

# CONTAINER DISCHARGE UNIT GEJO 05A



Please read this manual carefully before using this product.

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## 1. INTRODUCTION

maintenance.

This manual describes the hook grab supplied by Bakker Hydraulic Products BV and the regulations concerning its connection, operation and maintenance.

The hook grab is used with a truck-mounted crane for picking up and opening containers, and is specially adapted to the containers used.

It is essential, before using the hook grab, to read through this manual carefully to familiarise yourself with its operation, control and maintenance. Malfunctions are usually caused by incorrect start-up, operation or

Personnel operating the hook grab and those working near it should be aware

of how the hook grab works.

Carefully follow the advice provided here. In case of doubt, Bakker Hydraulic Products BV is always willing to advise you.

Bakker Hydraulic Products BV holds a large stock of these components and they can generally be supplied quickly.

If spare parts not supplied by Bakker Hydraulic Products BV are used, the company accepts no responsibility for the correct functioning of the hook grab.

## 2. OPERATIONAL CONDITIONS

This hook grab is considered an exchangeable equipment within the scope of the machinery directive 2006/42/EC. Be sure that the machine, of which this hook grab will be part of, meets the appropriate requirements and/or regulations and is well maintained.

#### Notes

When designing this product, account was taken not only of normal usage but also of usage that might reasonably be expected.

If the customer modifies the product without the manufacturer's knowledge, the customer (the user) is liable for the consequences and the guarantee becomes null and void.

Maintenance is, of course, permitted, providing it is carried out according to the instructions provided in the manual.

#### Warning

Ensure that *no one is within working range* of this product when it is being used!

## Caution

Take note of the maximum headroom!

## 3. SAFETY

!! In all cases: if in doubt, consult Bakker Hydraulic Products BV!

- Before moving the hook grab, create a "safety zone" for the working area.
- Never move the hook grab when there are people in the working area.
- Never lay the hook grab in a container with the piston rods out.
   This can damage the piston rods, resulting in sealing problems.
- Avoid sideways forces on the hooks, such as knocking against the edges of a container. This can cause the piston rods to become distorted.
- The hook grab should never be put vertically into a container or onto the ground using full force. Put the hook grab down carefully to avoid damage.
- Disregarding instructions, warnings and/or safety measures can cause injury.
- The hook grab must not be used in a manner or for a purpose other than that for which it was designed and intended.
- Before work is carried out on the hook grab, always disconnect the hydraulics.
- Cylinders on which a load is suspended can be under pressure. Only disassemble the lines when the cylinder can no longer be moved by the external load.
- Do not operate the hook grab with damaged, missing or incorrect working components.
- If the machine is not functioning properly, stop the machine immediately.
- The working, opening and moving of containers is never without risk and requires some experience. New operators of the attachment should be instructed by experienced operators on how to use the hook grab.
- When opening a container, the contents (glass) may jump up. Ensure that no one is in the immediate area before moving or opening a container.
- Never stand under the load.
- Nothing should ever be lifted with the closed catch.

## 4. COMMISSIONING AND USE

#### 4.1 GENERAL

Check that the hook grab is in good condition.

Carefully follow the operating instructions that apply to the crane, rotator and container to be used. If they contradict any instruction or warning in this manual, consult your supplier.

#### 4.2 THE ROTATOR

#### 4.2.1 Assembling the rotator drive shaft

- Place the rotator drive shaft in the suspension plate.
- If the outside measurements of the rotator shaft do not correspond with the inside measurements of the suspension plate, you probably have the wrong suspension plate. If so, contact your supplier. Rotate the rotator shaft until the hole in the rotator shaft is in front of the connector bush hole. Then mount the suspension pin and hairpin spring.

## 4.2.2 Assembling the rotator with flange fitting

- If you are using a rotator with a flange fitting, the hole pattern in the top plate must correspond with the hole pattern in the rotator.
- Attach the rotator to the top plate with a bolt joint according to the rotator supplier's instructions.

#### 4.3 THE HOSES FROM CRANE TO ROTATOR

- The rotator hose connections used for rotation are fitted with throttle valves. The rotator should not be used without these throttle valves.
- The hoses from the crane to the rotator used for rotation must be connected to a connection point supplied with a throttle valve.
- The hoses from the crane to the rotator, which are used for lifting, must be connected to the two remaining connection points on the rotator.

#### Note

If it appears that the operation of the hook grab and/or rotator does not correspond with the information given on your operating handles, the hoses have probably been connected incorrectly.

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## 4.4 THE HOSES BETWEEN THE ROTATOR AND HOOK GRAB

#### Note

When using a rotator purchased from Bakker Hydraulic Products BV the hoses that connect this rotator and the hook grab should be ordered from the manufacturer. You can then be sure that the hoses are the right length and diameter. If required, reinforced hoses can be supplied as extras by and in consultation with the manufacturer.

## 4.4.1 Mounting the hoses on a rotator with drive shaft

- Fit a hose to one of the hose connections on the rotator shaft (ensure that you have the right diameter hose).
- Now attach the other end of this hose to one of the connections on the cylinder.
- Repeat this to connect the second hose.

### Note

If the hook grab does not function properly after mounting the hoses, swap around the hoses from the crane to the rotator.

If the hook grab still does not operate to your complete satisfaction, contact the manufacturer or your nearest dealer.

#### 4.4.2 Mounting the hoses on a rotator with flange fitting

- To fit the hose to the hose connection on the hook grab, see Section 4.4.1.
- To connect the hose to the rotator, refer to the rotator manufacturer.

#### 4.5 THE LINK

#### Assembly

- A link is always mounted between the rotator and the jib of the crane.
- Mount the link at the top of the rotator.
- Fit the link pin and locking pin.
- Check that the link is able to move freely.
- Connect and lock the link to the crane.

#### Note

Make sure there is a little sideways slack.

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#### 4.6 CHECK OPERATION

 Check the operation of the attachment with reference to the control overview. Carry out this check first without a container, then with an empty container.

#### 4.7 WORKING WITH THE HOOK GRAB

- Work carefully!
- Connect the attachment and check its operation as described in 4.1 and 4.6.
- Check that everything is in good working condition.
- Attach the attachment to the container.
- Wait until there are no bystanders.
- Slowly manoeuvre the full container above the loading skip on the truck.
- Lower the container until its bottom side is below the level of the top side of the loading skip.
- Open the container.
- After emptying out the contents, close the container.
- Carefully replace the container.

## 5.0 MAINTENANCE

When used in combination with glass containers, ensure that the attachment is not unduly affected by the broken glass in the glass containers.

- Check the grab's hooks visually once a year.
- Test the hook grab once a year with a 3750 kg load per hook.
- Check the nuts and bolts every year for slack.
- The cylinder should never be "out" when the attachment is in contact with glass.
- Check the hoses regularly for wear that might result from glass jumping up.
- All hook grab nuts and bolts should be mounted using Loctite 243 or a comparable product.
- All hook grab cylinder connections should be mounted using Loctite 542 (thread sealer) or a comparable product.
- After 20 working hours, check all bolted connections and tighten if necessary.

<u>Caution!</u> With all maintenance activities on the hook grab, the hook grab must be non-operational and resting on the ground.

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Without lubrication	Tightening torque
M 8 8.8	29 Nm
M 18 10.9	35 Nm
M 10 10.9	70 Nm
M 12 8.8	65 Nm
M 14 8.8	104 Nm
M 16 8.8	162 Nm

## **TECHNICAL DATA:**

Type of hook grab : GEJO 05A

Height adjustment : 600 mm

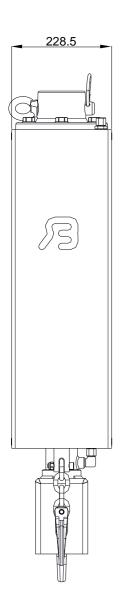
Weight : 115 Kg

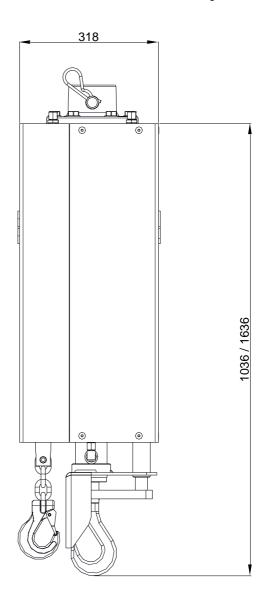
Maximum working pressure : 200 bars

Maximum load : 3000 kg

Maximum oil flow : 20 l/min

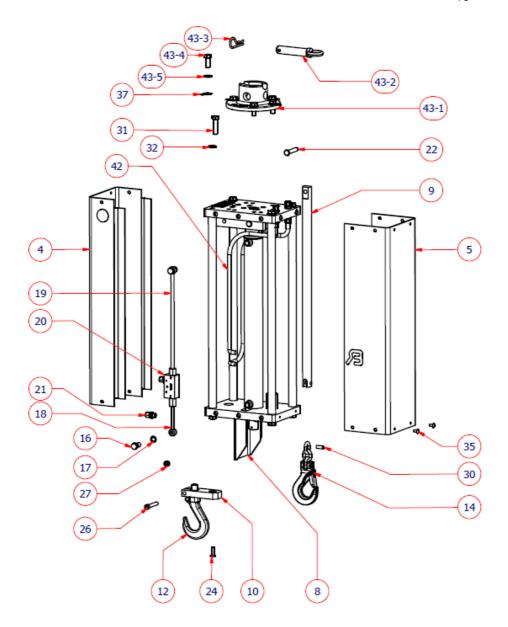
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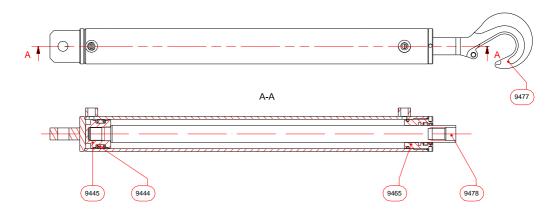
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Pos	Part number	Specification	Quantity
4	200.798.00	Protecting hood rear	1
5	200.799.00	Protecting hood front	1
8	200.800.00	Hook security	1
9	200.764.00	Pull rod	1
10	200.707.00	Clamp plate	1
12	9477	Hoisting hook	1
14	9462	Hoisting hook	1
16	31001020	Banjo bolt	2
17	7144	Sealing ring	4
18	800.028.01	Banjo + pipe L=200	1
19	800.028.03	Banjo + pipe L=400	1
20	75674	Non-return valve	1
21	31001031	Straight pipe fitting Ø10-3/8"	4
22	75577	Clevis pin	2
24	75357	Counter sunk head screw	1
26	9507	Bolt	2
27	9433	Self locking nut	2
30	75672	Cylindrical pin hardened	1
31	75148	Bolt	8
32	75221-16	Ring lock washer	2
35	75619	Round head bolt	20
37	75670-16	Tab lock plate	6
42	5015	Hose kit (inside)	1
43-1	9503	Suspension plate	1
43-2	9011	Suspension pin	1
43-3	9018	Hairpin spring	1
43-4	9413	Bolt	6
43-5	9426	Washer	6

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## Cylinder 9438A 35-60-600



No.	Description	Quantity
7190	Head bush	1
7191	Piston	1
7192	Seals	1
9477	Hook	1
9478	Piston rod	1

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