



**Nutzfahrzeuge**

## Body assembly guidelines Volkswagen Nutzfahrzeuge

### The Caddy

The following pages contain technical guidelines for custom body manufacturers/ coachwork specialists for construction and assembly of custom body-related parts and conversions.

The body assembly guidelines should be strictly adhered to if modifications are made with the intention of doing so.

Included in the Volkswagen body assembly guidelines are also the body dimension plans for our commercial vehicles Crafter, Transporter T4 and T5, Caddy and LT. These can be installed in 3 formats (TIF, DXF, IGES) for CAD programs and as PDF files.

Advice: If further technical queries about the series production vehicle arise over and beyond these guidelines, please contact your local conversion expert at your importer.

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Online contact: <http://www.vwn-aufbaurichtlinien.de/de/kontaktformular>

Note: Subject to errors and technical amendments. The electronic version of the body guidelines is the decisive source of up-to-date data on body guidelines

<http://www.vwn-aufbaurichtlinien.de>

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## 1.1 Body builder guidelines, inquiries

The body builder guidelines define the requirements for custom body builders and equipment fitters designing and mounting bodies or performing conversions to base vehicles of the Volkswagen Commercial Vehicles brand.

The body builder guidelines must be strictly adhered to when performing any modifications to the vehicle.

Ensure that no modification adversely affects the functional reliability and safety of the running gear, the body or the electric system. Modifications must only be performed by qualified specialists and in accordance with the generally acknowledged rules of the automotive industry.

Prerequisites for modifications to used vehicles: The vehicle must be in a good overall condition, i.e. structural parts such as longitudinal and cross members, pillars etc. must not be corroded to such an extent that structural stability might be adversely affected.

Vehicles whose modifications might affect the validity of general certificate of roadworthiness must be presented to an authorised testing centre for approval. It is recommended to clarify in advance with the relevant authority whether approval is required.

When **inquiring** about planned modifications, please enclose two sets of design drawings of the complete scope of the modification, including weights, centre of gravity and dimensions, which also clearly show how the body is attached to the chassis. Please use the online contact form:  
<http://www.vwn-aufbaurichtlinien.de/de/kontaktformular>

Please also provide information about the intended operating conditions of the vehicle. If bodies, installations or conversions comply with the present guidelines, no additional approval by Volkswagen AG is required for the presentation of the vehicle at the relevant authority examining roadworthiness.

The work safety regulations of the trade association and the EU machine directive apply.

When making modifications to vehicles, all corresponding and applicable legal regulations, rules, laws and directives must be observed.

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## 1.2 Warranty and product liability of the body builder

The body builder's or fitter's warranty conditions apply to the body builder's or fitter's scope of supply. Therefore, warranty claims associated with complaints to this scope of supply cannot be made under the warranty conditions applicable to Volkswagen Commercial Vehicles.

Volkswagen vehicles delivered after 01. January 2005 are covered by a 2-year warranty without mileage limitation for the flawless condition of the product (Volkswagen warranty).

Defects of bodies, installations and conversions provided by third parties as well as defects of the vehicle caused by the said bodies, installations or conversions are excluded from the Volkswagen warranty and also from the Volkswagen paint and body warranty. This also applies to accessories which were not installed and/or supplied by the vehicle manufacturer.

The body builder or fitter is solely responsible for the design and assembly of bodies and the execution of conversions.

All conversions must be documented by the body builder or fitter in the service schedule provided with every Volkswagen vehicle.

Due to the multitude of conversions and diversity of operating conditions, the information provided by Volkswagen AG is subject to the reservation that modified vehicles are not tested by Volkswagen AG. Modifications may affect the properties of the vehicle.

**For reasons of liability, the body builders or fitters must provide the following information in writing to their customers:**

"Due to the modifications\* to your Volkswagen Commercial Vehicles base vehicle, the properties of your base vehicle may have changed.

Please understand that Volkswagen AG does not assume any liability for any negative effects resulting from the modifications\* to the vehicle."

\* At this point, the term "modification" may be substituted by a more precise description of the work performed, e.g. by "camping equipment installation", "wheelbase extension", "box body".

In individual cases, Volkswagen AG reserves the right to demand proof of the information being passed on to the customer.

No general legal entitlement for the approval of a body modification exists, even if such approval was previously granted.

Bodies, installations or conversions complying with the present guidelines do not require additional approval by Volkswagen AG to be presented at the authorised examining body.

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## 1.3 Recommendations for vehicle storage

Extended storage times cannot always be avoided. The following measures are recommended to ensure that vehicle quality is not affected by long-term storage:

At vehicle delivery:

- Fill tank
- Do not park the vehicle under trees, poles; etc.
- Open all ventilation flaps, set blower to maximum speed
- Disconnect battery(ies)
- Remove dirt, snow and moisture from vehicle (footwell)
- Close windows, doors, front lid, rear lid and sunroof
- Put manual gearbox into 1st gear or lever of automatic gearbox into park position. Do not engage reverse gear. Do not apply the parking brake.
- Remove the windscreen wiper bags and prop up the wiper arm using a foam pad, remove any loose protective film. ("Aero wipers": remove and store in suitable location inside vehicle).
- Check tyre pressures; increase to 4.5 bar for commercial vehicles, if required.

Check vehicles weekly for contamination by aggressive media (e.g. bird droppings, industrial dusts) and clean, if required.

Check battery open-circuit voltage every three months. Open-circuit voltage means the voltage of the disconnected battery after a minimum storage period of 12 hours. Recharge battery in due time before it reaches an open-circuit voltage of 12.4 volt ('magic eye' changes from green to black). Batteries with an open-circuit voltage of less than 11.6 volt are in state of exhaustive discharge and should be disposed of soon.

Batteries must be recharged only with current-controlled and voltage-limited chargers. A maximum charging voltage of 14.4 volt must not be exceeded.

It is recommended to check the tyre inflation pressure every three months and to increase it to 4.5 bars for commercial vehicles, if required.

Reconnect battery negative lead(s) before recommissioning the vehicle.

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## 1.4 Compliance with environmental rules and regulations

Fitters of accessories and body builders must ensure that they comply with all applicable environmental rules and regulations, especially EU directive 2000/53/EC concerning end-of-life vehicles and EU directive 2003/11/EC relating to restrictions on the marketing and use of certain dangerous substances and preparations.

The vehicle owner must keep all assembly documentation concerning the modification and hand them over together with the vehicle to the dismantler. This ensures that modified vehicles are processed in compliance with environmental rules and regulations at the end of their lifecycle.

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## 1.5 Recommendations for inspection, maintenance and repair

Maintenance instructions or service schedules outlining inspection and servicing work should be provided for the modifications performed by the body builder or accessories fitter. These instructions or schedules must include the maintenance and inspection intervals as well as the required operating fluids and materials and the spare parts. Parts and components with a limited service life which must be checked in regular intervals to ensure service reliability and timely replacement must be explicitly stated.

This should be supported by a repair manual including tightening torques, settings and tolerances as well as other relevant specifications. Special tools, including their source of supply, must also be stated.

The manual must also state which type of work must be performed only by the body builders and accessories fitters or their authorised workshops.

If the body builders or accessory fitter's scope of supply includes electric, electronic or mechatronic, hydraulic or pneumatic systems, circuit diagrams and diagnosis routines or similar documentation facilitating a systematic search for faults must be provided.

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## 1.6 Accident prevention

Body builders must ensure that the fitted components, conversions, bodies and modifications comply with applicable legal rules and regulations as well as all regulations regarding work safety and accident prevention. All safety rules and the information material provided by accident insurance providers must be observed.

All technically feasible measures must be taken to prevent unsafe operation.

Country-specific laws, directives and approval regulations must be observed.

The body builder or device or equipment manufacturer is responsible for the compliance with these laws, rules and regulations.

For further information about commercial freight traffic in the Federal Republic of Germany please contact:

Berufsgenossenschaft für Fahrzeughaltung  
Fachausschuss "Verkehr"  
Sachgebiet "Fahrzeuge"

Ottenser Hauptstraße 54  
22765 Hamburg, Germany

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E-Mail: [info@bgf.de](mailto:info@bgf.de)

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## 1.7 Design advantages of the Caddy

### 1.7.1 Caddy short wheelbase

- 741 kg pure payload on panel van for all engines apart from natural gas and Blue Motion
- 701 kg pure payload on panel van for natural gas vehicles and 670 kg for Blue Motion
- Up to 712 kg payload on 5-seater Kombi (depending on engine) Caddy KR
- Up to 685 kg payload on 7-seater Kombi (depending on engine) Caddy KR
- Front-wheel drive
- 15" / 16" running gear
- McPherson strut suspension at front, rigid axle with leaf springs at rear
- Up to 3.2 m<sup>2</sup> load capacity
- Loading width 117cm
- Full and level cargo bed, loading sill protection
- Disc brakes at front and rear
- Powerful and frugal range of engines from Golf segment
- Highest towing capacities in vehicle class up to 1500 kg
- Onboard electronics with CAN bus technology
- Speed-dependent, electromechanical and hydraulic-mechanically controlled steering depending on engine

The weights indicated refer to the minimum unladen weight with driver. If standard or custom equipment is installed, the payload is reduced and the unladen weight increased. The unladen weight should be checked on a weighbridge or similar.

### 1.7.2 Caddy long wheelbase

- 813kg load capacity on panel van version for all other engine types
- 807kg pure payload on panel van for 1.9 l/77 kW TDI AG6 engine
- Up to 626 kg payload on 5-seater Kombi (depending on engine) Caddy LR
- Up to 693 kg payload on 7-seater Kombi (depending on engine) Caddy LR
- Front-wheel drive
- 15" / 16" running gear
- McPherson strut suspension at front, rigid axle with leaf springs at rear
- Up to 4.2 m<sup>2</sup> load capacity
- Loading width 117cm
- Full and level cargo bed, loading sill protection
- Disc brakes at front and rear
- Powerful and frugal range of engines from Golf segment
- Highest towing capacities in vehicle class up to 1500 kg
- Onboard electronics with CAN bus technology
- Speed-dependent, hydraulic-mechanically controlled steering

The weights indicated refer to the minimum unladen weight with driver. If standard or custom equipment is installed, the payload is increased and the unladen weight increased. The unladen weight should be checked on a weighbridge or similar.

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