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Operating instructions

for the HESTAL tarpaulin tensioner
***TensionMaster* IV**

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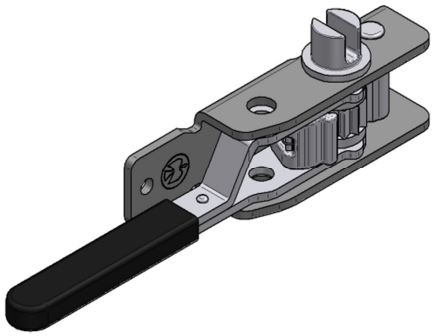

1. General

The HESTAL *TensionMaster* IV is a mechanical device for tensioning and untensioning lateral sliding tarpaulins on commercial vehicles in order to facilitate loading and unloading.
The HESTAL *TensionMaster* IV is available in 3 different housing designs,
each with a squared shaft (left / right) or slotted shaft (left / right) respectively.

2. Regulations

The following regulations and directives must be observed:
DGUV Regulation 1 "Accident Prevention Regulation - Principles of Prevention" (formerly BGV A1)
DGUV Regulation 70 "Vehicles" (formerly BGV D 29)
DGUV Principles 314-002 "Monitoring of Vehicles by Driving Personnel" (formerly BGG 915)
DGUV Principles 314-003 "Inspection of Vehicles by Experts" (formerly BGG 916)
DGUV Rules 109-009 "Vehicle Maintenance" (formerly BGR 157)
StVZO (German Road Traffic Ordinance)
VDI Directive 2700 "Load Securing on Road Vehicles"

3. Technical description

The HESTAL *TensionMaster* IV is used to tension the tarpaulin of a commercial vehicle superstructure by means of a dwell mechanism.
The tarpaulin is tensioned manually using a swivelling hand lever in several single strokes.
The pre-tensioned tarpaulin is automatically secured by a blocking element in each detent position.
The detent position is reached every 30°.
Tension is released from the tarpaulin by shifting the ratchet pawl. A cam keeps the blocking element in the untensioned position, thus allowing the expansion shaft to run free.
It continues to run free until you swivel the hand lever back to the locked position.

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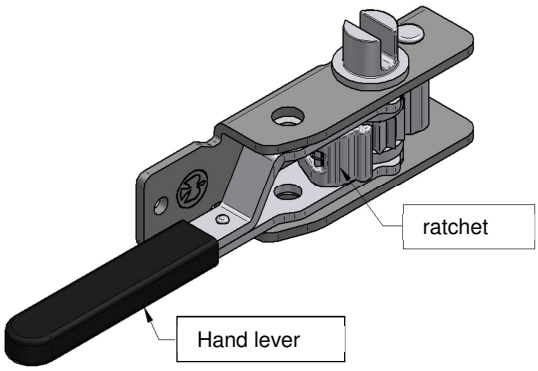
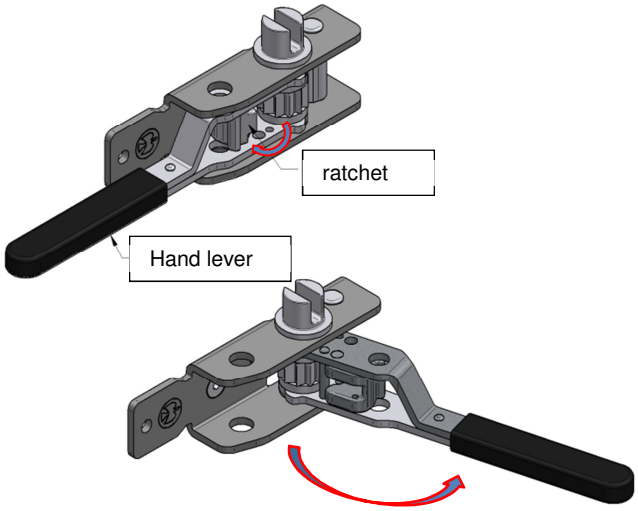
4. Operation / handling (singlehanded operation)

Tensioning: • Grab the hand lever on the handle (the ratchet pawl is swivelled to the front and engages in the gear wheel) • Moving the hand lever back and forth turns the tarpaulin bracing tube and tensions the tarpaulin. • After being tensioned, the hand lever must be placed against the vehicle!	
Untensioning: • Swivel the ratchet pawl to the rear • Press the hand lever forwards up to the stop (this presses the pawl out of the sprocket and the tarpaulin is untensioned. • Pull the hand lever back to the rear and press the ratchet pawl forwards to the sprocket. • The hand lever is now secured again.	

5. Notes on operation

The HESTAL *TensionMaster* IV must be operated by trained personnel only!
(see DGUV Regulation 70 "Vehicles")

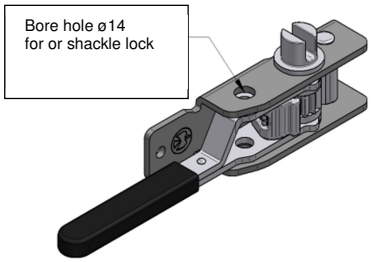
A high-visibility jacket must be worn in moving traffic!

The hand lever of the HESTAL *TensionMaster* IV MUST be closed again after the tarpaulin has been tensioned!

Before each journey, make sure that ...

- ✓ The hand lever of the HESTAL *TensionMaster* IV is closed
- ✓ The tarpaulin closures are properly closed
- ✓ The tarpaulin tensioner must be checked while in driving mode. The tarpaulin may have to be retensioned.

For locking with a shackle lock the marked hole is provided.



6. Maintenance

The HESTAL *TensionMaster* IV requires no maintenance.

The connecting elements must, however, after 500 km and 5000 km as well as every six-month intervals be retightened.

Note: The HESTAL *TensionMaster* IV does not include repair instructions or allow parts to be replaced!

(If required, parts must be replaced by the superstructure manufacturer or an authorised specialist company only! Only HESTAL genuine parts may be used! (see also DGUV Regulation 70 "Vehicles" Sections 56 and 57.))

Defective or worn components must be immediately replaced by HESTAL genuine parts.

7. Important information

The HESTAL *TensionMaster* IV is configured for a maximum torque of Md = 150Nm on the expansion shaft and a max. manual force of Fmax. = 35 daN.

Compliance with the installation instructions will ensure the proper functioning of the HESTAL *TensionMaster* IV.

For reasons of functional, traffic and occupational safety, it is permissible to combine only the HESTAL parts shown here.

When properly installed, the HESTAL *TensionMaster* IV complies with the DGUV Regulation 70 “Vehicles”