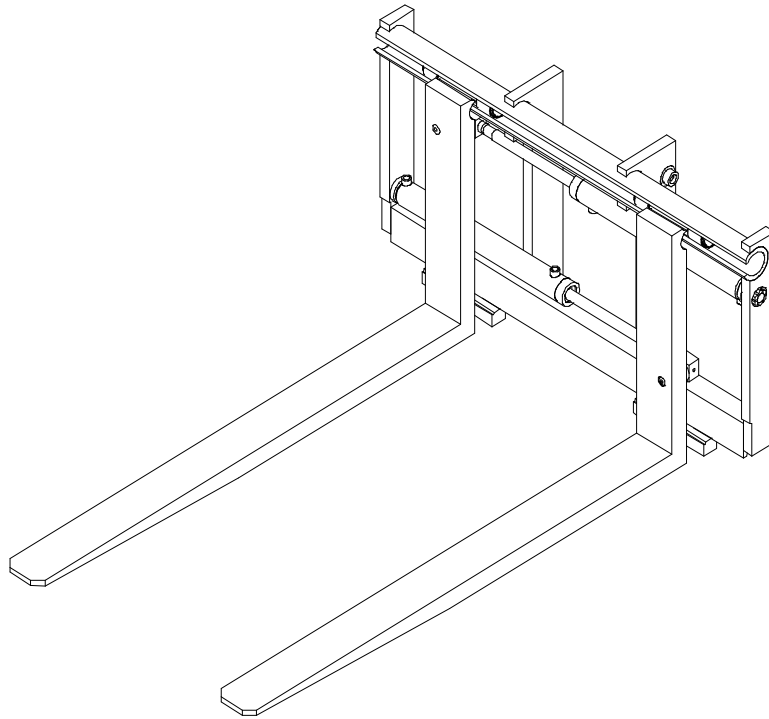


# *O.Bodins Maskin AB*

## Userø Manual Original

### Hydraulic forkpositioning attachment

List of spare parts and maintenance guide for C-model attachments



## Index:

Chapter	Page
1. The attachment and its functions	3
2. Exploded view of attachment	4
3. List of spare parts	5
4. Service	6
➤ Dismounting of forks	6
➤ Exchange of bushings	6
➤ Exchange of slideplates	6
➤ Mounting of forks	7
➤ Exchange of hydraulic cylinder	7
➤ Exchange of seals in cylinder	7
5. Safety	8
6. Warranty	9
7. Recommended products	9
8. Hydraulic scheme	10

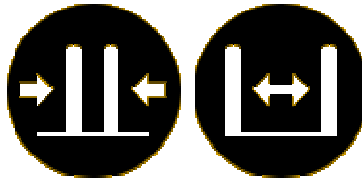
## 1. The attachment and its functions

Forkspreading- and sideshift attachment with hydraulic positioning of the forks. O. Bodins Maskin AB manufacture integral attachments which are fitted to the machine for which they are ordered using the original sideplates which allows for long lasting and trouble free performance. We also offer our attachments as *hook-on* attachments.

### Forkspreading

The forks are moved and adjusted to fit the cargo. Where a variety of goods are handled on a daily basis this function is very valuable.

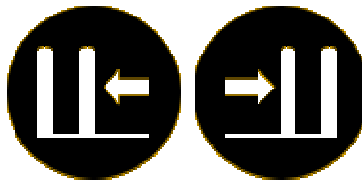
The fork spreading function allows the driver to adjust the forks from within the cabin in a swift and efficient way. This means a decrease in damaged pallets and goods. Also the work environment for the driver is greatly improved since there won't be any need to step out of the machine to adjust the forks for different types of cargo, which means less risk of the driver being hurt by the cargo or the adjusting of the forks.



### Sideshift

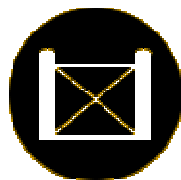
Enables the driver to move the forks parallelly in a sideways motion.

When loading cargo onto a lorry the driver can make small adjustments of the goods without moving the fork lift truck.

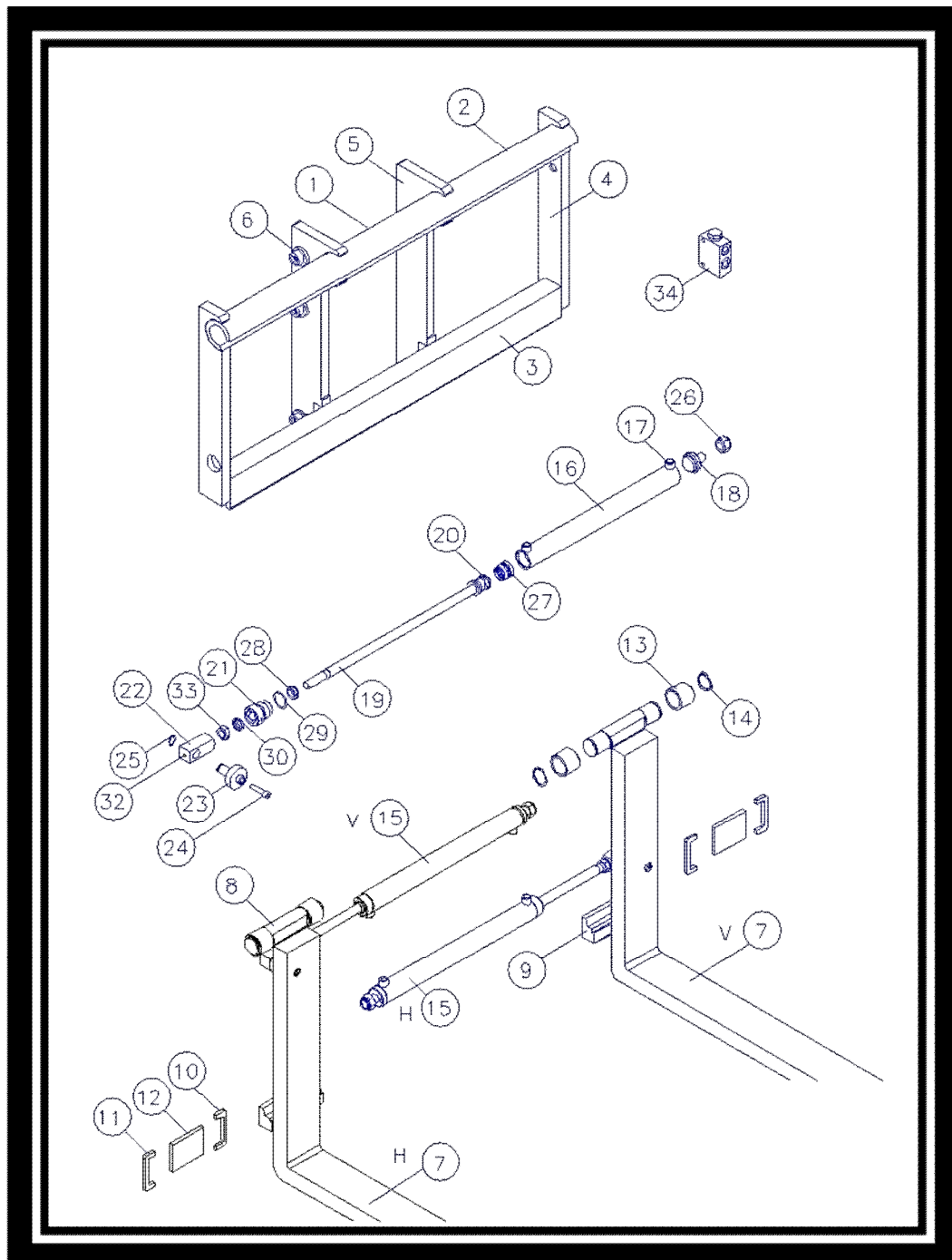


### Squeeze function for light handling

The third function allows for the driver to squeeze the forks together to pick up objects off the ground. We advise the driver to use caution when using the attachment for this type of work and only use it for light weight objects since the forks are made to withstand heavy loads from above but are significantly weaker when strained from the side.



## 2. Exploded view



## 3. Reservdelslista

Pos	Benämning	Dimension	Ant.	Anteckningar
1	Frame		1	
2	Upper beam (C-profile)		1	
3	Lower beam		1	
4	Outer frame part R-L		2	
5	Sideplates		2	
6	Stubshaft			
7	Fork R-L		2	
8	Fork axis		2	
9	Lower hook		2	
10	Bracket for slide plate		2	
11	Bracket for slide plate		2	
12	Slide plate		2	
13	Bushing		4	
14	Snap ring (SGA)		4	
15	Cylinder complete R-L		2	
*16	Cylinder pipe			<i>*Included in No 15</i>
*17	Hydraulic connection			<i>Not sold</i>
*18	Cylinder bottom			<i>separately!</i>
19	Rod			
20	Piston			
21	Head bush			
22	Rod end			
23	Axis of the piston rod end			
24	Allen screw		2	
25	Snap ring (SGA)		2	
26	Lock nut/fastening bolt		2	
27	Piston seals			
28	Rod seals			
29	O-ring			
30	Scraper seal			
31	Seals complete set			
32	Grease nipple			
33	Lock nut		2	
34	Flow valve			

## 4. Service and Maintenance

The attachment is labeled by O. Bodins Maskin AB. There is a metal plate attached to the fork positioner on the inside of the sideplate (see p.4 No. 5)

The serial number of the attachment is also stamped on the top of the sideplate, should the metal plate have gone missing please refer to the stamped number on the attachment to order a replacement metal plate for your attachment. The attachment is also equipped with a number of warning stickers, if any of these stickers are missing they need to be replaced before the attachment is put back in service.

### Maintenance:

The attachment and the forks have to be controlled every 12 months by authorized personnel. Note that the forks have to be dismantled from the attachment to be in compliance with the health and safety guidelines of this control, special attention should be paid to the joint between the upper axis and the fork and to the area of the lower hook on the fork. A fork that has been worn down more than 10% of its original thickness has to be replaced. A fork that is bent or crooked in any way has to be straightened by an authorized work shop and controlled again before it is put back in service. The attachment should be controlled with regards to any deformations, cracks in the metal or leaking of hydraulic oil, should any damages be visible the attachment has to be repaired by O. Bodins Maskin AB or authorized third party.

### Dismounting of the forks

- Spread the forks to 90% of maximum
- Detach the hydraulic system from the attachment
- Loosen bolt No 24
- Gently tap the axis rod end No 23 to loosen it, turn the rod end No 22, 90 degrees and pull the fork out of the attachment.

### Exchange of bushings

- See the steps above (dismounting the forks)
- Remove the snap ring No14 and pull out the old bushing
- Mounting: Heat the new bushing to approximately 100° C, use suitable gloves to mount the bushing and replace the snap ring to finish the job.

### Exchange of glide plates

- In order to exchange the glide plates simply dismount the forks.

## Mounting of the forks

- Clean the C-profile No 2 and grease it thoroughly
- Push the fork into the C-profile making sure the lower hook is aligned with the lower beam and that the glide plates are in place
- Turn the rod end No 22 back and fit the axis rod end No 23 into the hole in the fork. Tighten the bolt No 24, do not forget loctite.

## Exchange of hydraulic cylinder (dismounting)

- Spread the forks to 90% of maximum
- Detach the hydraulic system from the attachment
- Loosen the hydraulic connections No 17 and plug them
- Loosen bolt No 24
- Gently tap the axis rod end No 23 to loosen it, turn the rod end No 22, 90 degrees
- Loosen No 26 bolt or nut depending on model and pull out the cylinder

## Exchange of seals in cylinder

- Loosen rod end No 22 and lock nut No 33
- Loosen head bush No 21
- Replace piston seals nr 27, rod seal No 28, o-ring No 29 and scraper seal nr 30
- Follow steps 1 and 2 in reverse to assemble the cylinder

## 5. Safety

A daily check of the attachment should be made to ensure there is no visible deformation or crack in the metal anywhere on the attachment which may compromise the safety of said attachment. All of the safety stickers have to be visible and legible, missing, damaged or illegible stickers have to be replaced. The daily check should also ensure the attachment is sufficiently greased to avoid unnecessary wear and tear.

### **The attachment is made for:**

Material handling such as pallets, timber-stacks and other types of loose cargo or goods.

### **The attachment is NOT made for:**

Transportation or lifting of people or any other animate objects  
Moving goods that have been tied to the attachment  
Prying things from the ground  
Moving round/cylindrical objects unless these are securely fastened

### **Consider:**

The risk of people getting caught between the forks of the attachment or getting hands or clothes trapped in the C-profile or between the forks and the lower beam when the attachment is in operation.

Make sure no people are in the zone where the attachment or any goods that might fall off the forks can cause injury.

Detach the hydraulic system when servicing the attachment or the forks.



## 6. Warranty/Return policy:

### Terms of Warranty:

Since the lifting capacity of the forks are chosen with a 3 fold safety factor we do not extend our warranty to deformation of the forks unless there is some fault in the quality of the material from our supplier.

### Deliveries from O.Bodins Maskin AB

For spare parts and any reparation of our customer's products the time of Warranty is 6 months from the date of delivery.

For newly manufactured attachments the time of Warranty is 1 year. (not including wear parts like bushings and slide plates etc.)

All other parts from O.Bodins Maskin have a warranty of 1 month from the date of delivery.

Before acknowledging any Warranty claims O.Bodins Maskin AB has the right to investigate the product in question to ensure that the fault is not due to faulty use or mounting of the product or some incident or Force Majeure beyond the control of O.Bodins Maskin AB.

The Warranty from O.Bodins Maskin AB ONLY extends to the product itself which will be replaced. O. Bodins Maskin AB does NOT accept any charges for transportation or work costs that the customer might have been subject to during a Warranty claim.

When returning goods the following terms apply:

Return of product within 1 week = will be credited without return fee

Return of product within 8-30 days = will be credited with a 20% return fee

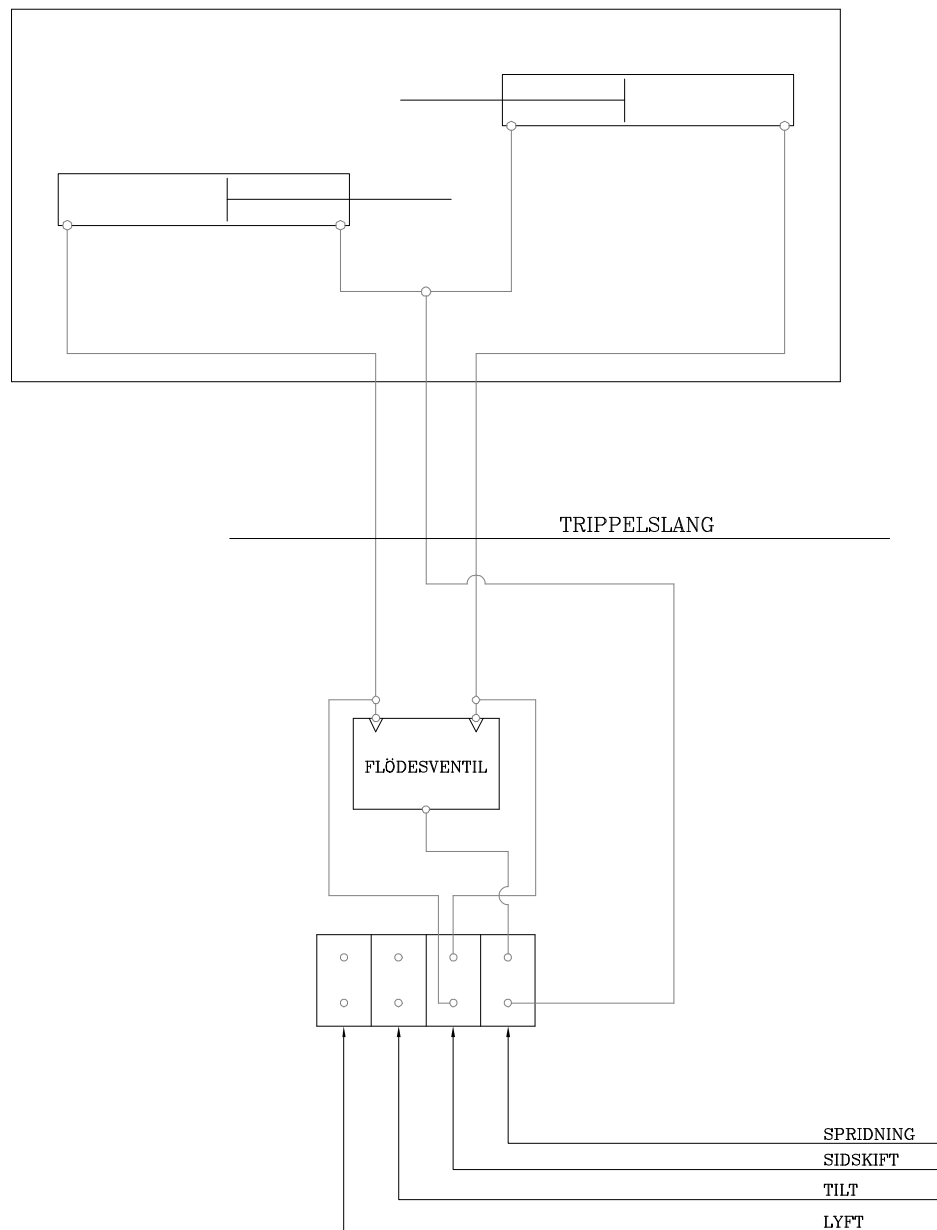
Return of product after 30 days = will not be credited

## 7. Recommended products

For the best performance of Your new attachment we recommend original spare parts from O.Bodins Maskin AB. But servicing your attachment we recommend the following products;

- Fork grease ó Long working grease OF-90052 *Swedol*
- Paint- Rallye-Color 513 matt black *Henkel/Teroson*

## Hydraulic scheme



Translation:

Trippelslang ó Triple hose, Flödesventil ó Flow valve, Spridning ó Spreading, Sidskift ó Sideshift, Lyft - Lift