



Operating Instructions



- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -

Original Operating Instructions

Traverse

Type BST, BST-H, BST-U, BST-U-H, BKT



BAUER Südlohn GmbH
Eichendorffstr. 62
D-46354 Südlohn
Tel.: +49 2862 709 – 0
Fax: +49 2862 709 – 156
Email: info@bauer-suedlohn.de

www.bauer-suedlohn.de
www.geotainer.com

Operating Instructions

- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -



Copyright

The operating instructions are protected by copyright for BAUER Südlohn GmbH. They are intended for maintenance and operating personnel. The text, images and drawings of a technical nature they contain may not be

- duplicated,
- distributed,
- used without authorisation for other purposes or shared with others, either in full or in part.

Any further use requires the prior written permission of BAUER Südlohn GmbH. Section 106 of the German Copyright Act (UrhG – Gesetz über Urheberrecht und verwandte Schutzrechte) applies in cases of violation. All misuse is punishable.

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

© Bauer GmbH 2020

History

1.1	12/02/2020	2.Customer version	BKL
1.0	28/01/2020	Customer version	BKL, cesitec GmbH, Bochumer Str. 217, 45886 Gelsenkirchen, Tel.: 0209 15519 104
Version	Date	Reason for/scope of the revision	Person responsible

Operating Instructions

- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -



Table of contents

	Page
1 Basic information.....	4
1.1 Information on the operating instructions.....	4
1.2 Abbreviations, symbols and technical terms.....	4
1.3 Conformity / standards and guidelines.....	5
1.4 Warranty and liability.....	5
2 Safety at the machine	5
2.1 Definitions.....	5
2.2 Warnings, symbols and markings.....	6
2.3 Working safely with the machine	7
3 Description of the Traverse type BST, BST-H, BST-U, BST-U-H, BKT.....	11
3.1 Intended use.....	11
3.2 Improper use	12
3.3 Structure Traverse type BST, BST-H, BST-U, BST-U-H, BKT	13
3.4 Technical data and load tables.....	17
3.5 Calculation.....	19
4 Setup and commissioning.....	19
5 Operation.....	20
5.1 Safety information.....	20
5.2 Operation of the Traverse type BST, BST-U and BKT with a forklift truck	21
5.3 Operation of the Traverse type BST-H, BST-U-H with a forklift truck.....	23
5.4 Operation of the Traverse type BKT with a crane	25
6 Troubleshooting and fault elimination.....	28
7 Maintenance.....	28
7.1 Safety.....	28
7.2 Servicing.....	28
7.3 Repair.....	29
8 Decommissioning, disassembly and disposal	30
9 Spare parts list.....	30
10 Annex	30
10.1 Declaration of conformity	30

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 load handling device determines who is authorised as a user.
- The operating instructions provide information about:
 - description of the dangers and instructions for safe handling of the LAM,
 - the intended use of the LAM,
 - the structure and description,
 - the mode of operation of the LAM,
 - measures to establish operational readiness and operational safety,
 - operation of the LAM,
 - maintenance and testing of the LAM.
- 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

The Note symbol is used to identify information on operation of the LAM 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
LAM	Load handling device, Traverse
PPE	Personal protective equipment

The following layout 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>	Indicates preconditions that must be fulfilled before an action description
Chapter <i>number + title</i>	Refers to a section in this manual or further applicable documents

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

This LAM has been designed and built according to state-of-the-art technology and recognised safety regulations. Conformity of the LAM with 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 LAM or its assemblies are made.

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

2 Safety at the machine



Note

This machine has been designed and built according to state-of-the-art technology and recognised safety regulations. Nevertheless, dangers to the life and limb of the user or third parties or negative effects on the LAM 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 Traverse.

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: Hand injuries!



Warning: Danger of falling!

Operating Instructions

- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -



Warning: Danger of slipping!



Warning: Danger due to hydraulic system under high pressure!

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!



Use hand protection!



Wear safety shoes!



Read the operating manual!

2.3 Working safely with the machine

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

2.3.1 Basic warnings and safety notes

Information for the operator

This operating manual must be stored within easy reach and readily available at the operating site of the Traverse.

Local accident prevention regulations must be observed during all work on the LAM. Furthermore, observe the DGUV provisions, in particular DGUV regulation 100-500, chapter 2.8 (previously BGR 500), and DGUV information (per the latest engineering standards), or the nationally applicable regulations.

Personnel working with the LAM must be older than 18 years of age and familiar with the functionality and application of the LAM, as well as the dangers arising from it.

The respective personnel must have received instruction on the task, and must be familiar with the operating manual, as well as any further applicable internal instructions. They must possess the following knowledge and skills in particular:

- Ability to assess the weight of the load,
- Ability to assess the location of the centre of gravity of loads,
- Knowledge of the lifting gear available,
- Load bearing capacity of the lifting gear, depending on the number of lines, type of attachment and angle of inclination,
- Selection of the correct lifting gear,
- Protection against unintentional unhooking,
- Conduct during attachment, lifting and transportation,
- Signals and gestures,
- Avoiding damage to lifting gear,
- Conduct when lowering and releasing lifting gear,
- Storage of lifting gear.

The operator is responsible for sufficient lighting in the working and transport areas!

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



Note

The LAM is designed for max. 16000 load changes (DIN EN 13155-E, chap. 1). Upon reaching the maximum number of load changes, the LAM must be put out of operation and scrapped, or - if possible - fully overhauled.

Information for the user

Before use, check the LAM for damage, e.g. for deformations, cracks, breakage, incomplete labelling.

The specified load bearing capacity must not be exceeded, see Chapter 3.4 *Technical data and load tables*.

.

Select the load bearing capacity and attachment type of all lifting accessories and accessory parts in accordance with the technical data for the LAM.

Lifting and load handling devices must be stored such that they are protected from weathering and aggressive substances, if safety may be impaired by these influences.

LAM and lifting gear with mechanical damage or deformations must not be further used. For permissible cross section reductions refer to DGUV regulation 100-500, chapter 2.8, or the national regulations.

LAM is only intended for vertical lifting, diagonal pulling is prohibited.

When moving the LAM, prevent oscillations or impacts with objects or building parts.

Adjust the movement of loads to the weather conditions!

Lifting and transporting loads with particular hazards

Refer also in this regard to DGUV rule 100-500, chapter 2.8, no. 3.10 (D), or the national regulations.

Hazardous substances are substances and items that may pose danger to persons, animals or the environment in case of accidents or with incorrect handling during transport. These may be:

- Explosive substances and items; items loaded with explosive substances; igniting devices, fireworks and other goods,
- Compressed, liquefied and pressurised gases,
- Flammable liquids,
- Flammable solids; self-igniting substances; substances that produce flammable gases in contact with water,
- Igniting (oxidising) substances; organic peroxide,
- Toxic, repellent and contagious substances,
- Radioactive substances,
- Caustic substances,
- Other hazardous substances and items.

Note the following in this regard:

- ⇒ Use load-bearing equipment that will not cause damage to packaging when lifting, transporting or setting down, e.g. when transporting gas bottles, use suitable loading drawers or special transport frames.
- ⇒ In case of hazardous goods with damaged packaging, only pick these up with load handling devices that will prevent any leakage or escape.
- ⇒ Do not pick up hazardous goods with load handling devices that only hold the load through magnetic, friction or suction forces.



WARNING!

Unauthorised alterations to the Traverse can jeopardise safe operation.

Risk of death and various injury hazards!

- Do not perform unauthorised design changes; all changes must be discussed with and approved by BAUER.
- Do not modify the protective/safety equipment.



⚠ WARNING!

A failure to wear personal protective equipment.

Injuries due to crushing and bumping in case of carelessness and unexpected situations!

- Wear PPE (protective gloves, safety footwear and hard hat).

2.3.2

Recognise safety-related protective equipment

On the basis of the risk assessment of the LAM, a safety chain is integrated in order to ensure safe work with the LAM. Furthermore, a locking hook is available, which holds the stacking tipper securely in an upright position and can only be manually triggered by the operator (not BST-(U)-H).



⚠ DANGER!

If the Traverse sits unsecured on the forklift forks, this will result in the Traverse / load toppling!

Various risks of injury due to a toppling Traverse / load.

- When transporting / using the Traverse, always drive the forklift forks into the fork pockets and secure with the fastening chain to prevent the LAM from slipping off the forks.

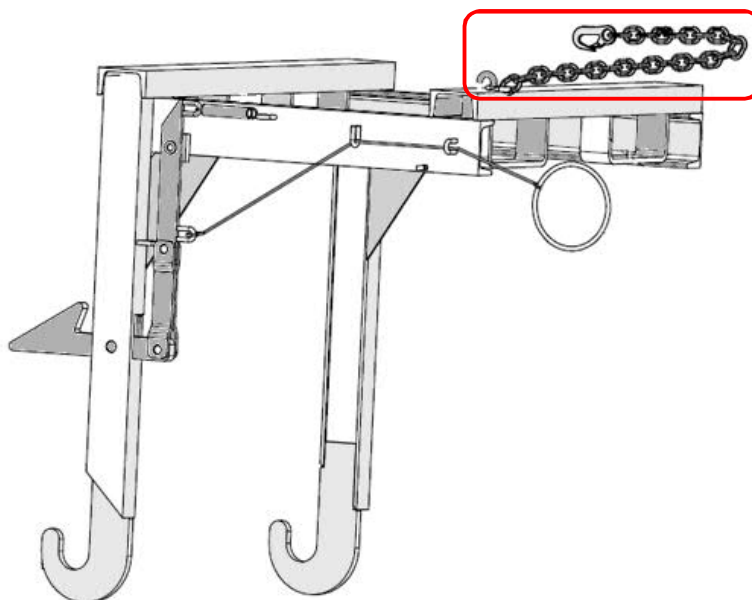


Fig. 2-1: Safety chain on the Traverse (all types)

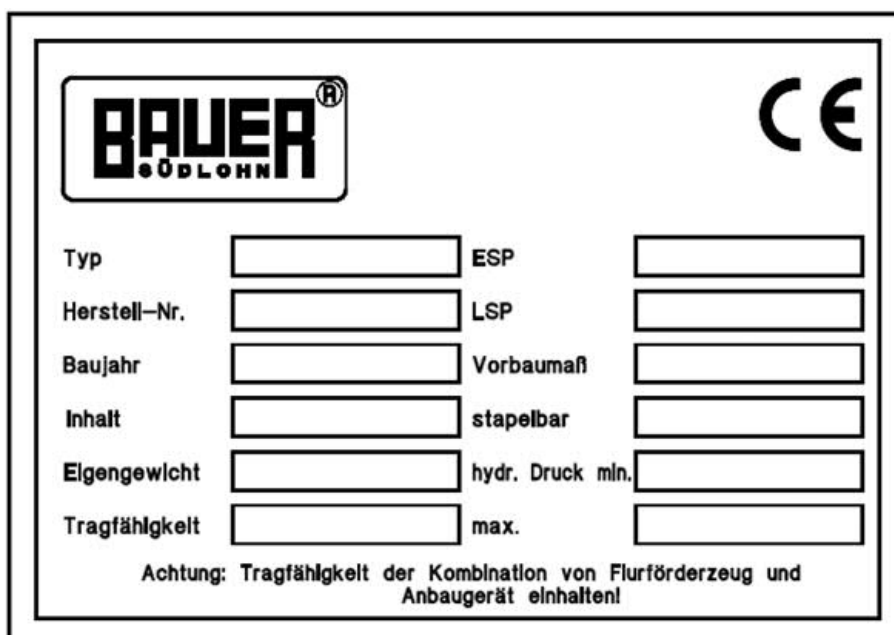
2.3.3 Machine marking



Note

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

The declaration of conformity and the operating manual are restricted to the Traverse supplied. A crane or lifting system is not part of this declaration of conformity.



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

Achtung: Tragfähigkeit der Kombination von Flurförderzeug und Anbaugerät einhalten!

Fig. 2-2: Traverse type plate

3 Description of the Traverse type BST, BST-H, BST-U, BST-U-H, BKT

3.1 Intended use

The Traverse serves exclusively as interchangeable equipment for holding, transporting and emptying by tipping out stacking tippers with the help of a forklift truck. For the cross beam type BKT it is also possible to use a crane as a lifting and transport vehicle, in conjunction with appropriate slings.

The Traverse is to be used exclusively within the performance limits listed in Chapter 3.4 Technical data and load tables.

3.2 Improper use

Improper use includes in particular:

- Any use other than the use of the machine described in chapter 3.1 *Intended use* and further sections of these operating instructions without written permission of the manufacturer.
- Transporting persons.
- Climbing on the cross beam or use as scaffolding.
- Leaving the load in the raised condition.
- Use, installation, operation, servicing or repair other than as described.
- Work performed by unqualified personnel.
- Use of unapproved, inappropriate accessories.
- Use of parts other than the original spare parts or 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.
- Lifting other loads or loads with different properties.
- Lifting the load in a manner or way that differs from the specifications.
- Using the LAM on construction sites.
- Operating in an environment with a special atmosphere (high humidity, explosive, briny, corrosive, alkaline, etc.).

Operating Instructions



- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -

3.3 Structure Traverse type BST, BST-H, BST-U, BST-U-H, BKT

3.3.1 Standard types of Traverse

Traverse	Type	Description
	BST BST-H	<ul style="list-style-type: none"> Fork bracket attached at the top for forklift Retention of the stacking tipper by the locating pin and the latch Manual triggering of the tipping process by wire rope hoist or hydraulically with type BST-H
	BST-U / BST-U-H	<ul style="list-style-type: none"> Fork pockets at the bottom for a forklift Retention of the stacking tipper by the locating pin and the latch Manual triggering of the tipping process by wire rope hoist or hydraulically with type BST-U-H Improved utilisation of the hoist height of the forklift truck
	BKT	<ul style="list-style-type: none"> Fork bracket attached at the top for forklift Crane lugs mounted at the top for use with a crane Retention of the stacking tipper by the locating pin and the latch Manual triggering of the tipping process by wire rope hoist
		<ul style="list-style-type: none"> Cross beam stand TS as an accessory part for BST, BST-H and BKT

Operating Instructions



- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -

3.3.2 Traverse Types BST and BST-H

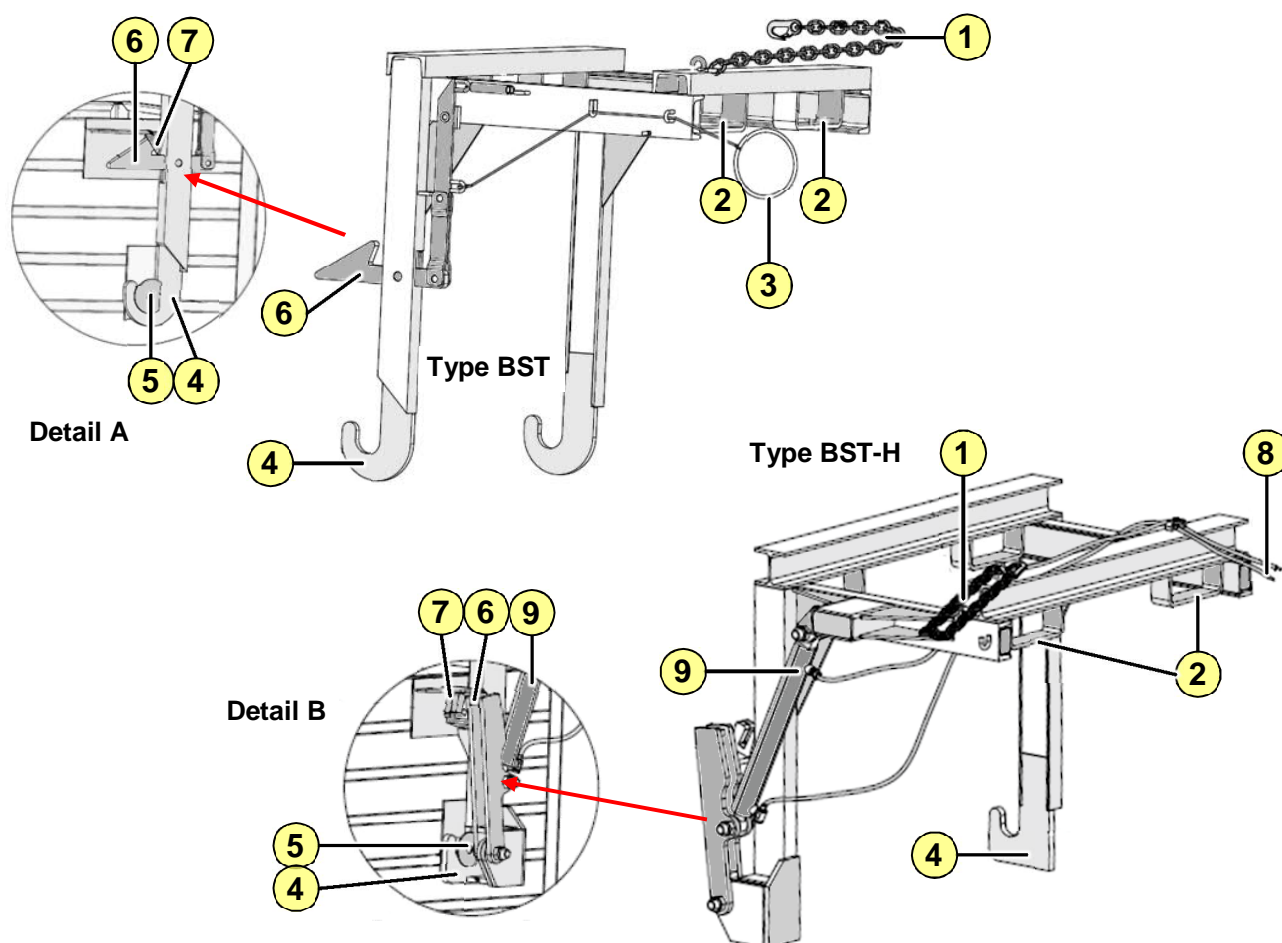


Fig. 3-1: Assemblies Traverse BST/BST-H

Item	Description
1	Safety chain
2	Fork pocket
3	Operating cable (only with BST)
4	Suspension
5	Locating pin on the stacking tipper
6	Tip protection
7	Latch on the stacking tipper
8	Hydraulic hoses (only with BST-H)
9	Hydraulic cylinder (only with BST-H)

Operating Instructions

- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -



3.3.3 Traverse types BST-U

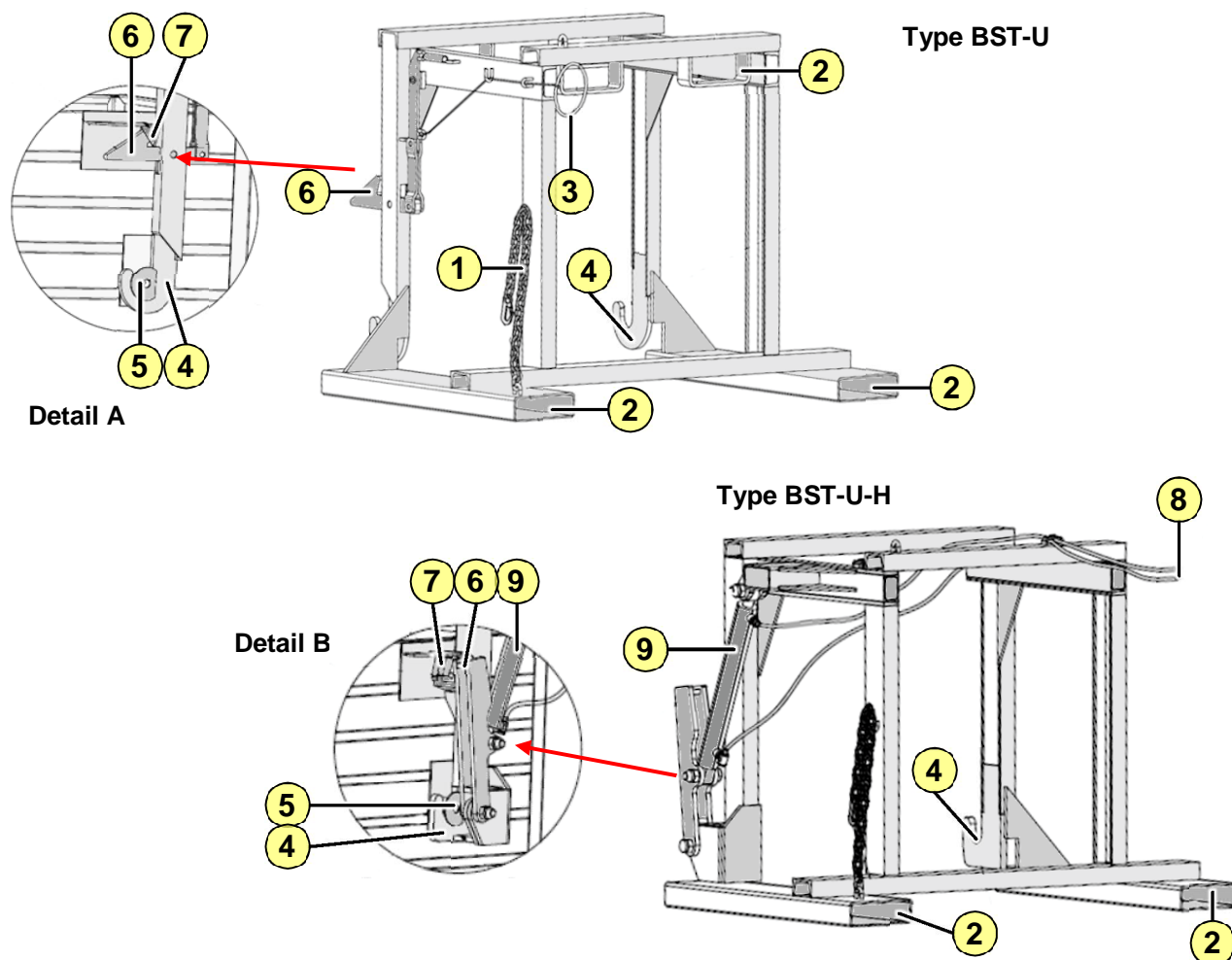


Fig. 3-2: Assemblies Traverse BST-U/BST-U-H

Item	Description
1	Safety chain
2	Fork pocket / fork bracket
3	Operating cable (only with BST-U)
4	Suspension
5	Locating pin on the stacking tipper
6	Tip protection
7	Latch on the stacking tipper
8	Hydraulic hoses (only with BST-U-H)
9	Hydraulic cylinder (only with BST-U-H)

3.3.4 Traverse types BKT

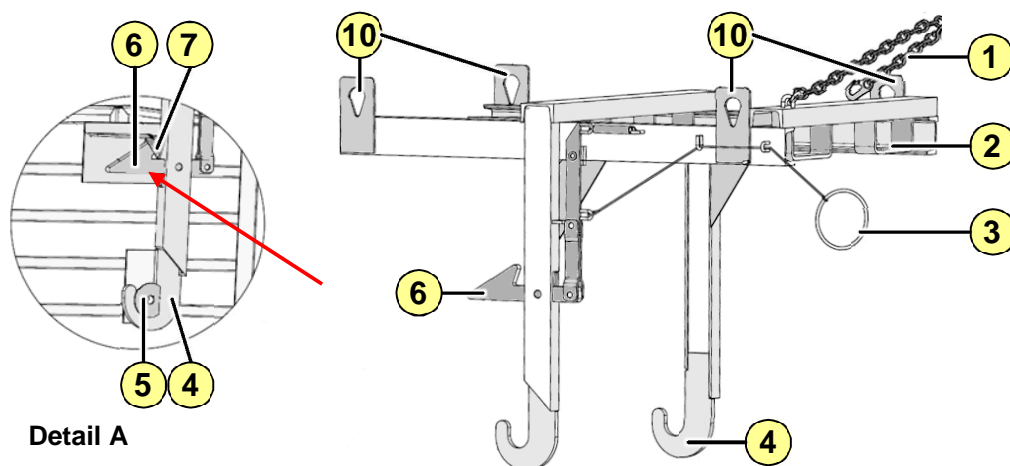


Fig. 3-3: Assemblies Traverse BKT

Item	Description
1	Safety chain
2	Fork pocket
3	Operating cable
4	Suspension
5	Locating pin on the stacking tipper
6	Tip protection
7	Latch on the stacking tipper
8	n.a.
9	n.a.
10	Crane lugs

Operating Instructions

- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -



3.4 Technical data and load tables



MATERIAL DAMAGE!

Exceeding the load-bearing capacity of the forklift truck

Damage to the forklift truck due to overload.

- Specify the load-bearing capacity of the forklift truck on the basis of the LAM load table!

3.4.1 Technical data Traverse type BST

Dimensions	Type	BST 30	BST 55	BST 70	BST 90	BST 150	BST 200
Length [mm]		945	945	945	945	945	945
Width [mm]		730	930	930	1130	1630	2130
Height [mm]		845	976	976	976	1081	1081
Volume [m³]		0.30	0.55	0.70	0.90	1.50	2.00
Weight							
Tare weight, painted [kg]		71	79	79	85	148	164
Load-bearing capacity [kg]		500	1000	1500	2000	2000	2000
Permissible max. number of load changes		16.0000					
Environmental conditions							
Permissible ambient temperature				-20°C to max. 40°C			

3.4.2 Technical data Traverse type BST-H

Dimensions	Type	BST-H 30	BST-H 55	BST-H 70	BST-H 90	BST-H 150	BST-H 200
Length [mm]		900	900	900	900	900	900
Width [mm]		870	1070	1070	1270	1770	2270
Height [mm]		1035	1030	1030	1030	1090	1090
Volume [m³]		0.30	0.55	0.70	0.90	1.50	2.00
Weight							
Tare weight, painted [kg]		135	144	144	150	220	239
Load-bearing capacity [kg]		500	1000	1500	2000	2000	2000
Permissible max. number of load changes		16.0000					
Environmental conditions							
Permissible ambient temperature				-20°C to max. 40°C			

Operating Instructions



- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -

3.4.3 Technical data Traverse type BST-U

Dimensions	Type	BST-U 30	BST-U 55	BST-U 70	BST-U 90
Length [mm]		1255	1255	1255	1255
Width [mm]		1144	1344	1344	1544
Height [mm]		863	1053	1053	1053
Volume [m³]		0.30	0.55	0.70	0.90
Weight					
Tare weight, painted [kg]		163	176	177	182
Load-bearing capacity [kg]		500	1000	1500	2000
Permissible max. number of load changes	16.0000				
Environmental conditions					
Permissible ambient temperature			-20°C to max. 40°C		

3.4.4 Technical data Traverse type BST-U-H

Dimensions	Type	BST-U-H 30	BST-U-H 55	BST-U-H 70	BST-U-H 90
Length [mm]		1110	1110	1110	1110
Width [mm]		1144	1344	1344	1544
Height [mm]		1056	1056	1056	1056
Volume [m³]		0.30	0.55	0.70	0.90
Weight					
Tare weight, painted [kg]		212	220	220	222
Load-bearing capacity [kg]		500	1000	1500	2000
Permissible max. number of load changes		16.0000			
Environmental conditions					
Permissible ambient temperature			-20°C to max. 40°C		

3.4.5 Technical data Traverse type BKT

Dimensions	Type	BKT 30	BKT 55	BKT 70	BKT 90	BKT 150	BKT 200
Length [mm]		1350	1350	1350	1350	1450	1450
Width [mm]		730	930	930	1130	1630	2130
Height [mm]		900	1030	1030	1030	1090	1090
Volume [m³]		0.30	0.55	0.70	0.90	1.50	2.00
Weight							
Tare weight, painted [kg]		91	99	99	103	167	183
Load-bearing capacity [kg]		500	1000	1500	2000	2000	2000
Permissible max. number of load changes		16.0000					
Environmental conditions							
Permissible ambient temperature				-20°C to max. 40°C			

3.4.6 Dimensions fork brackets/pockets

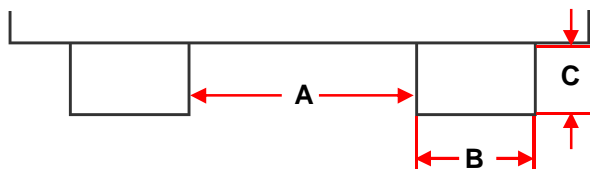


Fig. 3-4: Internal dimensions fork brackets/pockets

Dimensions	Type	BST/BST-H/ BKT 30	BST/BST-H/ BKT 55-70	BST/BST-H/ BKT 90-150	BST/BST-H /BKT 200
Fork bracket internal dimension A		110	250	450	590
Fork bracket internal dimension B		200			
Fork bracket internal dimension C		80			

Dimensions	Type	BST-U 30 / BST-U-H 30	BST-U 55-70 BST-U-H 55-70	BST-U 90 BST-U-H 90
Fork bracket internal dimension A		732	932	1132
Fork bracket internal dimension B		200		
Fork bracket internal dimension C		60		

3.5 Calculation

The design is in accordance with a **safety coefficient = 1.5**

4 Setup and commissioning

The Traverse is delivered in completely assembled form, is ready for operation without special commissioning and can be used with the specified lifting equipment (forklift truck).

Before initial use, the operator checks whether the Traverse corresponds to the model ordered and that the scope of delivery is complete.

A qualified person must perform an inspection before first commissioning. Only perform commissioning once any detected defects have been eliminated.

5 Operation

5.1 Safety information



DANGER!

Falling or uncontrolled parts during lifting, transportation and lowering. Transporting people on the load / with the LAM.

Risk of fatal injury and various injury hazards!

- Persons are forbidden from dwelling under the suspended load.
- Moving loads over the top of persons is prohibited.
- It is prohibited to transport persons on the load / with the LAM.
- Ensure that persons maintain a sufficient safe distance.
- Only lift and transport with direct visual monitoring. If unobstructed visibility is not possible, be guided by a second person located outside the danger zone.



DANGER!

Tilting the load, toppling of the forklift truck due to incorrect loading.

Risk of death and danger of crushing!

- Observe the maximum permissible loads for the LAM.
- Observe the specifications for loading the forklift truck.
- Observe the centre of gravity of the forklift-load-combination.
- Move the crane/load slowly to prevent any major oscillating movements.
- Observe the information about the intended attachment points on the load!
- Observe the weight and centre of gravity of the load!



WARNING!

Load / parts of the load may fall due to the use of unapproved, unsuitable or defective lifting equipment!

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

- Only use approved, suitable and undamaged lifting devices and lifting gear.
- Ensure sufficient load-bearing capacity of the lifting equipment.



WARNING!

Falling from the Traverse when climbing on it or using it as scaffolding.

Risk of death due to falling.

- Do not climb on the cross beam.
- Do not use the cross beam as scaffolding or similar.

5.2 Operation of the Traverse type BST, BST-U and BKT with a forklift truck

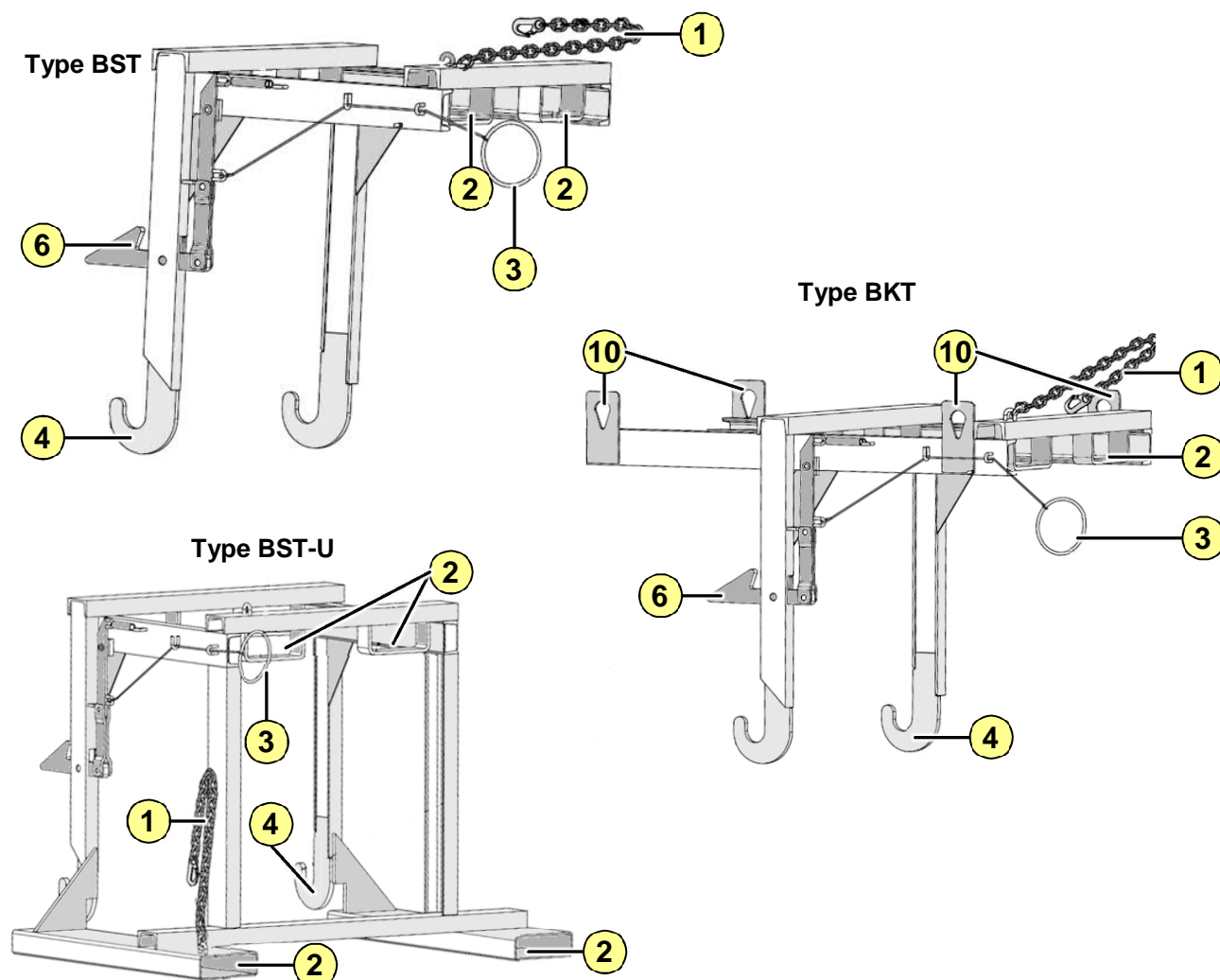


Fig. 5-1: Operation of Traverse

- Align the mast of the forklift truck vertically.
- Adjust forklift forks to match the distance between the fork pockets/brackets (2).
With the **Traverse type BST-U** it is optionally possible to use the fork brackets at the top (2) or the fork pockets at the bottom (2).
- Drive the forks into the fork pockets of the Traverse.
- Lay the fastening chain (1) of the Traverse around the fork carriage or back of the forks, pull tight and secure by hooking the carabiner into a chain link.

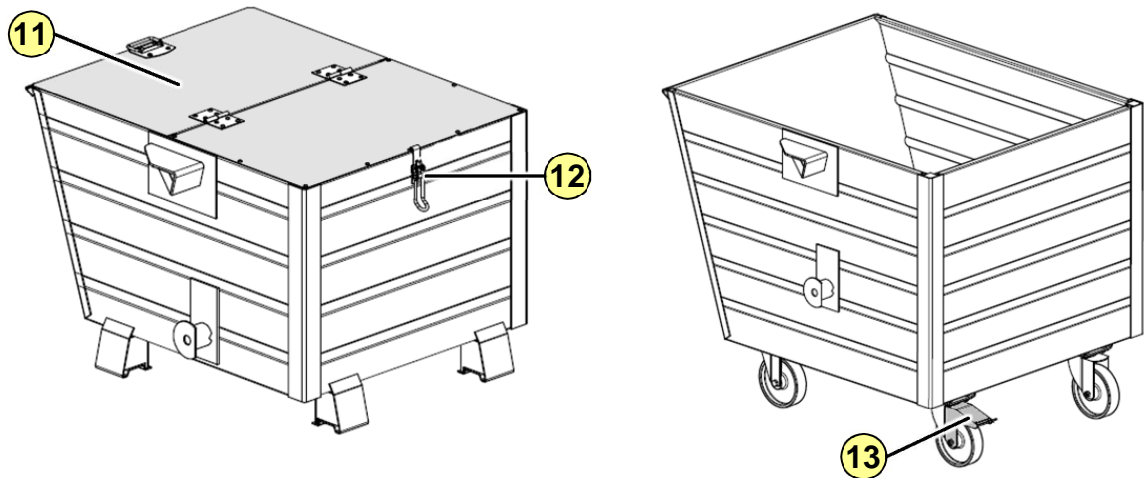


Fig. 5-2: Stacking tipper with cover or steering caster and lock

On the stacking tipper

- For stacking tippers with a cover, open the front cover part (11) and secure it with the cover locking mechanism (12).
- With stacking tippers with rollers, activate the steering castor lock (13).
- Take off and unwind the operating cable (3) from the hook.

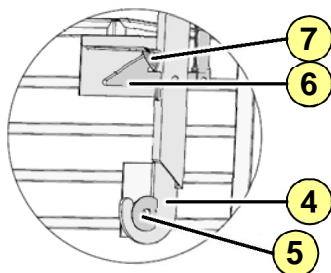


Fig. 5-3: Detail A

- Drive with cross beam to the stacking tipper and pick it up, such that
 - ⇒ the locating pins (5) of the stacking tipper lie in the suspensions (4) of the cross beam and
 - ⇒ the tip protection (6) engages behind the latch (7) of the stacking tipper (see Detail A).
- Lift the Traverse with the mast of the forklift truck and drive to the desired position.
- Lift the cross beam with stacking tipper to the desired height.
- Pull the operating cable (3) to trigger the tip protection (6).
 - ⇒ The stacking tipper empties itself independently.
- Lower the mast of the forklift, set the tipped stacking tipper down on the floor and pick up again.
 - ⇒ The locating pins (5) must lie in the suspensions (4) and
 - ⇒ the tip protection (6) engage behind the latch (7).

- Lift the cross beam with the forklift mast, drive the stacking tipper back to the set-down place and set down.
- WARNING:** Risk of injury due to tipping the stacking tipper. Only place stacking tipper on a level surface.
- Continue to lower the forklift mast until the suspensions (4) of the cross beam release the locating pins (5) of the stacking tipper.
- ⇒ The cross beam is now ready for picking up the next stacking tipper.
- After using the Traverse drive it back to the set-down place and set it down.
- Set the cross beam stand (optional) or other support beneath the cross member (types BST, BKT), to prevent tipping over.
- Open the carabiner of the fastening chain (1), remove it from the forklift and hook it back into a link of the chain.
- Drive the forklift truck out of the fork pockets (2).
- WARNING:** Risk of injury due to tipping Traverse. Only place Traverse on level surface.

5.3 Operation of the Traverse type BST-H, BST-U-H with a forklift truck

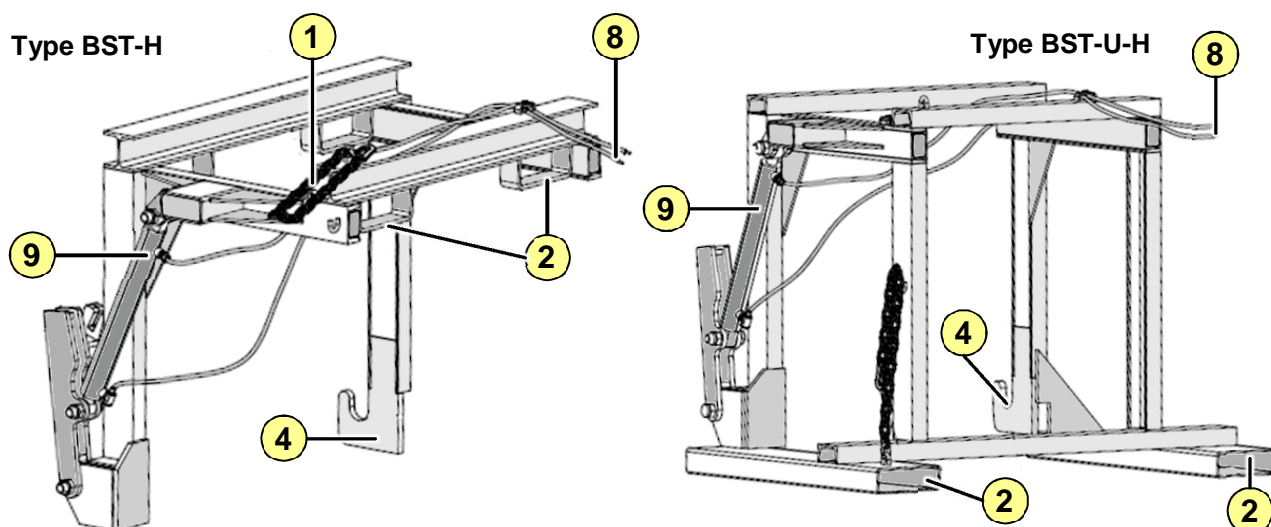


Fig. 5-4: Traverse type BST-H, BST-U-H

- Align the mast of the forklift truck vertically.
- Adjust forklift forks to match the distance between the fork pockets/brackets (2). With the Traverse type BST-U-H it is optionally possible to use the fork brackets at the top (2) or the fork pockets at the bottom (2).
- Drive the forks into the fork pockets of the Traverse.
- Lay the fastening chain (1) of the cross beam around the fork carriage or back of the forks, pull tight and secure by hooking the carabiner into a chain link.
- Connect the hydraulic hoses (8) of the cross beam to the hydraulic system of the forklift.
- WARNING:** The maximum hydraulic operating pressure of 250 bar must not be exceeded!

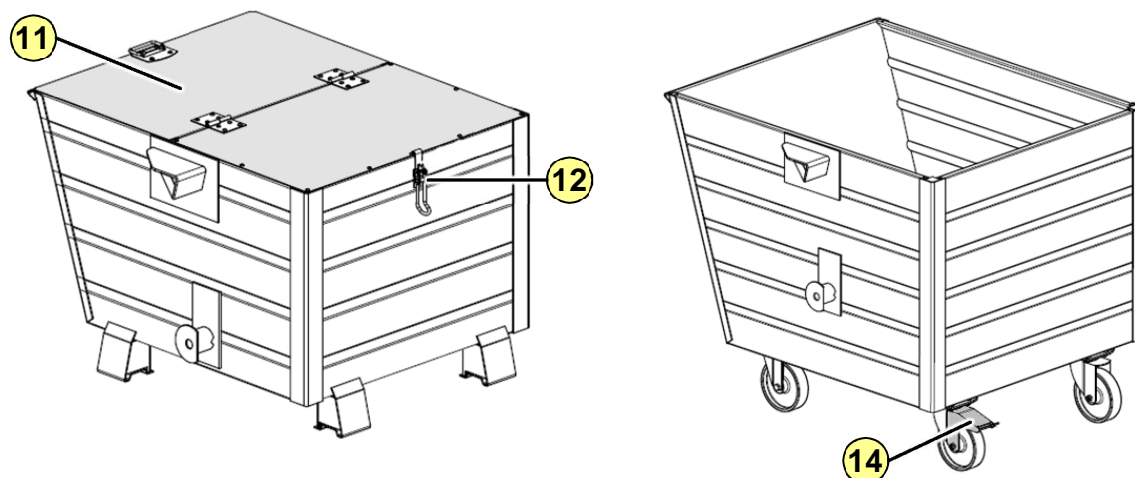


Fig. 5-5: Stacking tipper with cover or steering caster and lock

On the stacking tipper

- For stacking tippers with a cover, open the front cover part (11) and secure it with the cover locking mechanism (12).
- With stacking tippers with rollers, activate the steering castor lock (13).

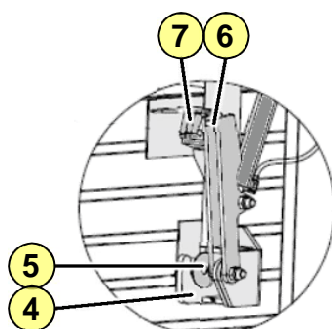


Fig. 5-6: Detail B

- Drive with cross beam to the stacking tipper and pick it up, such that
 - ⇒ the locating pins (5) of the stacking tipper lie in the suspensions (4) of the cross beam and
 - ⇒ the tip protection (6) engages behind the latch (7) of the stacking tipper (see Detail B).
- Lift the Traverse with the mast of the forklift truck and drive to the desired position.
- Lift the cross beam with stacking tipper to the desired height.
- Activate the control unit on the forklift.
 - ⇒ The stacking tipper is tipped and empties itself.
- Activate the control unit on the forklift.
 - ⇒ The stacking tipper tilts back into the initial position.

- Lift the cross beam with the forklift mast, drive the stacking tipper back to the set-down place and set down.
WARNING: Risk of injury due to tipping the stacking tipper. Only place stacking tipper on a level surface.
- Continue to lower the forklift mast until the suspensions (4) of the cross beam release the locating pins (5) of the stacking tipper.
⇒ The cross beam is now ready for picking up the next stacking tipper.
- After using the Traverse drive it back to the set-down place and set it down.
- Set the cross beam stand (optional) or other support beneath the cross member (types BST-H), to prevent tipping over.
- Open the carabiner of the fastening chain (1), remove it from the forklift and hook it back into a link of the chain.
- Disconnect the hydraulic hoses (8) of the cross beam from the hydraulic system of the forklift.
CAUTION: Risk of injury due to slippery floor. Clean up/remove any leaked hydraulic fluid from the floor immediately using suitable means.
- Drive the forklift truck out of the fork pockets (2).
WARNING: Risk of injury due to tipping Traverse. Only place Traverse on level surface.

5.4

Operation of the Traverse type BKT with a crane



WARNING!

Uncontrolled movements of the container due to fastening, lifting and moving incorrectly!

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

- Only use approved, tested and technically faultless lifting equipment.
- Attach lifting accessories only to the crane lugs.
- Observe maximum specified weights.
- Always attach lifting accessories in such a way that the load-handling attachment is located vertically above the centre of mass (avoid eccentric centre of mass).
- Make sure the suspension cables do not undershoot an angle of 60° to the horizontal.
- Do not attach cables and straps to sharp corners and edges, kink them or twist them.
- Lift the Traverse carefully and observe whether the load tilts. If necessary, correct the attachment.
- Adjust the movement of the Traverse to the weather conditions.

Operating Instructions

- Traverse Type BST, BST-H, BST-U, BST-U-H, BKT -

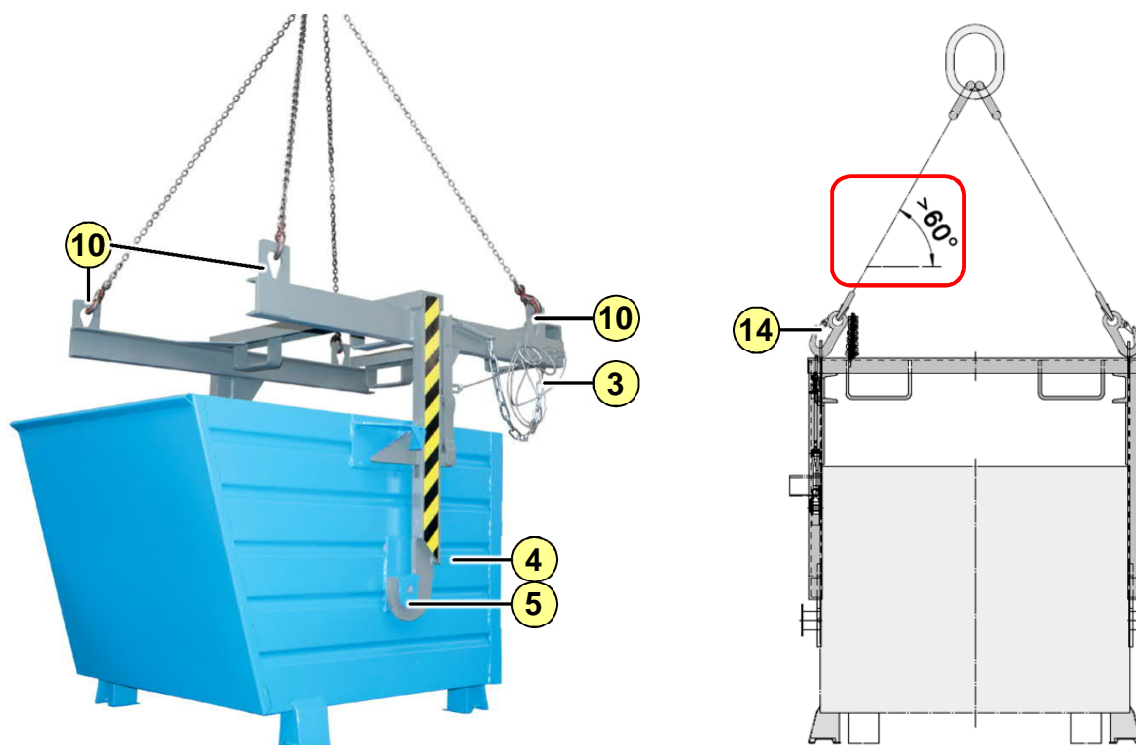


Fig. 5-7: Traverse BKT (operation with a crane)

- Attach the lifting equipment to the crane lugs (10) with the hook lock (14).

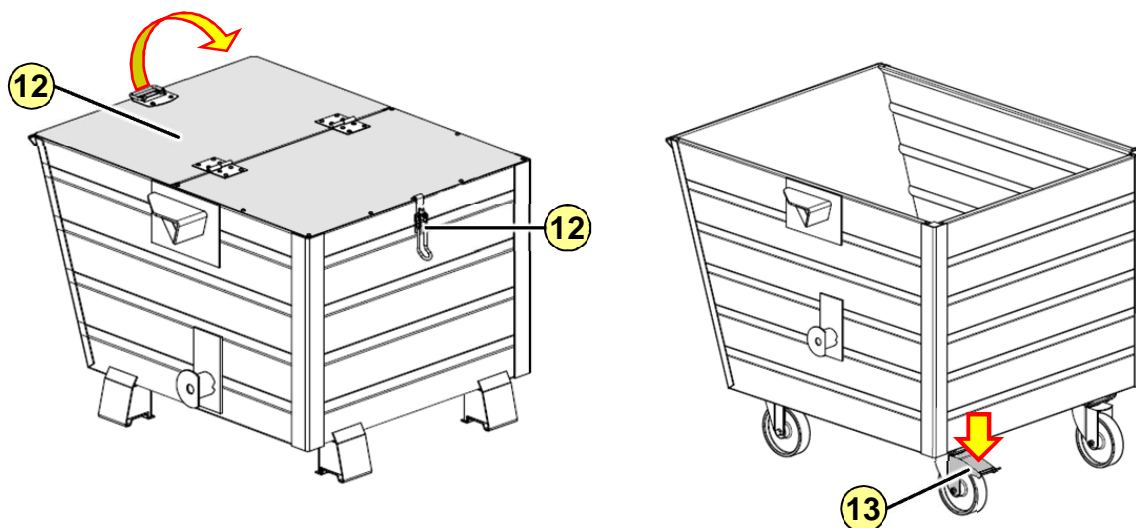


Fig. 5-8: Stacking tipper with cover or steering caster and lock

On the stacking tipper

- For stacking tippers with a cover, open the front cover part (11) and secure it with the cover locking mechanism (12).
- With stacking tippers with rollers, activate the steering castor lock (13).
- Take off and unwind the operating cable (3) from the hook.

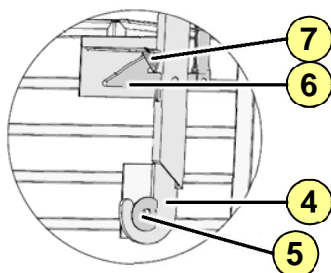


Fig. 5-9: Detail A

- Drive cross beam with a crane to the stacking tipper and pick it up, such that
 - ⇒ the locating pins (5) of the stacking tipper lie in the suspensions (4) of the cross beam and
 - ⇒ the tip protection (6) engages behind the latch (7) of the stacking tipper (see Detail A).
- Lift the Traverse with the crane and drive to the desired position.
- Lift the cross beam with stacking tipper to the desired height.
- Pull the operating cable (3) to trigger the tip protection (6).
 - ⇒ The stacking tipper empties itself independently.
- Set the tipped stacking tipper down on the floor and pick up again.
 - ⇒ The locating pins (5) must lie in the suspensions (4) and
 - ⇒ the tip protection (6) engage behind the latch (7).
- Lift the cross beam with the crane, drive the stacking tipper back to the set-down place and set down.

WARNING: Risk of injury due to tipping the stacking tipper. Only place stacking tipper on a level surface.
- Continue to lower the Traverse with the crane until the suspensions (4) of the cross beam release the locating pins (5) of the stacking tipper.
 - ⇒ The cross beam is now ready for picking up the next stacking tipper.
- After using the Traverse drive it back to the set-down place and set it down.
- Set the cross beam stand (optional) or other support beneath the cross member to prevent tipping over.
- Open the hook lock (14) of the lifting equipment and remove from the crane lugs (10).

WARNING: Risk of injury due to tipping Traverse. Only place Traverse on level surface.

6 Troubleshooting and fault elimination

After unusual incidents such as an overload, the Traverse must be visually inspected by a qualified person, even outside of the specified inspection periods.

The Traverse must be checked for mechanical damage and deformations, and the supervisor must be informed if applicable.

Deformed parts may only be repaired after consultation with the manufacturer.

7 Maintenance

7.1 Safety



WARNING!

Servicing and repair work performed improperly lead to reduced load-bearing capacity and malfunctions.

Various risks of injury!

- Have maintenance and repair work performed only by authorised personnel.
- The specifications of the manufacturer must be observed with purchased parts.
- If components have been removed, ensure correct assembly, reattach all fasteners and observe bolt tightening torques.
- Check connection points of the hydraulic assemblies regularly.
- When replacing hydraulic assemblies, observe the manufacturer's assembly specifications.



WARNING!

The Traverse may topple!

Danger of crushing inside the movement area of the Traverse.

- Set the Traverse down on a level surface.
- Use cross beam stand to prevent the Traverse tipping.

7.2 Servicing

The Traverse must be checked by an expert for good condition, function, completeness, deformation, wear, damage and cracks as a minimum:

- Before first commissioning
- At least yearly
- After a repair or renewed assembly

The results must be documented in an inspection report.

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	Complete Traverse	Check for wear and defects Verify proper function
Daily	Fastening chain	Check for presence, completeness and defects
Daily	Tip protection locking	Verify proper function
Daily	Hydraulic cylinders and hoses	Check for defects and leaks
Monthly	Complete Traverse	Check for wear, permanent deformation, cracks 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
Complete Traverse	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. Traverse with identified defects must be decommissioned immediately.

7.3 Repair

Repairs of the Traverse must be performed exclusively by the manufacturer or authorities commissioned by it.

Only original spare parts must be used.

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

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 device, manufacturing number and year of manufacture

10 Annex

10.1 Declaration of conformity

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