



# Operating Instructions

## - Box wagon / Chip box wagon -



# Original Operating Instructions

## Box wagon / Chip box wagon

Type KW/KW-ET/SKW/SKW-ET



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Internal use is permitted for the operator of the machine in connection with the operation of the machine.

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## History

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## 1 Basic information

### 1.1 Information on the operating instructions

- It is necessary to read through the operating instructions carefully before starting any work and store them in the immediate vicinity of the system, accessible to the authorised personnel at all times. The operator of the machine determines who is authorised as a user.
- The operating instructions provide information about:
  - description of the dangers and instructions for safe handling of the machine,
  - the intended use,
  - the structure and description of the components,
  - the functionality of the machine,
  - measures to establish operational readiness and operational safety,
  - the operation of the machine,
  - the maintenance and testing of the machine.
- They are a component of the machine and therefore must be supplied with the machine.
- For better explanation, illustrations may be shown not to scale and differ from the actual model.

### 1.2 Abbreviations, symbols and technical terms



#### Note/tip

The Note symbol is used to identify information on operation of the machine and provides useful tips and recommendations, as well as information for efficient, economical, fault-free operation.

**The following abbreviations are used in these operating instructions:**

Abbreviation	Meaning
BAUER	BAUER Südlohn GmbH
PPE	Personal protective equipment
Container	Box wagon / Chip box wagon

**The following design elements are used in these operating instructions:**

Symbol	Meaning
(1)	numbered action steps
⇒	result after performing action steps
\$	Enumeration
-	Enumeration, subgroup
<i>Italic text</i>	Identifies preconditions that must be met before an action description.

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### Warnings are shown as follows in these operating instructions:

Each signal word is highlighted in a background colour (red, orange or yellow) according to the degree of risk of the hazardous situation.

Warning  
symbol  
opt. PPE  
symbol(s)

#### **SIGNAL WORD!**

##### **Nature, source and cause of a danger**

Consequences of non-compliance

➤ Measures to prevent the danger; prohibitions

## 1.3 Conformity / standards and guidelines

The present machine has been designed and built according to the state of the art and the recognised rules of safety technology. Conformity of the machine with the EU guidelines and standards is confirmed through the CE declaration.

## 1.4 Warranty and liability



### **Note**

Conformity in accordance with the Machinery Directive 2006/42/EC and the CE marking in accordance with the Machinery Directive 2006/42/EC become invalid if unauthorised alterations of the components or their assemblies are made.

The manufacturer assumes no liability for damage due to failure to follow these operating instructions.

## 2 Safety by the machine



### **Note**

The present machine has been designed and built according to the state of the art and the recognised rules of safety technology. Nonetheless, dangers to the life and limb of the user or third parties or negative effects on the machine or other property can occur during use.

## 2.1 Definitions

### 2.1.1 Warning

A warning is used to warn of a situation that can lead to injury or death.

### 2.1.2 Personal protective equipment (PPE)

If personal protective equipment (PPE) is required to be worn, this is indicated through additional symbols in the warnings of these operating instructions and the product safety labels/safety signs on the machine.

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### 2.2 Warnings, symbols and markings

#### 2.2.1 Understand warnings



#### **DANGER!**

... refers to a dangerous situation with a high degree of risk that will lead to death or serious injury if not prevented.



#### **WARNING!**

... refers to a dangerous situation with a medium degree of risk that could lead to death or serious injury if not prevented.



#### **CAUTION!**

... refers to a dangerous situation with a low degree of risk that could lead to slight or moderate injury if not prevented.



#### **ATTENTION**

... refers to a possibly dangerous situation that can lead to property damage if not prevented.

#### 2.2.2 Understand warning symbols

The following symbols can be used in the operating instructions according to the type of danger:



General warning of danger!



Warning: suspended load!



Warning: crushing hazard!



Warning: hand injury!

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**Warning: obstacles on the floor!**

### 2.2.3 Personal protective equipment symbols

The following symbols can be used in the operating instructions according to the area of use:



**Wear helmet!**



**Wear hearing protection!**



**Use hand protection!**



**Wear safety shoes!**

### 2.2.4 Other markings



**Note attachment points!**

## 2.3 Working safely with the machine

The following section “Basic warnings and safety notes” deals with all warnings and safety notes for all stages of the machine’s life cycle. Warnings that are associated directly with an activity are an exception to this.

### 2.3.1 Basic warnings and safety notes

Local accident prevention regulations must be applied to all work on the machine.

Persons involved with the machine must be older than 18 years of age and familiar with the functionality of the machine and the dangers arising from the machine.

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### **DANGER!**

#### **Risk of fatal injury and various risks of injury**

Besides the safety notes in these operating instructions, the safety notes in the operating instructions of the supplier must be observed!



### **DANGER!**

#### **Unauthorised alterations of the Box wagon / Chip box wagon can endanger safe operation!**

#### **This will lead to risk of fatal injury or various risks of injury!**

Making unauthorised alterations to the machine such as the following without permission of BAUER is prohibited:

- Design changes
- Modifications of the protective/safety equipment
- Changing operating materials



### **WARNING!**

#### **Box wagon / Chip box wagon stacked on top of each other can tip over!**

Risk of fatal injury and crushing hazard due to containers tipping over.

- The containers must not be stacked.



### **WARNING!**

#### **Insufficient lighting or visibility.**

Danger of various types of injury.

- The operator is responsible for sufficient lighting in the working and transport areas!
- Operation of the container with insufficient lighting or visibility (fog) is prohibited.



### **WARNING!**

**For additional purchased components, the manufacturer's indications must be observed!**



### **CAUTION!**

#### **Risk of injury due to slipping, tripping and falling!**

- Do not leave any materials or tools lying on walkways or driveways.
- Immediately absorb/remove oil and other materials that encourage slipping in walkway areas; use oil binding agents.

### 2.3.2 Recognise safety technology protective equipment

On the basis of the risk assessment of the machine, a safety chain is integrated in order to ensure safe work with the machine.



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### **⚠ DANGER!**

#### **Unintentional falling/toppling of the Box wagon / Chip box wagon!**

Various risks of injury due to material tipping out/toppling container.

- Always connect the fastening chain to the carrier before lifting the container.
- Remove the locking ring just before the tipping process.

**Type KW-ET**



**Type SKW-ET**



**Fig. 2-1: Safety chain on the container**

### **2.3.3**

#### **Signage on the machine**

Warning symbols/product safety labels are attached to the danger points of the machine according to the following overview.

**Type KW-ET**



**Type SKW-ET**



**Fig. 2-2: Position of the warning symbols/product safety labels**

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### 3 Description of the container

#### 3.1 Intended use

The Box wagon / Chip box wagon is exclusively for gathering loose materials in a container. A handle is provided for manual transport and unloading.

In the -ET version, the container has fork pockets, which are intended for transport with a ground-level transport vehicle (forklift).

##### **Optional accessories:**

The single-side opening cover acts to protect against ingress by foreign substances and the release of contained goods during transport.

Containers with a drainage tap are intended for collecting wet chips, to enable defined drainage of the collected liquid.

Containers with crane lugs are designed for transport by crane.

The Box wagon / Chip box wagon is to be used exclusively within the performance limits listed in section 3.5 "Technical data".

#### 3.2 Improper use

Improper use includes in particular:

- Any use other than the use of the machine described as "Intended use" in sec. 3.1 and further sections of these operating instructions without written permission of the manufacturer.
- Use, installation, operation, maintenance or repair other than as described.
- Work performed by unqualified personnel.
- Use of unapproved, inappropriate accessories.
- Failure to follow safety and operating instructions, occupational safety and accident prevention regulations or applicable statutory regulations.
- Failure to eliminate faults in a timely fashion that could negatively impact safety.
- Use of parts other than the original spare parts or accessory items.
- Operating the machine with incomplete safety equipment.
- Operation with a forklift or the like as a "lifting platform".
- Transport of persons in the Box wagon / Chip box wagon.
- Use of the container in its tilted state as a "shovel".
- Operation of the container in potentially explosive areas.

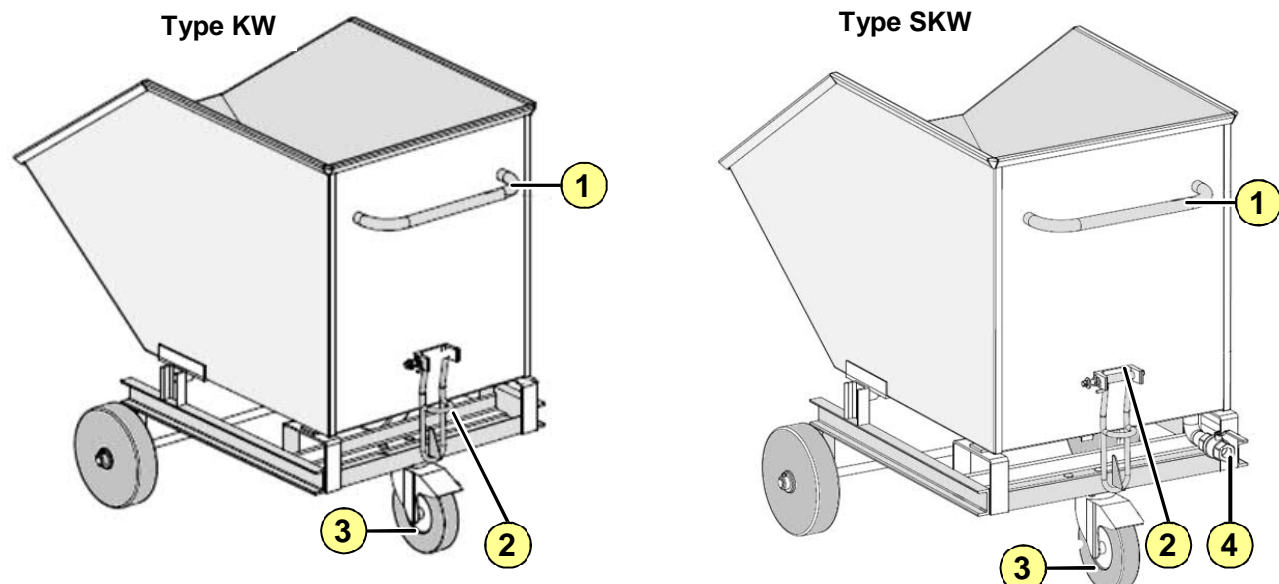
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### 3.3 Structure, function and operating modes

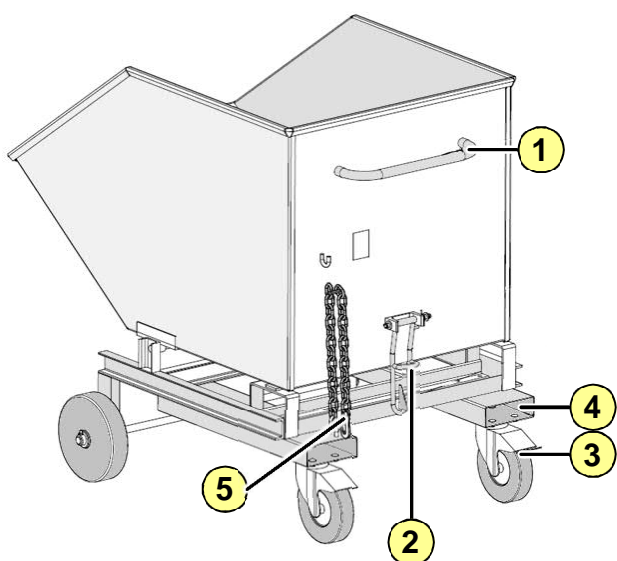
#### 3.3.1 Overview



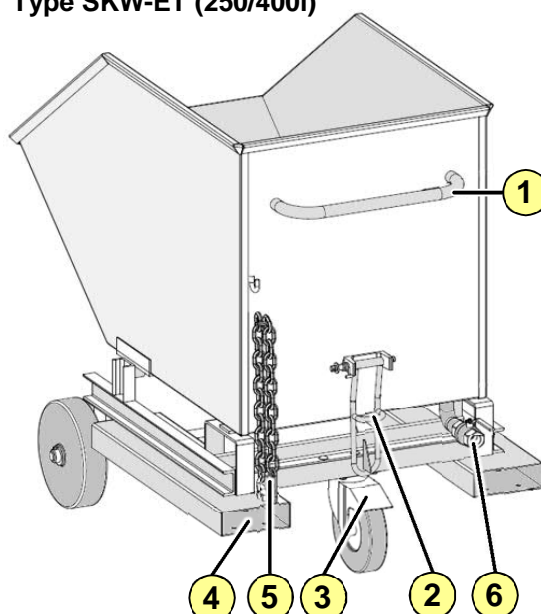
**Fig. 3-1: Box wagon / Chip box wagon assemblies**

Item	Description
1	Sliding handle
2	Safety catch
3	Caster with lock (250 and 400 l), 2 casters (600 and 1000 l), of which 1x with lock
4	Drain cock

#### Type KW-ET (600/1000l)



#### Type SKW-ET (250/400l)



**Fig. 3-2: Box wagon / Chip box wagon-ET assemblies**

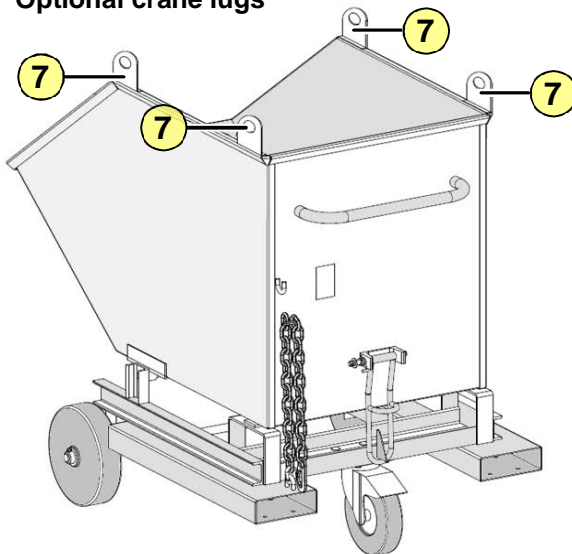
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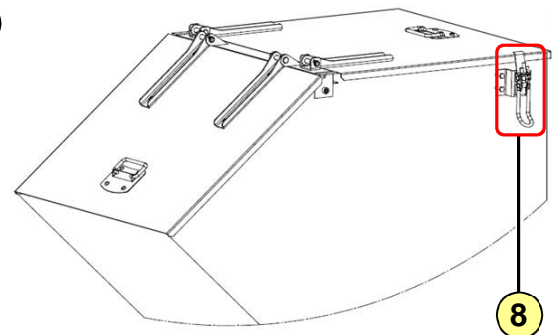


Item	Description
1	Sliding handle
2	Safety catch
3	Caster with lock (250 and 400 l), 2 casters (600 and 1000 l) of which 1x with lock
4	Fork pocket
5	Fastening chain with carabiner
6	Drain cock

**Optional crane lugs**



**Optional cover**



**Fig. 3-3: Optional assemblies**

Item	Description
7	Crane lugs (4x)
8	Clamp fastener (optional cover)

### 3.3.2 Operating modes

The following operating modes are defined:

Operating mode	Description
Loading	Filling with material; the container stands on the floor
Transport	Transporting and emptying the container

### 3.4 Operating materials and media supply

Operating materials and media such as electricity, hydraulic or pneumatic power supply are not necessary for operation.

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### 3.5 Technical data

#### 3.5.1 Box wagon KW/KW-ET

Dimensions	Type	KW 250	KW 400	KW 600	KW 1000
Length [mm]		1113	1317	1391	1420
Width [mm]		820	900	1070	1340
Height [mm]		989	1089	1158	1228
Volume [l]		250	400	600	1000
Weight					
Tare weight, painted / galvanised [kg]		62 / 67	76 / 82	123 / 133	149 / 160
Load-bearing capacity [kg]		300			
Environmental conditions					
Permissible ambient temperature		-20°C to max. 40°C			

Dimensions	Type	KW-ET 250	KW-ET 400	KW-ET 600	KW-ET 1000
Length [mm]		1113	1317	1391	1420
Width [mm]		820	900	1070	1340
Height [mm]		989	1089	1218	1288
Volume [l]		250	400	600	1000
Weight					
Tare weight, painted / galvanised [kg]		75 / 81	91 / 98	139 / 150	164 / 177
Load-bearing capacity [kg]		300			
Environmental conditions					
Permissible ambient temperature		-20°C to max. 40°C			

#### 3.5.2 Chip box wagon SKW/SKW-ET

Dimensions	Type	SKW 250	SKW 400	SKW 600	SKW 1000
Length [mm]		1113	1317	1391	1420
Width [mm]		820	900	1070	1340
Height [mm]		989	1089	1158	1228
Volume [l]		250	400	600	1000
Weight					
Tare weight, painted / galvanised [kg]		64 / 69	78 / 84	125 / 135	151 / 163
Load-bearing capacity [kg]		300			
Environmental conditions					
Permissible ambient temperature		-20°C to max. 40°C			

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Dimensions	Type	SKW-ET 250	SKW-ET 400	SKW-ET 600	SKW-ET 1000
Length [mm]		1113	1317	1391	1420
Width [mm]		820	900	1070	1340
Height [mm]		989	1089	1218	1288
Volume [l]		250	400	600	1000
Weight					
Tare weight, painted / galvanised [kg]		77 / 83	93 / 101	141 / 152	167 / 180
Load-bearing capacity [kg]		300			
Environmental conditions					
Permissible ambient temperature		-20°C to max. 40°C			

### 3.6 Machine marking



#### Note

The year of manufacture and the manufacturer's number can be found in the type plate of the Box wagon / Chip box wagon. This data is not noted in the operating instructions.

The manufacturer's number is listed in the order.

Typ	<input style="width: 100%;" type="text"/>	ESP	<input style="width: 100%;" type="text"/>
Herstell-Nr.	<input style="width: 100%;" type="text"/>	LSP	<input style="width: 100%;" type="text"/>
Baujahr	<input style="width: 100%;" type="text"/>	Vorbaumaß	<input style="width: 100%;" type="text"/>
Inhalt	<input style="width: 100%;" type="text"/>	stapelbar	<input style="width: 100%;" type="text"/>
Eigengewicht	<input style="width: 100%;" type="text"/>	hydr. Druck min.	<input style="width: 100%;" type="text"/>
Tragfähigkeit	<input style="width: 100%;" type="text"/>	max.	<input style="width: 100%;" type="text"/>

Achtung: Tragfähigkeit der Kombination von Flurförderzeug und Anbaugerät einhalten!

**Fig. 3-4: Box wagon / Chip box wagon type plate**

## 4 Setup and commissioning

The container is delivered in completely assembled form, is ready for operation without special commissioning and can be transported with the specified lifting equipment (forklift, ground-level transport vehicle).



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Before initial use, the operator checks whether the container corresponds to the model ordered and that the scope of delivery is complete. A qualified person must perform a visual inspection as part of commissioning.

## 5 Operation

### 5.1 Safety notes



#### **DANGER!**

##### **Persons in the transport and movement area of the container and forklift!**

Risk of fatal injury and crushing hazard when transporting and tilting the container and due to the material being dumped.

- Never step underneath the raised container!
- Exercise particular caution when driving backwards.
- Only move the container under direct visual supervision, even when driving backwards; the driving area must be completely visible!
- If unobstructed visibility is not possible, have a second person located outside the danger zone provide guidance.
- Before dumping, check whether it is possible to dump without danger and ensure that persons maintain a sufficient safe distance.
- Trigger the tilting operation ONLY with the pulling equipment provided for this purpose.



#### **DANGER!**

##### **Use of prohibited lifting equipment may cause container to fall!**

Risk of fatal injury and crushing hazard in the movement area of the container.

- Crane transport is only allowed if the container is equipped with crane lugs.
- For crane transport, only use permissible, undamaged lifting equipment and accessories with sufficient load-bearing capacity.
- For transport with a forklift, the forks must be inserted completely into the fork pockets.



#### **DANGER!**

##### **Transport of persons in the Box wagon / Chip box wagon!**

Risk of fatal injury due to crashing and being hurled from the container.

- Transporting persons in the container is prohibited.



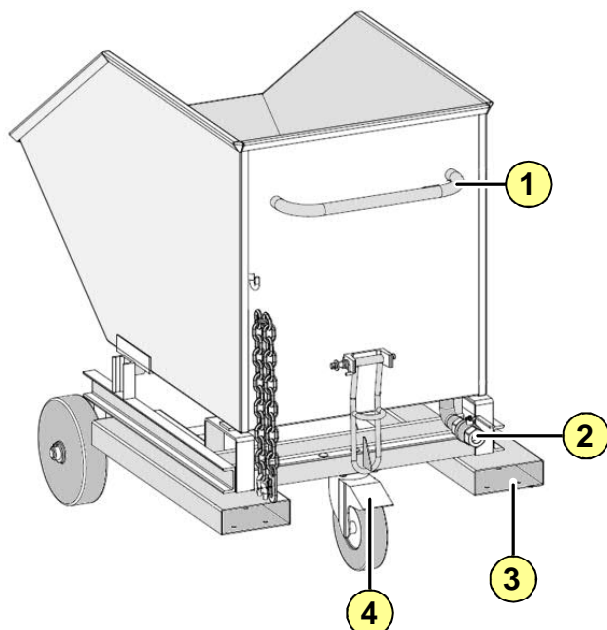
#### **WARNING!**

##### **Permissible load-bearing capacity of the forklift and bearing surface is exceeded!**

Risk of fatal injury and crushing hazard due to container and forklift tipping over.

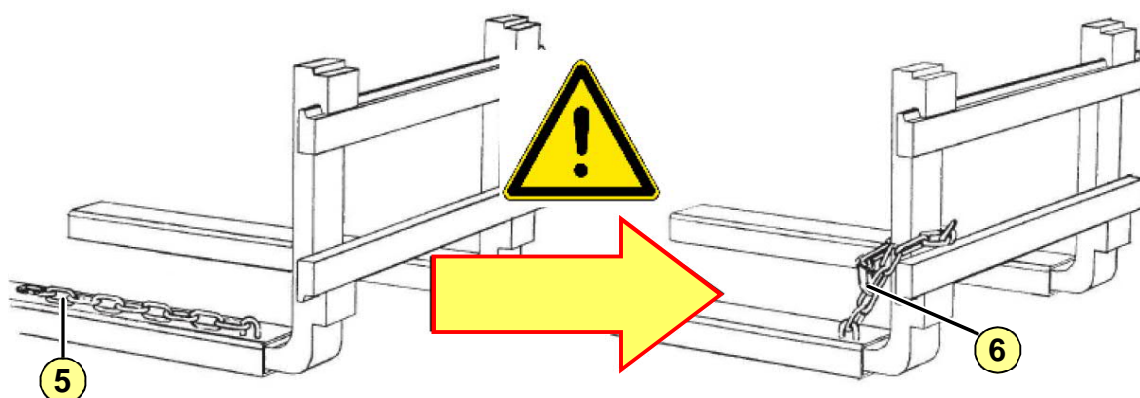
- Observe the permissible load-bearing capacity of the forklift.
- The operator must ensure the load-bearing capacity of the bearing surface at the placement location and on the transport routes!
- Take the slope of the bearing surface into account during transport and placement.

### 5.2 Operation with a forklift (KW-ET/SKW-ET)



**Fig. 5-1: Operation of Box wagon / Chip box wagon**

- (1) Box wagon / Chip box wagon: Before transport, open the drain cock (2) in a timely fashion and allow the liquid to drain into a receptacle. Reclose the drain cock (2) before the start of transport.
- (2) Activate the caster lock (4).
- (3) Align mast of forklift vertically.
- (4) Adjust forklift forks to match the distance between the fork pockets (3).
- (5) Drive the forks up to the end of the provided fork pockets (3) of the frame.



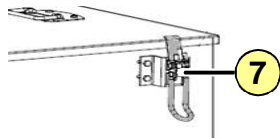
**Fig. 5-2: Operation of Box wagon / Chip box wagon**

- (6) Place the fastening chain (5) of the container around the fork carriage/back of the fork.
- (7) Hook the carabiner (6) into a link of the chain in order to secure the fastening chain (5).



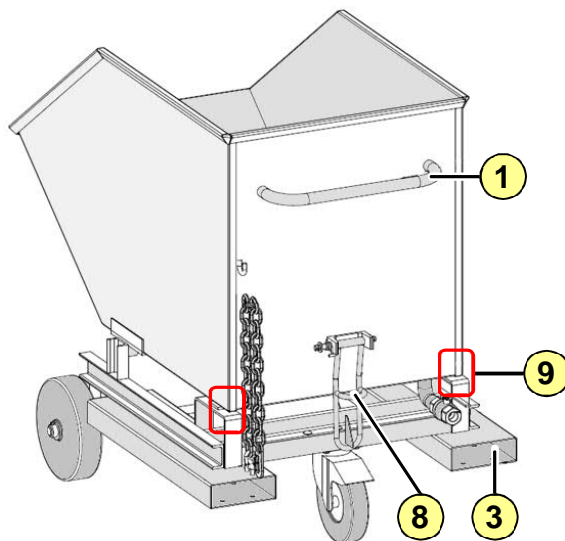
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**Fig. 5-3: Secure cover**

- (8) In case of containers with a cover: Open the front cover part and secure it with the clamp fastener (6).
- (9) Lift the container with the mast of the forklift and drive to the location of use.
- (10) Lift the container to the desired height.



**Fig. 5-4: Operation of Box wagon / Chip box wagon**

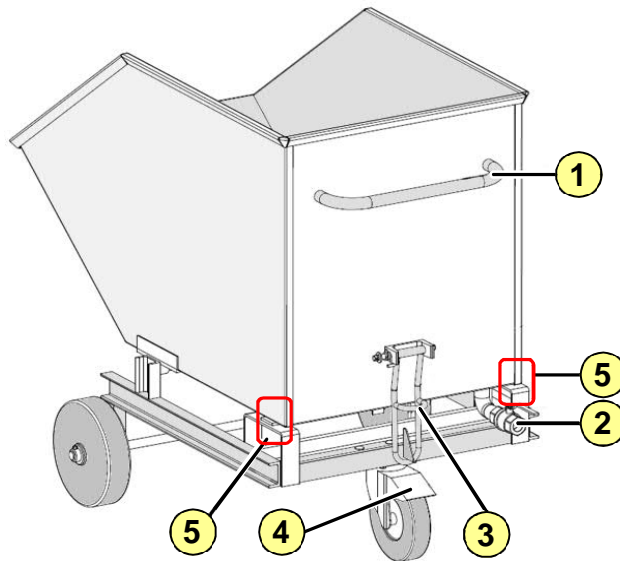
- (11) Secure the container with one hand on the sliding handle (1), release the safety catch (8) by hand and tilt the container.
- (12) Draw the container back manually by the sliding handle (1) until it latches into the base position again.  
**WARNING:** Risk of crushing body parts! Do not bring body parts into the area (9) between the container and support.
- (13) Lift the container and drive back to its set-down place, put the container down.  
**ATTENTION:** Only place container on level surface. On a sloped surface, there is a danger of the container slipping or falling over.
- (14) Open the carabiner (6) of the fastening chain (5), remove the chain from the forklift and hook the carabiner back into a link of the chain.
- (15) Drive the forklift backwards until the fork pockets (3) release the forks.
- (16) Activate the caster lock (4).

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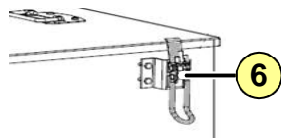


### 5.3 Manual operation of Box wagon / Chip box wagon (KW/SKW)



**Fig. 5-1: Operation of Box wagon / Chip box wagon**

- (1) Box wagon / Chip box wagon: Before transport, open the drain cock (2) in a timely fashion and allow the liquid to drain into a receptacle. Reclose the drain cock (2) before the start of transport.
- (2) Drive container by the sliding handle (1) to the desired location of use.
- (3) Activate the caster lock (4).



**Fig. 5-2: Secure cover**

- (4) In case of containers with a cover: Open the front cover part and secure it with the clamp fastener (6).
- (5) Secure the container with one hand on the sliding handle (1), release the safety catch (3) by hand and tilt the container.  
**WARNING: Risk of crushing the hands!**
- (6) Draw the container back manually by the sliding handle (1) until it latches into the base position again.  
**WARNING: Risk of crushing body parts! Do not bring body parts into the area (5) between the container and support.**
- (7) Release the caster lock (4).
- (8) Drive container back by the sliding handle (1) to its set-down place.
- (9) Activate the caster lock (4).

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### 5.4 Crane transport Box wagon / Chip box wagon

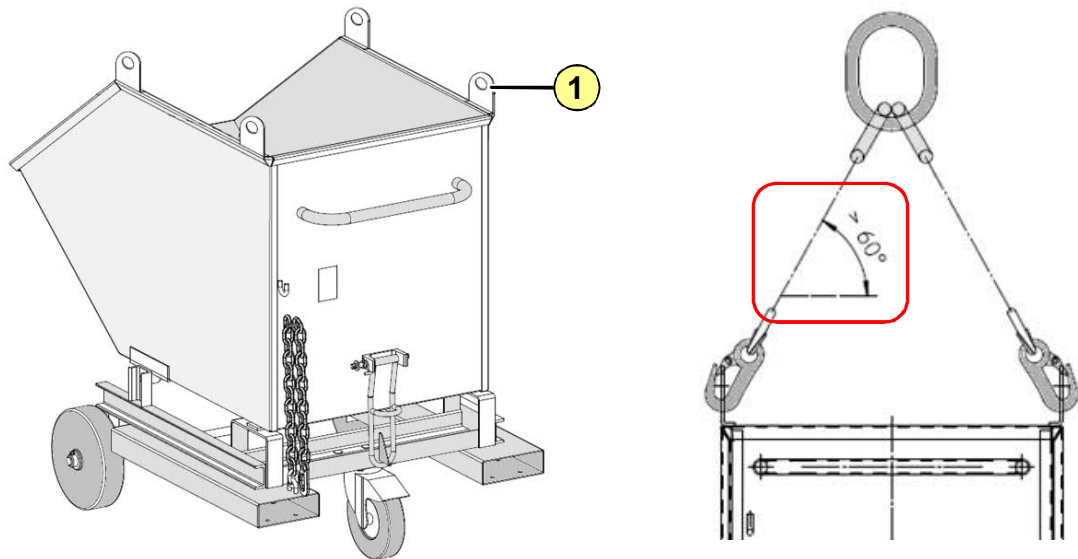


Fig. 5-1: Crane transport Box wagon / Chip box wagon



#### Note

When transporting the Box wagon / Chip box wagon by the crane lugs (1), make sure the suspension cables do not undershoot an angle of  $60^\circ$  to the horizontal.

## 6 Troubleshooting and fault elimination

### 6.1 Safety



#### ⚠ WARNING!

**Improper fault elimination can lead to serious personal injury or property damage.**

- Ensure sufficient free space for assembly before starting the work.
- Ensure order and cleanliness at the assembly location! Loose components and tools in piles or left lying around are sources of accidents.
- If components have been removed, ensure correct assembly, reattach all fasteners and observe bolt tightening torques.

### 6.2 Characteristic faults and elimination of them by the operator

After unusual incidents, the Box wagon / Chip box wagon must be visually inspected by a qualified person, even outside of the specified inspection periods.

The Box wagon / Chip box wagon must be checked for mechanical damage, and the supervisor must be informed if applicable.

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## 7 Servicing

### 7.1 Safety



#### ⚠ WARNING!

**Servicing and repair work performed improperly can lead to various risks of injury!**

- Have repair work performed only by authorised personnel.
- Use specified spare parts.
- Exercise particular caution when protective equipment is deactivated.

### 7.2 Maintenance

#### 7.2.1 Maintenance plan and work (operator)

Any parts that have become defective and must be replaced during maintenance can be found on the assembly drawing.

##### Inspection and maintenance checklist

Frequency	Object	Activity
Daily	Entire container	Check for wear and defects of the container Verify proper function
Daily	Fastening chain, carabiner	Verify presence and completeness and check for defects
Monthly	Entire container	Check for wear, permanent deformation and corrosion that negatively impacts the function or load-bearing capacity

#### 7.2.2 Maintenance plan and work (specialist personnel)

The following maintenance work must only be performed by specialist personnel of BAUER or an authority commissioned by BAUER.

Object	Activity
Entire container	Inspection by qualified person (in accordance with BetrSich [Industrial Safety Ordinance] sec. 10 and 11)*
Safety equipment	Inspection by qualified person

\*All inspections must be documented. Forklift attachments with identified defects must be de-commissioned immediately.

### 7.3 Repair

Repairs of the Box wagon / Chip box wagon must be performed exclusively by the manufacturer or authorities commissioned by it.

Only original spare parts must be used.

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### 8 Decommissioning, disassembly and disposal

No special requirements on decommissioning, disassembly and disposal exist.

### 9 Spare parts list



#### Ordering spare parts:

Bauer GmbH  
Eichendorffstr. 62  
D-46354 Südlohn  
Tel.: +49 2862 709 – 0  
Fax: +49 2862 709 – 156  
Email: [info@bauer-suedlohn.de](mailto:info@bauer-suedlohn.de)

All the information you need for ordering spare parts can be found in the spare parts list. To process your order quickly, we need the following information:

- our spare part item number
- our spare part item name
- order quantity
- name of the container, manufacturing number and year of manufacture

### 10 Appendix

#### 10.1 Declaration of conformity

The declaration of conformity is included in the delivery in the machine documentation.