



Driver instruction for transportation of passenger cars and light commercial vehicles not exceeding 4 t on special trucks (Transporters)

1. General instructions

- 1.1 Damage prevention is the primary objective for all companies and personal entrusted with the transportation of vehicles
- 1.2 These guidelines will enable all parties concerned to fulfill the most stringent requirements to the highest level of quality on the loading / unloading and transportation of vehicles.
- 1.3 **Legal requirements and liabilities are not affected by these instructions. This is also applicable to the load securing guidelines to VDI directive 2700, sheet 8.**

2. General rules for driving and loading personnel

2.1 All driving and loading personnel must

- Read **this booklet** carefully and take full consideration of its contents.
- Be experienced in handling the vehicles to be loaded
- Be in possession of a valid driving licence for the vehicles to be loaded.
- Remove working gloves before entering a vehicle.
- Be dressed correctly wearing clean clothing suitable for the handling of vehicles and conforming to the appropriate safety standards (as well as to the standards of the employer's liability insurance association).



Wear clothing with covered buckles, zippers and metal buttons.
Remove key-rings and bottle openers from belts.



Wear shirts with long protective sleeves.
Remove watches, arm- and hand jewellery.
Wear closed shoes without metal brackets.



Wear long trousers – no shorts.
No eating, drinking or smoking is permitted in the vehicles.
All electrical items (i.e. radio, navigation system) must be switched off at all times.



2.2 During the whole loading and unloading process the engine of the truck must be switched off, except for operations with the hydraulic system.

3. Condition of Transporters

3.1 The standard and equipment of the transporters must ensure damage free transportation.

3.2 The following standards are essential:

- Hydraulic systems should not leak oil, the mechanical equipment must be in full working order.
- The surfaces of the loading decks and drive over bars must afford a firm hold and must not have any sharp edges.
- Loading decks on transporters, in excess of 2 meters high, must be fitted with safety ropes on both sides.
- Loading deck struts, rope channels and supports of the safety ropes must be cushioned to secure damage free opening of the vehicle doors.
- Two connecting plates of approx. 50 to 100 cm are standard equipment of every truck.
- The transporters must be equipped with the sufficient wheel chocks and lashing belts with variable belt controller for the complete mixture of vehicles loaded (**see item 8.1 for the correct procedure**).

4. Preparation for loading

- 4.1 Loading decks must be clean and free from lashings or other objects (**i.e. chocks or tools**).
- 4.2 When using auxiliary ramps, an angle of incline of **max. 8°** must not be exceeded in order to avoid damages to front spoilers or other low parts of the vehicle.
- 4.3 Connecting sections between separate loading decks must be properly adjusted.
- 4.4 During the loading process the decks of truck and trailer must be fixed in a suitable position to enable the vehicles to be loaded without causing damage to the underbody or any other part of the vehicle.
- 4.5 **Trailers fitted with air suspension must be let down to the lowest possible position due to the loading instructions of the truck body-builders.**
- 4.6 Any gaps on the loading decks must be covered with plates insofar as they are not used to secure loads.
- 4.7 During transportation the angle of incline of the vehicles which are stacked must not exceed **25°** to horizontal.

5. Hand over and loading process

- 5.1 In line with individual policies and procedures of the respective manufacturer, vehicles have to be inspected prior to acceptance with regard to damage and missing parts / equipment.
- 5.2 It is only permitted to enter or leave the loaded vehicle via the driver's door.
- 5.3 Any damage detected has to be noted on the respective manufacturer damage report and where applicable on the freight document and must be countersigned by the delivering personnel.
- 5.4 Restricted inspection conditions may be noted on the way bill / loading list (snow, dark, etc.)
- 5.5 Any damage detected must be reported and countersigned before a vehicle has been moved. Later reports will not be considered.
- 5.6 The **complete** chassis-number of the windshield-label should be cross checked to the freight documents.
- 5.7 **Speed limits** in the loading areas must be observed.
- 5.8 Abusive driving methods are prohibited.
- 5.9 Never use the vehicles for the transport of passengers.
- 5.10 Drive at a walking speed when loading the vehicles on the truck.

bumper to bumper	10 cm	} use your fist as measurement
underbody to deck	5 cm	
roof to upper deck	10 cm	
distance between Stacked vehicles	10 cm	

6. Avoidance of catalytic converter damages

- 6.1 The rules of the manufacturer's operation manuals concerning **catalytic converter** must be strictly observed.
- 6.2 **Never use the accelerator pedal** to start vehicles with an **engine equipped with fuel-injection**.
- 6.3 Refrain from any attempt to start the engine when partially burned or unburned fuel could pass the catalytic converter.

Specifically:

- Do not attempt to start the engine by towing the vehicle, pushing or rolling it down the loading deck (see item 10 for the correct procedure).
- Never allow the tank to become empty.
- Do not perform frequent cold starts one after the other.
- Do not attempt to repeat starts continuously, do not engage the starter motor continuously and also do not move the vehicle by using the starter motor.
- Do not switch off ignition during driving.

7. Special instructions

7.1 Immediately shut off engine in case of

- a misfiring,
- irregular engine running following a cold start,
- a considerable reduction of engine power,
- unusual malfunction which may indicate a fault in the ignition system.

ATTENTION - call manufacturer's personnel or an authorised dealer for assistance!

- 7.2 **Never** park a vehicle over flammable materials like dry grass, leaves or flammable liquids, the exhaust system continues to produce intense heat after the engine has been switched off.
- 7.3 Clean windows covered with ice or snow by using a plastic ice remover or defroster spray without causing damages to the windows so that the view in all directions is clear.
- 7.4 Never force frozen wipers from the windshield by hand or by switching on the wiper motor (use defroster spray to loosen the wipers).

7.5 Before transportation of the vehicles ensure that:

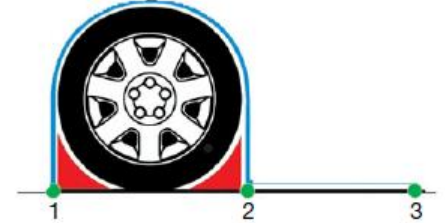
- Doors, windows, sunroofs, bonnet lids and boot lids / tailgates are shut.
- Misplaced protection devices are put in correct position.
- Wipers and other electrical items are switched off.
- All MT cars are secured by shifting transmission to first gear and fully engaging parking brake or Note: vehicles loaded at an angle front facing up "reverse gear" must be selected and handbrake applied on full.
- All AT cars are secured by shifting selector lever to position "P" and fully engaging parking brake. (MT= Manual Transmission, AT = Automatic Transmission)
- Ignition keys are removed from ignition lock and steering lock is blocked.
- All vehicles need to be locked and all the keys secured in the cabin of the truck moving said vehicles.

8. Lashing of vehicles on the loading decks

8.1 Three-point-webbings with variable belt controller in combination **with wheel chocks** must be used.

8.2 Lashing has to proceed as follows:

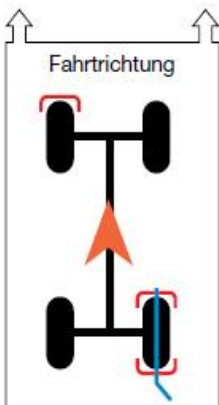
- Anchor the first hook to the transporter deck (lashing bar) in such a way that the webbing runs as vertically as possible.
- Then tie the webbing round the wheel, making sure that the anti-slip devices are positioned correctly.
- Anchor the second hook to the transporter deck (lashing bar) as above.
- Anchor the third hook at an anchor point lying laterally away from the wheel and tighten the webbing using a ratchet.



ATTENTION !!!

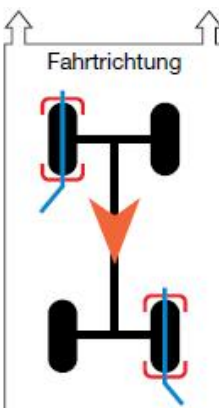
Before leaving the plant/compound and during long distance transportation repeated control of lashing devices is required.

8.3 Securing of vehicles loaded in direction to the traffic without recess or center rest



- One wheel chock in front and one behind either rear wheel.
- Additionally secure this rear wheel by means of a three-point- webbing.
- Diagonally to this wheel place one wheel chock in front of the respective front wheel.

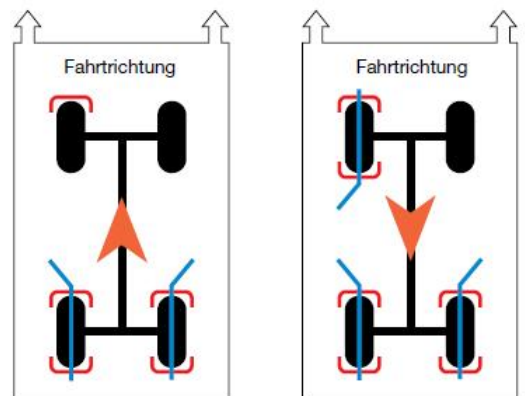
8.4 Securing of vehicles loaded in opposite direction to the traffic without recess or center rest



- One wheel chock in front and one behind either rear wheel.
- Diagonally to this wheel place one wheel chock in front of and one behind the respective front wheel.
- Additionally secure both wheels by means of one three-point-webbing each.

8.5 Additional securing of vehicles loaded rearmost without recess or center rest

The last vehicle loaded behind the rearmost axle of the trailer or in the case of solo vehicles that is loaded behind the rear axle should additionally be secured to the wheels of the rearmost axle by means of two wheel chocks and one lashing strap.



8.6 Securing of vehicles loaded facing forwards and/or backwards and of the last vehicle in the center rest or recess

Both wheels of one axle or both axles of vehicles must rest in the recess or center rest. This loading procedure is a substitute for wheel chocks. Refer to sections 8.3 - 8.5 for all other measures to secure vehicles.

8.7 In case a vehicle cannot be secured with wheel chocks or lashing belts within the protected area, on the top deck, either one of the following must be done:

a) The loading platform shall be lowered to allow performing of this work from the ground,

or

b) the wheels of one axle of the vehicle within the protected area shall be secured by means of two wheel chocks and one webbing on each side.

8.8 If wheel chocks cannot be used for technical reasons, an additional blocked wheel must be secured with a lashing belt.

9. Before unloading of the vehicle the following steps have to be done:

- Release the three-point-webbings
- Remove the wheel chocks
- Start the engine
- Release handbrake

ATTENTION: Engine has to be started before releasing the handbrake because power-steering and servo-assistance are only activated if engine is running.

10. Starting the engine with jump leads

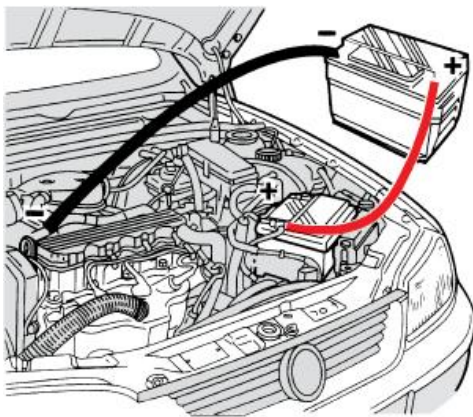
10.1 Make sure that the battery providing the jump start has **the same voltage** as the battery in your car (**12 volt**). Use jump leads of **25 mm diameter** for starting batteries with isolated terminals.

10.2 Always connect leads in the following order:

1. Connect the end of the red jump lead to the positive terminal of the battery providing the jump start (**identified by "+" sign on battery case or terminal**).
2. Connect the other end of this lead to the positive terminal of the discharged battery ("**+**" sign).
3. **Connect the first end of the black jump lead to the negative terminal of the battery providing the start (identified by "-").**
4. Connect the other end of the second jump lead to ground on the other vehicle, e.g. engine block or screw connection in engine suspension.

5. Start the engine.

6. Reverse above sequence exactly when removing the jump leads.



10.3 ATTENTION - any deviation from the a.m. instructions could lead to

- personal injury,
- damage resulting from battery explosion,
- damage to electrical systems in both vehicles.

10.4 Important Instructions

Switching on the vehicles ignition causes high voltage to the whole ignition system - both to the electrical components and to the wiring harness.

Attention!!!

Electronic ignition systems have a very high ignition power! Do not touch the ignition system or any electrical components! This can be very dangerous!

Any unqualified operating of the ignition system is strictly prohibited. Never start the engine while working in the engine compartment.

11. Authorised personnel of the car manufacturers are entitled to inspect trucks and also their loading at any time. In case of incorrect loading manufacturer's personnel are entitled to instruct the drivers to correct the mistake.

12. During weekends, public holidays or night-time a loaded truck should be parked on carrier's protected compound or guarded resting places / service stations.