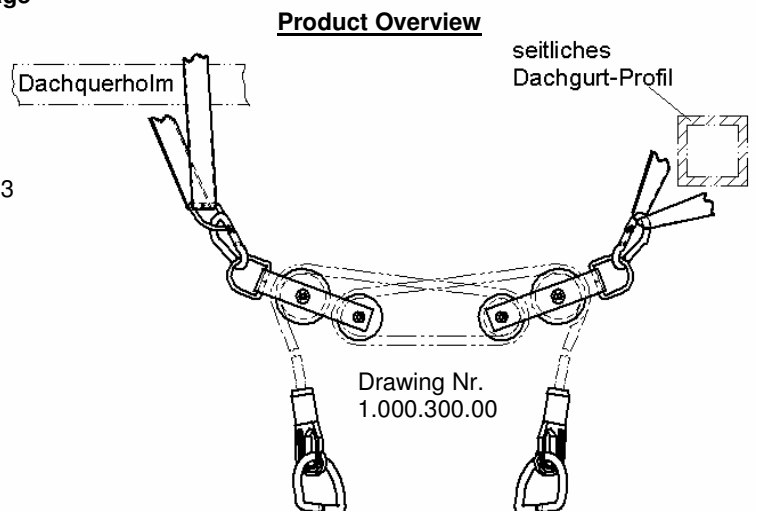


## Installation and Operating Instructions for the HESTAL Gurtlift System 501

These paperworks turns at vehicle engineering business and trained staff. No construction work carried out by layman! In case of uncertainties or questions regarding the installation do not hesitate to contact us.

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## 1. General Information

The HESTAL Gurtlift System provides for easier positioning of the tensioning strap for load restraining.

It results in a significant time reduction for the load restraining process.

The HESTAL Gurtlift System is designed for tensioning straps of 50mm width.

Tensioning straps should be replaced when their cross section is weakened by 10 % (through cuts, rips, places and traces of wear for example). (This is a safety requirement – refer to relevant load restraints standards).

When using edge protectors (tubing or angle pieces for example protect the tensioning strap) it should be ensured that these are positioned on the edges of the load restraining strap.

The Delta-shackle respectively (Illustration 7) of the HESTAL Gurtlift System are to be positioned in such a way that the shackles do not cause any indentations in the loaded goods (damage to paintwork for example).

The HESTAL Gurtlift System is to be used only with the belt in place (belt width 50 mm).

At all times the HESTAL Gurtlift System is to be positioned above the lashing hoops embedded in the vehicle base.

This system is not approved for any applications not described in the Installation and Operating Instructions.

Any modifications to the HESTAL Gurtlift System or deviation from the Installation Instructions negate all and any kinds of liability claims.

## 2. Regulations

The relevant load restraining regulations and guidelines need to be observed at all times.

- Accident prevention regulations „General regulations“ (VBG 1)
- Accident prevention regulations „Vehicles“ (BGV D 29)
- Principles for the checking of vehicles by qualified staff (ZH 1/282.2)
- TÜV information sheets
- German road traffic regulations
- VDI guidelines 2700 „load security on street vehicles“
- Superstructure guidelines of the body builder




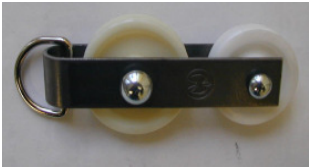




### 3. Installation Instructions

#### 3.1 General

The HESTAL Gurtlift System is attached to the sides of the vehicle in the area of longitudinal roof rail via the attachment strap (Illustration 1) by the manufacturer.

The number and position of the Gurtlift units is determined by the number of pallets the truck and/or trailer is designed for.

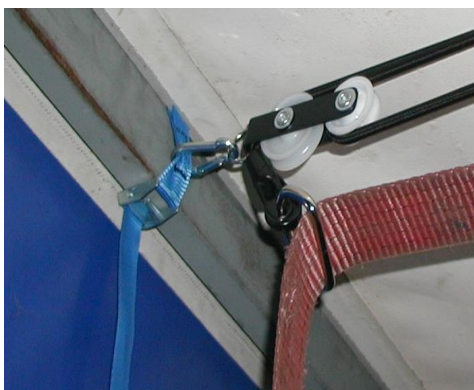
#### 3.2 Product Components

Illustration 1 1.000.300.03	Illustration 2 1.000.300.25	Illustration 3 1.000.300.06	Illustration 4 1.000.300.50
Attachment Strap	D-Shackle D 30 x 4,5	Snap Hook	Deflection Sheave Box, complete
			
Illustration 5 1.000.300.01	Illustration 6 1.000.300.02	Illustration 7 1.000.300.17	Illustration 8 1.000.300.19
Expanding Rope	Protective Snap Hook	Delta Shackle 50 x 8	Hose Clamp Diameter Range 32-50mm
			

#### 3.3 Installation

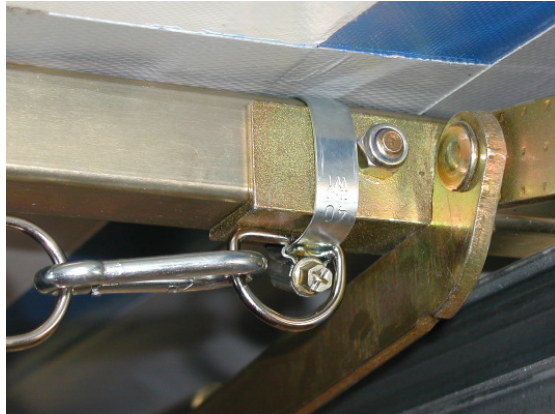
- Unpack the HESTAL Gurtlift System and spread out on a level area (vehicle base for example); now the HESTAL Gurtlift System is to be attached to the longitudinal roof rail with the 25 mm wide attachment strap. The expanding rope is to be uncoiled as illustrated; see product overview on page 1.
- The attachment of the HESTAL Gurtlift System is to be carried out in accordance with the respective roof profile design. Generally, it needs to be ensured that the attachment strap (Illustration 1) is not positioned anywhere near potential areas of shear (sliding roof).

#### 3.4 Attachment Examples



**Illustration 9: Attachment to Longitudinal Roof Rail**

The HESTAL Gurtlift System is attached directly to the longitudinal roof rail via the 25 mm wide attachment strap (Illustration 1). (Do not use the D-shackle (Illustration 2) supplied)! This prevents twisting of the deflection sheave box (Illustration 4) and enables the expanding rope (Illustration 5) to run freely.



**Illustration 10: Attachment to the Transverse Roof Beam in Curtainsider and Sliding Roof Frames**

Subject to the sliding roof and roof profile design, the hose clamp (DIN 3017) supplied (Illustration 8) and the D-shackle D 30x4,5 are to be attached in such a way that the tightening screw of the clamp sits on the underside of the transverse roof beam.

The D-shackle D30x4,5 (Illustration 2) with its flat side is to be pulled under the transverse roof beam too.

The snap hook (Illustration 3) is clipped straight into the D-shackle D30x4,5.

With this type of attachment the attachment strap supplied (Illustration 1) is not used.



**In case the HESTAL Gurtlift System is attached via the 25 mm attachment strap in the area of the sliding roof, a warning sign is to be provided for the detachment of the HESTAL Gurtlift System prior to operating the sliding roof.**

After attachment of the HESTAL Gurtlift-System a tensioning strap for load restraining (width 50 mm) is to be fed through the two Delta shackles 50 x 8 (Illustration 7) on the ends of the protective snap hooks (Illustration 6).

### 3.5 Functional Check

- Clip the load restraining tensioning strap into the corresponding lashing hoops and tension with the ratchet unit until the HESTAL Gurtlift System is completely expanded.
- Release the whole system. The HESTAL Gurtlift System will now pull the captive tensioning strap back into its respective rest position under the vehicle roof.

### 3.6 Important Advice

The expanding rope (Illustration 5) is designed for a maximum load height of 3000 mm.

## 4. Operating Instructions

### 4.1 Functional Description

- The positioning of the tensioning strap in its rest position under the vehicle roof is achieved by multiple deflection of an expanding rope in the lateral roof edges of the vehicle.

### Tensioning

- By pulling down and inserting the tensioning strap into the ratchet unit the HESTAL Gurtlift System is being expanded and the tensioning strap is positioned above the load to be restrained.
- The number and location of the lashing straps required is to be determined by the operator, depending on the type, weight and dimensions of the load, and he is to attach them accordingly. (The friction coefficients of both load and lashings are to be observed).

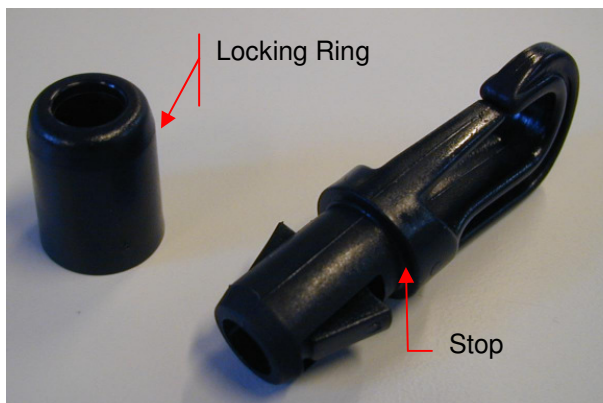


## Release

- After releasing the ratchet the tensioning strap is to be guided upwards slowly. This will prevent the tensioning strap twisting in the Delta shackles.

## 4.2 Repair / Replacement

- In the event of repair or replacement it is particularly important to ensure that the ends of the expanding rope are fully inserted into the protective snap hook opening, right up to the stop.



- Now the locking ring of the snap hook is to be pushed on, right up to the stop.
- If these instructions are ignored a secure connection between these components cannot be guaranteed.
- Should the expanding rope lose some of its elasticity after prolonged use, it may be shortened as follows: Pull away locking ring and remove expanding rope from the snap hook; prior to cutting the rope the cutting area needs to be heated to prevent fraying of the filaments. Re-assemble snap hook as described earlier.

## 4.3 Operation

- If working in a busy traffic situation a suitable safety vest should be worn.

## 4.4 Maintenance

- The HESTAL Gurtlift requires regular maintenance in accordance with its use over a period of time. Checking for free movement, adjustment and replacement of worn components.  
**For replacements only original HESTAL components may be used.**



- **Faulty or worn components need to be replaced without delay with original HESTAL components!**