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SHORING GRAB

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OPERATING MANUAL

► Shoring grab

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Preface

Please read this operating manual carefully before using the device for the first time as this will prevent its incorrect use.

Please ensure to pass on all safety instructions to other users as well.

The operating manual sets out the correct handling of the shoring grab and the plate grab on the construction site, during transport etc. It should thus be kept in the document box in the excavator cabin.

The manual also contains information on the mandatory annual inspections pursuant to the German Ordinance on Industrial Safety and Health (BetrSichV), ensuring high safety levels as well as increasing the resale value of the device.



Shoring grab

1. Intended use

The shoring grab is designed exclusively as an attachment tool with quick coupling system for commercial use.

The shoring grab is intended mainly to be used for lifting, moving, setting down and pull-ing up shoring boxes in line with the exact procedures set out in this manual.

The (compact) plate grab is optimised for handling slide rail shoring plates.

Please note: When used correctly, these devices reduce the risk of accidents and injuries to a minimum and speed up installation and extraction times at the same time.

Both shoring grabs may only be used with the RSV R7-B13 rotary motor and the KG40 universal joint.

Any other use is considered as not as intended. The manufacturer cannot be held liable for damages resulting from such a use, and the user alone bears the risk.



1.1 Foreseeable misuse

The maximum permissible tensile load for the attachment tool is seven tonnes. When extracting shoring elements, the maximum tensile load of seven tonnes must not be exceeded. The attachment tool must not be used to loosen shoring boxes that are stuck.

If you require tensile forces exceeding five tonnes, please use our shoring extractor (Hydralifter) which can muster a tensile force of up to 100 tonnes in confined spaces.



Plate grab

► Shoring grab

1.2 Reading this can save lives!

Using the device as intended also requires adhering to the following points as specified by the manufacturer:

- Handover with initial instructions
- Safety information and regulations
- Operational, service and maintenance requirements.

The attachment tool may only be used and/or serviced by persons who are familiar with it and have been instructed about any potential associated risks.

Maintenance procedures are set out in this document, repair work may only be carried out by the manufacturer!

The manufacturer cannot be held liable for any damage resulting from unauthorised modifications to the attachment tool.

All relevant and country-specific accident prevention regulations as well as other commonly recognised safety, occupational health and road traffic regulations must be complied with.

Manufacturers, dealers, owners and operators all bear responsibility for safety.

Please take into account that the life of the user and others may depend on correct and safety-conscious operation of the equipment.

2. Safety information and accident prevention

Before commencing operation, users and machine operators must familiarise themselves with all control elements and their functions. Trying to do so during operation would be too late!



The **safety icon** indicates safety information in this operating manual.

Non-observation of safety instructions may put the health and lives of people at risk and result in damage to material.

2.1 General safety instructions

- In addition to the instructions provided in this operating manual, please adhere to general accident prevention and safety regulations.
- The attached warning and instruction signs provide important information for safe operation of the device; observing them serves your safety.
- When using public roads, the relevant rules of the road (StVO) must be observed.
- It is not permitted to enter the operating area or the slewing range of the machinery.
- The operating area must be secured accordingly before commencing operation

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2.2 Operational safety instructions



- ▶ It is not permitted for any person to enter the area under a suspended load or the danger zone around the machinery!

- ▶ Never allow anyone to guide the attachment tool by hand! **Risk of injury!**



- ▶ Take note of and observe all signs displayed at dangerous areas and machines.

- ▶ The operator of the equipment must ensure to prevent any danger to others. (We recommend using CCTV technology for a 360-degree view and for areas that are not visible from the operator's cabin.)

- ▶ Before starting to move and before commencing operation, the risk area must be checked.



- ▶ Avoid unnecessary and jerky movements when swivelling.

- ▶ Drive slowly and think and look ahead.

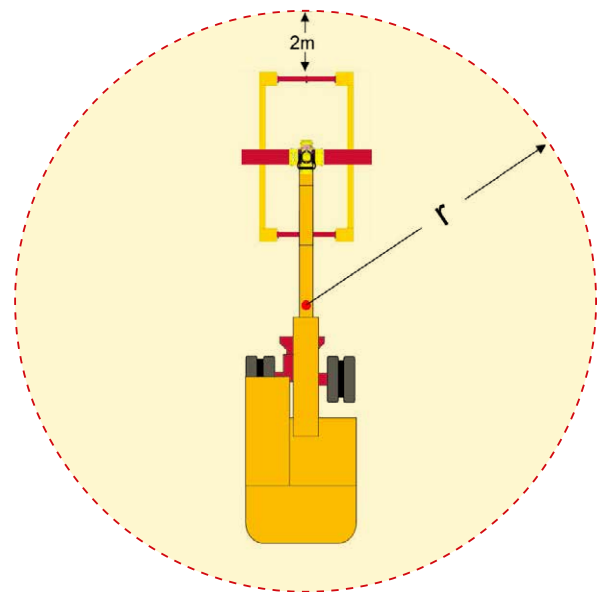


- ▶ Beware of crush and shear points on power operated (e.g. hydraulically) moving parts. Please take note of and observe the DIN 4844-standard signs at the danger spots.

2.3 Risk area

It is strictly prohibited for any person to enter the risk area (r) during operation of the hydraulic excavator! Failure to observe this rule may result in severe injuries and damage

The risk area (r) is the space around the lifting equipment where people may be hit by loads or equipment as a result of movements of the equipment or any attachments, or by swinging loads, falling loads or falling equipment.



- ▶ Always ensure that nobody enters the risk area (r) around the equipment!

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2.4 Hydraulic system



The hydraulic system is highly pressurised. Fluids escaping under high pressure (hydraulic oil) can penetrate the skin and cause serious injuries. In case of injury, seek medical attention immediately. Risk of infection!



When connecting the hydraulic hoses to the excavator's hydraulic system, the hydraulic systems both on the excavator and the attachment sides must be unpressurised and the excavator engine must be turned off.

Before working on the hydraulic system, uncouple the device, release the pressure from the system and turn off the engine.

- Ensure that the connectors of the hoses and the hydraulic cylinders are compatible.
- The female and male connectors for functional connections between carrier vehicle and attachment should be marked in order to prevent incorrect operation. Accidentally mixing up the connections will result in a reversal of functionality (e.g. extend/retract). Risk of accident!
- The hydraulic hose pipes must be checked regularly and replaced if worn or too old. The replacement pipes must comply with the specifications of the equipment manufacturer.

- Suitable equipment must be used for locating leaks due to the risk of injury.
- Do not inhale heat vapours!
- Only use nitrogen for recharging hydraulic accumulators – risk of explosion! Recharging must be carried out in a specialist workshop or directly by the manufacturer.
- In the case of loss of pressure in the membrane accumulator, the device must be checked in a workshop immediately!
- Before carrying out any work on the hydraulic system, set down the device, release the pressure from the system and turn off the engine.
- The maximum operating pressure of the hydraulic system is 80 bar. In the case of loss of pressure, the system must be checked immediately.

2.5 Safe maintenance work

- Repair, maintenance and cleaning work must only be carried out with the engine turned off. Ensure that all parts have stopped moving before commencing the work.
- If the device is lifted off the ground when work is carried out, it must be secured using suitable support elements (e.g. stand).

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- ▶ When protective elements need to be removed during maintenance work, the risk of accident increases. The protective elements must be correctly reattached after completion of the work to ensure their full functionality.
- ▶ Oils and greases must be disposed of properly and in an environmentally friendly manner.
- ▶ Check nuts and bolts after ten operating hours and tighten if necessary.
- ▶ Before starting the machine, it must be checked for worn and corroded parts. These must be replaced, otherwise there is a risk of failure and/or accidents due to insufficient mechanical strength.
- ▶ Please note: At the end of the season as well as after overload situations welding seams must be checked visually for cracks. Checking for cracks averts the need for more extensive repair work and prevents accidents.
- ▶ All maintenance and repair work that is not covered by this operating manual must only be carried out in specialist workshops, otherwise the manufacturer will not accept any warranty claims.
- ▶ Only original spare parts from Schmölz Schacht-FIX and Baugeräte GmbH may be used for the attachment, otherwise the warranty will become void.

3 Ordering spare parts

Please provide the following information:

1. Device and type number (on identification plate). Photos of parts to be replaced are also helpful.
2. The spare part number (SP no.) listed in this operating manual.
3. The latest version of this operating manual can be ordered by email.
4. Please check thoroughly which of the additional equipment/additional versions in the spare parts list are the correct ones for your device.
5. Shipping: By parcel service/shipping company. Please provide a clear and exact address with post code.
6. Requests can also be sent by e-mail to mail@schachtfix.info
+49 (0) 8349 9720
+49 (0) 8349 9721

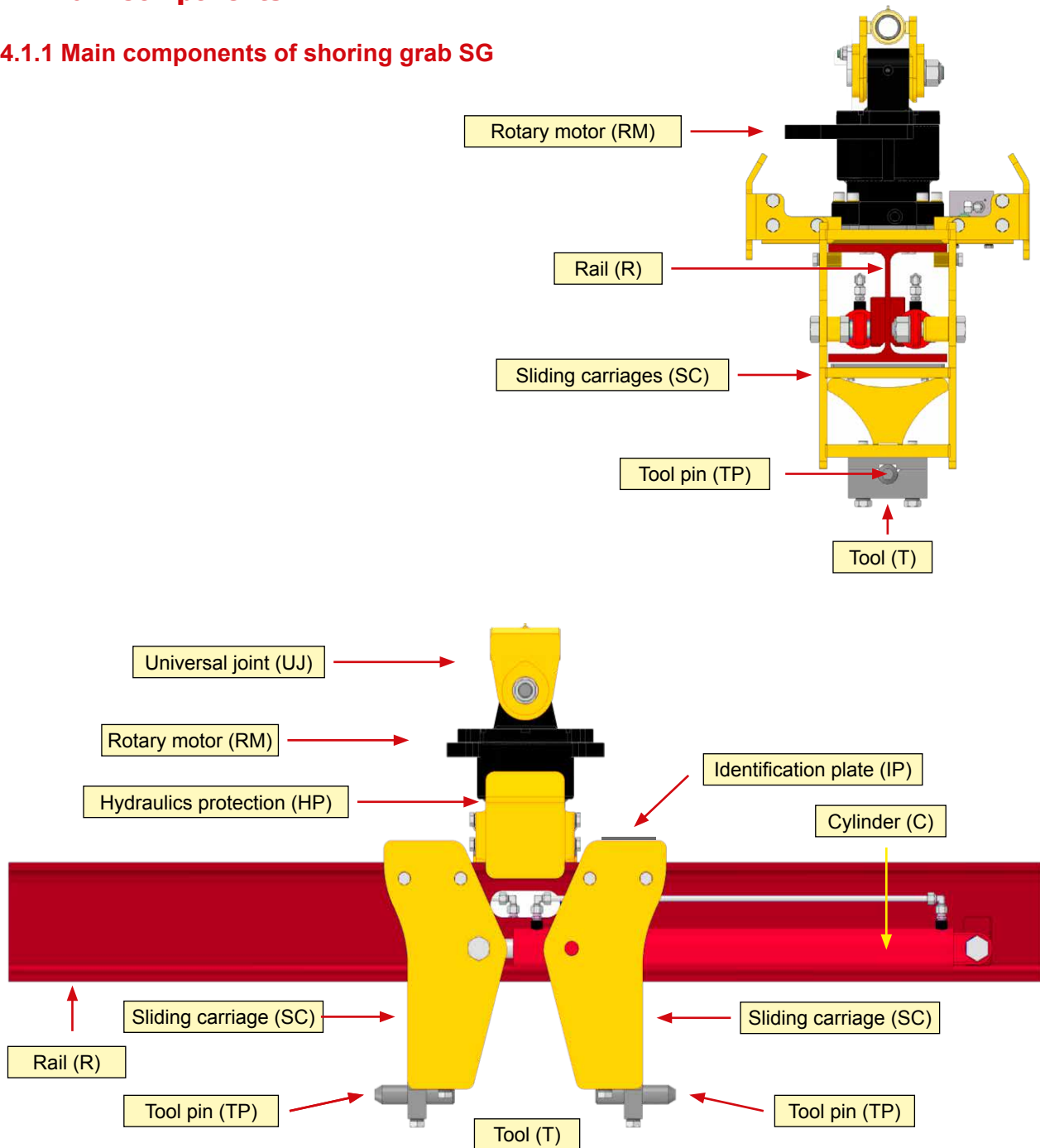
All repairs within the 12-month warranty period must be agreed with the manufacturer first. Repair work that has not been agreed in advance will be carried out on the owner's risk.

► Shoring grab

4 Getting to know the device, practicing its safe handling

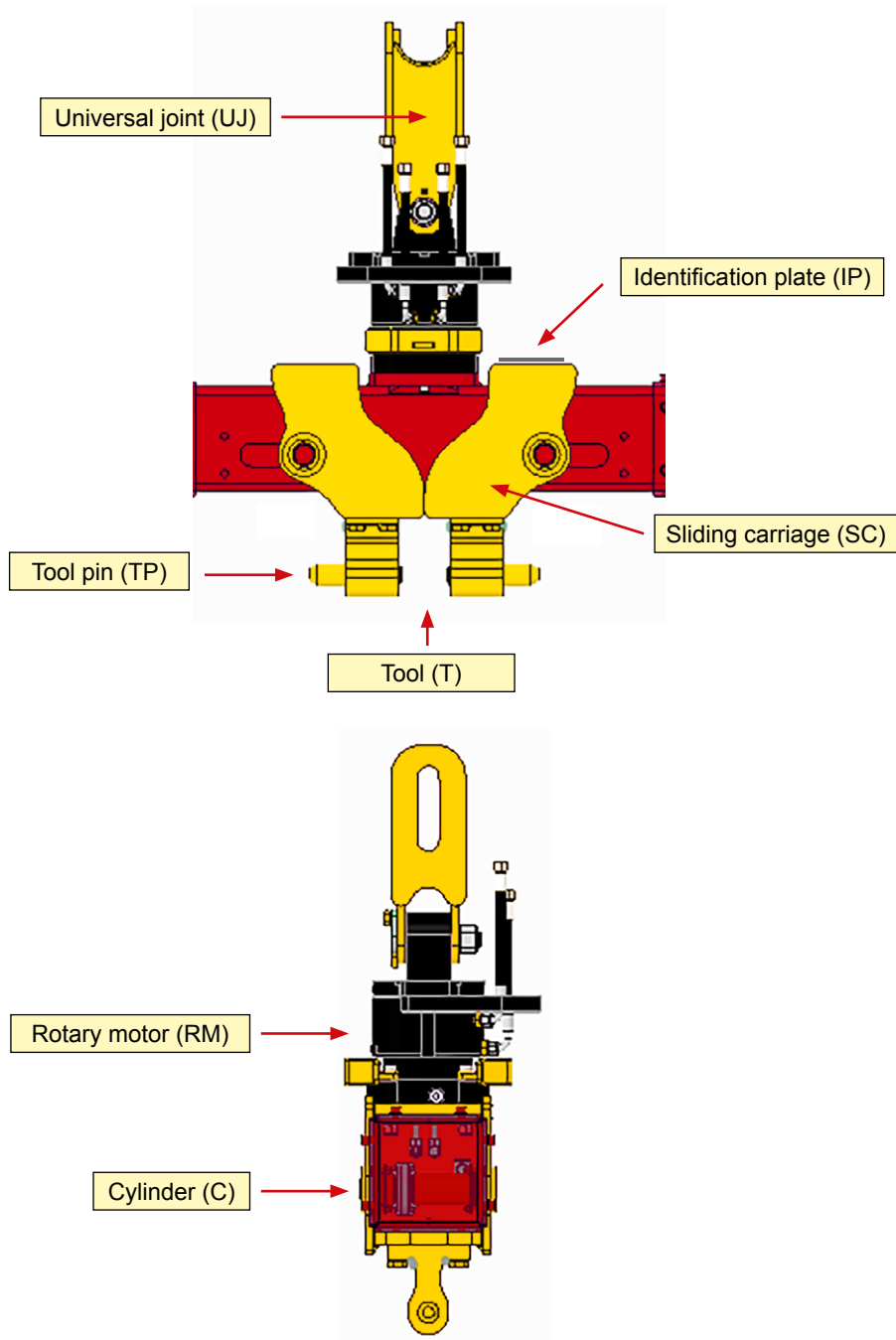
4.1 Main components

4.1.1 Main components of shoring grab SG



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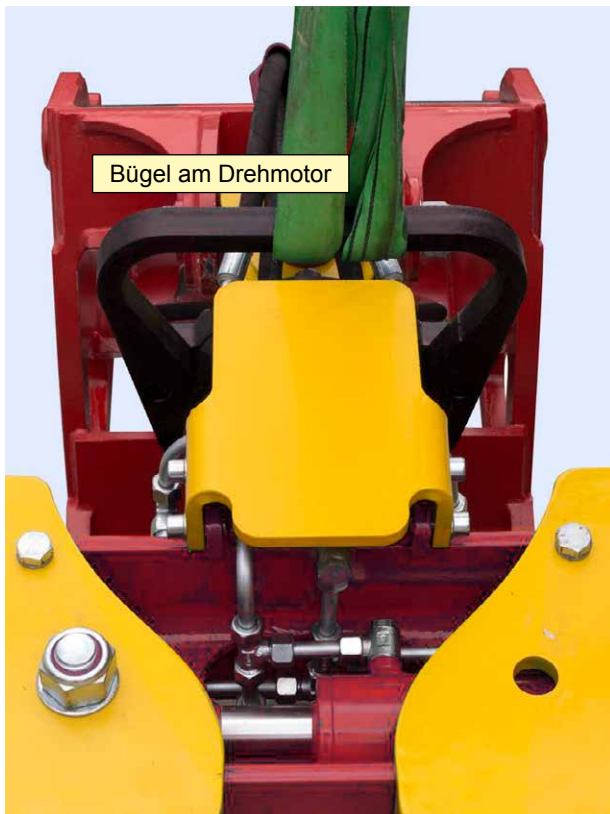
4.1.2 Main components of plate grab PG



► Shoring grab

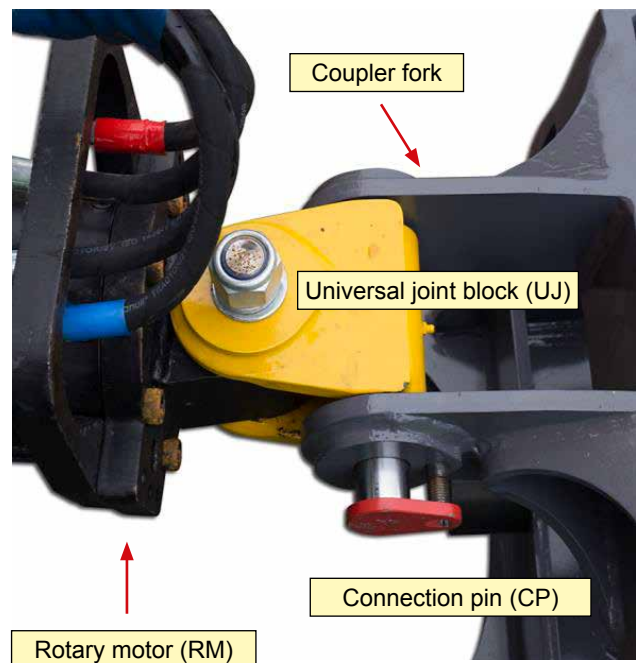
4.2 Transport and storage

- When disconnecting the attachment tool from the carrier machine's quick coupling system, place it on a level, solid surface.
- When moving the device using a forklift, please ensure that it rests securely on the means of transport. Only lift the attachment tool as much off the ground as is absolutely necessary for its transport.
- If the attachment tool cannot be coupled to a carrier device using the quick coupling system, the attachment tool must be securely attached to the rotary motor bracket with a sling as shown in the illustration below.



4.3 Commissioning

- The attachment tool may only be commissioned by trained and qualified technicians.
- We recommend getting the tool commissioned by the manufacturer or at a specialist workshop.
- Any work on the device must be carried out with the engine, drive and hydraulic system turned off.
- Carefully selecting quality hydraulic oil prolongs the machine's life and ensures flawless function and operational safety. For normal operating conditions, we recommend DIN 51524 Part 1-standard HL hydraulic oil and for heavy operating conditions we recommend DIN 51524 Part 2-standard HLP hydraulic oil.



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- Never mix mineral oil systems and bio-oil (requires laborious rinsing/cleaning process).
- To fit the quick coupling adapter (CA), attachment tool and adapter must be placed on an even and solid surface.
- The attachment tool has a hydraulically controlled function for extending and retracting the sliding carriages as well as a rotary function (left-right movement).

1. Connect the coupler fork to the universal joint block of the attachment tool. **Only use the connecting pin (CP) supplied by the manufacturer for this purpose!**

2. Connect the four pre-installed hydraulic hoses on the hydraulic motor to the hydraulic connectors on the quick coupling adapter.

The two hoses marked blue and red control the attachment tool sliding carriages' extend and retract functions.

The two unmarked hoses control the rotary function (left-right) of the attachment tool. These two hoses must be connected to the outer connectors on the quick coupling adapter.

3. Select an operating pressure for controlling attachment tools of 100 bar and a flow rate of 80 litres/min. on the carrier machine. **Follow the instructions in the operating manual of the carrier machine.**

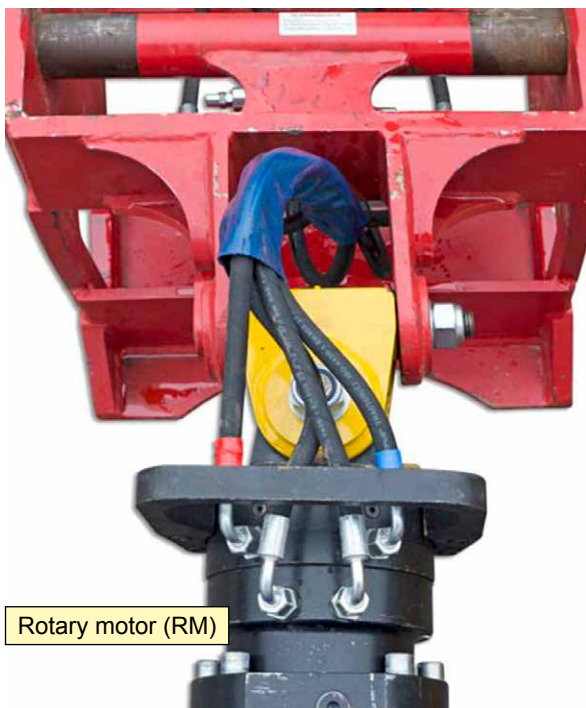


► Shoring grab

4. Couple the attachment tool with the hydraulic quick coupling system to the carrier machine as described in **chapter 4.4**, 1-3 of this operating manual.

Follow the operating instructions for the quick coupling system and the carrier machine!

Quick coupling adapter



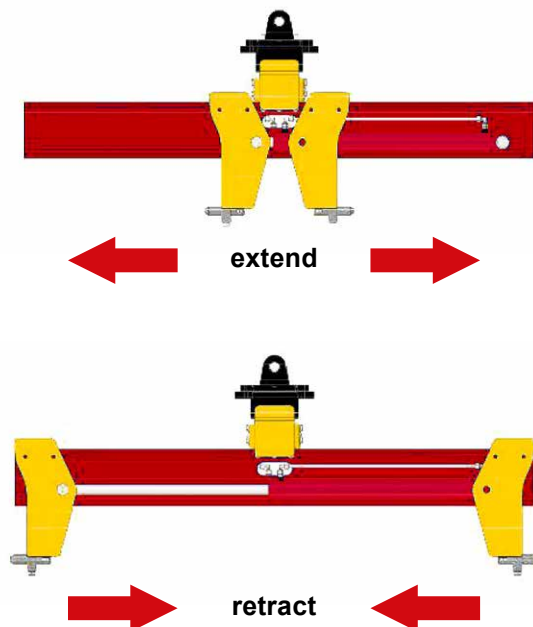
Rotary motor (RM)

5. Check if the work and rotary functions of the attachment tool can be operated via the hydraulic control system of the carrier machine as described in the operating manual of the carrier machine.

Testing functionality

If the controls for the attachment tool working functions do not work as described in the operating manual for the carrier machine:

- check the settings for controlling hydraulic attachment tools as set out in the carrier machine's operating manual.
- If the two sliding carriages "retract" instead of "extend" or "extend" instead of "retract", check the relevant hydraulic control settings on the carrier machine and reset them to default. Repeat the functionality check.

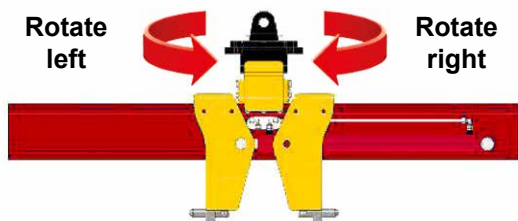


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Testing the rotary function

If the controls for the attachment tool rotary function (left-right turn) do not work as described in the operating manual of the carrier machine:

- ▶ check the settings for controlling hydraulic attachment tools as set out in the carrier machine's operating manual.
- ▶ If the attachment tool turns "right" instead of "left" or "left" instead of "right", check the relevant hydraulic control settings on the carrier machine and reset them to default. Repeat the functionality check.



6. Familiarise yourself with the control of the working and rotary functions of the attachment tool from the carrier machine as set out in 5.
7. Carry out a functionality test with a suspended load, taking into account the following chapters of this operating manual.



Never allow anyone to enter the risk area of the carrier machine during this process!



- ▶ Lift the shoring box no more than 50 cm off the ground for this test.
 - ▶ Upon completion of the test, visually check all hydraulic components for leaks.
8. The bolts on the rotary motor must be re-tightened after ten operating hours observing the permissible maximum tightening torque for this bolt.

4.4 Coupling and testing of the attachment tool

Before each use, the attachment tool must be attached to the carrier machine via the hydraulic quick coupling system. Follow the operating instructions for the quick coupling system and the carrier machine.

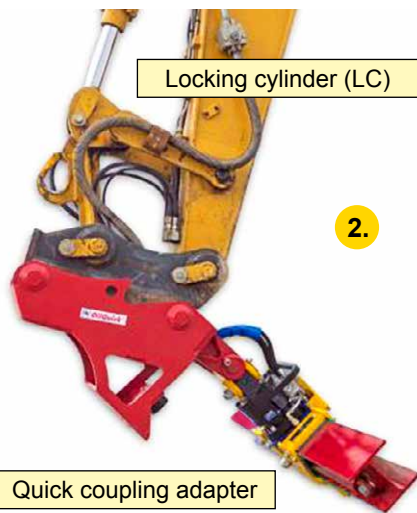
1. Set down the attachment tool with fitted quick coupling adapter (CA) within reach of the excavator arm as shown in the illustration. Select an operating pressure for controlling attachment tools of 100 bar and a flow rate of 80 litres/min. on the carrier machine.



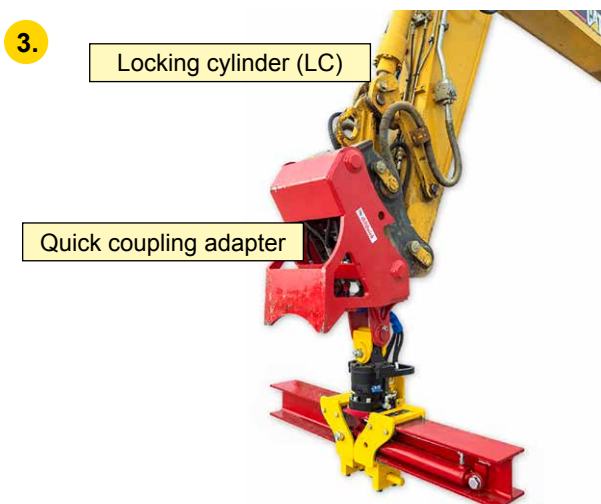
Quick coupling adapter

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- After attaching the tool, the quick coupling adapter must be brought into the position shown in the illustration by the carrier machine operator engaging the locking cylinder (LC). Follow the instructions in the operating manual of the carrier machine.



- The attachment tool can then be lifted up further

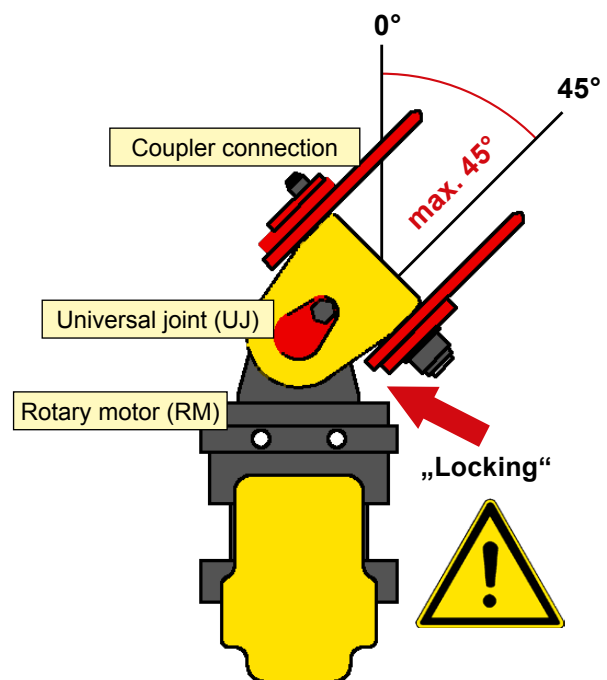


4.5 Constant stretching of the cardan joint

There must never be any pressure exerted to the coupler from the top. This can be ensured by monitoring the universal joint and the top edge of the rotary motor and is practised during induction.

It is important that the universal joint (UJ) can always swing freely. A “locking situation”, i.e. the connection elements for connection with the coupler hitting the rotary motor, must be prevented by all means as this may result in damage to pins and coupler connection.

After a “locking situation” has occurred, the coupler must be detached from the universal joint block and the connection must be inspected. If in doubt (even when there is no visible damage), it is recommended to replace the pins as a preventative measure.

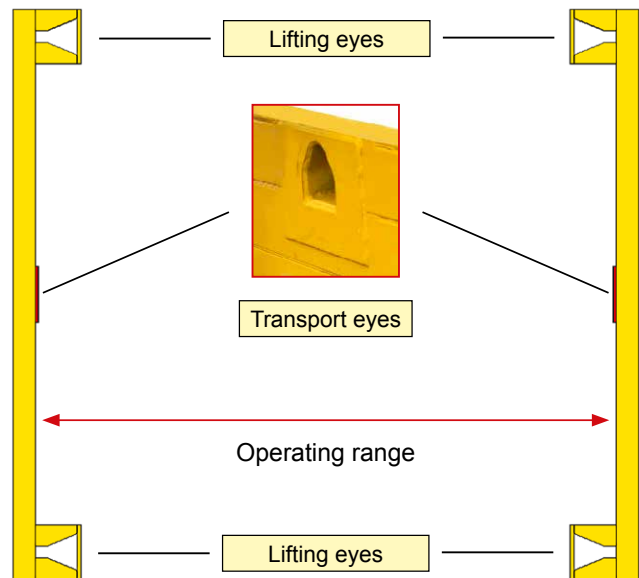


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4.6 Prerequisites and preparations for using the tool

In order to move the shoring boxes, they must feature transport eyes for the grab in the centre, otherwise the shoring grab cannot be used. In those instances, please contact our technical department. We are happy to advise you on how to retrofit shoring boxes of this type with suitable transport eyes.

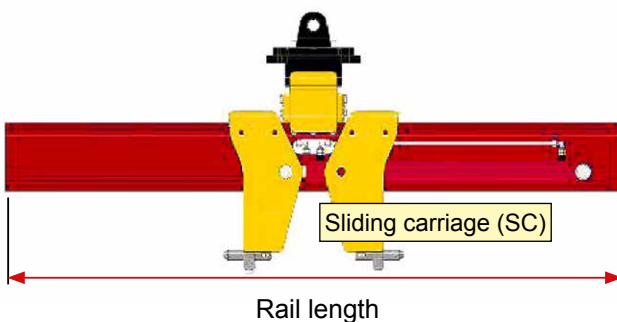
Measure the width of the shoring box that is to be transported or moved. Use the table below to check if the shoring grab can cover the required operating range.



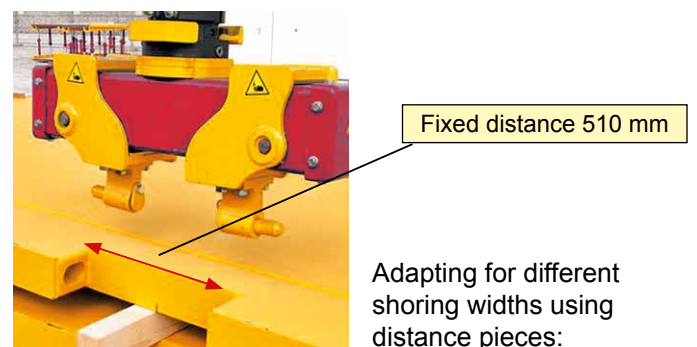
4.6.1 Lifting eyes and rail lengths for selecting the shoring grab

The shoring grab's operating range is a function of rail length (R) and sliding carriage (SC) used with the tool.

Rail length	Operating range	
	from	to
2200 mm	640 mm	2100 mm
2600 mm	640 mm	2500 mm
3000 mm	640 mm	2900 mm



4.6.2 Plate grab with fixed-distance lifting points and extensions



► Shoring grab

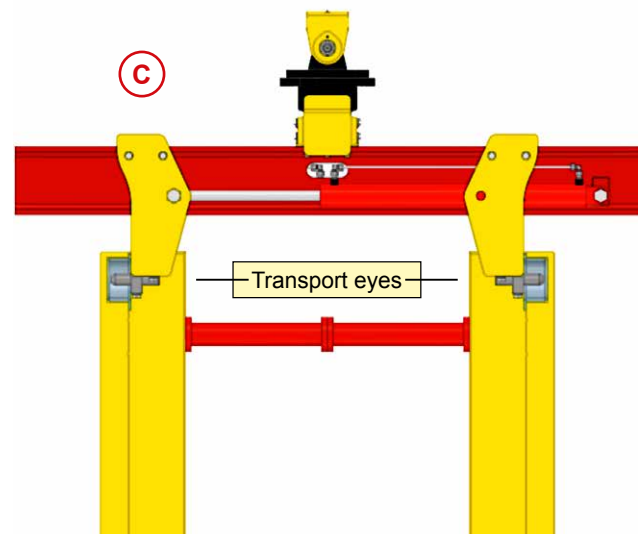
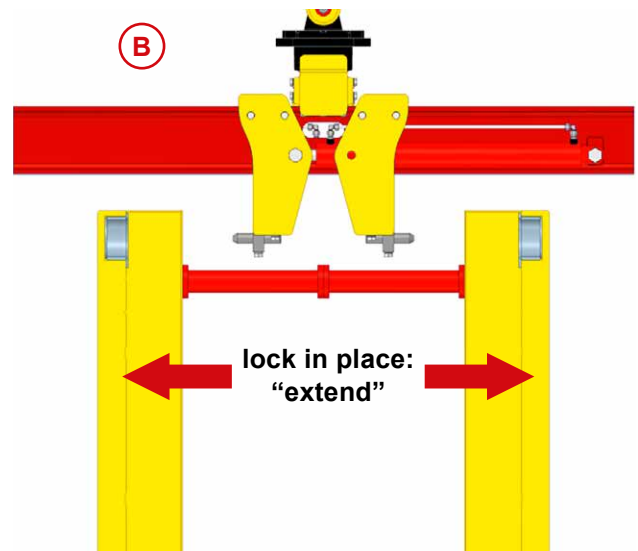
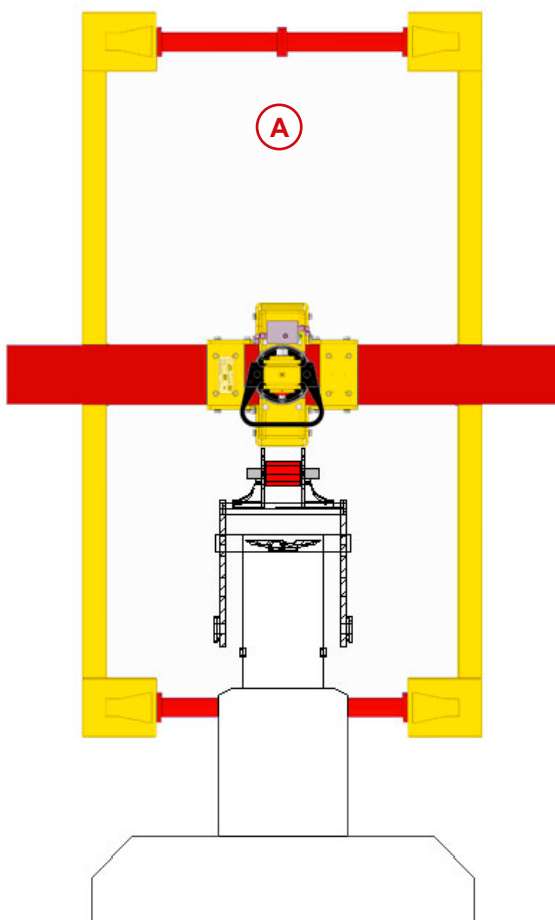
4.7 Typical work with shoring boxes

4.7.1 Lifting and setting down the shoring box

Place shoring grab in the centre of the shoring box (A). Lock the shoring grab in place by extending the two sliding carriages (B). Both tool pins must be fully inserted into the transport eyes, i.e. the tools must make contact with the carrier plate (C).

Then slightly lift the shoring box. Check, with help from another person if necessary, if the tool pins are fully inserted into the lifting eyes of the shoring box and if it is held securely by the shoring grab.

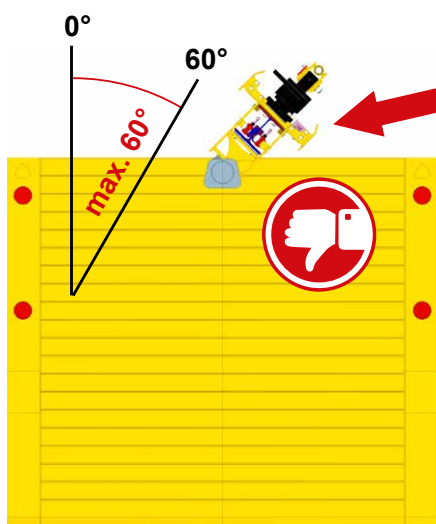
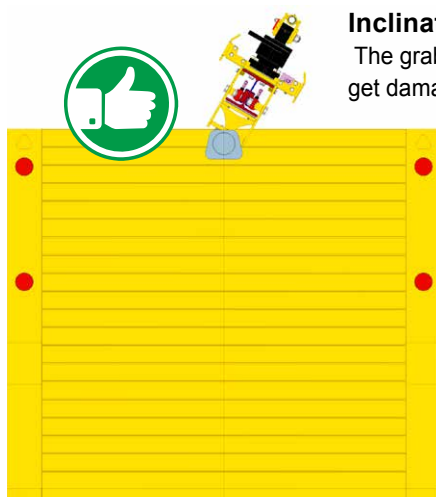
If the machine operator has no view of the pins and the two tools, the inspection must be carried out by the machine operator or another person (assistant) from outside the cabin!



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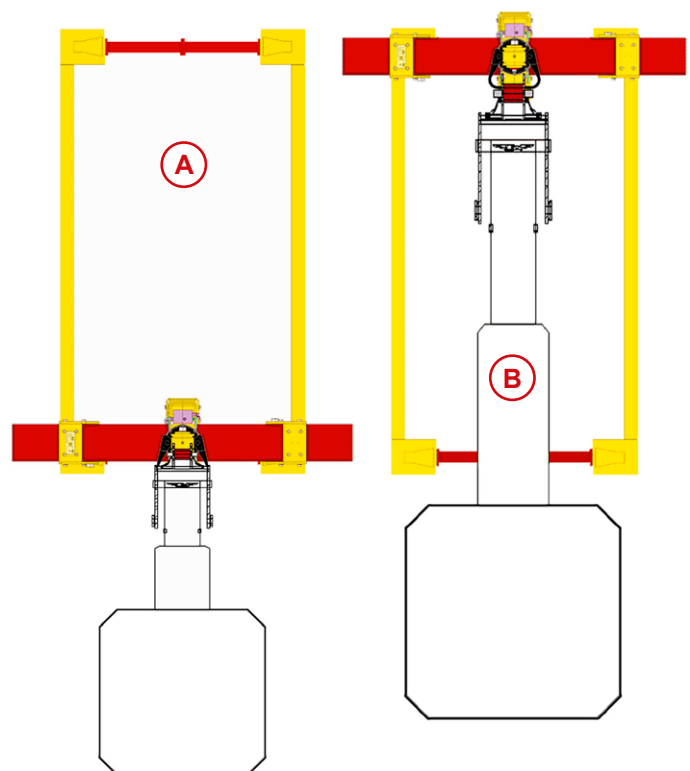
4.7.2 Moving the shoring box

Prevent the box from swinging when lifting and moving it. The shoring grab tool must not get tilted or jammed (angle of inclination 60° max.).



4.7.3 Extracting the shoring box

Move the excavator as close to the shoring box as possible. Position the shoring grab on the side of the shoring box facing the excavator (A) first. Then extend the sliding carriage until the tool pins are inserted into the lifting eyes. Lift the shoring box by no more than 50 cm.

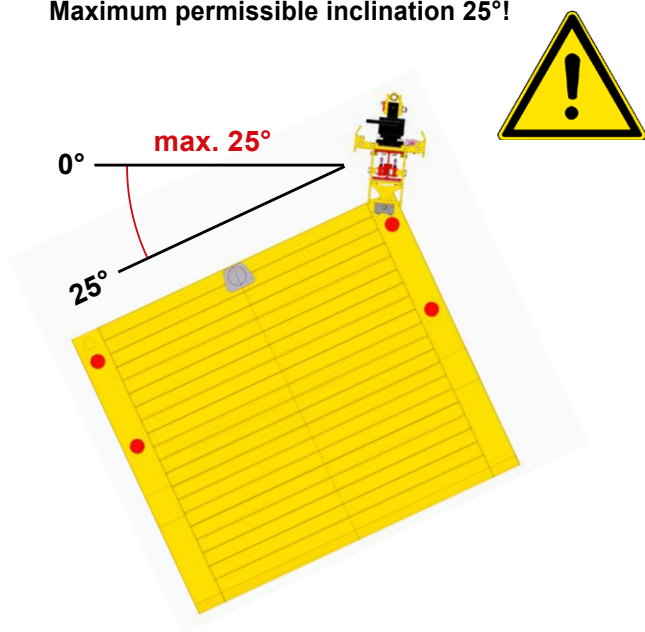


Open the shoring grab by retracting the sliding carriages and position the shoring grab on the side of the shoring box away from the excavator. (B) Then extend the sliding carriage until the tool pins are inserted into the lifting eyes. Lift the shoring box by approx. 50 cm.

► Shoring grab

When lifting the box, the pins on the tools must not get tilted or jammed.

Maximum permissible inclination 25°!



4.7.4 Summary of how to use the system correctly (for induction briefing)

Extracting the shoring box (chapter 4.7.3)

- Move the excavator as close to the shoring box as possible.
- Grab the shoring box using the lifting eyes on the side facing the excavator first.
- Now lift the side of the shoring box facing the excavator by 50 cm.
- “Open” the shoring grab.
- Grab the shoring box using the lifting eyes on the side away from the excavator.
- Lift the side of the shoring box away from the excavator by 50 cm as well.
- Keep lifting the shoring box by alternating the sides until it can be lifted by the transport eyes in the centre as set out in chapter 4.7.

⚠ When lifting the box, the pins on the tools must not get tilted or jammed.

⚠ The maximum permissible tensile load via the lifting eyes is 15 tonnes.

⚠ The shoring box may only be loosened by lifting it from alternating sides using the lifting eyes at the corners. The transport eyes in the centre must not be used for loosening the shoring box.

Moving and placing the shoring box (chapters 4.7.2 and 4.7.1)

- Grab the shoring box using the transport eyes in the centre.
- Slightly lift the box and check, with the help of another person if necessary, if the shoring box is held securely by the shoring grab using the transport eyes.

⚠ When lifting the box, the pins on the tool must not get tilted or jammed.

⚠ The maximum permissible tensile load via the lifting eyes is 15 tonnes.

⚠ The shoring box may only be loosened by lifting it from alternating sides using the lifting eyes at the corners. The transport eyes in the centre must not be used for loosening the shoring box

Failure to adhere to any of the aforementioned points may result in injury to people or damage to the equipment.

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5 Troubleshooting

- In the event of malfunctions or accidents that prevent proper operation of the attachment tool, it must be taken out of operation immediately.
- Attach clear and visible signs (e.g. "Beware, malfunction!") on or next to the attachment tool.
- Should the equipment leak hydraulic oil, lubricant or similar, do not simply top up the fluid, but search for the cause of the leak.

6 Service and maintenance

Please note that at the end of the working season as well as after overload situations, impacts etc., the weld seams must be visually checked for cracks. Checking for cracks can avert the need for more extensive repair work and prevents accidents.

6.1 Universal joint and connecting pin

Universal joint and connecting pin must be visually inspected for damage daily. In case of damage, operation of the attachment tool must be ceased immediately.

6.2 Hydraulic system

The entire hydraulic system must be visually checked daily. Damaged, worn or leaking hydraulic lines, connectors and seals must be replaced by a qualified person immediately.

6.3 RCleaning

Clean the attachment tool daily, before and after each use. If a jet steam cleaner is used, the lubricating nipples must be covered first.

6.4 Lubrication schedule

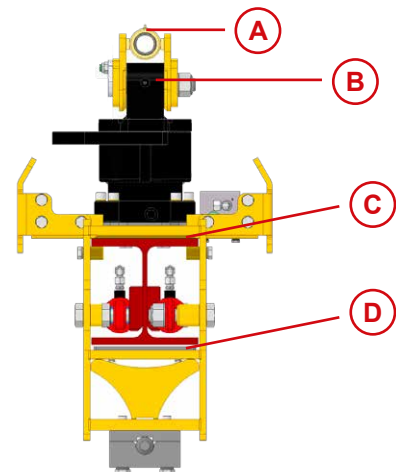
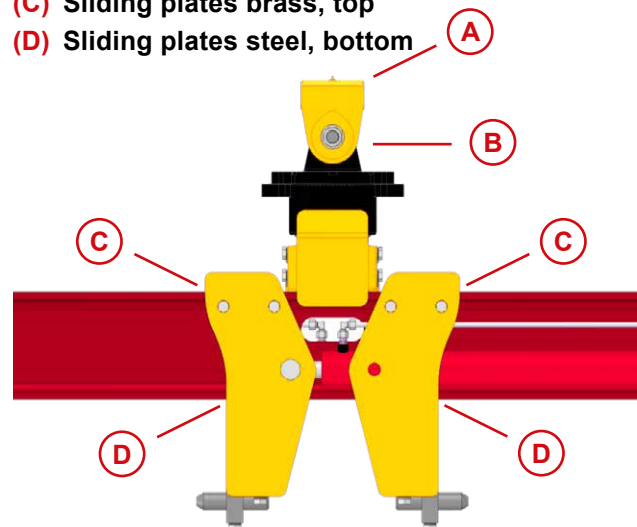
The following parts and points must be lubricated weekly with one pump from the grease gun

(A) Lubricating nipple at the universal joint

(B) Lubricating nipple at the rotary motor

(C) Sliding plates brass, top

(D) Sliding plates steel, bottom



► Shoring grab

6.5 Longer periods of non-use

- Thoroughly clean the attachment tool and lubricate according to lubrication schedule.
- If the attachment tool is taken out of use for more than six months, remaining hydraulic oil must be drained off and disposed of in an environmentally friendly manner.
- To be stored in a dry place.
- Before putting the tool back into operation, it must be checked using the checklist as provided in chapter 7 by a qualified person.

Checked on (date):
vby:
Signed:

Checked on (date):
vby:
Signed:

7 Regular inspections pursuant to BetrSichV (German Ordinance on Industrial Safety and Health)

The attachment tool must be inspected regularly, **at least once per year**, by the manufacturer or by a **qualified person that has been instructed by the manufacturer**. This inspection must be documented.

To document the regular inspection in accordance with the German Ordinance on Industrial Safety and Health (BetrSichV), the checklist must be completely filled in.

Checked on (date):
vby:
Signed:

Checked on (date):
vby:
Signed:

Checked on (date):
vby:
Signed:

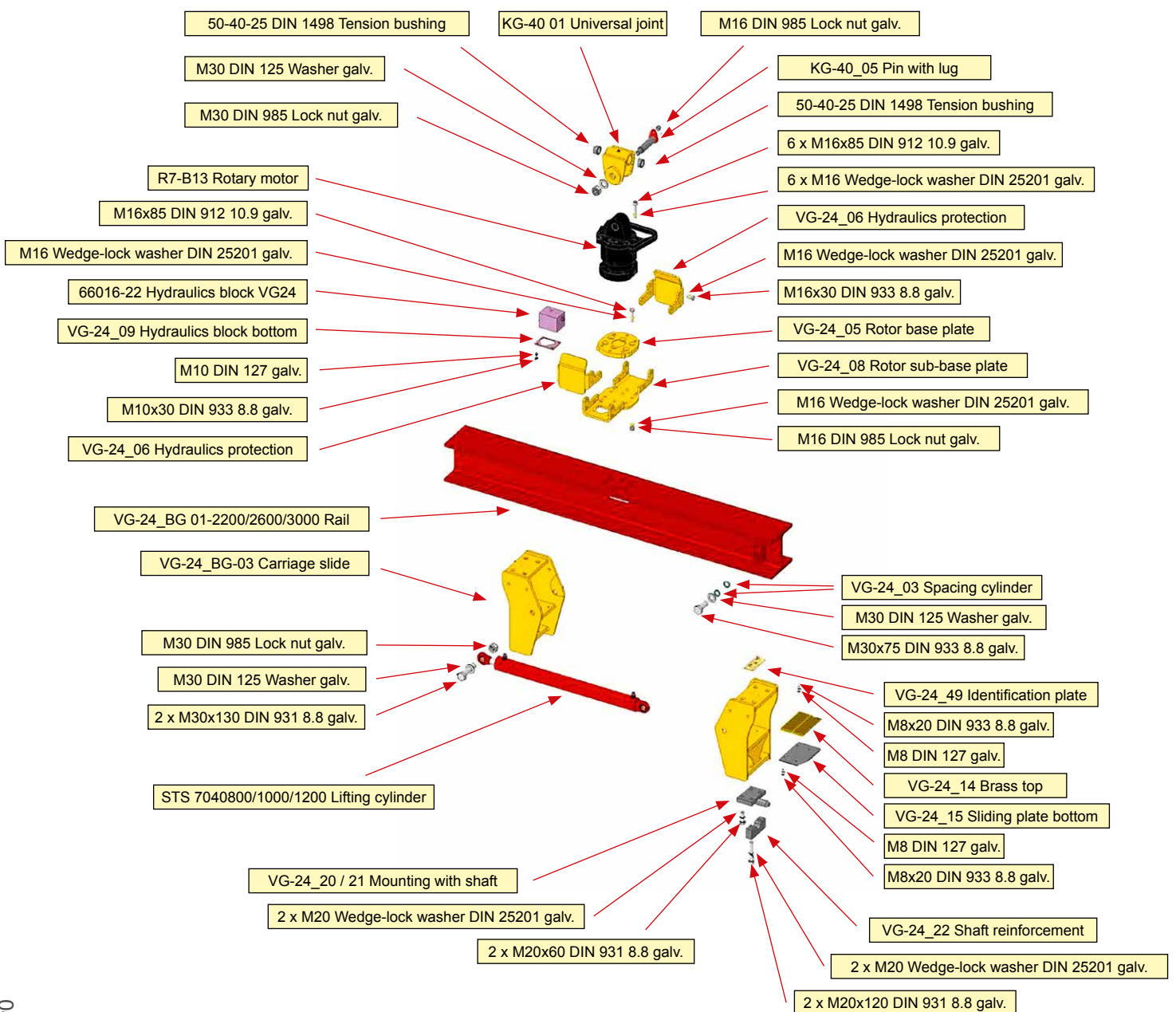
► **Operating manual**

Serial number	Date:	Date:	Date:	Date:	Date:
1. General					
• Cleaning completed					
• Bolts and nuts checked					
• Cylinder mounting at the bottom checked					
2. Lubrication according to lubrication schedule					
• Lubrication completed					
3. Universal joint					
• Visual inspection: not deformed or damaged					
• Moves freely					
• Pin inspection: not ground in					
• Visual inspection: no cracks in welding seams					
4. Rotary motor					
• Visual inspection: no damage					
• Visual inspection: no hydraulic oil leaks					
• Screws/nuts tightened to the correct torque value					
5. Hydraulics					
• No damage					
• No loss of hydraulic oil					
• Hydraulics safety signs in place					
6. Rail bar					
• Visual inspection: no damage					
• Visual inspection: not deformed					
• Visual inspection: no cracks in welding seams					
7. Tools					
• Visual inspection: no damage					
• Visual inspection: not deformed					
• Visual inspection: no cracks in welding seams					
• Shaft reinforcement in place					
8. Hydraulics protection					
• Visual inspection: no damage					
• Visual inspection: not deformed					
9. Sliding carriages					
• Visual inspection: no damage					
• Visual inspection: not deformed					
• Visual inspection: no cracks in welding seams					
10. Identification plate, safety and test marks					
• In place					
• Clearly readable					

► Shoring grab

8 Spare parts

8.1 Shoring grab overview



► Operating manual

8.2 Shoring grab spare parts list

Assembly group	Part number	Description	Number
VG-24_BG 01-2200		Rail bar 2,200 mm	1
VG-24_BG 01-2600		Rail bar 2,600 mm	1
VG-24_BG 01-3000		Rail bar 3,000 mm	1
	VG-24_03	Spacing cylinder	4
		M30x75 DIN 933 8.8 galv.	2
		M30 DIN 125 Washer galv.	2
VG-24_BG-02			
	VG-24_05	Rotor base plate	1
	VG-24_06	Hydraulics protection	2
	VG-24_08	Rotor base plate bottom	1
	VG-24_09	Hydraulics block bottom	1
	66016-22	Hydraulics block VG24	1
		M16x65 DIN 933 8.8 galv.	6
		M16 Wedge-lock washer DIN 25201 galv.	36
		M16 DIN 985 Lock nut galv.	6
		M16x30 DIN 933 8.8 galv.	24
VG-24_BG-03			
	VG-24_BG-03	Sliding carriage	2
	VG-24_14	Brass top	4
	VG-24_15	Sliding plate bottom	2
	VG-24_49	Identification plate	1
		M30x130 DIN 931 8.8 galv.	2
		M30 DIN 985 Lock nut galv.	2
		M30 DIN 125 Washer galv.	2
		M10x30 DIN 933 8.8 galv.	3
		M10 DIN 127 galv.	3
		M8x20 DIN 933 8.8 galv.	8
		M8x30 DIN 933 8.8 galv.	8
		M8 DIN 127 galv.	16
VG-24_BG-04			
	VG-24_20 / 21	Shaft with mounting	2
	VG-24_22	Shaft reinforcement	2
		M20x120 DIN 931 8.8 galv.	1
		M20x60 DIN 931 8.8 galv.	1
		M20 Wedge-lock washer DIN 25201 galv.	1

► Shoring grab

8.2 Shoring grab spare parts list

Assembly group	Part number	Description	Number
Cylinder			
	STS 7040800	Lifting cylinder 800	1
	STS 70401000	Lifting cylinder 1000	1
	STS 70401200	Lifting cylinder 1200	1
Rotary motor			
	R7-B13	Rotary motor	1
		M16x85 DIN 912 10.9 galv.	6
		M16 Wedge-lock washer DIN 25201 galv.	6
Universal joint			
	KG-40_01	Universal joint	1
		M8x1 DIN-71412-A Lubricating nipple	1
		50-40-25 DIN 1498 Tension bushing	2
	KG-40_05	Pin with lug	1
		M30 DIN 985 Lock nut galv.	1
		M30 DIN 125 Washer galv.	1
		M16 DIN 985 Lock nut galv.	1
Plates			
	PK-001	Test mark	1
	PK-002	Inspection tag	1
	SK-001	Safety sign	1
	SK-002	Hydraulics safety sign	1
	SK-003	Shear points safety sign	2
	SK-004	Oil pressure safety sign	2
Hydraulics components			
	153 152	SWVE 12LR 3/8" Swivel fitting	2
	110 152	GE 12LR 3/8" straight screw-in fitting	5
	110 172	GE 12LR 1/2" straight screw-in fitting	2
	160 172	EVT 12L Adjustable T-fitting	1
	158 182	XEVW 12L Adjustable elbow fitting	3
	120 152	W 12L Elbow fitting	2
	850L 1217	EGE 12LR 3/8" ED	2
	12x1,5 R1	Pipe number: 1	1
	12x1,5 R2	Pipe number: 2	1
	12x1,5 R3	Pipe number: 3	1
	12x1,5 R4	Pipe number: 4	1
	12x1,5 R4	Pipe number: 5	1

► Operating manual

8.3 Overview plate grab

8.4 Spare parts list plate grab

Spare parts list is currently under review (new model). Please order the latest version of the document before ordering spare parts for the plate grab.

10 10 Technical details

Rail length	Tool weight
2200 mm	400 kg
2600 mm	500 kg
3000 mm	600 kg

Dynamic lift load: 7,000 kg

9 Disposal

- Drain oil and dispose of it in an environmentally friendly manner.
- Rough cleaning
- Dispose of metal scrap

Rail length	Shoring box width	
	from	to
2200 mm	640 mm	2100 mm
2600 mm	640 mm	2500 mm
3000 mm	640 mm	2900 mm

Operating temperature: -10 °C to +40

Identification plate

Serien-Nr.:	<input type="text"/>	Herstellungsjahr:	<input type="text" value="20"/>
Typ:	<input type="text" value="VG"/>	Max. Belastung Öldruck:	<input type="text" value="80 bar"/>
Eigengewicht Verbaugreifer:	<input type="text" value="500 kg"/>		
Max. Hebelast:	<input type="text" value="15 t"/>		
Der Aufenthalt unter schwebender Last ist verboten!			
Schmölz SchachtFIX & Baugeräte GmbH Osterried 2 • 87616 Marktoberdorf Germany			

► Shoring grab

11 EU declaration of conformity

The manufacturer

Schmölz SchachtFIX & Baugeräte GmbH
Osterried 2
87616 Marktoberdorf/Germany

Declares that the following products conform to the EU standards and directives listed below

Lifting device

Types:

Verbaugreifer + Plattengreifer

Year of production

2013 2013 (see identification plate)

Serial no.:

01 2013 (see identification plate)

Incomplete machine

The attachment must not be used until it is fitted to a machine and the complete machine meets the directives and standards as set out on this page. The product conforms to the specifications of the following health and safety directives

:

EU Machinery Directive 2006/42/EC

Marktoberdorf, 01/04/2016

.....
Florian Schmölz
(Proprietor)

► **Operating manual**

12 Commissioning checklist

The checklist must be completely filled in in legible writing and returned to the manufacturer to validate the manufacturer's warranty.

Machine type + serial no.:	
2200 mm	400 kg
Owner and owner's address, incl. e-mail:	
Date:	
Instructed person(s):	
Instructor/trainer:	
Commissioning checklist	
<input type="checkbox"/> Handover of operating manual	
<input type="checkbox"/> Serial no. check	
<input type="checkbox"/> Instruction based on the operating manual	
<input type="checkbox"/> Final functionality test carried out	
<input type="checkbox"/> Safety instructions delivered	
<input type="checkbox"/> Accident prevention measures	
<input type="checkbox"/> Obligation to hand over all documents (incl. to resellers)	
<input type="checkbox"/> <input type="checkbox"/> Instructions delivered	
..... Signatures of instructed persons	

TWF TIEFBAUTECHNIK

Sales | Rental | Leasing



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OPERATING MANUAL