



Nutzfahrzeuge

Body assembly guidelines Volkswagen Nutzfahrzeuge

The LT

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>

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

Data status October 2009

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"

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22765 Hamburg, Germany

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1.7 Delivery Program

Extras: The standard vehicle can be prepared ex-works for the desired attachment. Please, check the attachment-relevant extras before ordering the vehicle. Ordering options and prices are included in the sales documents.

VW Nutzfahrzeuge Aufbauoptionen



Total weight	Wheelbase mm	Box-type delivery van	High-space box-type delivery van	Station wagon	High-space station wagon
2,8 t	3.000				
	3.550				
3,5 t	3.000				
	3.550				
	4.025				
4,6 t	3.550				
	4.025				

Total weight	Wheelbase mm	Flatbed truck and dump truck*	Chassis with cab	Double cab with flatbed truck/ dump truck*	Chassis with double cab
2,8 t	3.000				
	3.550				
3,5 t	3.000				
	3.550				
	4.025				
4,6 t	3.550				
	4.025				

- Exhaust gas pipe, lateral
- End cross-member (omitted at chassis)
- Increase of axle load, front (LT 35)



- Reductions of total weight
- Absorption of external noise
- Exterior mirror (bracket)
- Battery power / 2nd battery
- Flashing indicators, lateral (for wide attachments)
- Damping for high attachments
- Differential lock
- Rpm governor
- Tachograph
- Generator power / 2nd generator
- Rear axle gear ratio
- Coolant compressor
- Auxiliary drive of standard transmission
- Spare-wheel support
- SBBR line (700 mm reserve)
- SBBR lamp preparation
- Stabilizers
- Connection socket 12 V in the seat box
- Telephone/D-Netz [mobile phone network] preparation
- Underrun protection
- Wheel chocks
- Periphery lamps
- Fastening lugs box-type delivery van/station wagon
- VW emblem, rear doors (steering)
- Warning lamp, triangle and first-aid kit
- Heat isolation
- Cowl
- Auxiliary heating
- Auxiliary instruments (switches for electronic installations)

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1.8 The Conceptual Advantages of the New LT

- standard design
 - favourable traction with full payload
 - service-friendly
 - low air resistance
 - good entrance and passing-through possibility
- high load-carrying capacity of the chassis
- highly chargeable torsion-resistant cap-profile frame
- even upper belt
- attachment fixing already installed
- appropriate wheel bases
- selectable rear axle gear ratio for individual operating conditions
- efficient engine offer - environmentally friendly and consumption-oriented
- high trailing load
- easy to write on, large-surface side walls at box-type delivery van
- full standing height in high-space box-type delivery vans (high roof made of steel)
- Volkswagen quality

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