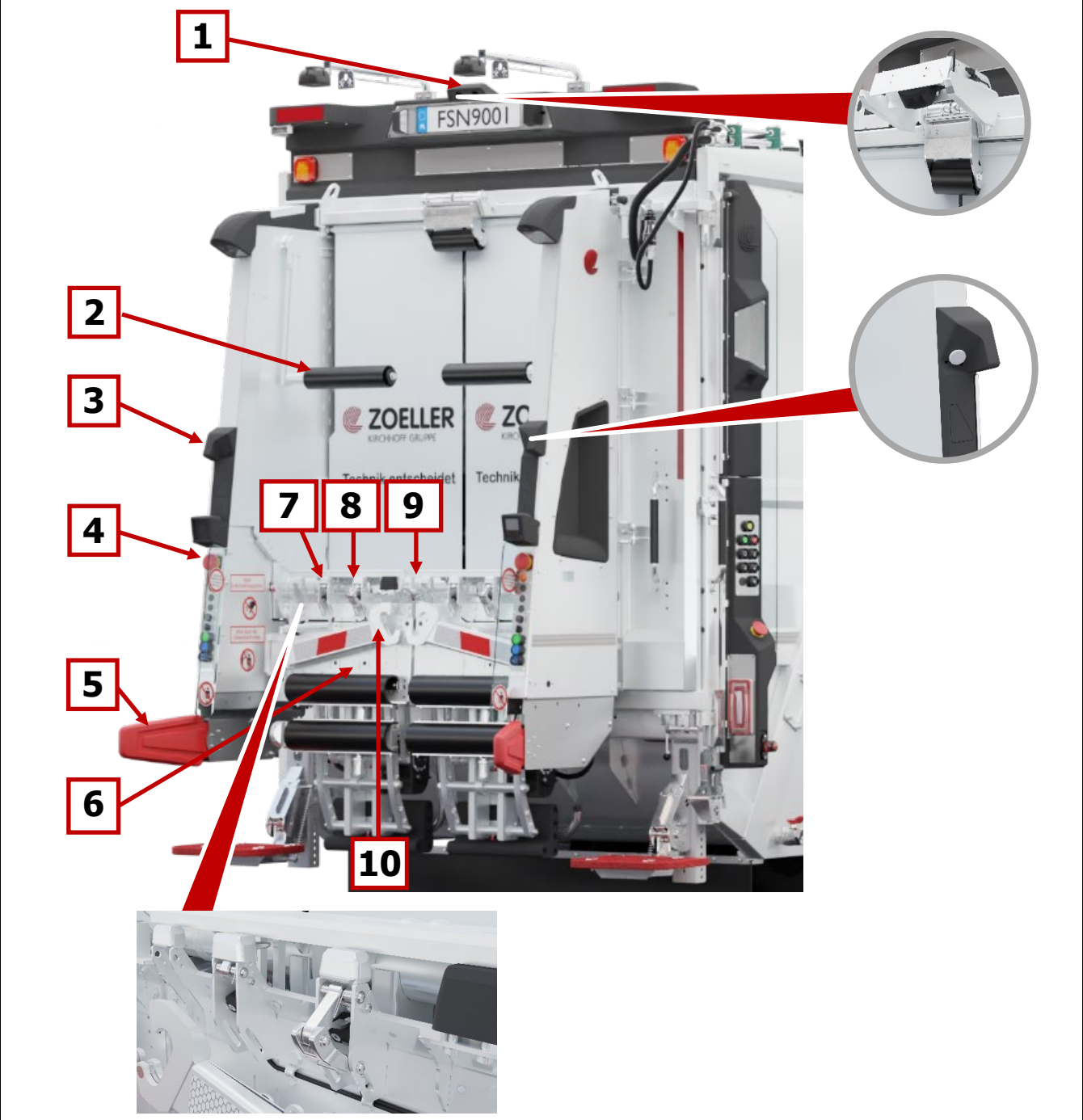


OPERATION ONLY BY INSTRUCTED PERSONNEL!

! WARNING


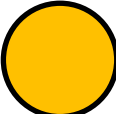
















Risk of crushing due to moving parts!
Do not stay in the danger zone!

1. Component overview





Pos	Designation	Pos	Designation
1	WPS II – LIDAR-Sensor	2	Container stop
3	WPS II - Ultrasonic Sensor	4	EMERG.STOP/control panel EN 1501-5
5	Safety barrier	6	Lifting comb
7	First-signal unit	8	Second-signal unit
9	Lifting comb	10	Folding arms (optional)



Quick guide DELTA 2322

2. Operating controls on the lifter			
	<p>EMERGENCY STOP Entire vehicle stops immediately. An alarm sounds in the cab.</p>		
	<p>INDICATOR FROM Manual operation AT Automatic operational readiness FLAS- Pickup function active HES</p>		
	<p>BIO SELECTOR 0 Tip without shake I Tip and 1x AUTO shake *) II Tip and 2x AUTO shake *) *) adjustable via software parameter</p>		
	<p>SELECTOR SWITCH COMPOUND OPERATION</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;"> 2-wheel/single operation</td> <td style="text-align: center;"> 4-wheel/compound operation</td> </tr> </table>	 2-wheel/single operation	 4-wheel/compound operation
 2-wheel/single operation	 4-wheel/compound operation		
<i>alternative:</i> 	<p>COMPOUND MODE button (illuminated)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>OFF: Both pallet trucks move independently of each other. The pallet truck is lowered to a 2-wheel pick-up height.</p> </td> <td style="width: 50%; vertical-align: top;"> <p>ON: Both pallet trucks are locked together and move synchronously. The pallet trucks are raised to 4-wheel pick-up height.</p> </td> </tr> </table>	<p>OFF: Both pallet trucks move independently of each other. The pallet truck is lowered to a 2-wheel pick-up height.</p>	<p>ON: Both pallet trucks are locked together and move synchronously. The pallet trucks are raised to 4-wheel pick-up height.</p>
<p>OFF: Both pallet trucks move independently of each other. The pallet truck is lowered to a 2-wheel pick-up height.</p>	<p>ON: Both pallet trucks are locked together and move synchronously. The pallet trucks are raised to 4-wheel pick-up height.</p>		
	<p>AUTOMATIC mode button Automatic emptying ON or OFF.</p>		
	<p>LIFTER UP manual button Upward movement of the pallet truck and swivel arm.</p>		
	<p>LIFTER DOWN manual button Downward movement of pallet truck and swivel arm. Button operation in dead man's control.</p>		
OPTIONS			
	<p>TRAVEL-HEIGHT BUTTON Raising the lifting carriages to a safety height Pushing the button a second time causes the lifting carriages to lower again.</p>		
	<p>BUTTON PACKER PLATE - START MANUAL</p>		
	<p>COMMUNICATION button Audible signal in driver's cab.</p>		
	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>BULKY-WASTE COUNTER 0 = OFF Manual mode</p> </td> <td style="width: 50%; vertical-align: top;"> <p>I = ON Both lateral bars of the retention systems are pushed backwards. The automatic functions of the lifter are switched off. At the same time the compaction unit automatically carries out a compaction cycle.</p> </td> </tr> </table>	<p>BULKY-WASTE COUNTER 0 = OFF Manual mode</p>	<p>I = ON Both lateral bars of the retention systems are pushed backwards. The automatic functions of the lifter are switched off. At the same time the compaction unit automatically carries out a compaction cycle.</p>
<p>BULKY-WASTE COUNTER 0 = OFF Manual mode</p>	<p>I = ON Both lateral bars of the retention systems are pushed backwards. The automatic functions of the lifter are switched off. At the same time the compaction unit automatically carries out a compaction cycle.</p>		




3. Operating modes

Manual mode

Dead-man's control, function only with pushed BUTTONS  , lifter stops immediately when button is released!

- ▶ Check freedom of movement!
- ▶ Position the container at the lifting holder.
- ▶ Push **LIFTER UP**  until the container is emptied. By keeping button depressed in the emptying position, BIO-shaking is activated.
- ▶ Push **LIFTER DOWN**  until the container is deposited on the ground.


Semi-automatic mode

- In **semi-automatic mode** emptying is started by
- ▶ pushing the container against the **first-signal unit**. The lifter raises the container. The correct pickup of the container is confirmed by the **second-signal unit** and the lifter remains at a safety height. The control lamps  flash.
 - ▶ pushing **BUTTON**  ▶, the emptying cycle is started and the container lowered again to the safety height.
 - ▶ By pushing the **BUTTON**  a second time the container is deposited back on the ground.

NOTE:

Pushing   switches the automatic mode off and the lifter stops.





Automatic operation

During **automatic lifter operation**, the emptying cycle is started by means of a container being engaged on the first-signal units.  Indicator lights are on continuously. The container is picked up, the correct pickup is confirmed by the **second-signal unit**, then tipped and emptied (with shaking, if required) and deposited back on the ground. If this confirmation does **not** take place the lifter is lowered again.

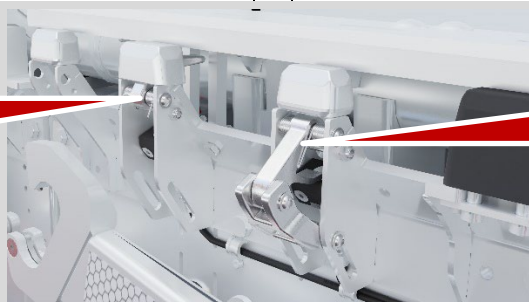
NOTE:

Pushing   switches the automatic function off and the lifter stops.

Pickup function

The pickup function is designed as accessory mode for pick-up of 4-wheeled containers and is switched on by 2x activating **BUTTON AUTOMATIC**  (Control lamps  flash). A 4-wheeled container is picked up automatically by the container receiver and raised to an adjustable safety height after it is pushed against the **lifting comb** thus activating the **first-signal sensors**. As soon as the **second-signal units** confirm the correct container pickup, this automatic function is switched off and the container must be tipped and emptied manually with the **BUTTONS LIFTER UP**  **LIFTER DOWN** .

Second-signal unit



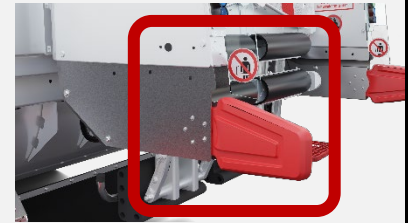
First-signal unit

4. Safety devices

The safety barriers


form a lateral protection to keep all unauthorized persons outside the working area of the lifter. The shearing and crushing areas are covered by the lateral panels to prevent any involuntary ingress into this area. All danger zones of the lifter are marked by warning labels.

The second-signal units are provided with a signal-guard to prevent any involuntary actuation. During manual operation mode, first and second signal unit are inoperative.



Mechanical working-area protection

The working-area protection is equipped with signal-guards. If the signal-guards are touched during the down movement, e.g. by entering the workspace, the automatic function is immediately terminated and the lifter stops.


To restart the lifter, it must be lowered manually by the push buttons .

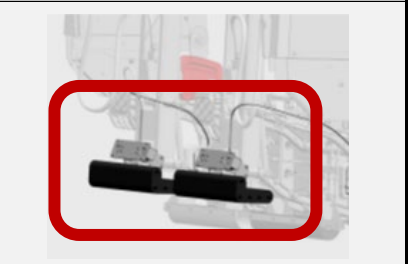


Sensor-controlled working-area protection

The working-area protection is equipped with **ultrasonic sensors**. They detect an approach up to approx. 100 cm.

When a solid or operator is detected in the hazard zone during the down movement, the automatic function is interrupted immediately and the lifter stops.

To restart the lifter, it must be lowered manually by the push buttons .



Worker Protection System (WPS II) (Option)

The Worker Protection System (WPS II) prevents the automatic mode, when the loader is being caught by the lifter or container, or when he is in the rotation range. The WPS II consists of one **LIDAR sensor** and **two ultrasonic sensors**.

In case of hazard detection the automatic function of the corresponding lifter side is switched off.



LIDAR sensor



Ultrasonic sensors

To restart the lifter, it must be lowered manually .

Both lifter sides are controlled separately. In combined mode, WPS II is not active.