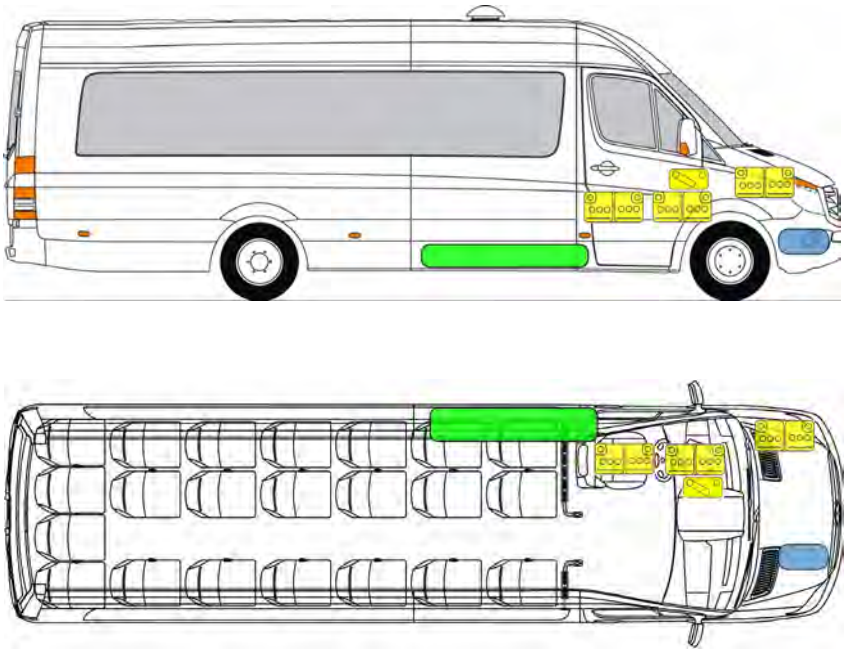
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

Transfer 55

Model designation	Length	Passenger door no.	Drive	Basis
612.783	7.68 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

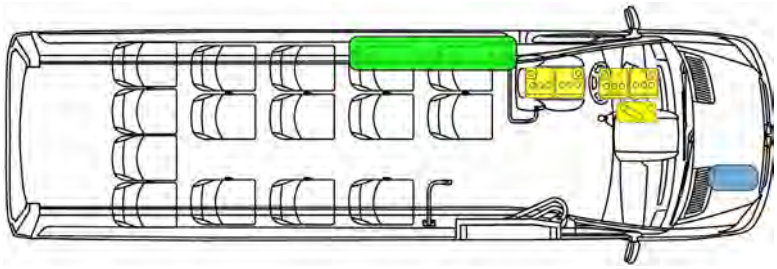
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

Travel 45

Model designation	Length	Passenger door no.	Drive	Basis
612.773	7.36 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

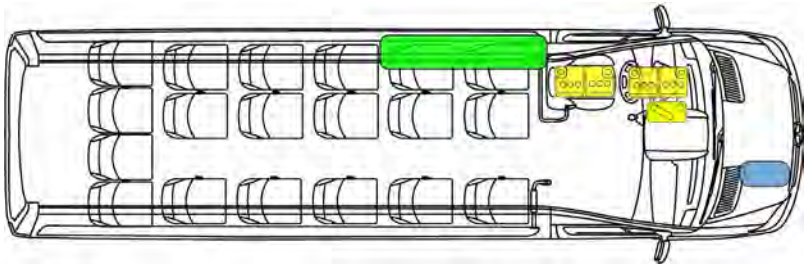
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

Travel 55

Model designation	Length	Passenger door no.	Drive	Basis
612.783	7.68 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

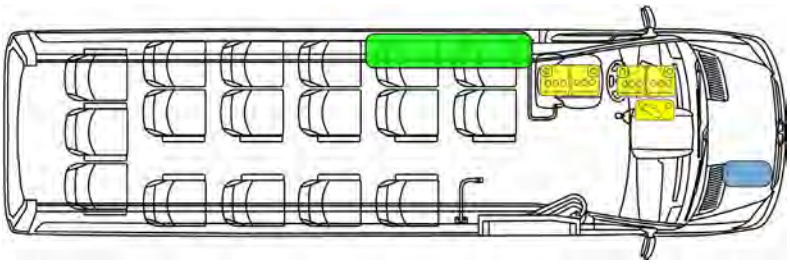
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

Travel 65

Model designation	Length	Passenger door no.	Drive	Basis
612.794	7.72 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

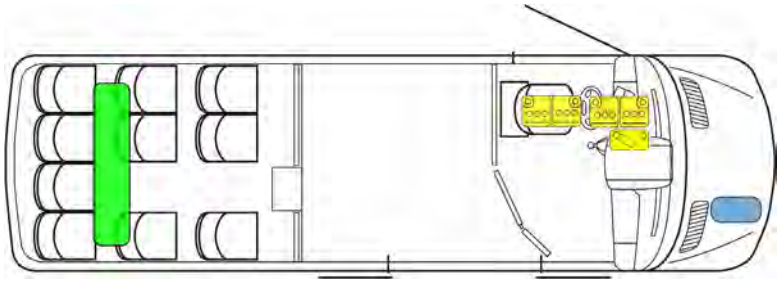
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

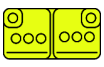
City 35

Model designation	Length	Passenger door no.	Drive	Basis
612.765	6.96 m	1	Diesel engine	NCV 3

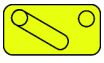


Fuel tank

AdBlue tank



Starter battery (in footwell)
Backup battery (in seat base)*



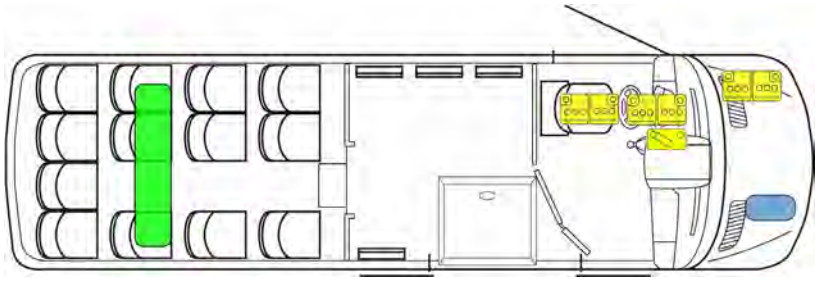
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

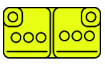
City 45

Model designation	Length	Passenger door no.	Drive	Basis
612.775	7.36 m	1	Diesel engine	NCV 3

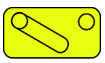


Fuel tank

AdBlue tank



Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*



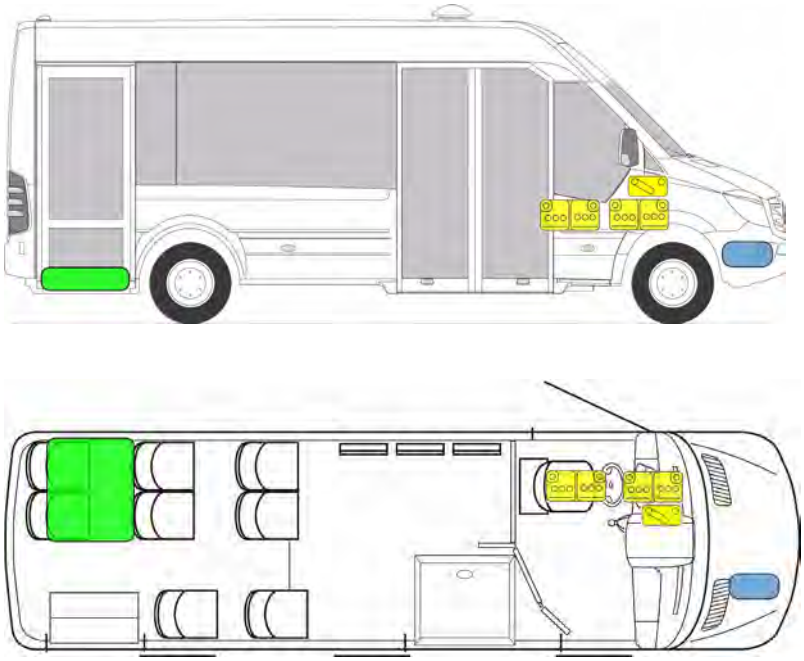
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

City 65 K

Model designation	Length	Passenger door no.	Drive	Basis
612.767	7.06 m	2	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

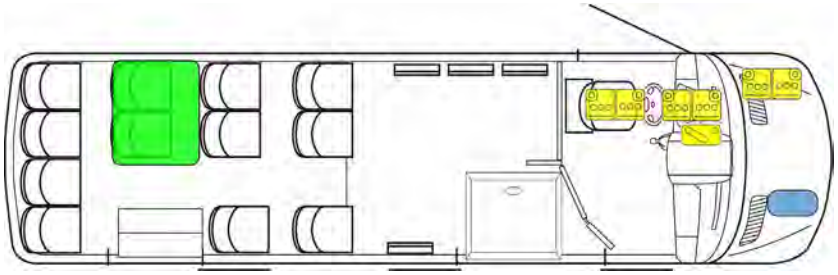
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

City 65

Model designation	Length	Passenger door no.	Drive	Basis
612.797	7.72 m	2	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

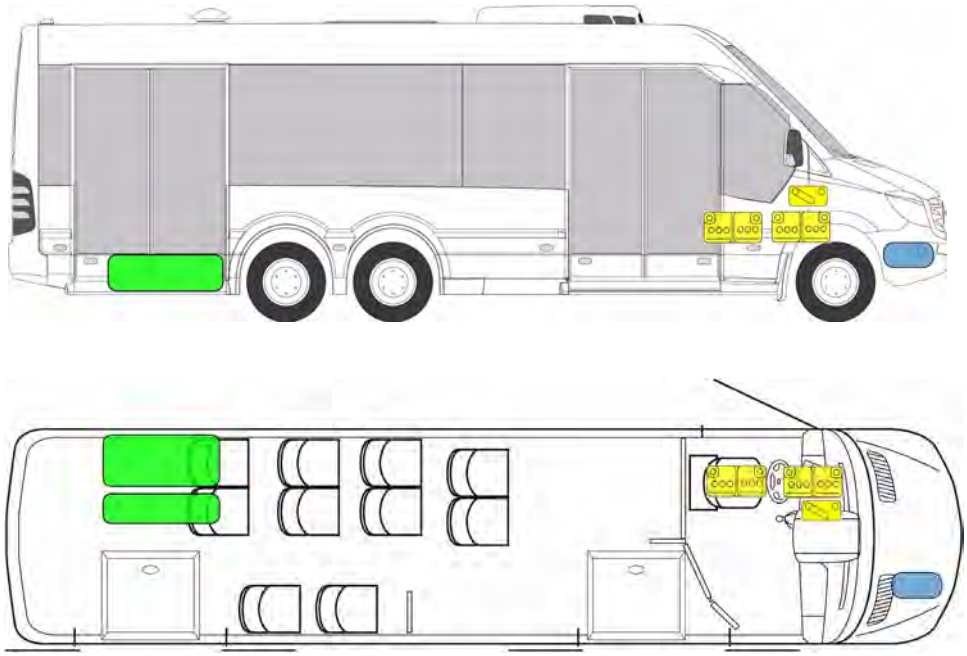
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

City 77

Model designation	Length	Passenger door no.	Drive	Basis
612.708	8.72 m	2	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

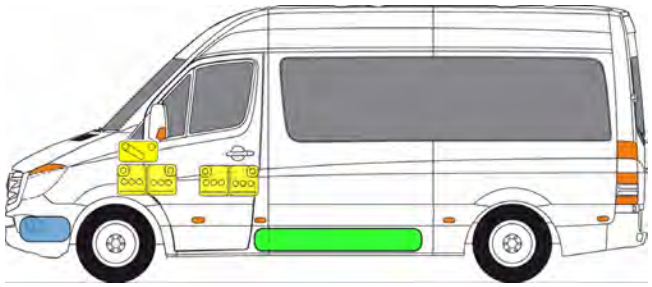
Battery isolating switch
(in footwell next to accelerator pedal)

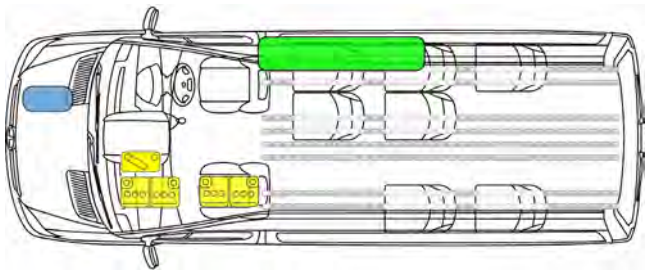
*: Option

Appendix: Euro VI minibuses

Mobility 23 RL

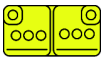
Model designation	Length	Passenger door no.	Drive	Basis
612.850	5.93 m	1 side, 1 rear	Diesel engine	NCV 3



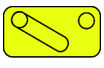


Fuel tank

AdBlue tank



Starter battery (in footwell)
Backup battery (in seat base)*



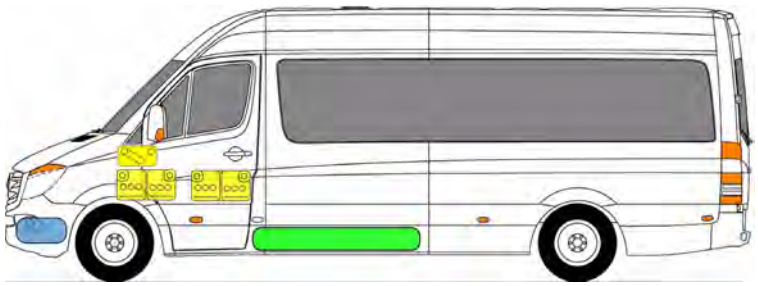
Battery isolating switch
(in footwell next to accelerator pedal)

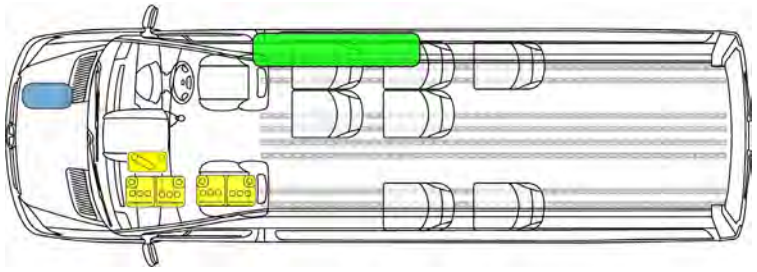
*: Option

Appendix: Euro VI minibuses

Mobility 35 RL

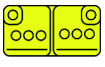
Model designation	Length	Passenger door no.	Drive	Basis
612.863	6.96 m	1 side, 1 rear	Diesel engine	NCV 3



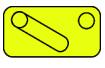


Fuel tank

AdBlue tank



Starter battery (in footwell)
Backup battery (in seat base)*



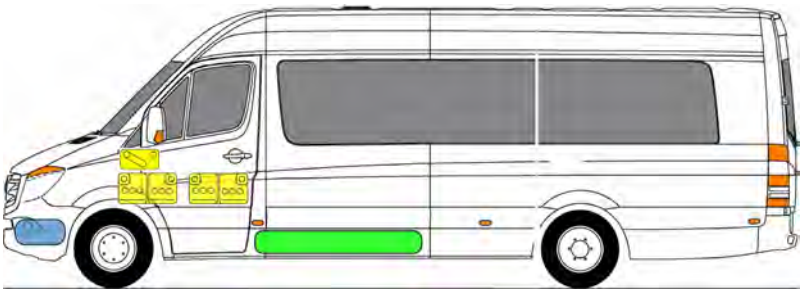
Battery isolating switch
(in footwell next to accelerator pedal)

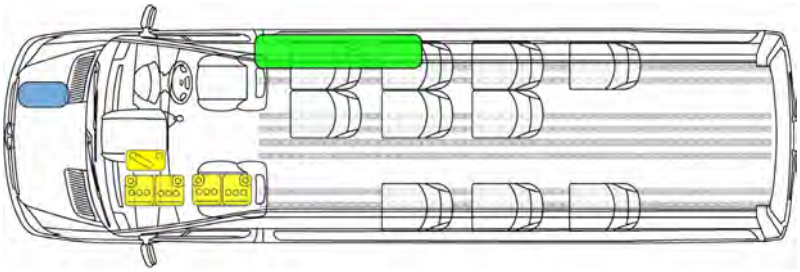
*: Option

Appendix: Euro VI minibuses

Mobility 45 RL

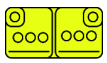
Model designation	Length	Passenger door no.	Drive	Basis
612.873	7.36 m	1 side, 1 rear	Diesel engine	NCV 3



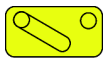


Fuel tank

AdBlue tank



Starter battery (in footwell)
Backup battery (in seat base)*



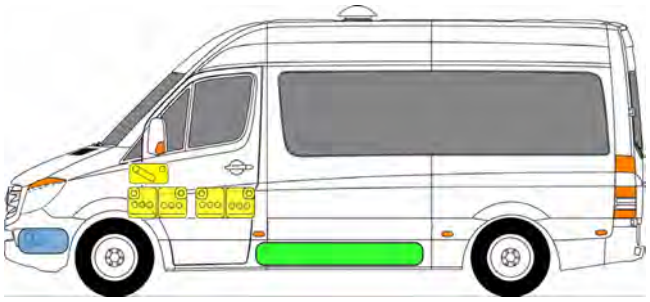
Battery isolating switch
(in footwell next to accelerator pedal)

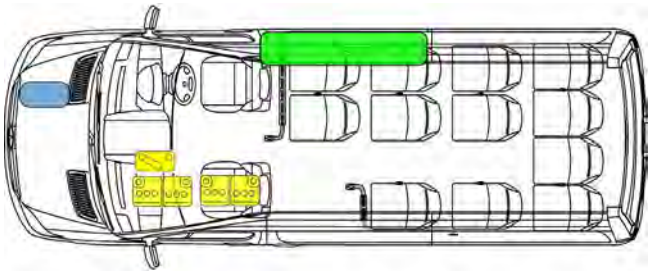
*: Option

Appendix: Euro VI minibuses

Transfer 23 RL

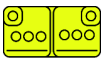
Model designation	Length	Passenger door no.	Drive	Basis
612.851	5.93 m	1	Diesel engine	NCV 3



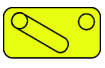


Fuel tank

AdBlue tank



Starter battery (in footwell)
Backup battery (in seat base)*



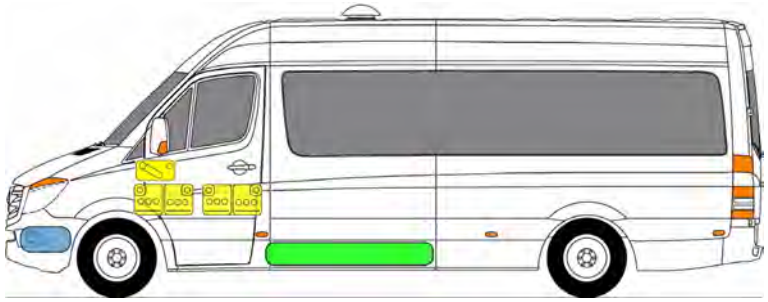
Battery isolating switch
(in footwell next to accelerator pedal)

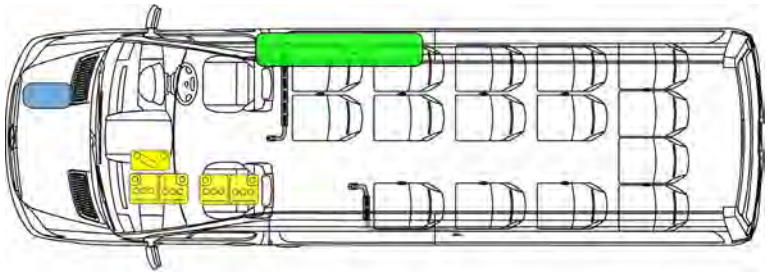
*: Option

Appendix: Euro VI minibuses

Transfer 34 RL

Model designation	Length	Passenger door no.	Drive	Basis
612.862	6.96 m	1	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

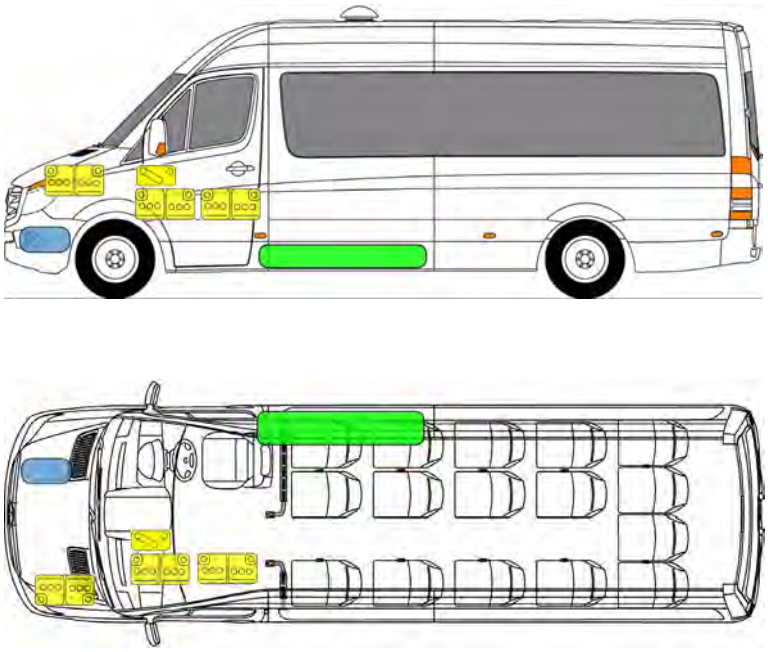
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

Transfer 35 RL

Model designation	Length	Passenger door no.	Drive	Basis
612.863	6.96 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

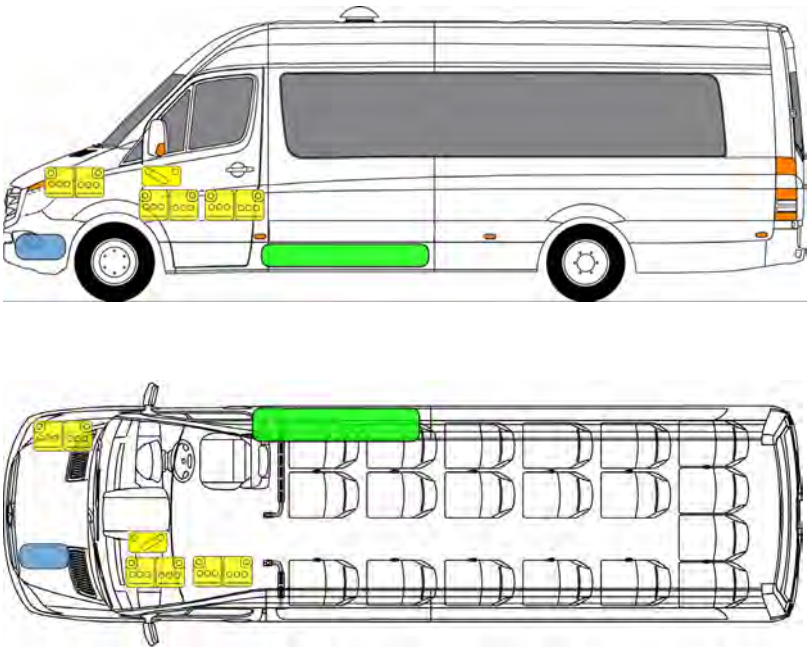
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

Transfer 45 RL

Model designation	Length	Passenger door no.	Drive	Basis
612.873	7.36 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

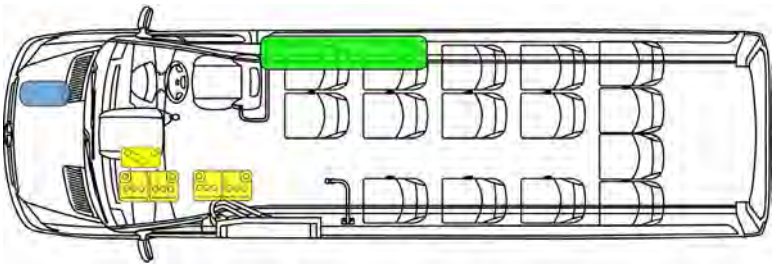
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

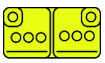
Travel 45 RL

Model designation	Length	Passenger door no.	Drive	Basis
612.873	7.36 m	1	Diesel engine	NCV 3

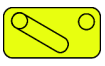


Fuel tank

AdBlue tank



Starter battery (in footwell)
Backup battery (in seat base)*



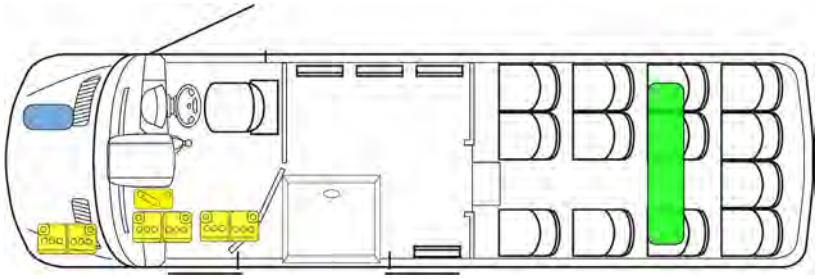
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

City 45 RL

Model designation	Length	Passenger door no.	Drive	Basis
612.875	7.36 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

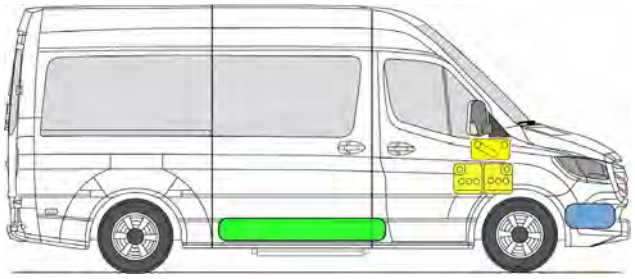
Battery isolating switch
(in footwell next to accelerator pedal)

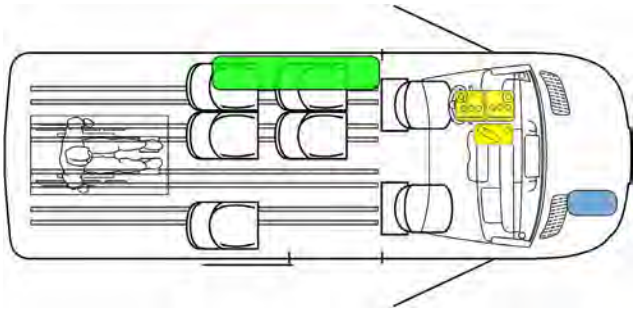
*: Option

Appendix: Euro VI minibuses

Mobility 23

Model designation	Length	Passenger door no.	Drive	Basis
613.701	5.93 m	1 side, 1 rear	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

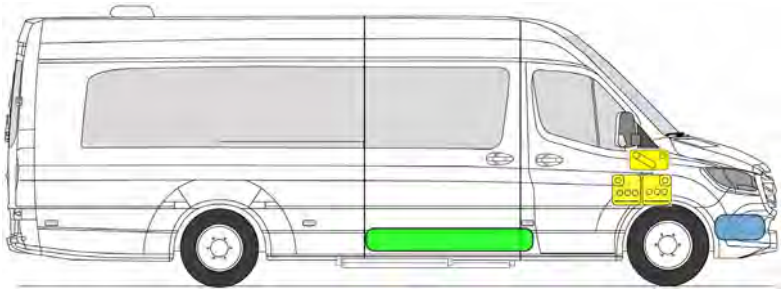
Battery isolating switch
(in footwell next to accelerator pedal)

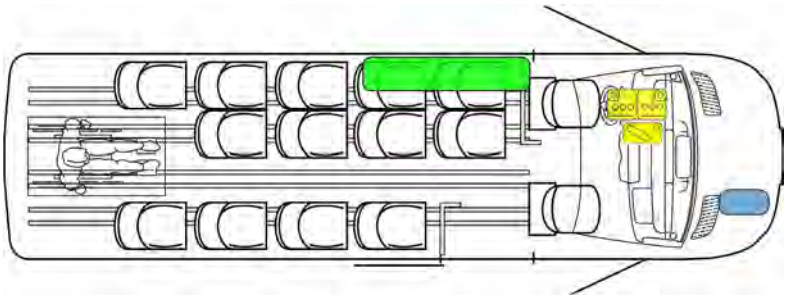
*: Option

Appendix: Euro VI minibuses

Mobility 45

Model designation	Length	Passenger door no.	Drive	Basis
613.704	7.37 m	1 side, 1 rear	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

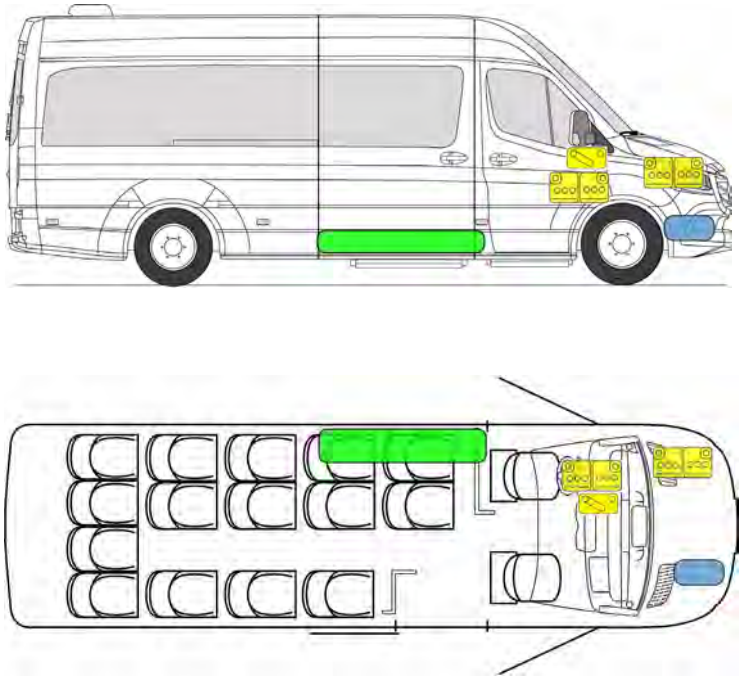
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

Transfer 35

Model designation	Length	Passenger door no.	Drive	Basis
613.713	6.97 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary batteries (in engine compartment)*
Backup battery (in seat base)*

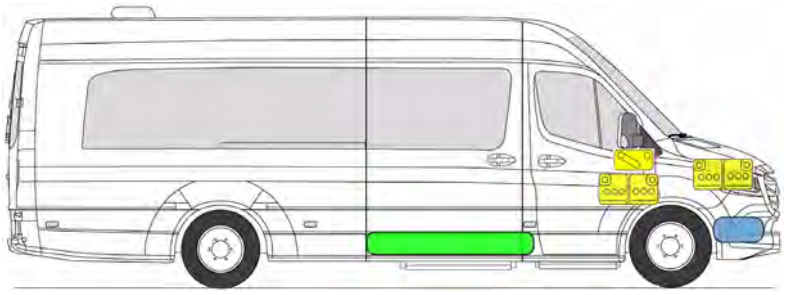
Battery isolating switch
(in footwell next to accelerator pedal)

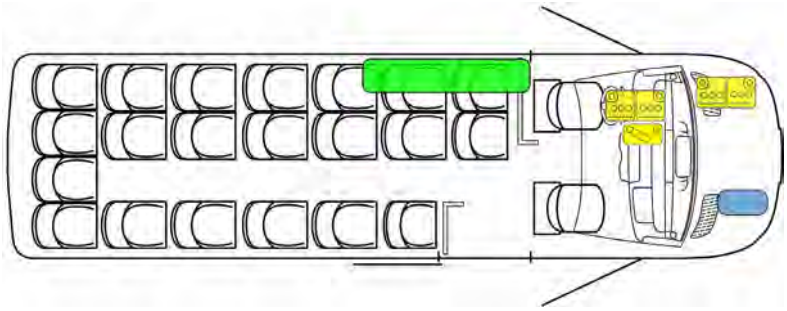
*: Option

Appendix: Euro VI minibuses

Transfer 45

Model designation	Length	Passenger door no.	Drive	Basis
613.714	7.37 m	1	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

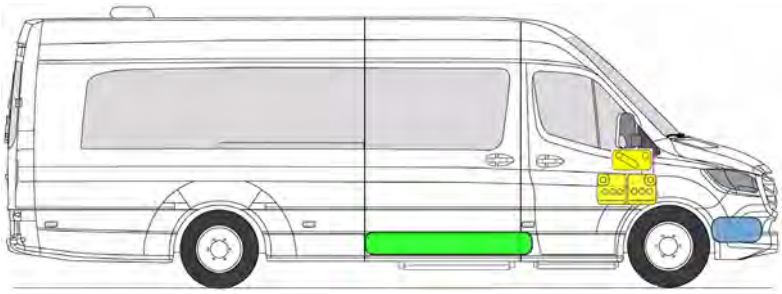
Battery isolating switch
(in footwell next to accelerator pedal)

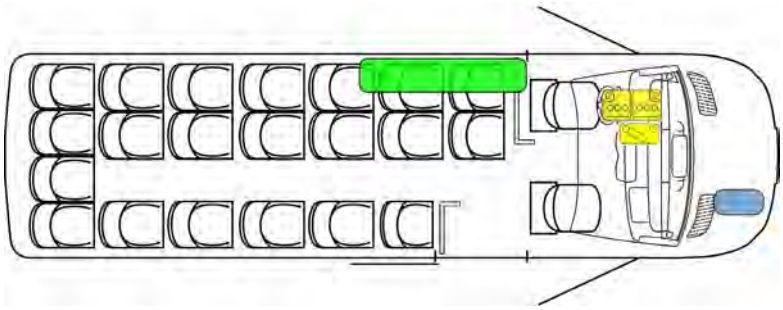
*: Option

Appendix: Euro VI minibuses

Travel 45

Model designation	Length	Passenger door no.	Drive	Basis
613.724	7.37 m	1	Diesel engine	NCV 3





Fuel tank

AdBlue tank

Starter battery (in footwell)
Backup battery (in seat base)*

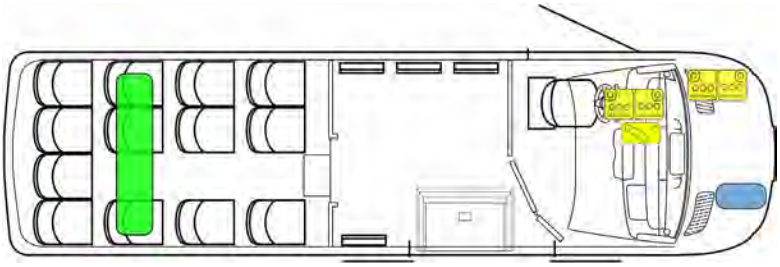
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

City 45

Model designation	Length	Passenger door no.	Drive	Basis
613.734	7.37 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

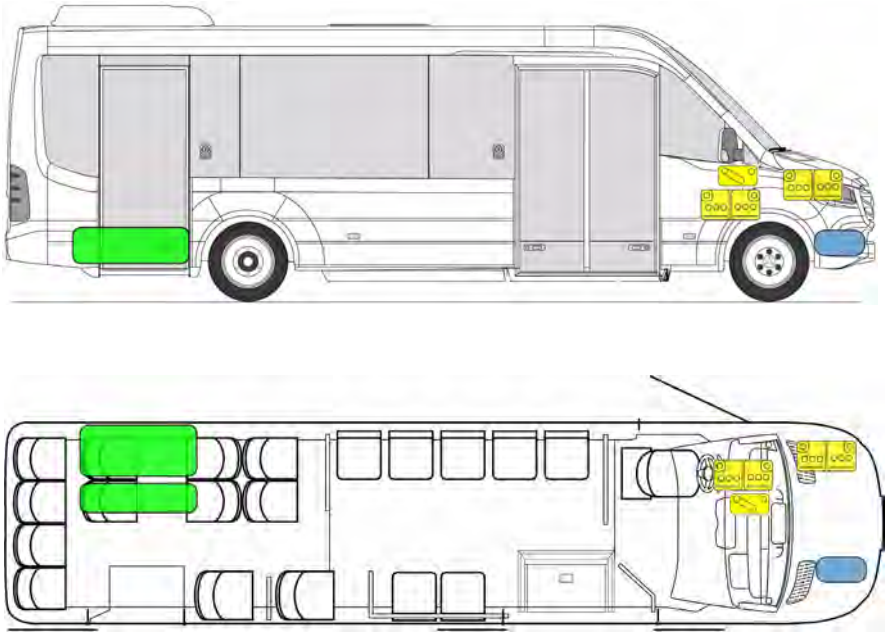
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

City 75

Model designation	Length	Passenger door no.	Drive	Basis
613.738	8.49 m	2	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

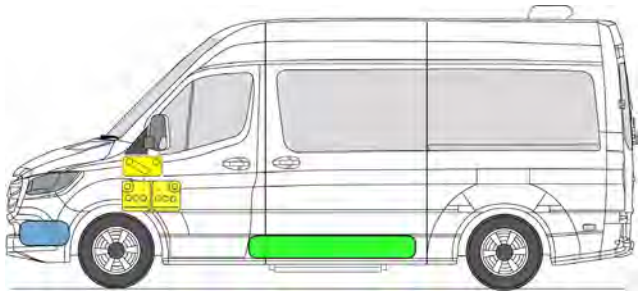
Battery isolating switch
(in footwell next to accelerator pedal)

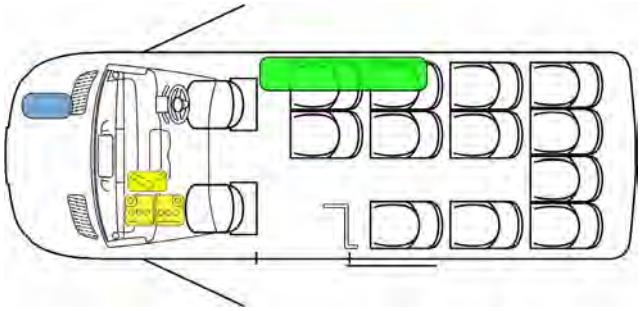
*: Option

Appendix: Euro VI minibuses

Transfer 23 RL

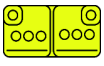
Model designation	Length	Passenger door no.	Drive	Basis
613.811	5.93 m	1	Diesel engine	NCV 3



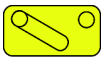


Fuel tank

AdBlue tank



Starter battery (in footwell)
Backup battery (in seat base)*



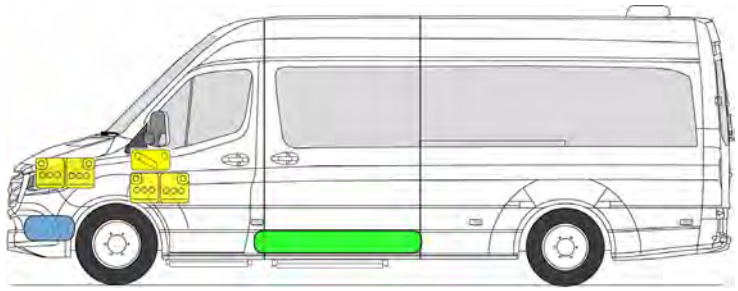
Battery isolating switch
(in footwell next to accelerator pedal)

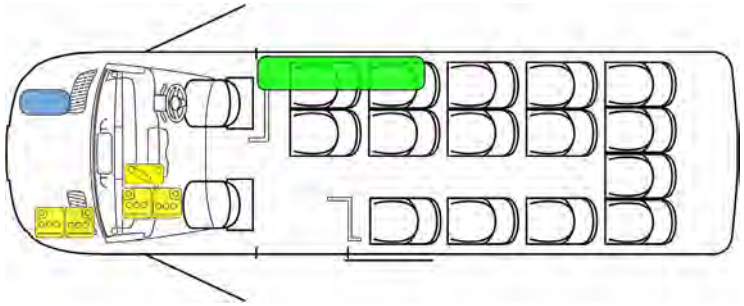
*: Option

Appendix: Euro VI minibuses

Transfer 35 RL

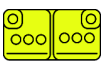
Model designation	Length	Passenger door no.	Drive	Basis
613.813	6.97 m	1	Diesel engine	NCV 3



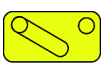


Fuel tank

AdBlue tank



Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*



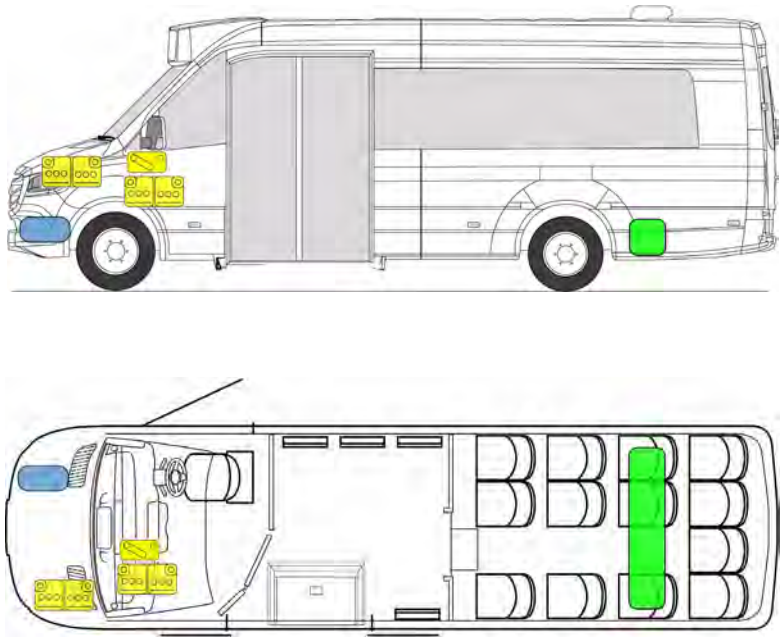
Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: Euro VI minibuses

City 45 RL

Model designation	Length	Passenger door no.	Drive	Basis
613.834	7.37 m	1	Diesel engine	NCV 3



Fuel tank

AdBlue tank

Starter battery (in footwell)
Auxiliary battery (in engine compartment)*
Backup battery (in seat base)*

Battery isolating switch
(in footwell next to accelerator pedal)

*: Option

Appendix: All-electric city buses (eCitaro)

7.4. All-electric city buses (eCitaro)

7.4.1. Model designation overview

Designation	Model designation	Model	Length	Door no.	Drive
eCITARO	628.630	City bus	12.0 m	2	All-electric drive
eCITARO	628.631	City bus	12.0 m	3	All-electric drive
eCITARO G	628.640	City bus	18.0 m	3	All-electric drive
eCITARO G	628.641	City bus	18.0 m	4	All-electric drive

Features

General information, engineering features

- All-electric drive (energy storage system of lithium-ion or solid-state batteries)
- Passenger capacity: up to 170 persons
- Mainly standing

Exterior view

- Multiple wide entrances
- Low entry height
- Low waistline height

Doors

- Inwards opening doors
- Outwards opening doors
- Double-leaf
- Electrically driven
- Width 1.25 m

Interior equipment, seats

- Low backrests
- No seat adjustment
- No passenger restraint systems
- Numerous handrails
- Seat-free floor space for wheelchair passengers and pushchairs

Appendix: All-electric city buses (eCitaro)

eCitaro

Model designation	Length	Door no.	Axles	Drive
628.630	12 m	2	2	All-electric

Heating-oil tank (with lines), auxiliary heating *

High-voltage batteries (orange lines)

Emergency-off switches (in the driver's station and at the charging socket)

On-board electrical system batteries

Battery isolating switch (in battery compartment)

Risk of fatal injury.

The on-board power supply has a voltage of up to 750 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

1 Depending on the vehicle equipment specification, there could be a collector (pantograph) mounted on the roof. High voltage could be present at the contacts. Danger of death!

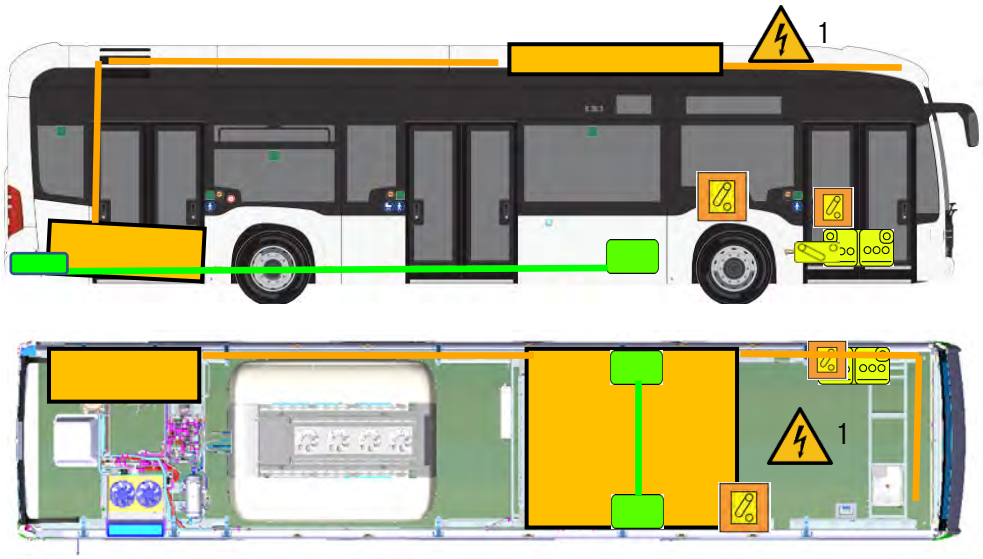
Note: Following operation of an emergency-off switch, the high voltage is safely dissipated to below 60 V DC (max. permissible contact voltage) in the course of the next 7 minutes.

*: Option

Appendix: All-electric city buses (eCitaro)

eCitaro

Model designation	Length	Door no.	Axles	Drive
628.631	12 m	3	2	All-electric



Heating-oil tank (with lines), auxiliary heating *

High-voltage batteries (orange lines)

Emergency-off switches (in the driver's station and at the charging socket)

On-board electrical system batteries

Battery isolating switch (in battery compartment)

Risk of fatal injury.
The on-board power supply has a voltage of up to 750 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

1 Depending on the vehicle equipment specification, there could be a collector (pantograph) mounted on the roof. High voltage could be present at the contacts. Danger of death!

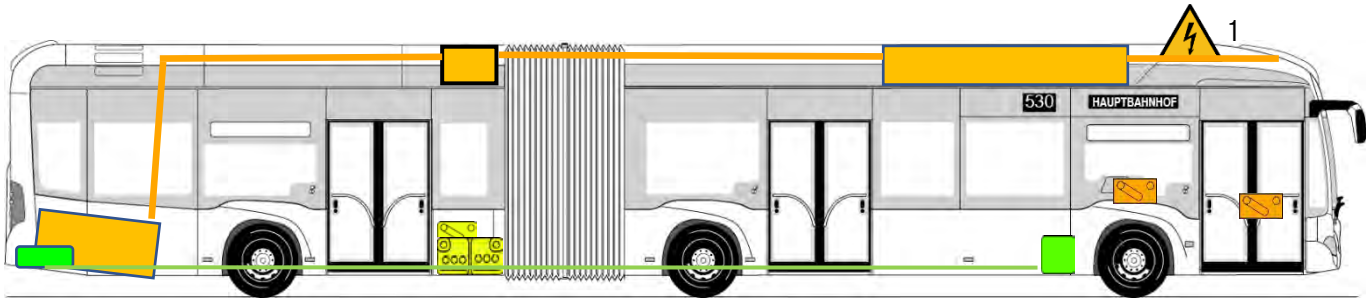
Note: Following operation of an emergency-off switch, the high voltage is safely dissipated to below 60 V DC (max. permissible contact voltage) in the course of the next 7 minutes.

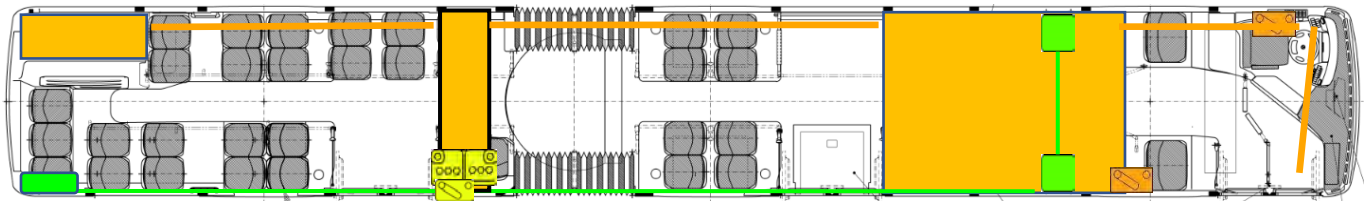
*: Option

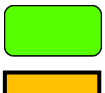
Appendix: All-electric city buses (eCitaro)

eCitaro G

Model designation	Length	Door no.	Axles	Drive
628.640	18 m	3	3	All-electric



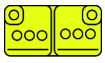




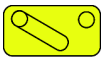
Heating-oil tank (with lines), auxiliary heating *

High-voltage batteries (orange lines)

Emergency-off switches (in the driver's station and at the charging socket)



On-board electrical system batteries



Battery isolating switch (in battery compartment)

Risk of fatal injury.

The on-board power supply has a voltage of up to 750 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

Depending on the vehicle equipment specification, there could be a collector (pantograph) mounted on the roof. High voltage could be present at the contacts. Danger of death!

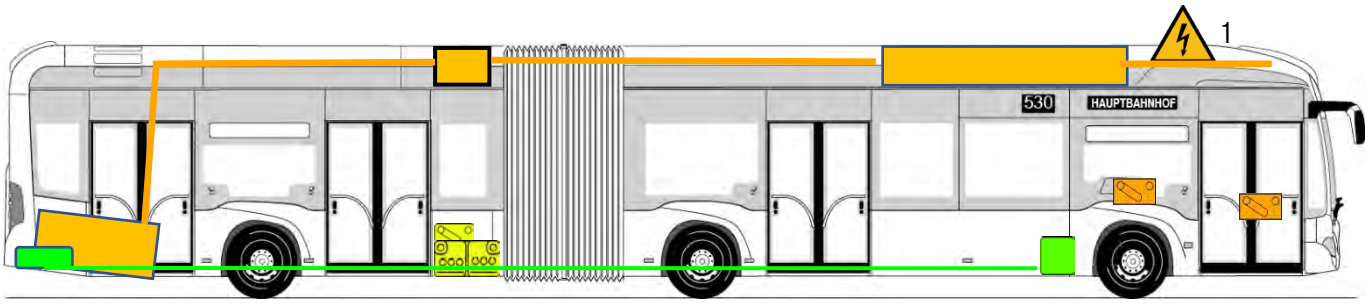
Note: Following operation of an emergency-off switch, the high voltage is safely dissipated to below 60 V DC (max. permissible contact voltage) in the course of the next 7 minutes.

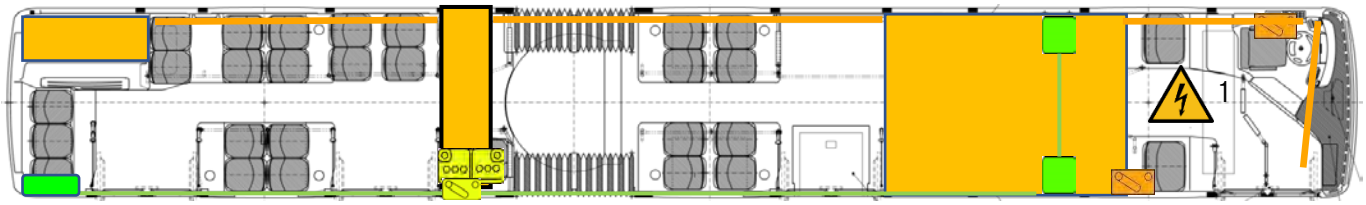
*: Option

Appendix: All-electric city buses (eCitaro)

eCitaro G

Model designation	Length	Door no.	Axles	Drive
628.641	18 m	4	3	All-electric





Heating-oil tank (with lines), auxiliary heating *

High-voltage batteries (orange lines)

Emergency-off switches (in the driver's station and at the charging socket)

On-board electrical system batteries

Battery isolating switch (in battery compartment)

Risk of fatal injury.
The on-board power supply has a voltage of up to 750 V. If not de-energised, the system presents a lethal danger to rescue personnel in case of contact.

1 Depending on the vehicle equipment specification, there could be a collector (pantograph) mounted on the roof. High voltage could be present at the contacts. Danger of death!

Note: Following operation of an emergency-off switch, the high voltage is safely dissipated to below 60 V DC (max. permissible contact voltage) in the course of the next 7 minutes.

*: Option

This working document has been prepared for emergency rescue personnel. It is not a controlled document.
We reserve the right to make technical modifications as part of ongoing development.

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