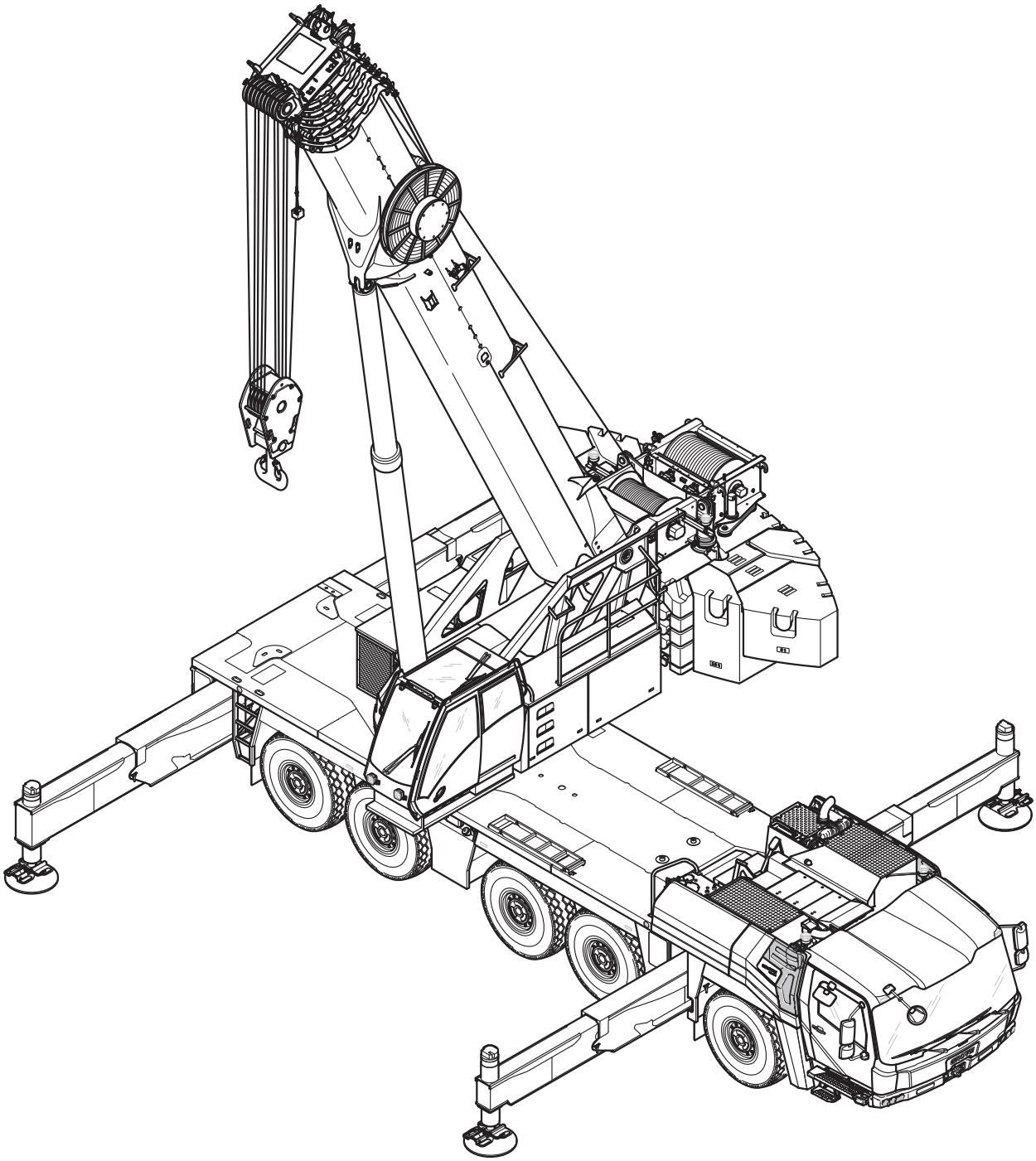
Lattice extension operating manual



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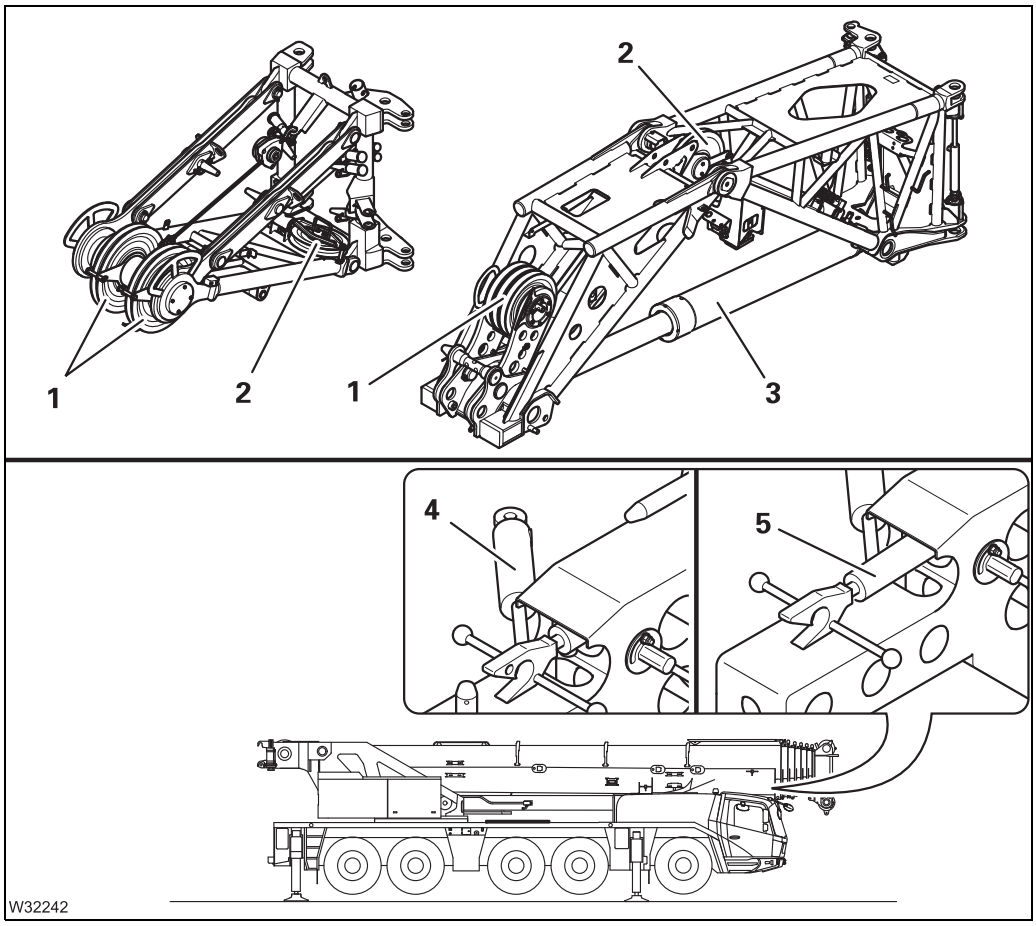
1.2 Terms used

In relation to the terms used, only two different heavy load lattice extensions are described, as representative examples of all lattice extensions.



1 Head sheave
2 Deflection sheave
3 Derricking cylinder
4 Extension cylinders
5 Swivel ram

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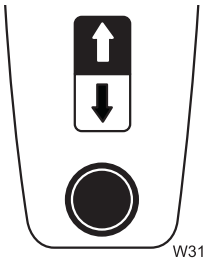
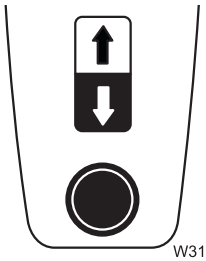
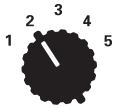
Function selection	Button combination  W31267	 W31268
 W31270	Lock the slewing connection	Unlock the slewing connection
 W31271	Lock the right-hand connection	Unlock the right-hand connection
 W31272	Lock the left-hand connection	Unlock the left-hand connection
 W31273	Lower the lattice extension	Raise the lattice extension

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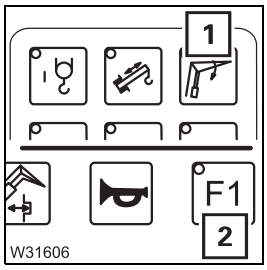
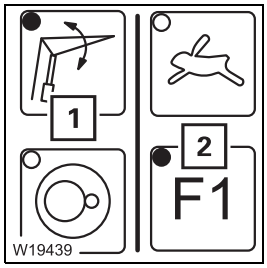
3.3 On the hand-held control



The buttons (**1**) and (**2**) are active when the swing-away lattice is electrically connected.

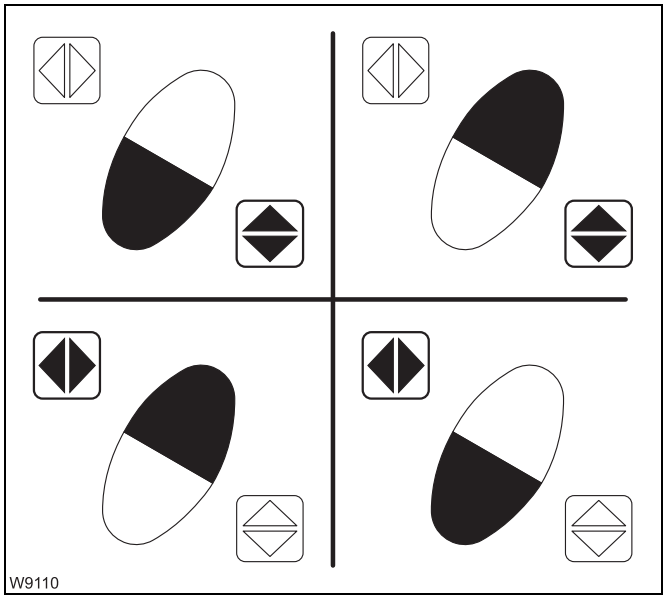
For operation, you must pre-select a function and then press the required combination of buttons.



Pre-selecting

- **Lattice extension derricking gear:** Press button (**1**) once – the lamp in the button lights up
- **Interlocks:** Press button (**1**) once **and** button (**2**) once – the lamps in the buttons light up

The pre-selection remains in force until superseded by another pre-selection.

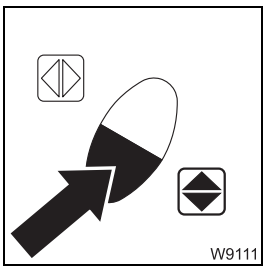


Function buttons
The operations are not monitored by the RCL.

There are four button combinations; engaged buttons are shown in black:

- **Pre-selected function on**
  Press the required button combination.
- **Pre-selected function off**
  Release one or both the buttons.

Press a non-assigned button combination – pre-selection off.



- **Faster movement:** Increase pressure on button
- **Slower movement:** Decrease pressure on button

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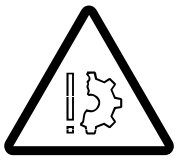
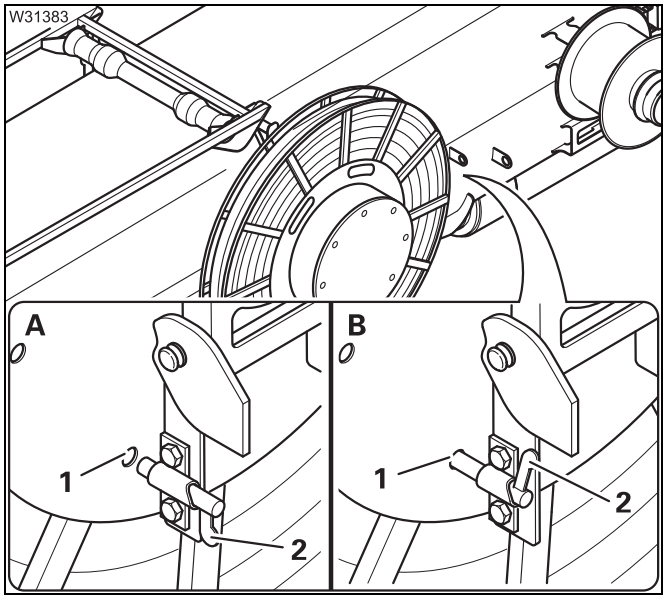
4.2.2 Checking the rotation lock on the hose reel

The rotation lock must be undone before you operate with a lattice extension.
The rotation lock must be inserted before removal of the hose reel.



Risk of damage to the hoses
Always check if the rotation lock is released before beginning operation with a lattice extension.
In this way you can prevent the hoses being torn off when telescoping.

Risk of accidents from uncontrolled rotation of the hose reel
The rotation lock must always be inserted before the hose reel is removed. Otherwise, the hose reel will rotate uncontrollably against the holder and could injure you.



There are holes (**1**) distributed around the inner face of the hosereel.

A – Releasing the rotation lock

- Rotate the spring latch (**2**) so that it is **no longer** engaged in a hole (**1**).

B – Inserting the rotation lock

- Rotate the hose reel so that the spring latch (**2**) is aligned with a hole (**1**).
- Rotate the spring latch (**2**) so that it engages in the hole (**1**). The hose reel is now secured against rotation.

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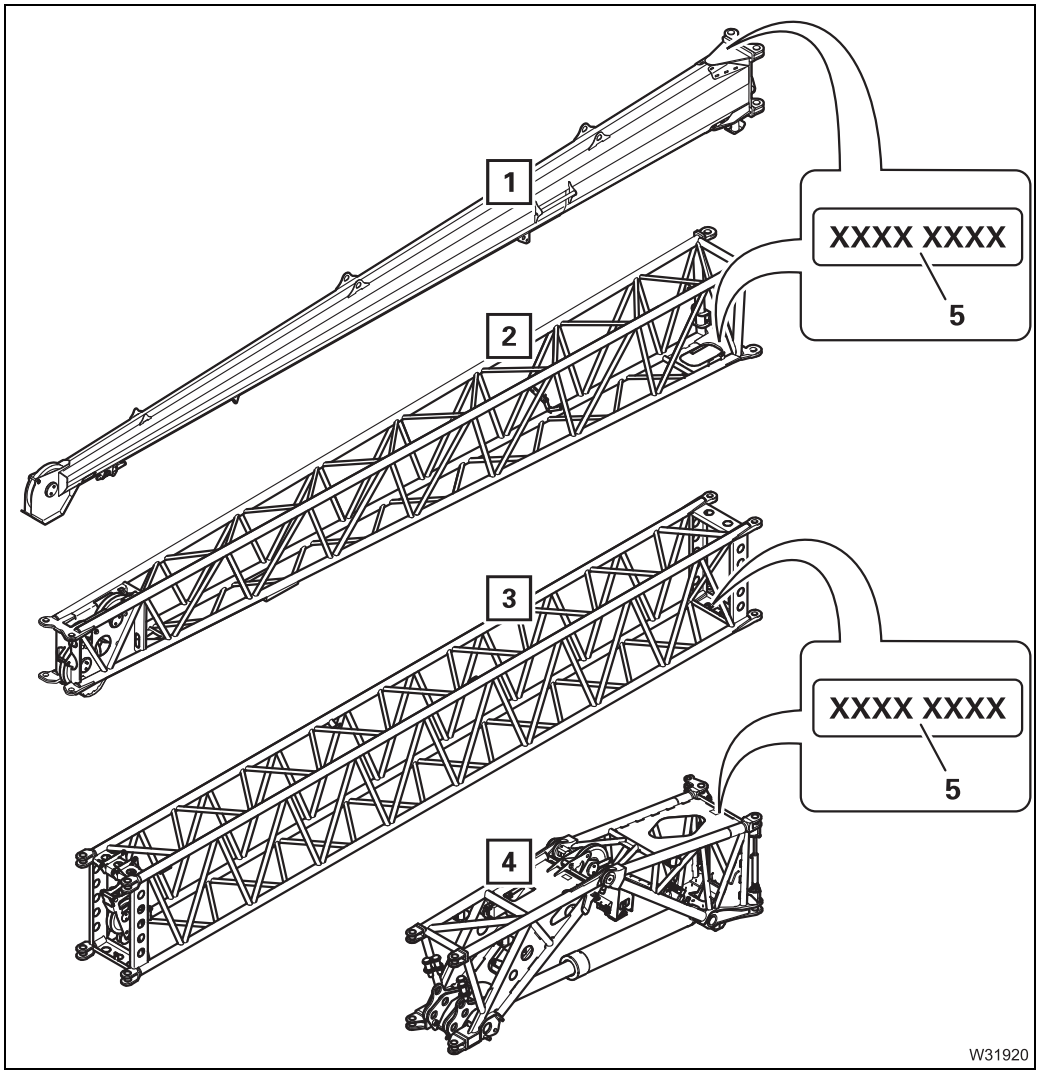
5.2.2 Identification

Danger of accidents when using an incorrect swing-away lattice!
Install only the swing-away lattice that belongs to the truck crane. Other swing-away lattices must not be installed.



The truck crane and corresponding sections 1 to 4 are labelled with the same serial number (**5**).

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5.3 Checklists for rigging work

5.3.1 Overview

The distinction is made between various different procedures.

– **Installation** and **removal**
These procedures have to be performed when the lattice extension is being transported separately. The installation and removal of the lattice extension is described.

– **Rigging**
Rigging is only possible when the necessary brackets and cylinders are mounted on the main boom.

Rigging must be performed when the lattice extension is being transported on the crane. The changeover between the transport position and the working position is described.

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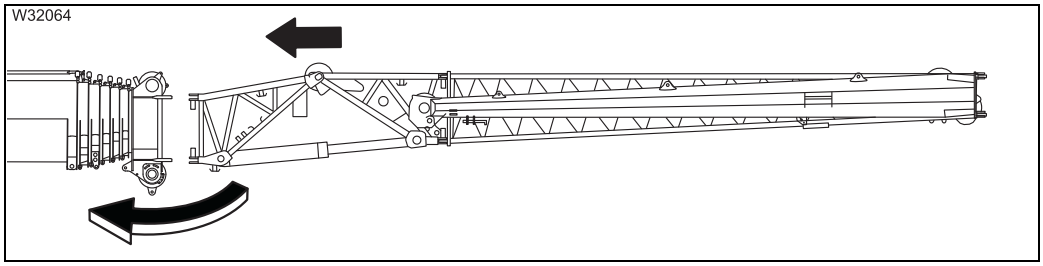
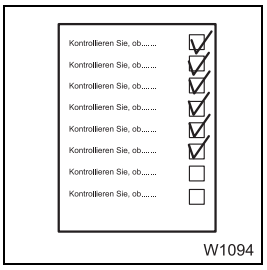
5.3.3 CHECKLIST: Installing the swing-away lattice – into the transport position



This checklist is not equivalent to the complete operating instructions. There are accompanying operating instructions which are indicated by cross-references.
Observe the warnings and safety instructions specified there!

Only **combination B** can be mounted in the transport position.



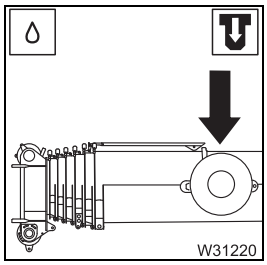
1. Prerequisite

– The truck crane is on outriggers and the superstructure is turned to the side or to the rear; ➠ *Operating manual GMK5250L.*

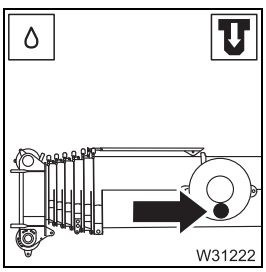
– The appropriate counterweight for the crane operation must be rigged; ➠ *Operating manual GMK5250L*.

– The main boom is fully retracted and locked.
The telescoping cylinder must be locked in telescopic section VI; ➠ p. 5 - 74.
The main boom is lowered to the horizontal position; ➠ *Operating manual GMK5250L*.

– An auxiliary crane must be available.

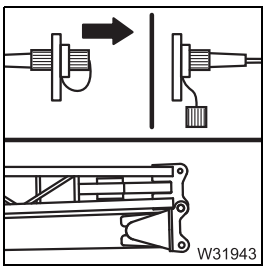


2. Mount the hose drum; ➠ p. 4 - 3.



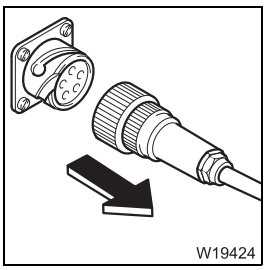
3. Check that the locking device has been released; ➠ p. 4 - 5.

22/02/2016

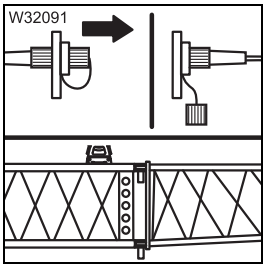


– Disconnect the electrical connections between section 2 and section 1; ➠ p. 5 - 118.

8. For the combinations C and D



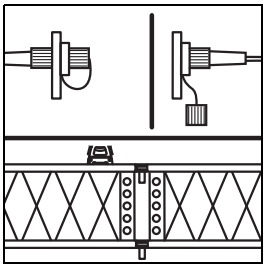
– Disconnect the electrical connection between section 2 and section 3; ➠ p. 5 - 116.



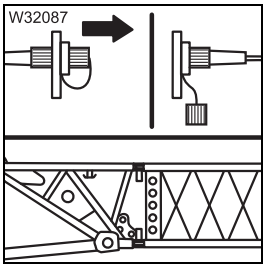
– Sling lifting gear to sections 1 and 2 together and attach a guide rope; ➠ p. 5 - 4.

– Separate the connection between section 2 and section 3; ➠ p. 5 - 96.

– Lift sections 1 and 2 together and set down aside.

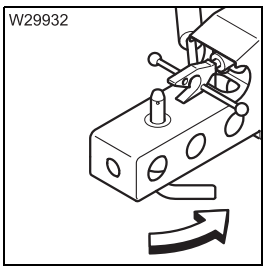


– For combination **D** – Disconnect the electrical connections between section 3 and section 3; ➠ p. 5 - 114.

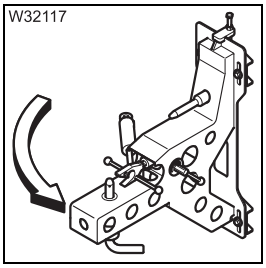


– Disconnect the electrical connections between section 3 and section 4; ➠ p. 5 - 112.

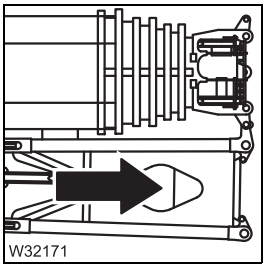
22/02/2016



9. Check that the *front* connection is locked; ➠ p. 5 - 79.

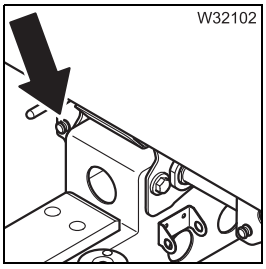


10. Fully extend the extension cylinder so the slewing connection lines up; ➠ p. 5 - 75.

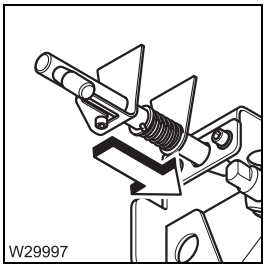


11. Establishing and securing the slewing connection:

– With hydraulic locking pins; ➠ p. 5 - 84,
– With mechanical locking pins; ➠ p. 5 - 87.



12. Secure the *rear* connection in the *front* position; ➠ p. 5 - 83.



13. Lock the *middle* connection; ➠ p. 5 - 81.

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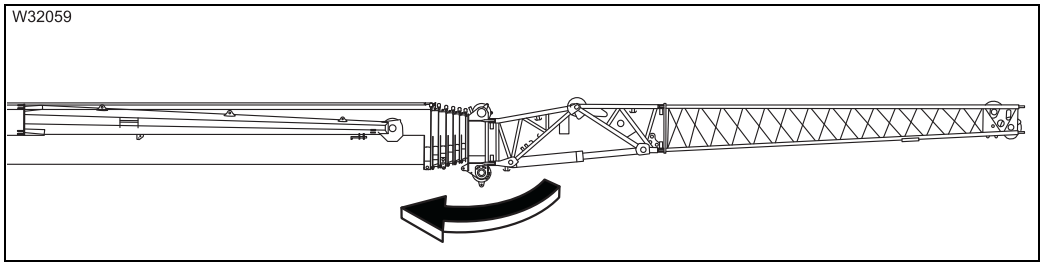
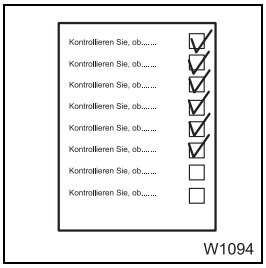
5.3.8 CHECKLIST: Rigging the swing-away lattice 2 + 10.5 m – in the transport position



This checklist is not a complete operating manual. There are accompanying operating instructions which are indicated by cross-references. **Observe the warnings and safety instructions specified there!**



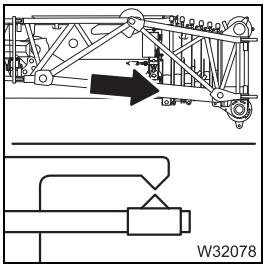
1. Prerequisite

– The truck crane is on outriggers and the superstructure is turned to the side or to the rear.

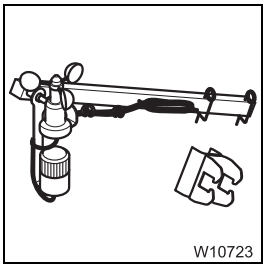
– The appropriate counterweight for the crane operation must be rigged; ➠ *Operating manual GMK5250L*.

– The main boom is fully retracted and locked.
The telescoping cylinder must be locked in telescopic section VI; ➠ p. 5 - 74.
The main boom is lowered to the horizontal position; ➠ *Operating manual GMK5250L*.

– Section 1 must be attached and secured to the side of the main boom.



2. Lower the swing-away lattice so that it can be set down on the *rear* connection; ➠ p. 5 - 135.



3. If necessary, remove the anemometer and air traffic control light; ➠ p. 5 - 128.

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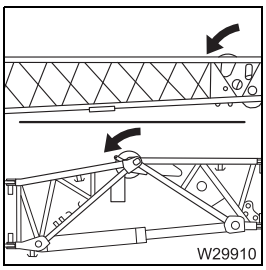
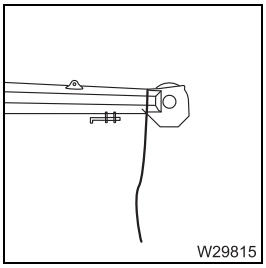
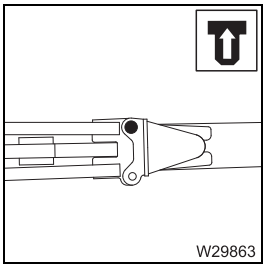


9. Fold in the deflection sheaves.

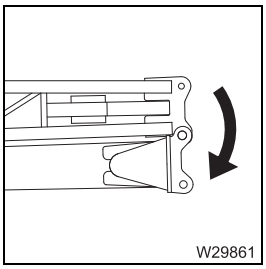
– On section 2; ➠ p. 5 - 123.
– On section 4; ➠ p. 5 - 123.



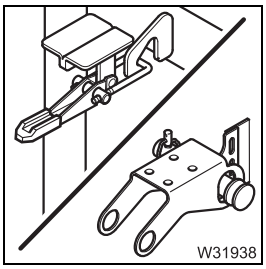
10. Fasten the guide ropes to section 1.



11. Separate the connection on the left-hand side between section 1 and section 2; ➠ p. 5 - 100.



12. Swing section 1 to the side of section 2; ➠ p. 5 - 104.



13. Establishing the *folded* connection; ➠ p. 5 - 101.

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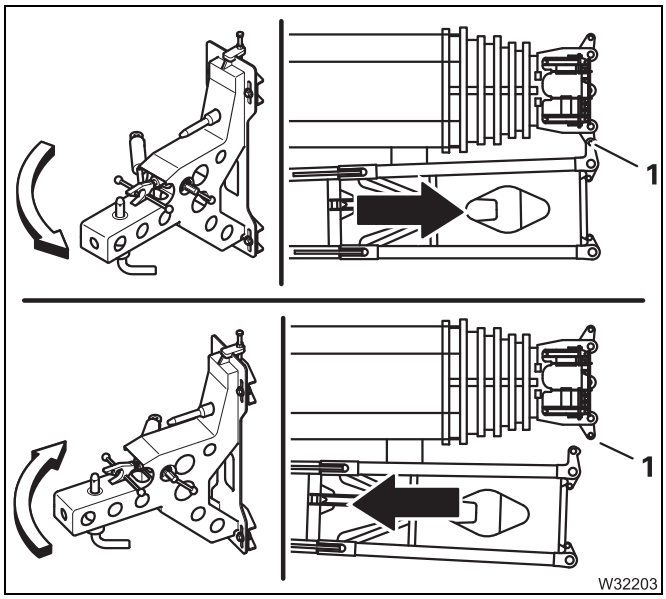
5.4.3 Extending/retracting the extension cylinder

The swivel ram can move the folded swing-away lattice into the *front* and *rear* positions.



Front position

The extension cylinder is extended.

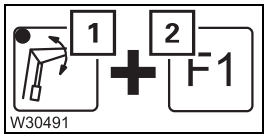
This position is used for establishing the slewing connection (**1**).

Rear position

The extension cylinder is retracted.

This position is used for establishing a transport condition.

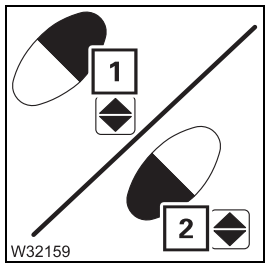
Risk of damage to connecting points!
Ensure that all necessary connections have been established and separated as specified in the checklist before moving the extension cylinder.
This prevents the connecting points from being overloaded or torn off.



Preselect the extension cylinder

The extension cylinder is operated via the hand-held control.

- Press button (**1**) once and button (**2**) once.
  - The lights in the buttons go on.



Retract/extend the extension cylinder

- Press the button combination for the desired movement.

  1 Extend the extension cylinder

  2 Retract the extension cylinder

The extension cylinder retracts or extends faster corresponding to how far you press the button (**1**) or (**2**) in.

The extension cylinder retracts or extends until you release the button or an end position is reached.

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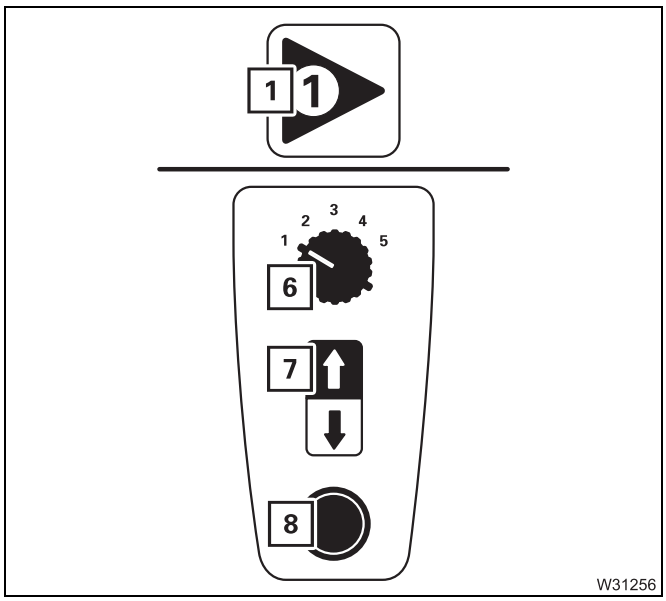
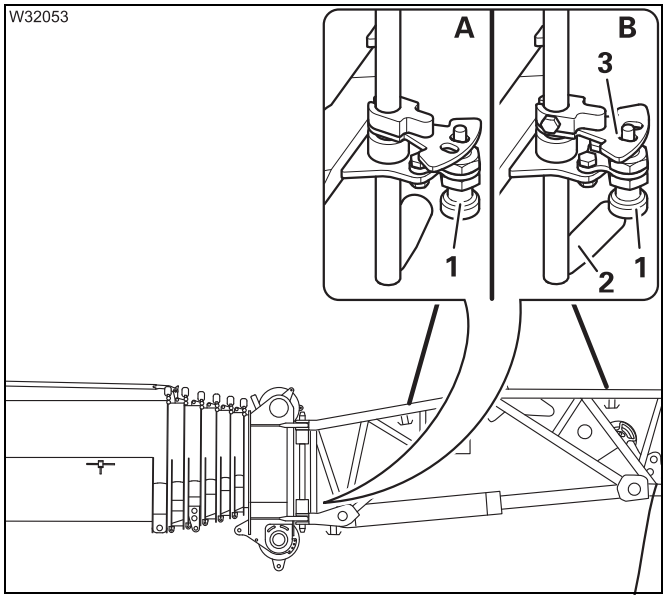


(1) – Establishing the slewing connection

- Select function 1 using the switch (**6**).
- Press the button (**7**) and also the button (**8**).
- Keep the button pressed until the pins are fully extended.

There is a risk of accidents due to the swing-away lattice falling.
Once the connection is made, always secure it with the mechanical lock. This prevents the connection being unintentionally released or separating by itself so that the swing-away lattice is dropped.



Securing the slewing connection

- **(A)** – Pull the locking pins (**1**) downwards.
- **(B)** – Turn the handles (**2**) and allow the locking pins (**1**) to engage in the holes (**3**).

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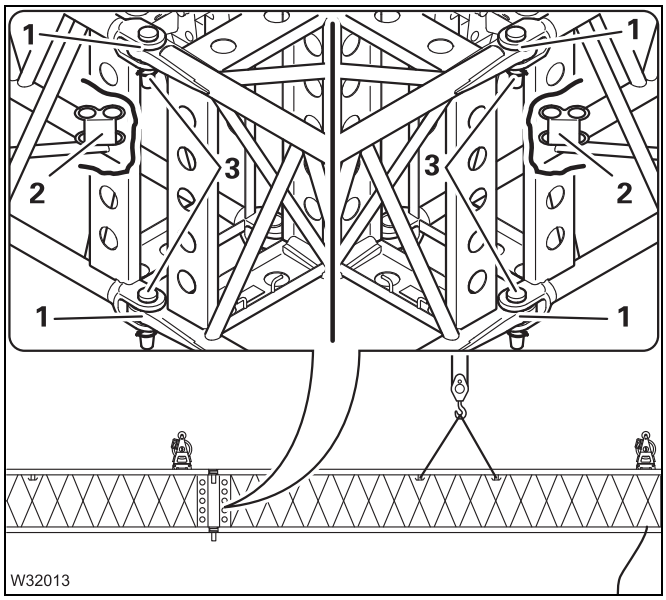
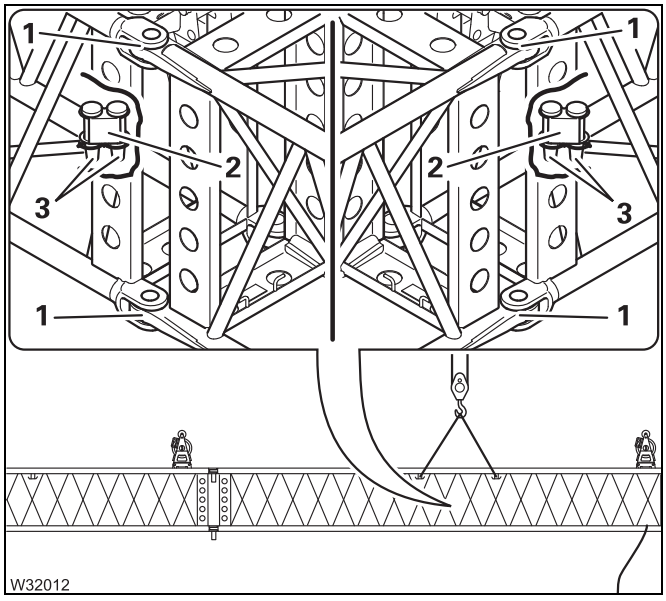
Section 3 - section 3



Connecting

- Sling the section 3 that is to be installed on an auxiliary crane.
- Align the connecting points (**1**).
- Remove the pins (**3**) from the clamps (**2**) and insert them into the connecting points (**1**).
- Secure the pins.



Separating

A guide rope must be attached.

- Sling the section 3 that is to be removed on an auxiliary crane.
- Remove the pins (**3**) from the connecting points (**1**) and insert them into the clamps (**2**).
- Secure the pins.
- Lift the section 3 that is to be removed from the other section 3.

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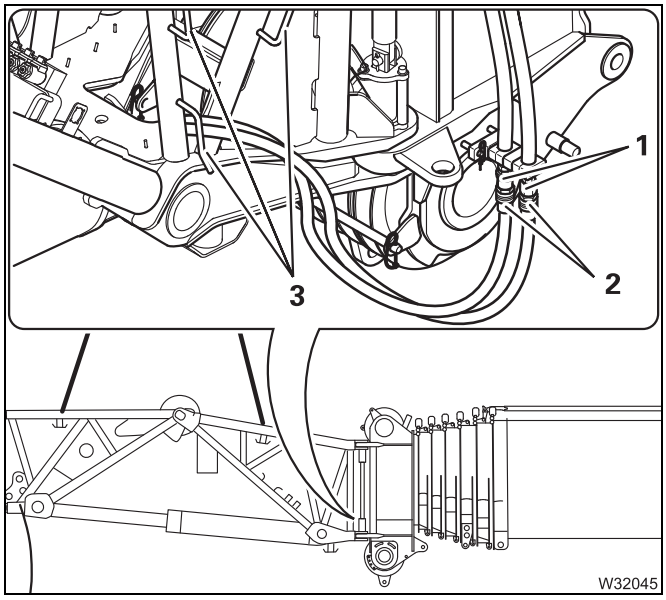
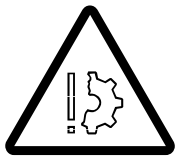
5.4.20 Establishing/disconnecting the hydraulic connections – Main boom/swing-away lattice

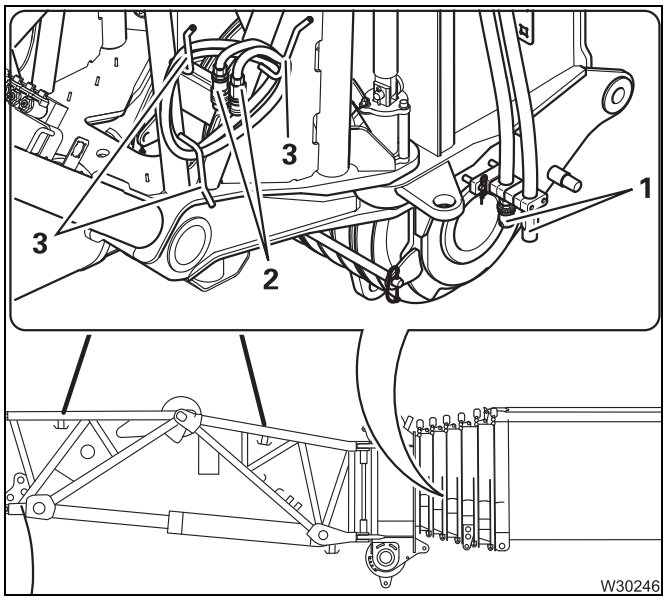


Connecting

- Remove the hoses (**2**) from the holders (**3**).
- Connect the hoses to the connections (**1**) (match the markings).



Risk of damage to the hoses!
Feed the hydraulic hoses under the main boom head so that they hang freely. Ensure that the hoses cannot be ripped off when folding the lattice extension.



Separating

- Remove the hoses (**2**) from the connections (**1**).
- Close the hoses and the connections (**1**) with the caps.
- Wind the hoses (**2**) on to the holder (**3**).

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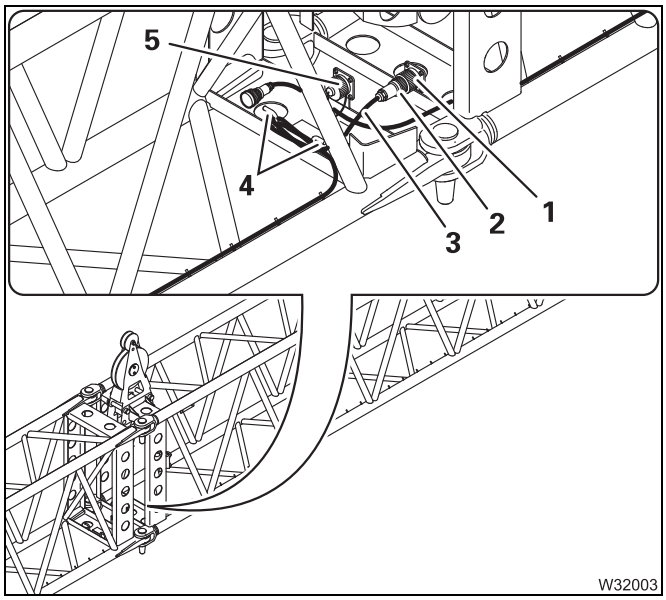
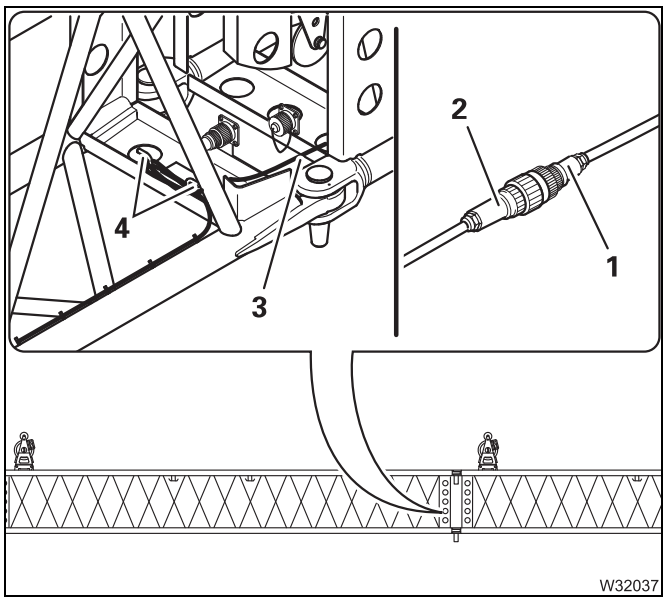
**Section 3 -
section 3**



Making the electrical connections

- Unwind the cable (**3**) from the holder (**4**).
- Remove the plug (**2**) from the dummy socket (**5**) and plug it into the socket (**1**).
- Lay the cable (**3**) so that it will not be damaged during crane operation.



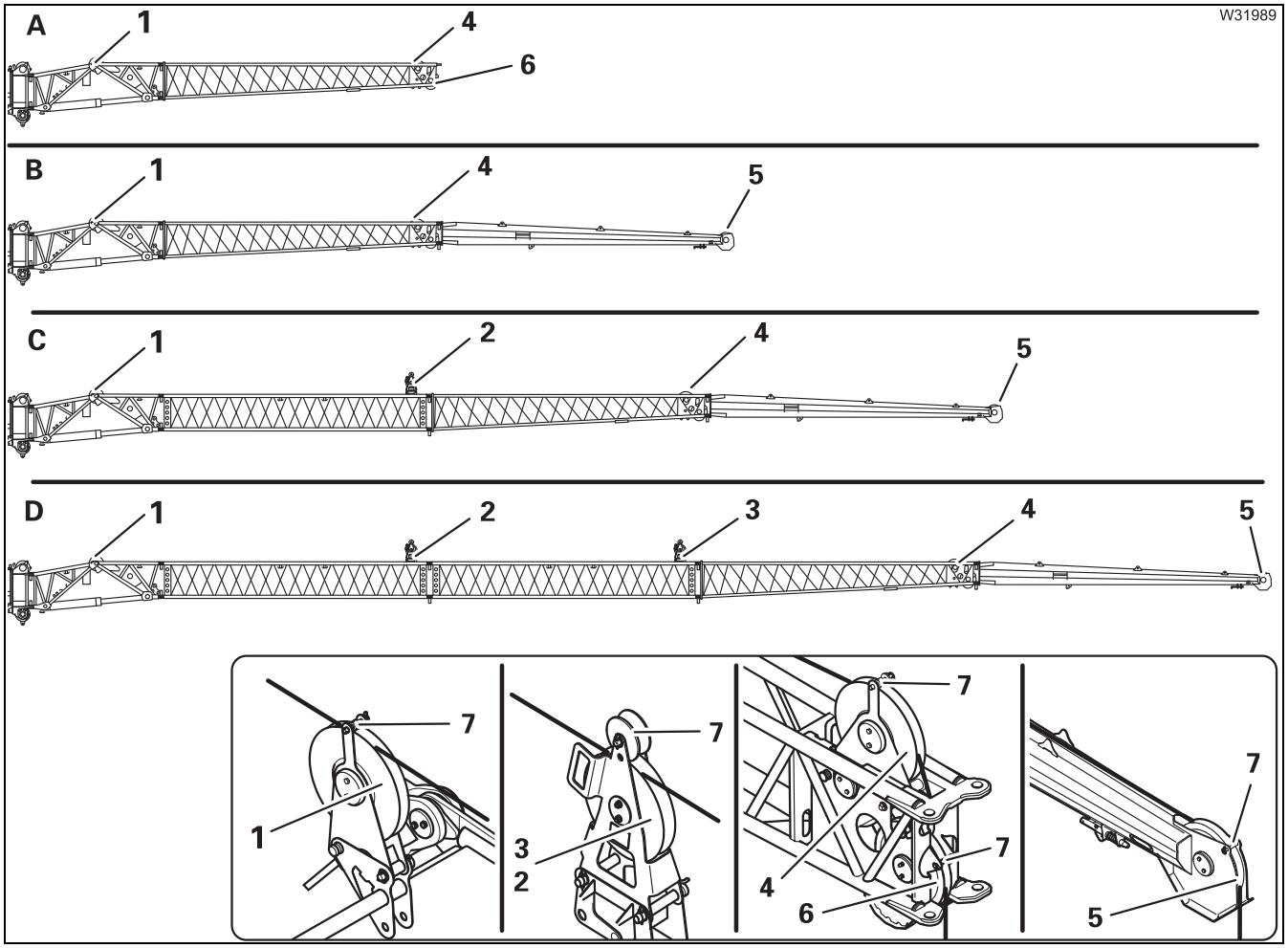
Making the connections for the camera

- Unwind the cable (**3**) from the holder (**4**).
- Insert the plug (**2**) into the socket (**1**).
- Lay the cable (**3**) so that it will not be damaged during crane operation.

22/02/2016

5.4.23 Attaching/removing the hoist rope

Risk of accidents due to falling parts!
Always secure the sheaves and rods for securing the hoist rope with retaining pins.
This prevents elements from coming loose or falling and causing injuries.



Fitting with swing-away lattices A to D

- Remove the sheaves (**7**) and rods (**7**).
- Guide the hoist rope over the deflection sheaves (**1**) to (**4**) and over the head sheaves (**5**) or (**6**), according to the swing-away lattice being used.
- Install all sheaves (**7**) and all rods (**7**).
- Secure the sheaves (**7**) and all rods (**7**).

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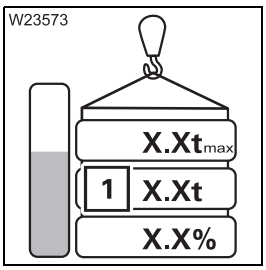

The RCL display does not display the reduced values correctly.
This means that the displayed value can deviate from the value that was previously calculated during the operations planning.

If this is the case, the RCL is not defective. Do not override the RCL. Even if the displayed value is higher than the calculated value.

Risk of accidents if the RCL is overridden!
Do not under any circumstances override the RCL.
If the RCL is overridden, the crane operation will not be monitored and the truck crane will overturn if it moves outside of the permissible working range.

5.5.7 Instructions for turning loads over

Turning loads is only permitted with swing-away lattices up to a maximum length of 22 m ; ➠ *Turning loads over*, p. 10 - 1.

22/02/2016

Malfunction	Cause	Solution
The main boom cannot be telescoped when the swing-away lattice is rigged – the swing-away lattice is not automatically swung	Swinging is not possible because the required connections have not been unlocked/separated. Error message 8033 40 xx xx (Time window exceeded)	Unlock the *front* connection; ➠ p. 5 - 79. Separate the *folded* connection; ➠ p. 5 - 101.
The swing-away lattice cannot be derricked	The lattice extension derricking gear is switched off.	Lattice extension derricking gear; ➠ p. 5 - 135.
	The electrical connection between main boom head and section 2 is separated.	Make the electrical connection; ➠ p. 5 - 107.
	The hydraulic connection has been disconnected.	Establishing an hydraulic connection; ➠ p. 5 - 105
	The specified RCL code does not apply to operation with the lattice extension.	Enter the RCL code for operation with the swing-away lattice; ➠ p. 5 - 139.
	The current load exceeds the derricking load - The *Raise swing-away lattice* motion is disabled. RCL error code **5 02 6** is displayed.	1. Raise the swing-away lattice. 2. If necessary, increase the working radius using the *Lower main boom* movement.

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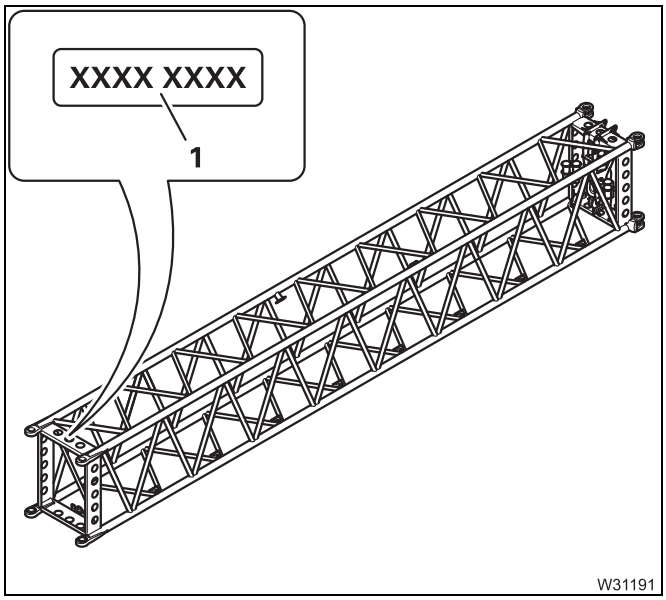
6.2.2 Identification

Section 5

Danger of accidents when using an incorrect boom extension!
Install only the section 5 that belongs to the specific truck crane. Other boom extensions must not be installed.



The truck crane and the corresponding section 5 must be labelled with the same serial number (**1**).

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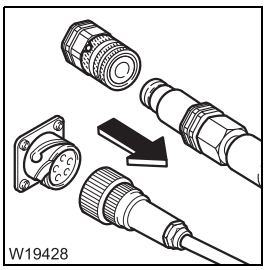
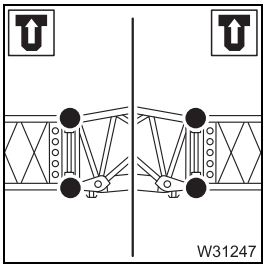
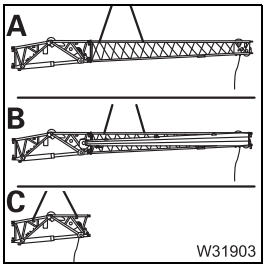


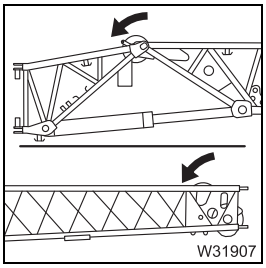
6. Disconnect all electrical and hydraulic connections between section 5 and the swing-away lattice.
– Electrical connection; ➠ p. 6 - 18.
– Hydraulic connection; ➠ p. 6 - 25.



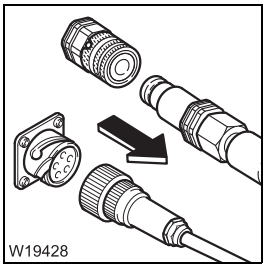
7. If mechanical locking is in use
– Separate the connection between section 4 and section 5; ➠ p. 6 - 29.



8. Lift the swing-away lattice off section 5 and set it down.



9. Fold in and secure the deflection sheaves.
– On section 4; ➠ p. 6 - 21.
– If necessary, at section 2; ➠ p. 6 - 22.



10. Disconnect the electrical and hydraulic connections between section 5 and the main boom.
– Electrical connection; ➠ p. 6 - 18.
– Hydraulic connection; ➠ p. 6 - 25.

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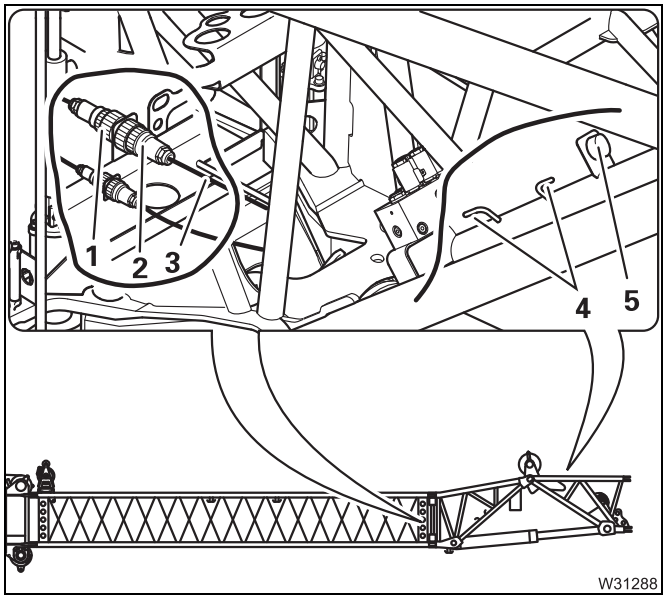
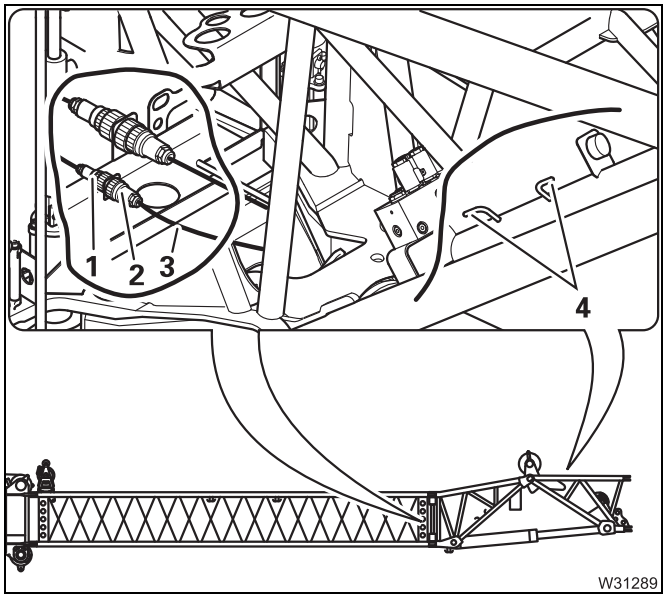
6.4.7 Connecting/disconnecting the electrical connections – section 4/section 5

Risk of crushing hands and arms during hydraulic locking!
Whilst section 4 is unlocked it can swing. Therefore, do not reach between section 5 and section 4. This will prevent your arms or hands from being crushed.
Lay the cable so that it will not be damaged during crane operation.



Making the electrical connections

- Unwind the cable (**3**) from the holder (**4**).
- Remove the plug (**2**) from the dummy socket (**5**) and plug it into the socket (**1**).
- Lay the cable (**3**) in such a way that it will not be damaged during crane operation.



Making the connections for the camera

- Unwind the cable (**3**) from the holder (**4**).
- Insert the plug (**2**) into the socket (**1**).
- Lay the cable (**3**) in such a way that it will not be damaged during crane operation.

22/02/2016

6.5.3 Procedure if permissible wind speed is exceeded

Risk of accidents from excessively high wind speeds!
If the current wind speed is higher than the maximum permissible wind speed, cease crane operation immediately and set up the corresponding rigging mode.
This will prevent the truck crane from overturning due to overload.

- Prior to and during crane operation, check whether the current wind speed is lower than the maximum permissible wind speed.
- Be sure to follow the instructions for checking the wind speed;
  ➠ *Operating manual GMK5250L.*

If the maximum permitted wind speed is exceeded

An automatic shutdown **does not** occur if the maximum permissible wind speed is exceeded.

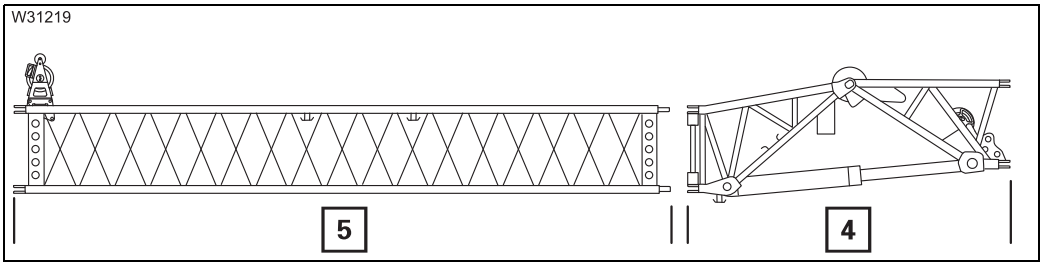
- Immediately cease crane operation.
- Put the truck crane into the rigging mode specified for the current wind speed in the *Lifting capacity table*.

6.5.4 Instructions for turning loads over

Turning loads over with a rigged boom extension is prohibited.

22/02/2016

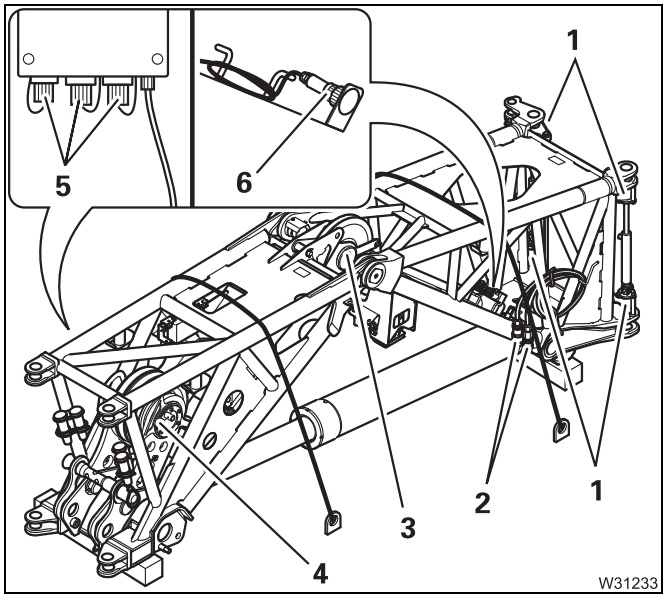
7.1.4 Transport dimensions and weights



Section	Length x width x height in m	Weight in kg
4	4.20 x 1.05 x 1.50	1637
5	8.20 x 0.90 x 1.20	715

7.1.5 Transport condition

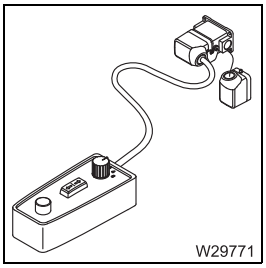
Section 4



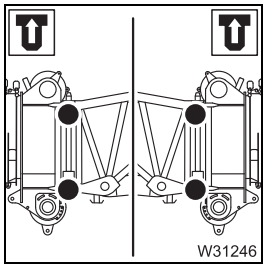
- Check that the heavy lattice load extension is secure for transport or secure it now, if necessary:
  - All pins (**1**) must be secured in the clamps.
  - The hoses (**2**) must be wound on to the holders.
  - The head sheave (**4**) and the deflection sheave (**3**) must be folded in and secured.
  - The plug (**6**) must be plugged in and the sockets (**5**) closed with caps.
  - Section 4 must be secured to a suitable support.

12.05.2017

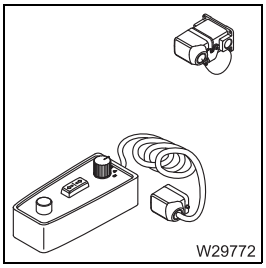
9. If hydraulic locking is in use



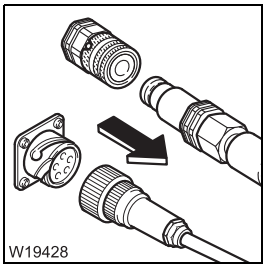
– Connect the *lattice extension* hand-held control; ➠ p. 3 - 4.



– Break the connection between section 4 and the main boom; ➠ p. 7 - 31.

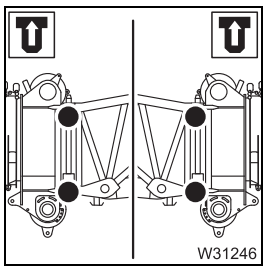


– Take off the *lattice extension* hand-held control and stow it away for transport, ➠ p. 3 - 4.



10. Break the electric and hydraulic connections:
– electrical connection; ➠ p. 7 - 35
– hydraulic connection; ➠ p. 7 - 37.

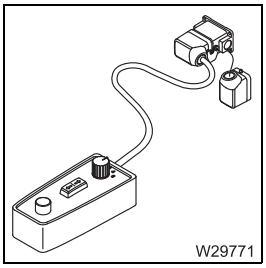
11. If mechanical locking is in use



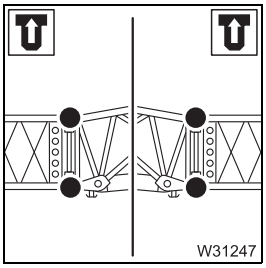
– Break the connection between section 4 and the main boom; ➠ p. 7 - 34.

22/02/2016

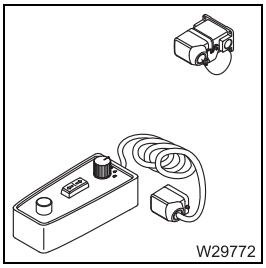
9. If hydraulic locking is in use



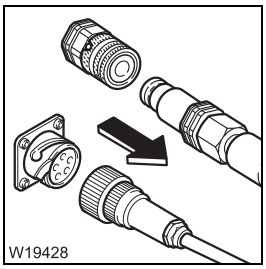
– Connect the *lattice extension* hand-held control; ➠ p. 3 - 4.



– Break the connection between section 4 and section 5; ➠ p. 7 - 52.

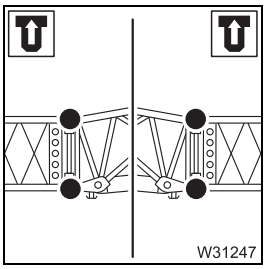


– Take off the *lattice extension* hand-held control and stow it away for transport, ➠ p. 3 - 4.



10. Break the electrical and hydraulic connections between section 4 and section 5:
– electrical connection; ➠ p. 7 - 56
– hydraulic connection; ➠ p. 7 - 58.

11. If mechanical locking is in use

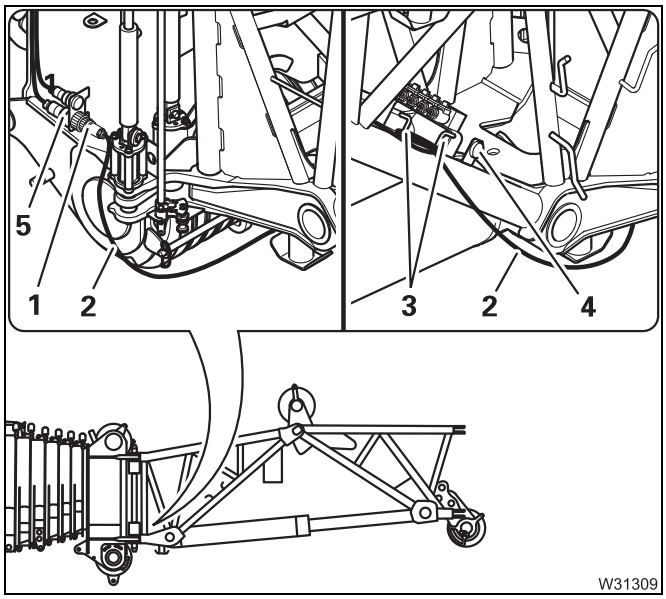


– Break the connection between section 4 and section 5; ➠ p. 7 - 55.

22/02/2016

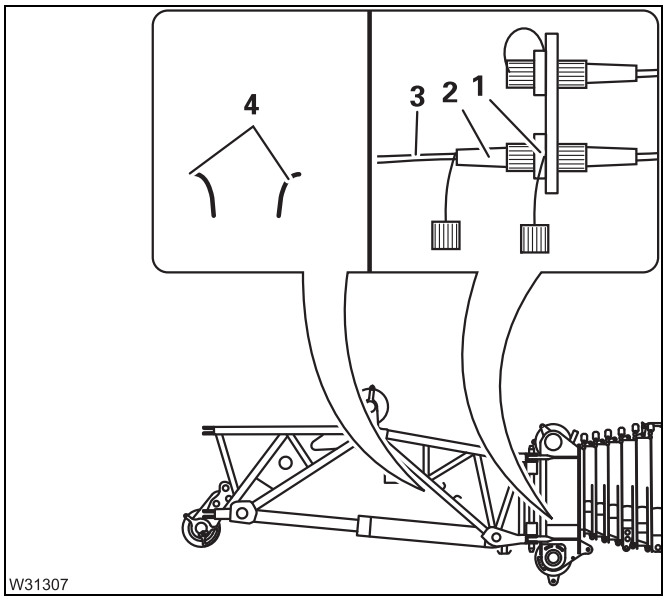
7.3.4 Making/breaking the electrical connections – section 4 / main boom

Crush hazard for hands and arms during hydraulic locking
Whilst section 4 is unlocked it can swing. Therefore do not reach between the main boom and section 4. In this way you avoid the risk that your hands and arms may be trapped and crushed.
Lay the cable so that it will not be damaged during crane operation.



Making the electrical connections

- Unwind the cable (**2**) from the holder (**3**).
- Remove the plug (**1**) from the dummy socket (**5**) and plug it into the socket (**4**).
- Lay the cable (**2**) in such a way that it will not be damaged during crane operation.



Making the connections for the camera

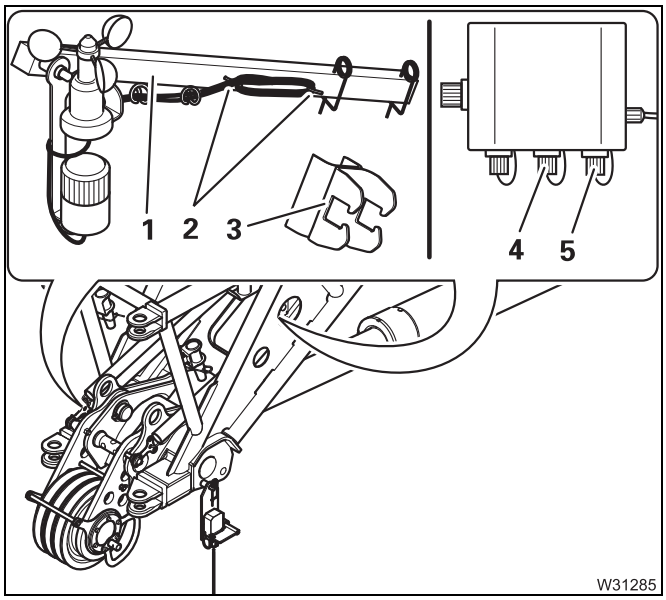
- Unwind the cable (**3**) from the holder (**4**).
- Insert the plug (**2**) into the socket (**1**).
- Lay the cable (**3**) in such a way that it will not be damaged during crane operation.

22/02/2016

Removal

You must remove the rod with the anemometer/air traffic control light before driving on the road.

- Switch off the air traffic control light.



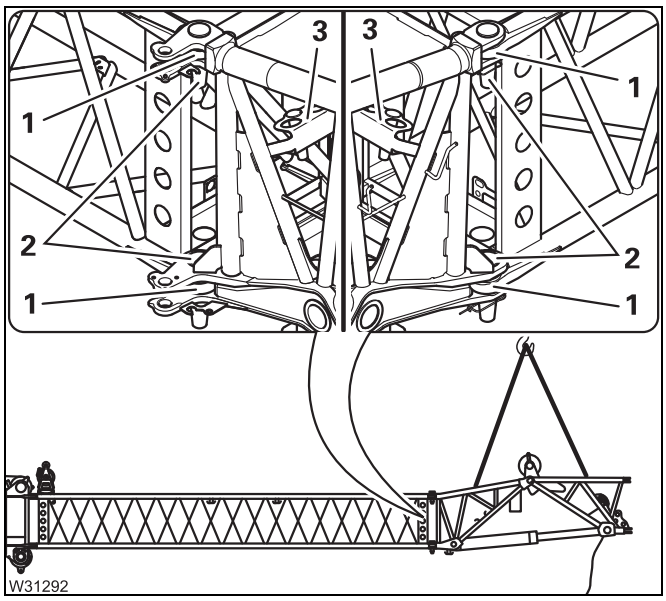
- Remove the plug and close the sockets (**5**) and (**4**) with caps.
- Wind the cables on to the holders (**2**).
- Take the rod (**1**) out of the holder (**3**).

Stow away the anemometer safely;
➠ *Operating manual GMK5250L.*

22/02/2016

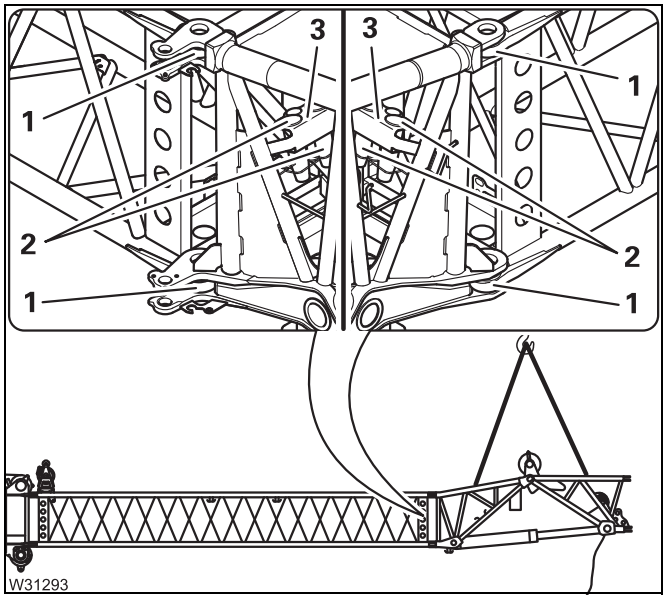
7.3.18 Installing section 4 on to section 5 / removing it – mechanical locking

– Section 4 must be attached to an auxiliary crane.
– A guide rope must be attached.



Installing

- Align the connection points (**1**).
- Remove the pins (**2**) from the clamps (**3**) and plug them into the connecting points (**1**).
- Secure the pins.
- Disconnect the guide rope and the lifting tackle.



Removing

- Remove the pins (**2**) from the connecting points (**1**) and plug them into the clamps (**3**).
- Secure the pins.
- Disconnect the guide rope and the lifting tackle.

22/02/2016

7.5.2 Derricking, telescoping the main boom

Slewing range of 360°

Risk of accidents if the RCL is overridden
Do not override the RCL when lowering the boom into horizontal position. If the RCL is overridden, the crane operation will not be monitored and the truck crane will overturn if it moves outside of the permissible working range.

The requirements that must be satisfied before the raising, lowering and telescoping of the main boom with rigged heavy load lattice extension are permitted, for a slewing range of 360° are monitored by the RCL; ➠ *Operating manual GMK 5250L*.

If the main boom is set to a steep angle and if the heavy load lattice extension is at 0°, the hook block may hit the main boom. When the minimum permitted working radius has been reached, the RCL will prevent the boom being raised further.

7.5.3 Procedure if permissible wind speeds are exceeded

Risk of accidents from excessively high wind speeds
If the current wind speed is higher than the maximum permissible wind speed, cease crane operation immediately and set up the corresponding rigging mode.
This will prevent the truck crane from overturning due to overload.

- Prior to and during crane operation, check whether the current wind speed is lower than the maximum permissible wind speed.
- Make sure that you follow the instructions for checking the wind speed; ➠ *Operating manual GMK 5250L.*

If the maximum permissible wind speed is exceeded

No automatic shutdown occurs if the maximum permissible wind speed is exceeded.

- Immediately cease crane operation.
- Put the truck crane into the rigging mode specified for the current wind speed in the *Lifting capacity table*.

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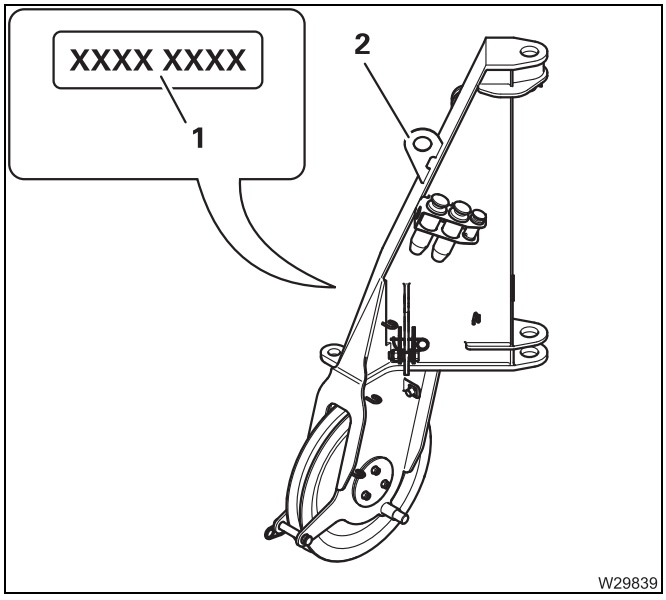
8 Auxiliary single-sheave boom top 1

8.1 Operations planning

8.1.1 Identification and slinging points

Risk of accidents if auxiliary single-sheave boom tops are interchanged!
Install only a auxiliary single-sheave boom top that belongs to the crane. No other auxiliary single-sheave boom tops may be installed.

Danger of accidents if used improperly
Only fit slings to the auxiliary single-sheave boom top at the slinging points provided. Use only sling gear and connecting elements of sufficient load bearing capacity.



Identification

The crane and the corresponding auxiliary single-sheave boom top must be labelled with the same serial number (**1**).

Slinging points

There is a connection point (**2**) at the auxiliary single-sheave boom top.

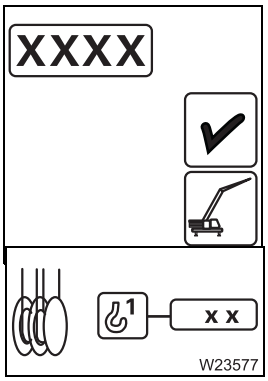
22/02/2016

8.3 Operation with the auxiliary single-sheave boom top 1

The raising, lowering, slewing, derricking and telescoping movements of the main boom are carried out in the same way as when operating with the main boom. This section only contains information that you will need for a rigged or folded up auxiliary single-sheave boom top.

8.3.1 Setting the RCL

Input



- Input the current rigging mode for operation with the **main boom** into the RCL.

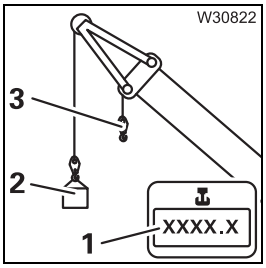
- Input into the RCL the current reeving at the auxiliary single-sheave boom top for the hoist whose hoist rope is reeved to the auxiliary single-sheave boom top.

Shutdown

Operation with the auxiliary single-sheave boom top is monitored by the RCL.

When operating with the auxiliary single-sheave boom top, RCL shutdowns may occur for the same reasons as when operating with the main boom; ➠ *Operating manual GMK5250L*.

In certain rigging modes, the RCL shuts down if loads that are lighter than the maximum load bearing capacity specified in the *lifting capacity table* are lifted.



- **During operation with the auxiliary single-sheave boom top**

  If a hook block (**3**) is reeved at the main boom, then the displayed current load (**1**) is influenced by

  – the weight of the lifted load (**2**) and

  – the weight of the hook block (**3**).

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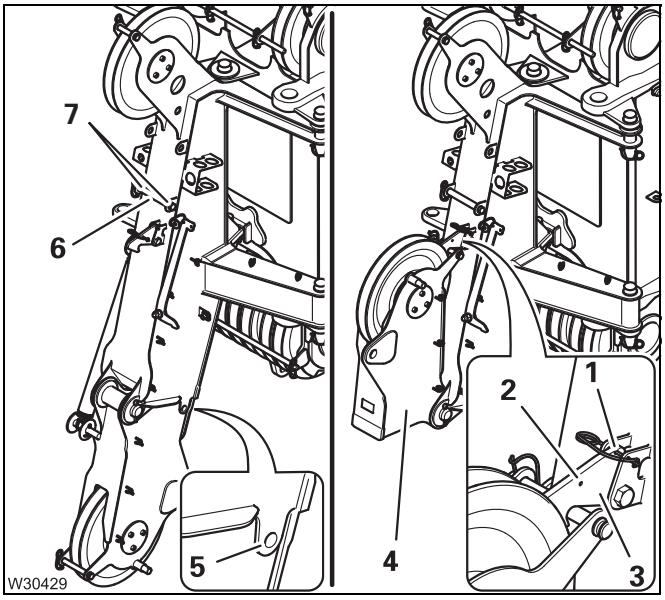
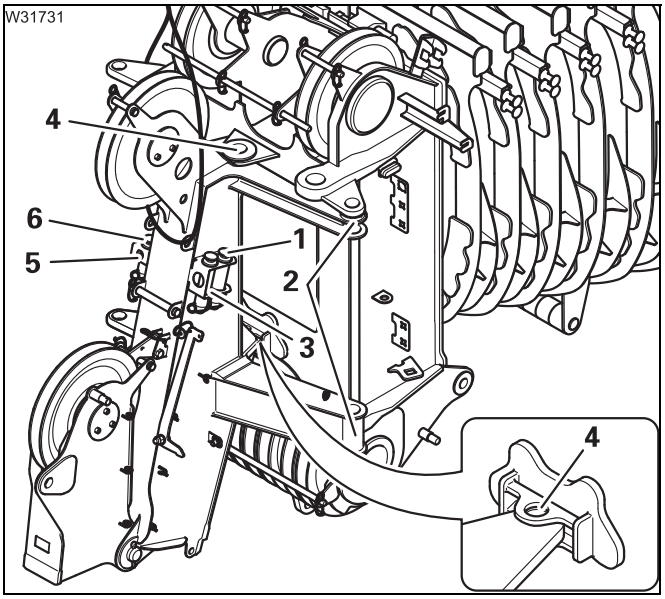
9.2.2 Moving the auxiliary single-sheave boom top into the transport position

Crush hazard due to the head sheave folding back
The lower part of the head sheave folds against the frame of the auxiliary single-sheave boom top and can trap and crush your hands.
Therefore always grasp the head sheave by its upper area.
By this means you avoid your hands being crushed between the frame and the head sheave.



Folding the head sheave in

- Take the pin (**6**) out of the connecting point (**5**) and insert it into the holder (**7**).
- Fold the head sheave (**4**) upwards so that the lever (**3**) engages.
- Take the retaining pin from the hole (**2**) and insert it into the connecting point (**1**).



For transportation on a separate vehicle

- Sling the auxiliary single-sheave boom top to an auxiliary crane; ➠ p. 9 - 1.
- Remove the pins (**1**) from the connecting points (**2**) and plug them into the clamps (**3**).
- Remove the pins (**5**) from the connecting points (**4**) and plug them into the clamps (**6**).
- Secure all the pins in the holders.
- Lift the auxiliary single-sheave boom top from the head of the main boom.

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10 Turning loads over

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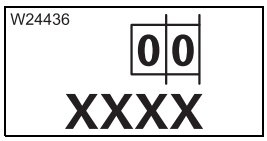
11.3 Permissible rigging modes and axle loads

Depending on the rigged counterweight and lattice extension, you must bring the superstructure, the main boom and rigged into certain positions so that the permissible axle loads are not exceeded.

Risk of damage to the axle lines.
Move the superstructure, the main boom and the lattice extension into the specified positions only. This prevents excessive strain on the axle lines.



- Enter the RCL code for the actual rigging mode and actual outrigger span of the truck crane in accordance with the *Lifting capacity table*.

Risk of accidents if the RCL is overridden!
Always enter the RCL code for the current rigging mode. The specified positions are within the monitored working ranges.
If the RCL is overridden, the truck crane may overturn even if you move it into the positions specified.

- Bring the superstructure, the main boom and the lattice extension into the position specified for the rigged counterweight in the following table.
- Tie down the hook block so that it cannot swing around.

Notes on the tables

The axle loads specified in the following tables refer to a driving mode with the basic unit.

Note on the specified angle ranges
The specified maximum axle load is only reached at the limits of the listed angle range for the main boom, e.g. at 20° or 70°. If the maximum axle load is reached at the front, it will be below the maximum value at the rear and vice versa.
The axle loads are below the specified maximum axle loads within the listed angle range.

The following applies to the footnotes in the table:

1)	Rear:	Slewing angle display 0°
	Front:	Display, slewing angle 180°
2)	Front:	Each on the 1st and 2nd axle lines
	Rear	respectively on 3rd, 4th and 5th axle lines

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Heavy load lattice extension 10.0 m

All axle loads specified apply to a reeved 3-sheave hook block, weight 950 kg.

Counter-weight in t	Telescopic section telescope status I-II-III-IV-V-VI in %	Main boom angle in °	Lattice extension inclination in °	Super-structure position[1]	Maximum Axle Load[2] in t	
					front	rear
0.0	0-0-0-0-0-0	5 - 40	0	front	17.0	12.5
	0-0-0-0-0-0	5 - 60	35	front	17.0	16.0
	0-0-0-0-0-0	80	35	rear	8.5	15.5
7.0	0-0-0-0-0-0	5 - 40	0	front	14.0	16.5
	0-0-0-0-0-0	5 - 45	35	front	14.0	17.5
	0-0-0-0-0-0	80	35	rear	10.5	16.5
16.5	0-0-0-0-0-0	5 - 15	0	front	10.5	20.0
	0-0-0-0-0-0	5 - 10	35	front	10.5	20.0
	0-0-0-0-0-0	70 - 80	35	rear	14.0	17.5
21.0	50-0-0-0-0-0	5 - 40	0	front	17.5	20.5
	50-0-0-0-0-0	5 - 40	35	front	17.5	20.5
	0-0-0-0-0-0	65 - 80	35	rear	15.5	20.5
26.0	50-0-0-0-0-0	5 - 35	0	front	15.5	22.5
	50-0-0-0-0-0	5 - 35	35	front	15.5	22.5
	0-0-0-0-0-0	60 - 80	35	rear	17.5	22.0
30.5	50-0-0-0-0-0	5 - 25	0	front	14.0	23.5
	50-0-0-0-0-0	5 - 25	35	front	14.0	23.5
	0-0-0-0-0-0	55 - 80	35	rear	19.0	23.5
35.5	50-50-0-0-0-0	5 - 35	0	front	18.5	24.5
	50-50-0-0-0-0	5 - 35	35	front	18.5	24.5
	0-0-0-0-0-0	50 - 80	35	rear	21.0	25.0
40.0	50-50-0-0-0-0	5 - 25	0	front	16.5	25.5
	50-50-0-0-0-0	5 - 25	35	front	16.5	25.0
	0-0-0-0-0-0	45 - 80	35	rear	22.5	26.0
45.5	50-50-50-0-0-0	5 - 30	0	front	17.5	26.5
	0-0-0-0-0-0	40	0	rear	13.5	27.5
	50-50-50-0-0-0	5 - 30	35	front	17.5	26.5
	0-0-0-0-0-0	40- 80	35	rear	24.5	27.5

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