ENGLISH
Shop Crane
Operating instructions

Importer:

Simon, Evers & Co. GmbH, Katharinenstraße 9, 20457 Hamburg

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Katharinenstraße 9

20457 Hamburg

Germany

Contents

NOTE: Owner/ Operator must read and understand this instruction manual before using the crane. The operator shall work in accordance with this manual. Please keep the manual for future reference, if this or the warning/caution labels are damaged or got lost, please contact us for replacement.

1. About this manual

These operating instructions describe the correct use of the offered product. It is developed and produced according to the current state of the art. However, risks can arise inthe case of incorrect use. Please observe the corresponding information and read through the operating instructions carefully. The operating instructions form part of the device and are valid for all specified device versions. The operating instructions describe the safe and correct use of the device in all operating phases.

Any technical questions should be directed to your authorized service partner.

The workshop crane described in these operating instructions is used for lifting, moving and lowering heavy loads

Information and instructions

General information

- Environmentally hazardous waste, such as hydraulic oil, will have a negative effect on the environment, or health, if handled incorrectly.
- The waste packages should be sorted and put into solid dustbins according to the materials and be collected disposal by local special environment protection bureau. To avoid pollution, it's forbidden to throw away the wastes randomly.
- To avoid leaking during the use of the products, the user should prepare some absorbable materials (scraps of wooden or dry duster cloth) to absorb the leaking oil in time.
- To avoid second pollution to the environment, the used absorbable materials should be handed in to special departments in terms of local authorities.

Structure of warnings

Warnings are used in this document to highlight potential causes of personal injury or material damage.

- Always read and observe these warnings.
- Follow all measures highlighted by the relevant warning.

The following warning levels are used to reflect the severity and probability of the relevant hazard:

DANGER!

Indicates an extremely dangerous situation. Failure to observe this warning can leadto serious, irreversible injuries or death.

WARNING!

Indicates an extremely dangerous situation. Failure to observe this warning can leadto serious, irreversible injuries or death.

CAUTION!

Indicates a dangerous situation. Failure to observe this warning can lead to minor ormoderate injuries.

NOTICE

Indicates a risk of material damage. Failure to observe this warning can lead to material damage.

2. Safety Instructions

The safety chapter provides important information on how to work safely with the described product. Failure to observe the specified measures can result in material damage and injuries, and potentially even death.

- Before commissioning and operating the device: Read the safety chapter thoroughly.
- Use the described device only as specified in this document.

Correct Use and Application

- The operator/ the operating company has to ensure the correct usage and has to ensure, that this crane is used only by staff, which is trained and authorized to use this crane.
- When operating, the operator has to use personal protective equipment, such as safety shoes and safety gloves.
- The crane is intended to be used for indoor applications with ambient temperatures between +5°C and + 40°C. It is not allowed for use in harsh or extreme or explosive environments.
- Not allowed to use cranes to handle of the loads which could lead to dangerous situations (e.g. molten metal, acids, radiating materials, especially brittle loads).
- Not allowed to use the cranes to contact foodstuffs.
- This shop crane is designed for use only on hard level surfaces that can carry the load. The usage on soft surfaces can lead to instability and possible loss of the load.
- Not allowed to use the cranes on sea ships.
- This crane is not designed to be water resistant, therefore use it in dry environment.
- Pay attention for wind forces. Wind forces might have an influence to the stability or light weights might fall down. Don’t use the crane if you can’t ensure the stability of the crane.
- Practice maintenance work according to regular Inspection.
- The crane equipped with hydraulic jack. The jack service life is 80 times full travel lifting with rated load.
- Never operate the hydraulic power unit beyond its maximum stroke indicated on the label.
- The capacity of the crane reduces as the jib extension is prolonged. Do not load the crane beyond the rated capacity for each specified jib extension position as indicated in the label. Overloading can cause damage to or failure of the product.
- The load hook is provided with a latching mechanism. Ensure it works properly.
- To lift the load in a well-balanced and stable way make sure the center of gravity remains always inside the crane base.
- Do not allow the load to swing or drop violently when lowering or moving
- The crane is not transportation device but in case the load has to be removed, lower the load and jib extension to the lowest possible point before transporting. The crane is not designed to sustain the load indefinitely, so when the operation is finished make sure the load is fully lowered and supported on a firm surface.
- Make a visual inspection before each use the crane. Any crane which appears to be damaged must be removed from service.
- As an additional safety feature the crane is equipped with a valve to prevent the unit from being overloaded. This unit must not be tampered with.
- Never position any part of your body under the load.

- Prohibit lifting people. People could suffer severe injury.
- When the event of accidents occurs, immediately stop operating this crane. Leaving the crane as far as possible to avoid injury
- If these basic rules are not followed, injury to the user, the crane or the load being lifted may result

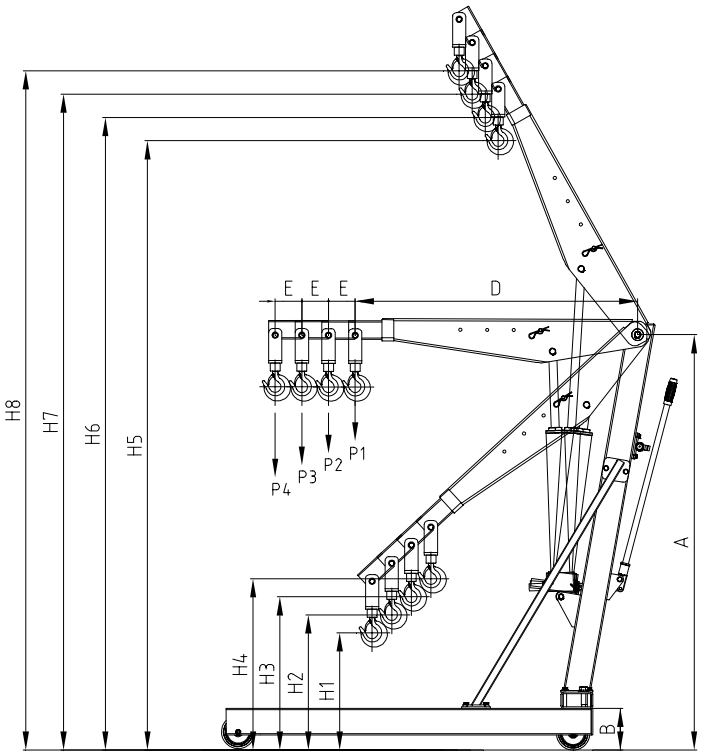
3. Structure and function

Image shows similar item

Item	Designation	Function
1	Boom extension	Changing the length of the boom
2	Bolt with spring cotter pin	Securing the boom extension
3	Boom	Lifting arm of the crane
4	Post	Support pillar of the crane
5	Hydraulic cylinder	Raising and lowering the boom
6	Handle	Controlling and moving the crane
7	Pump lever	Pumping up the boom
8	Star knob for hydraulic valve with return spring	Lowering the load
9	Bolt with locking pin	Ensuring stability on both sides of the chassis
10	Swivel castor with parking brake	Moving and parking the crane securely
11	Rollers	Moving the device
12	Base	Moving and stabilising the crane
13	Load hook with safety catch	Carrying the load

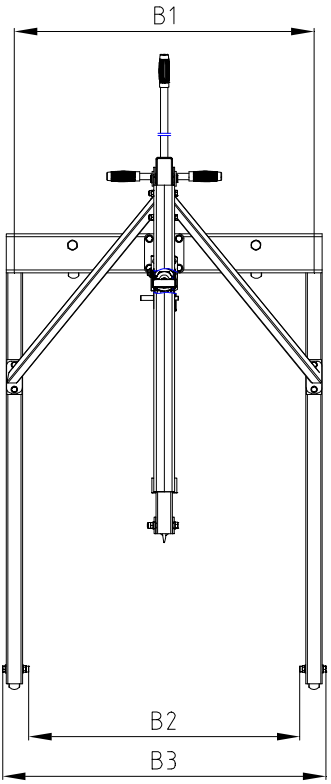
4. Technical Specifications

Technical data – workshop crane



Machine type		P-500	P-1000
Dimensions (mm)	A	1596	1596
	B	157	157
	D	1060	1060
	E	100	100
	H1	440	440
	H2	507	507
	H3	575	575
	H4	643	643
	H5	2225	2225
	H6	2310	2310
	H7	2400	2400
	H8	2475	2475

Machine type		P-500	P-1000
Rated Capacity （KG）	P1	500	1000
	P2	450	900
	P3	400	800
	P4	350	700



Machine type		P-500	P-1000
Dimensions (mm)	B1	915	915
	B2	830	830
	B3	985	985

Correct environmental conditions

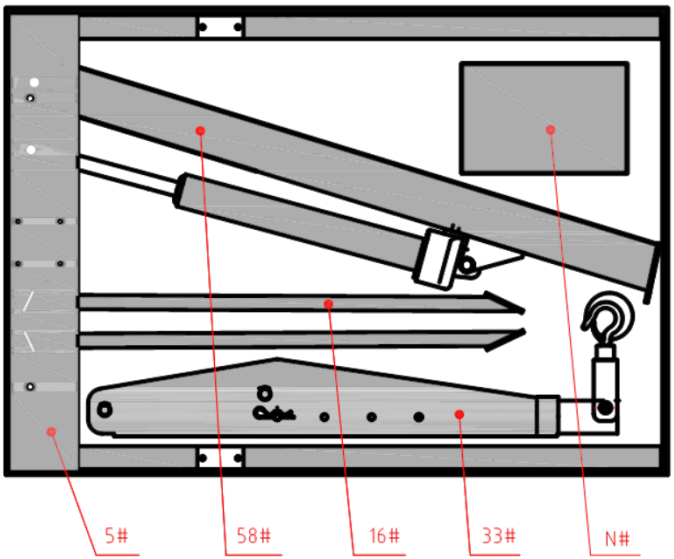
Condition	**Value**
Application area	Indoor application
Permitted ambient temperature	+5°C to +40°C
Minimum illumination	50 Lx

5. Commissioning

Preparing for commissioning

- Check all supplied components for transport damage.
- After opening the package, please check if the spare parts in fig. A are all included firstly. Totally 6 pcs (2 x No. 16)
- Check the functionality of the actuators, rollers, wheel axles and pump lever.
- Immediately notify the carrier of any transport damage or missing components.
- Bleed the air before each use: Loosen the rotary knob (turn to the left). Then bleed the system by “pumping” the pump lever several times.

Fig. A



Parts List Assembly kit.					
No.	Description	Qty.	No.	Description	Qty.
1	Nut	2	15	Bolt	2
2	Washer	8	21	Bolt	2
3A	Bolt	2	27	Handle	1
4	Front Wheel	2	28	Washer	2
6A	Steering Wheel	2	29	Bolt	2
7	Washer	4	30	Spring seat	1
8	Bolt	4	31	Washer	1
9	Nut	4	32	Screw	2
10	Spring washer	4	52	Spacer	2
11	Washer	12	55	Pin	1
12	Bolt	4	56	Pin	1
13	Washer	2	57	Snap ring	4
14	Spring washer	2	60	Nut	2

6. Assembly

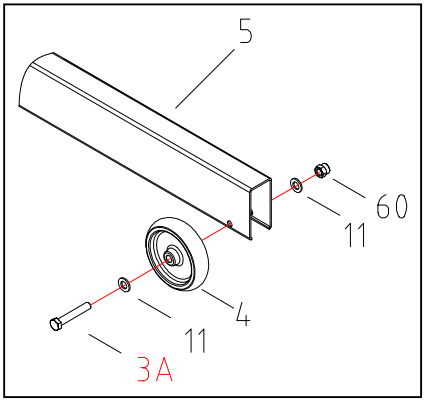


Fig. 1

Step 1 （Fig.1):

Required components for this step:

- Assembly kit
  - Bolt (3A#)
  - Front wheel (4#)
  - Nut (60#)
  - Washer (11#)
- Base (5#)

Assemble the bolt (3A#), the nut (60#) and washer (11#) in the order shown in the fig.1 and place the front wheel (4#) in the designated holes the base (5#). Tighten the nut (60#).

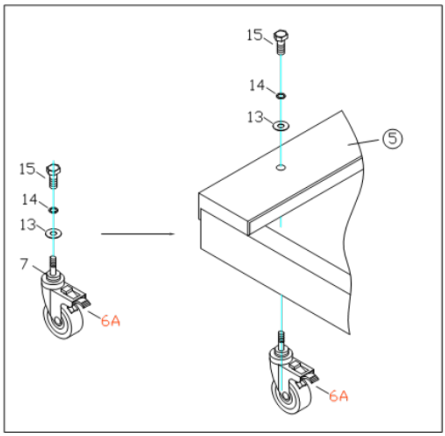


Fig. 2

Step 2 (Fig.2):

Required components for this step:

- Assembly kit
  - Steering wheel (6A#)
  - Washer (7#)
  - Washer (13#)
  - Spring Washer (14#)
  - Bolt (15#)
- Base (5#)

Place two washers (7#) on the pin of the steering wheel (6A#) and put it through the designated hole in the base (5#).
Assemble the washer (13#), the spring washer (14#) and the bolt (15#) according to the order in Fig. 2 and tighten the bolt (15#).

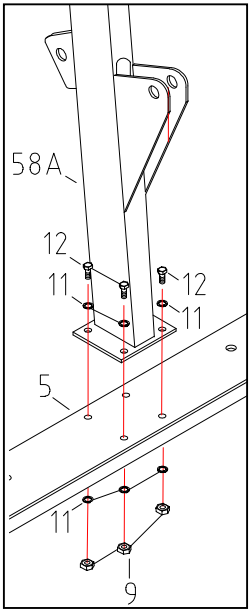


Fig. 3

Step 3 (Fig. 3):

Required components for this step:

- Assembly kit
  - Nut (9#)
  - Washer (11#)
  - Bolt (12#)
- Base (5#)
- Post (58A#)

Align the 4 holes at the bottom of the post (58#) with the ones from base (5#).
Assemble the washer (11#), the bolt (12#) on one side and the nut (9#) and the washer (#11), and on the other side of the base (5#) in the order shown in Fig. 3. Then tighten the nut (9#).

Note: Don't twist the nuts (9#) too tightly.

Note: During this step, please make sure all parts of the post (58A#) are stable to avoid any accident and injury.

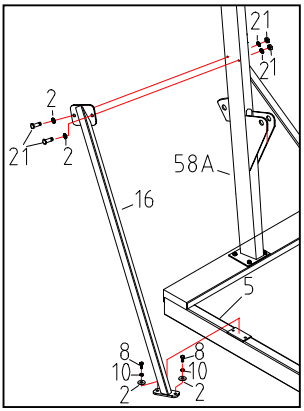


Fig. 4

Step 4 (Fig.4):

Required components for this step:

- Assembly kit
  - Nut (1#)
  - Washer (2#)
  - Bolt (8#)
  - Spring Washer (10#)
  - Bolt (21#)
- Base (5#)
- Support (16#)
- Post (58A#)

Align the holes from the support (16#) with the designated holes in the base (5#) as well as the post (58A#).
Assemble the Nut (1#), Washers (2#), the bolts (8#), (21#), the spring washer (10#) according to the order in Fig. 4.

Note: Do not overtighten all bolts at first. Once installing all the bolts, tighten the bolts (21#), (8#) and (12#) from step 3 one by one.

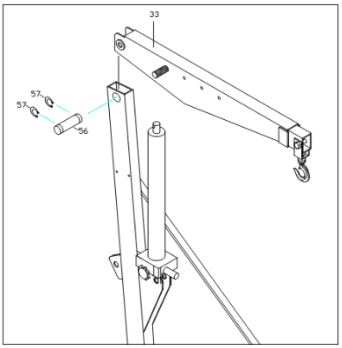


Fig. 5

Step 5（Fig.5):

Required components for this step:

- Assembly kit
  - Pin (56#)
  - Snap ring (57#)
- Boom (33#)
- Post (58A#)

Align holes of boom (33#) with the corresponding hole in the post (58A#).
Insert the pin (56#) through the designated hole and fasten the pin (#56) with the snap ring (57#).

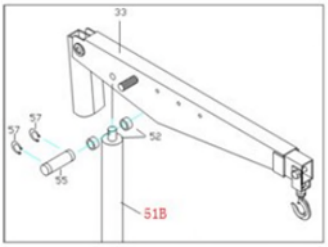


Fig. 6

Step 6（fig. 6):

Required components for this step:

- Assembly kit
  - Spacer (52#)
  - Pin (55#)
  - Snap ring (57#)
- Boom (33#)
- Cylinder (51A#)

Pull the piston rod of the cylinder (51B#) upwards to expose the hole. Align the spacer (52#) inside the boom (33#), then align both with the piston rod hole of the cylinder (51B#).
Insert the pin (55#) through the designated hole and fasten the pin (#55) with snap ring (57#).

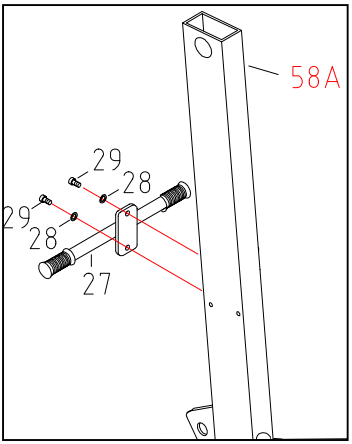


Fig. 7

Step 7 (Fig. 7):

Required components for this step:

- Assembly kit
  - Spacer (52#)
  - Handle (27#)
  - Washer (28#)
  - Bolt (29#)
- Post (58A#)
- Cylinder (51A#)

Align the designated holes from the handle (27#) and the post (58#) and assemble the washer (28#) and the bolt (29#) according to the order in Fig. 7. Then tighten the bolt (29#).

Installation is complete.

7. Use and Operation

- It is necessary that the operator can watch the crane and the loads during all movements.
- Before using the crane, it is necessary to purge air from the valve system of the hydraulic unit. This can be done by releasing the valve, then pumping the hydraulic jack several times.

SAFETY TESTS

Safety tests need to be executed by a qualified person at least once year and/or according the National respective or after an unusual incident. Crane also needs to be carefully examined for any damages. The operating company is responsible that any faults or damages are rectified immediately.

CAUTION!

Collisions with persons in the vicinity!

Risk of personal injury.

▶Before moving the device, raising or lowering the load, instruct persons to leave the hazardous area.

▶In the case of a potential risk to persons, issue a warning signal in a timely manner.

▶If endangered persons fail to leave the hazardous area, stop the device immediately.

Checking the device before daily use

Regular inspection allows faults or malfunctions to be recognized at an early stage and rectified promptly. This increases the service life of the product and helps to ensure safe operation.

Checking the device for damage and defects before start-up at the beginning of a shift

- Remove and loads from the device.
- Visually inspect all assemblies for deformation or cracks.
- Check the lift mechanism for correct function and ease of movement. Look out forany unusual noises and blockages.
- Check the hydraulic system for leaks.
- Check the rollers for correct function and ease of movement.
- Check that retaining rings, locking and cotter pins are in place.
- Verify that all signs and warnings are present and legible.
- Check the function of the load hook safety catch and repair if necessary.
- Immediately notify the relevant supervisor(s) of any damage or defects on thedevice.
- Take any devices with damaged or defective safety-relevant components out ofservice and repair them before next use.

Setting up/converting the boom

WARNING!

Falling components!

Risk of personal injury and property damage due to the boom extension falling or slipping out.

▶Align the boom horizontally to prevent it from falling or slipping out.

Setting up the boom

- Position the boom horizontally.
- Align the boom extension to the desired position.

! Changing the boom length changes the maximum load capacity. Observe theinformation on the boom extension as well as page 8 in this manual.

- Insert the bolt at the desired point and secure with the cotter pin.

The boom is set up.

Raising the load

WARNING!

Inadequately secured load!

Risk of material damage and personal injury due to falling loads.

▶Do not position body parts under the raised load.

▶Do not move loads unless they have been adequately secured.

▶If there is a risk of the load tipping: take appropriate protective measures.

NOTICE

Exceeding the permitted load capacity!

Risk of damage to the device due to excessive loads.

▶Note the permissible maximum capacity.

▶The load capacity is reduced when the boom is extended.

▶Observe the information on the boom extension!

Raising the load

- Position the load centrally in front of the chassis.
- Apply the parking brakes on the swivel castors.
- Attach the lifting gear to the load.
- Attach the load to the load hook via the lifting gear.
- Move the pump lever up and down until the desired height is reached.

The load has been raised.

Moving the load

WARNING!

Swinging load!

Risk of personal injury and property damage due to swinging load or sudden tippingover.

▶Ensure that the load is in correct condition.

▶Only move loads that have been attached correctly and securely.

▶Do not move the crane jerkily.

CAUTION!

Unintentional lowering of the load!

Risk of personal injury due to crushing.

▶Do not place any part of your body between the raised load and the ground.

Moving the load

Requirements

– Before moving the load, lower the boom and load to the lowest possible point where the load is raised.
– Parking brake is released.

- Steer the device to the left or right using the handle.

The device moves in the desired direction.

Lowering the load

CAUTION!

Lowering load!

Risk of personal injury due to crushing.

▶Always lower the load slowly and carefully.

▶Do not place any part of your body between the raised load and the ground.

▶Never position body parts between the mast and the boom.

▶Wear safety shoes.

NOTICE

Increased impact load!

Risk of device damage and malfunction due to excessively fast lowering of the load.

▶Always lower the load slowly and carefully.

! If the device is to be moved after depositing the load, ensure that there is sufficientroom for maneuvering.

Lowering the load

- Turn the star knob for the hydraulic valve with return spring to the left and slowlylower the load.

! Due to the risk of damage to the load or the workshop crane, turn the star knob forthe hydraulic valve with return spring carefully to the left.

The load has been lowered.

Parking the device

Parking the device securely

- Position the device on a smooth, level surface.
- Lower the boom fully.
- Then secure both sides using bolts with locking pins.
- Apply the parking brake on the swivel castor.

The device is parked securely.

8. Maintenance and repair

Faults and troubleshooting

Both maintenance and repair must only be carried out by qualified personnel.
It is allowed to adjust the pressure valve only from trained service technicians.

- In the case of a device fault, carry out the following troubleshooting measures.
- If you encounter problems when carrying out the measures or if they fail to rectifythe problem, contact the manufacturer's customer service department.

CAUTION!

Incorrect maintenance!

Risk of material damage and personal injury due to failure of important components.

▶Use only original spare parts from the manufacturer.

▶Maintenance and repair work must only be completed by specialist personnel with the requisite training.

▶When replacing rollers, ensure that the device remains level (e.g. always replace left and right at the same time).

▶Always observe the device-specific settings when carrying out repairs or replacing components.

Fault table

Fault	Possible cause	Fault rectification
The workshop crane cannot be moved.	Parking brake is applied.	Release the parking brake.
	Parking brake jammed.	Check the function of the parking brake and contact customer service if necessary.
Load handler does not reach the top position.	Oil level in hydraulic reservoir too low.	Contact customer service.

Fault	Possible cause	Fault rectification
Load handler not lifting even though the hydraulic pump is working correctly.	Load too heavy.	Reduce the load.
	Load too heavy due to blockage.	Ensure that the load to be lifted is dismantled and/or can be moved freely.
	Hydraulic valve no longer closes or leaks due to oil contamination.	Clean the outside of the hydraulic unit and, if necessary, contact customer service.
	Star knob for hydraulic valve is not set correctly.	Adjust the hydraulic valve.
	Spring return on the star knob does not work.	Ensure correct function of the spring return.
	Viscosity of hydraulic oil is too high.	Check the temperature at the area of use.
	There is air in the hydraulic unit.	Contact customer service.
	Hydraulic unit is defective.	Contact customer service.
Raised load handler lowers automatically.	Hydraulic unit is leaking.	Contact customer service.
	Hydraulic valve no longer closes or leaks due to oil contamination.	Clean the outside of the hydraulic unit and, if necessary, contact customer service.
	Star knob cannot be turned back completely.	Check the spring return for contamination.
	Star knob rotates freely on the shaft.	Check the threaded rod on the star knob.
	Star knob does not reset automatically.	Ensure correct function of the spring return.
Raised load is lowered slowly or not at all.	Ambient temperature too low, hydraulic oil too viscous.	Move to area with higher ambient temperature.
	Star knob without function.	Check the threaded rod on the star knob.
	Hydraulic cylinder is damaged or deformed.	Contact customer service.

Maintenance

- Only qualified and trained personnel are allowed to do service on this crane.
- Lubricate all moving parts at regular intervals.
- Always keep the crane clean and protected from aggressive conditions.
- Check the state of the markings and that the markings remain as the initial ones.
- Check the oil level of the hydraulic unit with the piston fully retracted. Top up if necessary.
- Make sure the boom is lowered completely before adding oil to the hydraulic unit

! An excess of oil will render the crane inoperative

- Use only hydraulic oil, HL or HM types, with an ISO grade of cinematic viscosity of 30 cSt at 40ºC or an Engler viscosity of 3 at 50ºC.

! Never use brake fluid

! Please consider that oil leakage of hydraulic fluid can cause failures and accidents.

! Waste material like oil must be disposed and recycled according to the national regulations.

- When ordering spare parts, please state the part number as shown in the exploded view drawing provided, the model number and the capacity of the crane. Use approved and from your dealer released original spare parts.
- No modification shall be carried out which adversely affects the compliance of the crane with the standards.

Maintenance intervals

Requirements

– The device is used in single-shift operation.
– The device is used under normal operating conditions – see page 9.

- Maintain the device at the specified intervals.
- If the device is operated in very dusty conditions, subjected to extreme temperature fluctuations or used in multi-shift operation, the intervals must be reduced accordingly.

Maintenance interval	Maintenance
Daily.	Check the device before operation, check that the bolts and cotter pins are present and correctly seated – see page 14.
After the first 100 operating hours.	– Re-tighten wheel nuts and bolts. – Check the hydraulic system for leaks.
Monthly.	– Remove dirt and foreign bodies.
Every 3 months.	Check the setting of the hydraulic valve.
Every 6 months.	– Check the function of the hydraulic valve. – Check all parts of the device for wear and replace faulty parts.
Annually or after unusual events.	Have safety checks performed at regular intervals and following any unusual events – see “Repairs”.

Consumables

Lubricants

Lubricant		Value	Unit
Hydraulic oil	Oil type	HM or HL	-
	Viscosity	30	cSt at 40 °C
	Refill quantity	1.25	Litres

Repairs

Safety tests to be performed at intervals and after unusual events

! Always perform safety checks in accordance with national regulations. These maydeviate from the steps listed below.

Requirements

– The inspecting person is qualified to conduct the following check.
– The inspecting person is independent and unbiased (from an operational and business perspective) and assesses the device purely in terms of its safety.
– The inspecting person possesses sufficient knowledge and experience to assess the condition of the device and the effectiveness of the safety equipment based on the rules of technology and the principles for testing the described device.

- Inspect the technical condition of the device with regard to accident safety.
- Thoroughly check the device for damage.
- Produce a written test report and retain it for at least 2 years. Responsibility forthe test report rests with the owner.
- Rectify any identified defects before next using the device.
- Following a successful inspection, attach an inspection plaque to the device in avisible location.

9. Shutdown, storage and disposal

Decommissioning

Shutting down the device

- Thoroughly clean the device.
- Apply a thin layer of oil or grease to any non-painted mechanical components.

Returning the device to service after shutdown

- Thoroughly clean the device.
- Apply a thin layer of oil or grease to any non-painted mechanical components.
- Start up the device.
- Perform a complete function check immediately after start-up.

Storage

Storing the device

NOTICE

Incorrect storage!

Risk of material damage.

▶Always store the device in a dry and frost-free environment.

Storing the device

Requirements

– Device is being taken out of service for more than 2 months (e.g. for operationalreasons).
– Device has been prepared for storage as described, see “Shutting down the device”.

- Protect the device against dust and corrosion, e.g. using a tarpaulin.
- Before storing the device for longer than 6 months, discuss necessary additionalmeasures with the manufacturer's customer service department.

Disposal

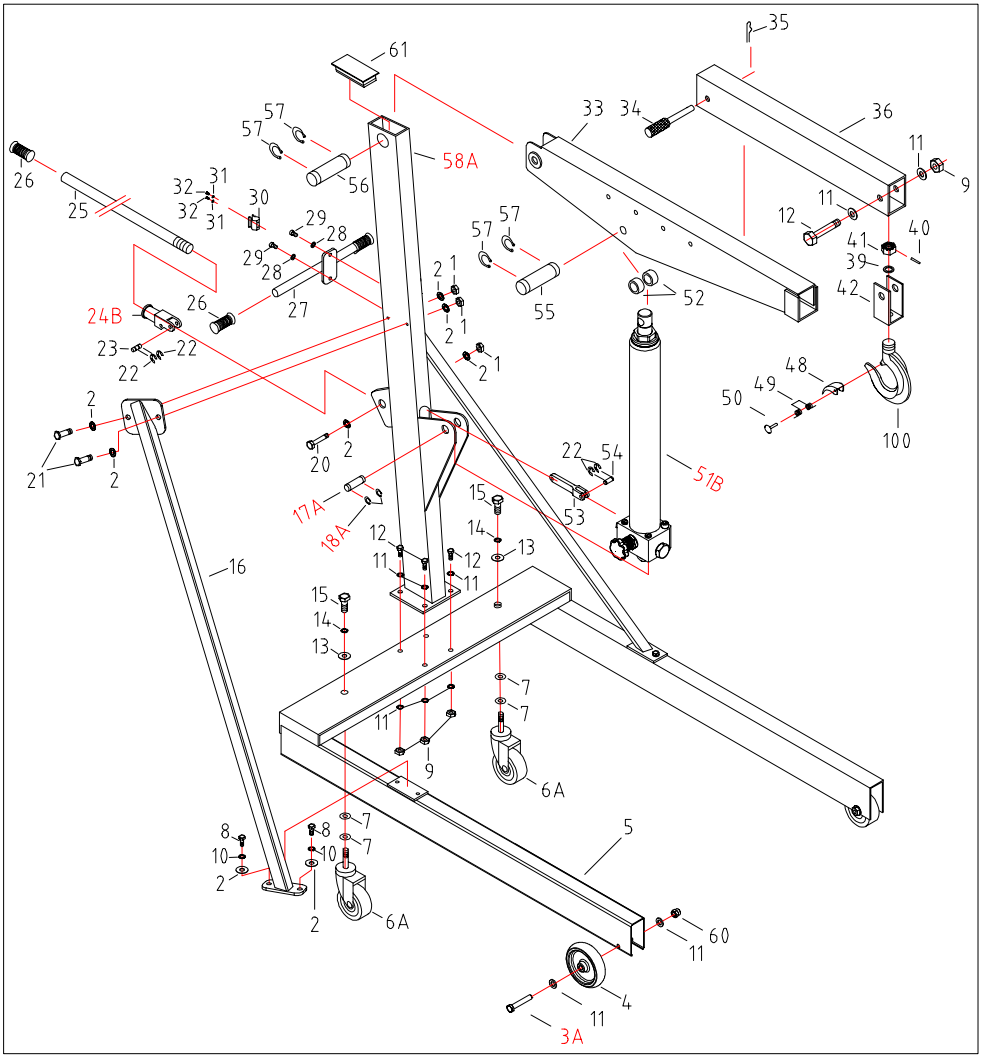
Decommissioning the device

- Observe the applicable regulations in the country of use when decommissioningthe device.

Disposing of the device

- Observe the country-specific regulations regarding disposal of the device andconsumables.

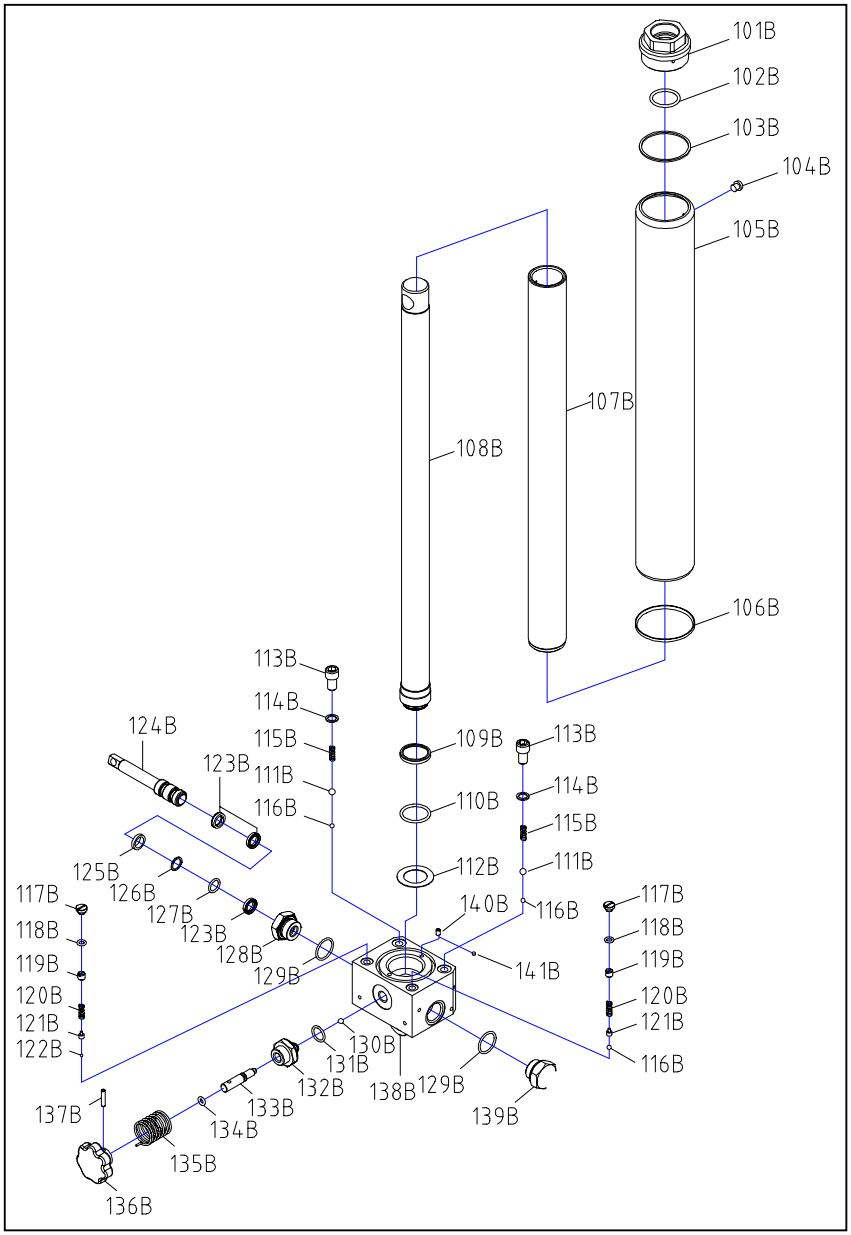
10. Exploded View Shop Crane



11. Parts List Shop Crane

No	Description	Qty	No	Description	Qty
1*	Nut	3	27*	Handle	1
2*	Washer	10	28*	Washer	2
3A*	Bolt	2	29*	Bolt	2
4*	Front wheel	2	30*	Spring seat	1
5	Base	1	31*	Washer	2
6A*	Steering wheel	2	32*	Screw	2
7*	Washer	4	33	Boom	1
8*	Bolt	4	34	Pin	1
9*	Nut	5	35	Spring pin	1
10*	Spring Washer	4	36	Lifting arm	1
11*	Washer	14	39	Nut	1
12*	Bolt	5	40	Pin	1
13*	Washer	2	41	Washer	1
14*	Spring Washer	2	42	Hook seat	1
15*	Bolt	2	51B	Cylinder assembly group	1
16	Support	2	52*	Spacer	2
17A	Pin	1	53	Linkage	1
18A	Snap ring	2	54	Pin	1
20	Screw	1	55*	Pin	1
21*	Screw	2	56*	Pin	1
22	Snap ring	4	57*	Snap ring	4
23	Pin	1	58A	Post	1
24B	Socket	1	60*	Nut	2
25	Jack handle	1	61	Cover	1
26	Hand grip	3	100	Hook	1
*Included in the assembly kit					

12. Exploded View Pump



13. Parts List Pump

No	Description	Qty	No	Description	Qty
101B	Cylinder Head	1	102B	O-Ring	1
103B	Square-Ring	1	104B	Oil Plug	1
105B	Reservoir	1	106B	Square-Ring	1
107B	Cylinder	1	108B	Piston Rod	1
109B	O-Ring Retaining	1	110B	O-Ring	1
111B	Ball	2	112B	Washer	1
113B	Screw	2	114B	Washer	2
115B	Spring	2	116B	Ball	3
117B	Screw	2	118B	O-Ring	2
119B	Screw	2	120B	Spring	2
121B	Seat	2	122B	Ball	1
123B	Y-Ring	4	124B	Pump	1
125B	Snap Ring	1	126B	Scraper Ring	1
127B	O-Ring	1	128B	Screw	1
129B	O-Ring	2	130B	Ball	1
131B	O-Ring	1	132B	Screw	1
133B	Release Indicator	1	134B	O-Ring	1
135B	Spring	1	136B	Release Knob	1
137B	Pin	1	138B	Valve Block	1
139B	Screw	1	140B	Copper Beak	1
141B	Magnets	1			

Simon, Evers & Co. GmbH
HAMBURG

14. EC Declaration of Conformity
within the meaning of EC Machine Directive 2006/42/EC

We hereby declare that the machines listed below conform to the pertinent basic health and safety requirements of the EC Directive in respect of their design, construction and type and in the version brought onto the market by us.

This declaration will cease to be valid in the event of any modification to the machine not approved by us.

Description of the machines:	Shop Crane
Machine types:	P-500 P-1000
Pertinent EC directives:	EC Machine Directive (2006/42/EC)
Name of manufacturer:	Simon, Evers & Co. GmbH
Address:	Katharinenstr. 9 20457 Hamburg – Germany
Date	01.01.2025
Name of the signatory:	Arne Münchow
Function of the signatory:	Director IBE/ Authorized representative
Manufacturer's signature:	*Simon, Evers & Co. GmbH*

ppa. Münchow