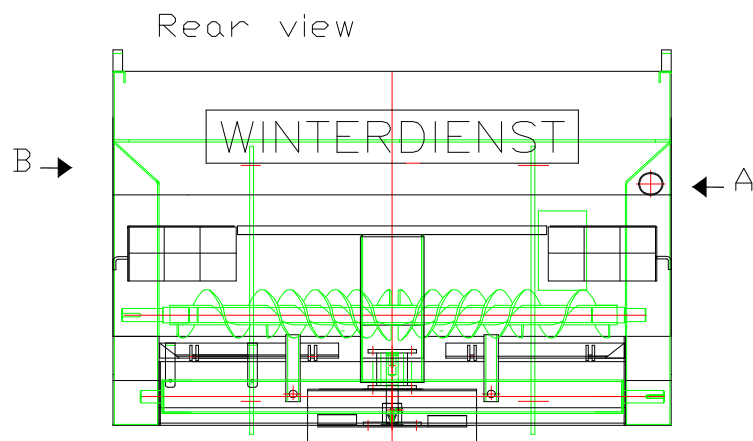




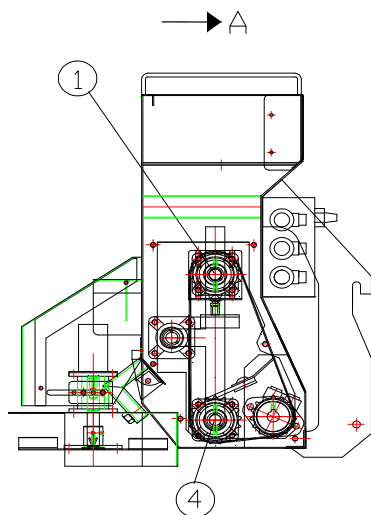
## 10. Technical documentation for Citymaster carrier vehicle

### 10.1 Combination tail-end spreading attachment

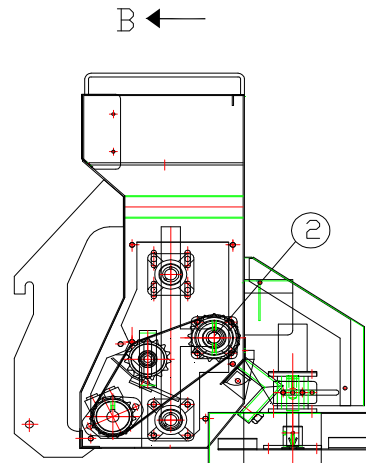
#### 10.1.1 Schematic diagram



Chain transmission – roller-feed spreader



Chain transmission – disk-feed spreader



- ① Agitator shaft
- ② Discharge shaft - screw
- ④ Discharge shaft - flat driving tabs



### 10.1.2 Mounting instructions

- Hang the spreading attachment into the parking device.
- Push the spreading attachment including the parking device against the vehicle, and align.
- Adjust the parking device such that the spreading attachment bracket can be hung into the existing claws.
- Remove the parking device from the spreading attachment.
- Align the spreading attachment on the left and right using the adjusting screws.
- Fasten the spreading attachment beneath the bracket using the existing cotter pins.
- After that, hook up the pneumatic and electrical systems.

existing claws



adjusting screw

Use the bolts included in the supply.



Connect the connector and socket.



### 10.1.3 Hook-up to the onboard hydraulic system

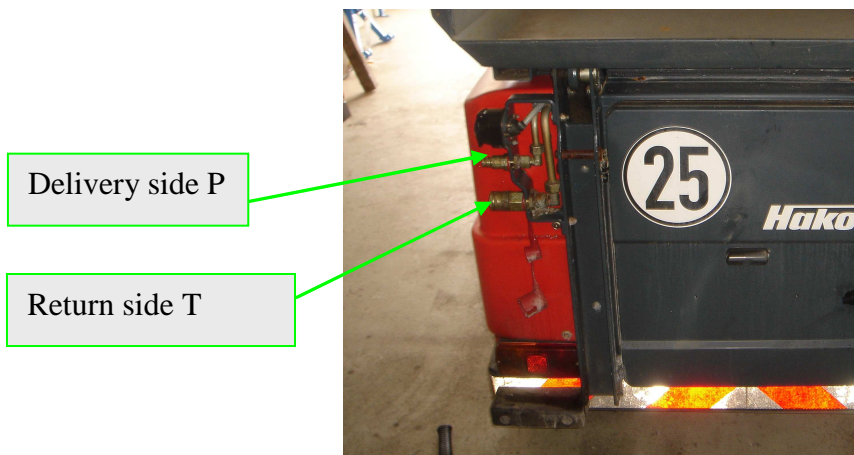
The combination tail-end spreading attachment is supplied with oil via a separate circuit of the onboard hydraulic system.

**Set the flow-control valve to 12 liters / min.**



**Caution!**

**Adjusting an appropriate flow of oil is indispensable as the control unit may cut out failing this.**



**Delivery side**  
**Return side**

→ **marked "P"**  
→ **marked "T"**



**Caution!**

**Be sure not to mix up the marking or the hook-up sequence as this may result in damage to the spreading attachment or in malfunctions respectively.**



### 10.1.5 Maximum filling levels

Grit: upper edge of spreading attachment

Salt: upper edge of spreading attachment

Winter road sand: upper edge of guard



Exceeding these maximum filling levels will result in overloading of the carrier vehicle and may cause damage to the chassis.

### 10.1.5 Switching valve disk-feed / roller-feed spreading attachment

When the spreading attachment is activated the combination tail-end spreading attachment will merely work as a roller-feed spreading attachment only. To use the unit as a disk-feed spreading attachment, actuate the green toggle switch.

#### Installation on the handrail

ON/OFF switch  
disk-feed spreading attachment





### 10.1.6 Installation of the switching valve disk-feed / roller-feed spreading attachment

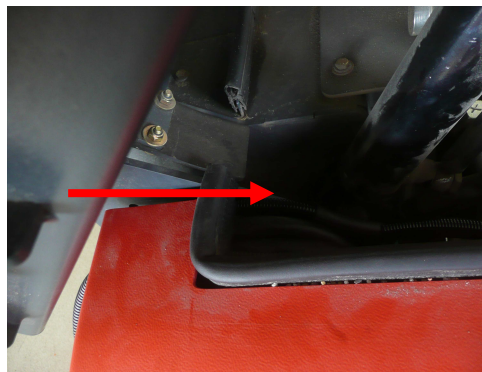
prefabricated set of cables  
(included in the scope of supply)



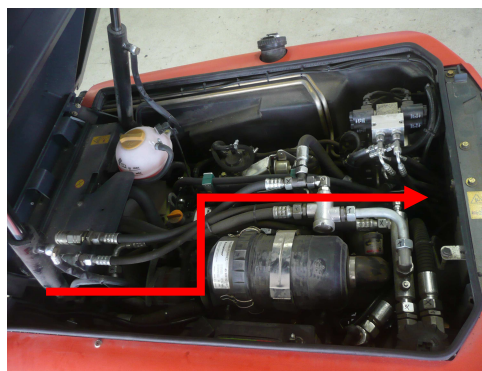
Installing the three-pole socket



Run the cable between the paneling  
and the platform.



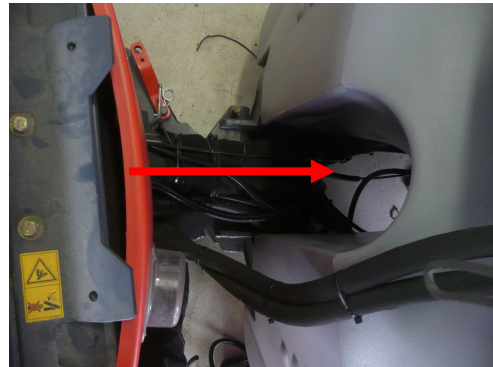
Routing of cables inside the vehicle



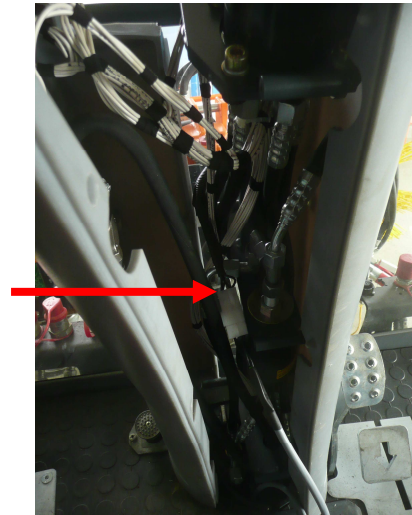




Routing of cables in the bending zone



Merging of cables from the toggle switch cable (mounted on the handrail) to the cable of the three-pole socket in the steering column; cable length to be adjusted as required.



Plug the connector into the multiple-function outlet.



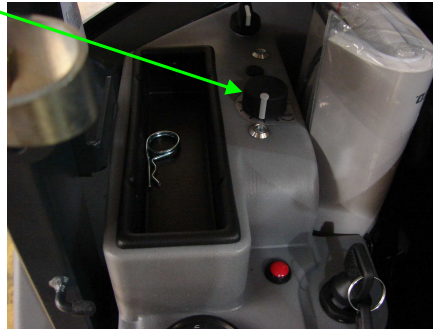
**Functional test!**



### 10.1.7 Functional test



To operate the combination tail-end spreading attachment, it is indispensable to adjust the potentiometer in the vehicle fully up in order to use the full hydraulic volume available.



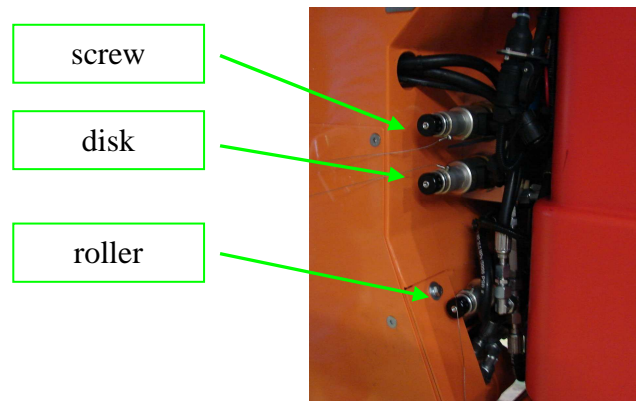
The following adjustments can be made on the hydraulic block of the combination tail-end spreading attachment:

1. to adjust the spreading width for the disk-feed spreader

→ upon opening	→ speed increases	→ wider spreading pattern
→ upon closing	→ speed decreases	→ narrower spreading pattern

2. Spreading flow control for screw shaft and roller:

→ upon opening	→ speed increases	→ high flow rate
→ upon closing	→ speed decreases	→ low flow rate





### 10.1.4 Schematic diagram for installation of the combination tail-end spreading attachment

