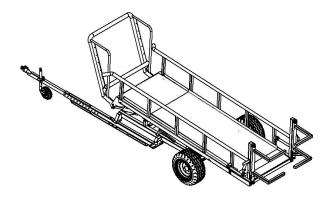
## FASTERHOLT ROUND BALE WAGON

**RB-3 MODEL 2011-**

**OPERATING MANUAL & SPARE PARTS CATALOGUE** 



TM

# FASTERHOLT

### A/S FASTERHOLT MASKINFABRIK EJSTRUPVEJ 22, DK-7330 BRANDE DENMARK

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Date: 15-12-2011

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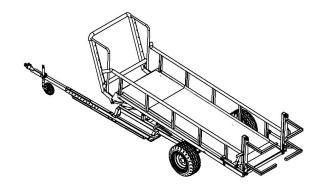
## **EU Declaration of Conformity for a machine Machinery Directive 2006/42/EU, Annex II, A**

Manufacturer: Fasterholt Maskinfabrik A/S
Ejstrupvej 22, Fasterholt DK-7330 Brande
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www.fasterholt.dk
Represented by:
Name:
Address:
Documentation responsible for technical dossier
Christian Lambæk, production manager, Fasterholt Maskinfabrik A/S.
hereby declare, that
Machine model / Type: RB3 wagon for round bales, nr. VORB3
Build year: Machine No.:
complies with all relevant provisions of the Machinery Directive - 2006/42/EU.
Using the following harmonized standard:
DS/EN 349 + A:2010 DS/EN ISO 13857:2008, DS/EN/ISO 12100 -1,-2,: 2010.
Place: DK- 7330 Brande
Date:
Signature:
Christian Lambæk, production manager

#### **Introduction - RB3 Round Bale Wagon**

RB3 Round Bale Wagon is connected directly to the round baler, where it retains up to three bales, which means you can unload in one or a few unloading areas on the field. This facilitates the collection, and makes both loading and any wrapping significantly easier.

The RB3 wagon is equipped with a loading grab that captures the bales when they leave the baler. Then the loading grab lifts the bales up on the wagon floor, which has an oblique angle. The round bales run backward themselves and are captured by the two unloading arms that hold them in place until the unloading area is reached. When unloading the two unloading arms are loosened and the entire top frame of the wagon is tipped up and the bales run off.



#### **Technical data:**

 Length w. pull
 820 cm

 Width - body
 135 cm

 Length - body
 440 cm

 Height w. pull
 35 cm

 Wheels
 14.00/65x16" x 14 lag

The wagon is designed for bales with the following measures:

Width120 cmDiameterØ150 cmMax. weight per bale800 kg



#### I M P O R T A N T! READ THROUGH THIS BEFORE YOU TAKE YOUR RB3 ROUND BALE WAGON IN USE!



### Operating instructions for Fasterholt RB3 Round Bale Wagon

By purchasing your Fasterholt Round Bale Wagon you have got a Danish quality product. But even the best of machines only provide top results when used and treated properly.

In order to ensure its conformity with the EU Machinery Directive, it is necessary to use only original spare parts. Otherwise the compliance will lapse, and safety is entirely at your own risk.

#### Intended use

The round bale wagon is designed to carry three round bales. In the field the wagon is pulled by a round baler, and after pressing the bales, they are loaded on to the bale wagon and later unloaded together at specific place in the field.

Any additional use is outside the intended use, and Fasterholt Maskinfabrik shall not be held responsible for any consequential damages.

The RB3 Round Bale Wagon may only be used and maintained by people whom through appropriate instruction and studies of the manual are familiar with the RB3 Round Bale Wagon and especially aware of the dangers associated with using it.

Unauthorized changes to the machine and its construction exempt Fasterholt Maskinfabrik for any form of liability for consequential damage.

#### 1. Safety instructions/Warnings!

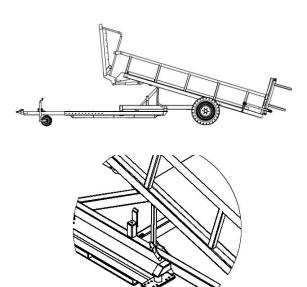
It is very important that this operating imanual is carefully read before the RB3 Round Bale Wagon is connected with the round baler.

The RB3 Round Bale Wagon should never be left to others before you are convinced that they have the necessary knowledge to operate the round bale wagon properly.

#### **General Safety Rules**

- Do not use the RB3 before other persons are at a safe distance. Never allow children to stay near the RB3 in operation.
- Never unload the RB3 before other persons are at a safe distance.
- Always disconnect the RB3 from the baler before lubricating the machine, cleaning the machine, dismounting the machine or adjusting the machine.
- When connecting or disconnecting the RB3 to the baler you must make sure, that there aren't any persons in between the RB3 and the baler.
- Before using the RB3 you must ensure that loose objects and tools are removed from the machine.
- Wagon floor must be properly installed and undamaged before activating the RB3.
- Do not change the wagon floor on RB3 or work without the wagon floor on the RB3.
- Avoid working in loose clothing that can be pulled into moving parts of the RB3.
- Do not go near the moving parts on the RB3.
- Always use the statutory lightning and safe distance labelling for transport by road, and when driving at night.
- Limit transport speed to the maximum specified speed on the RB3. If the machine is not marked with a maximum permissible speed, the machine must maximum be transported by 25 km/h.
- Do not use the RB3 for other work than described in the intended use.
- Do not stand on the baler or other platform above the RB3, when it is in operation.
- When working under the RB3, the wheels must be blocked.
- Stay on the wagon during operation and transport must not take place.
- When parking of the RB3 please ensure that the machine stands on a levelled surface and that the support wheel is correctly fixated.

- When working under the upper frame, you need to make sure that the upper frame is secured with the safety bracket.



#### 1. Securing the upper frame with the safety bracket

- Remember to retighten the wheel nuts!
- **DANGER!** Avoid welding in the paint film! In case of welding, remove all paint from the welding area avoid inhalation of sanding dust.

Hydraulic oil can be harmful because:

- Contact with skin may cause allergies
- Inhalation of oil mist may cause lung ailments
- Leakage of oil under high pressure is dangerous because a oil jet can cut into the skin, eyes, etc.
- If any leak on the wagon is noticed stop this immediately and solve the problem
- Please note, when the RB3 is in operation the oil may be 70 degrees Celsius hot or even more. This can cause a risk of scalding by separation.

#### Disposal of oil spills:

- If oil is found spilled, promptly remove with rags or oil-absorbing powder.
- Spilled products, wipes and powder used for removing oil spills must be kept in closed metal containers and brought to the municipal collection points.

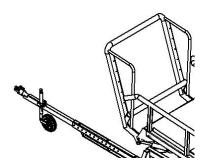
### 2. Setting RB3 Round Bale Wagon before taking it into use

The wagon is connected to the drawbar of the baler by lowering the wagon down on the pole with the bale wagon's support wheel, so that the bale wagon rests on the baler drawbar.

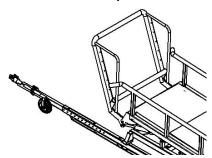
Then loosen the support wheel by the securing tab and turn it around so it is placed horizontally on the bale wagon drawbar. Remember to attach the bale wagon with safety split!

After assembly, the bale wagon must be at level or even lower at the rear than in the front.

- Hydraulic hoses to the loading grab, the upper frame and the unloading arms connected to the double acting outlet.
- Place light cable and connector valve in plug on the baler.



#### 1. Support wheel in vertical position.



#### 2. Support wheel in horizontal position.

#### 3. Use of the round baler

When using the round bale wagon the driver must be at the tractor. In the tractor's cab the driver has the option to switch the operation of the bale wagon from loading, where the loading grab lift the bale onto the bale wagon, to unloading, where the upper frame is tipped up and the unloading arms in the rear end are opened.

**You load** the bale wagon by lifting the round bale onto the bale wagon when pressing is finished.

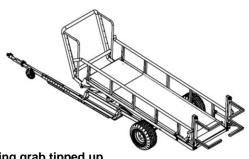
After the pressing the bale lands on the loading grab, which is lowered. After this the loading grab is tipped up and lifts the bale onto the bale wagon upper frame.

The bales run back on the tilted wagon floor until the wagon is filled with three bales. When the wagon is filled up, you can unload the bales exactly where you want them, for instance at the end of the field.

When loading the two unloading arms in the rear end are in closed position and the upper frame not tilted up.

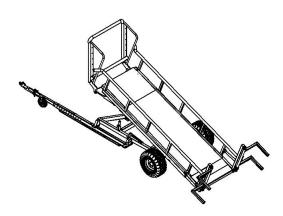


#### 1. Loading grab tipped down



#### 2. Loading grab tipped up

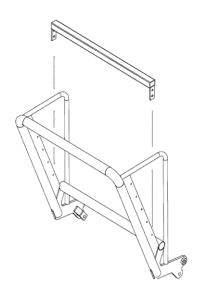
**You unload** the bales by switching to tip of the upper frame and opening the unloading arms. When the upper frame is tipped up the unloading arms in the rear end of the wagon open and the round bales fall out onto the ground behind the bale wagon.



## 3. Unload the bales with open unloading arms and tipped upper frame.

**Before reversing** with the bale wagon the loading grab must be tipped up and the upper frame tipped down with closed unloading arms.

#### 4. Pressing of small bales:





For loading of small bales a tube mounted on the loading grab makes it possible to lift small bales onto the bale wagon. The tube can be mounted in different positions on the loading grab.

#### **Control functions:**

#### Maintenance:

Lubricate all grease fittings with grease.

(Approximately every week when the bale wagon is in operation)

2 x 2 pcs nipples by		axles for loading grab cylinders
2 x 2		unloading arms
2 x 2		cylinders for unloading arms
2 pcs -		axles for tip cylinder
2		axles for tip
2		axles for loading grab

#### Control of light.

Remember to regularly tighten the wheel nuts. Remember to regularly check the tire pressure (70 psi).

#### 5. Defects on the RB Round Bale Wagon

Loading grab and tip of upper frame / opening of the unloading arms can not be activated:

- Too little oil pressure
- Electrical defect

You cannot switch between loading grab and tip of upper frame / opening of the unloading arms.

- Defects in coil for 6/2-way valve
- No power to 6/2-way valve
- Electrical defect

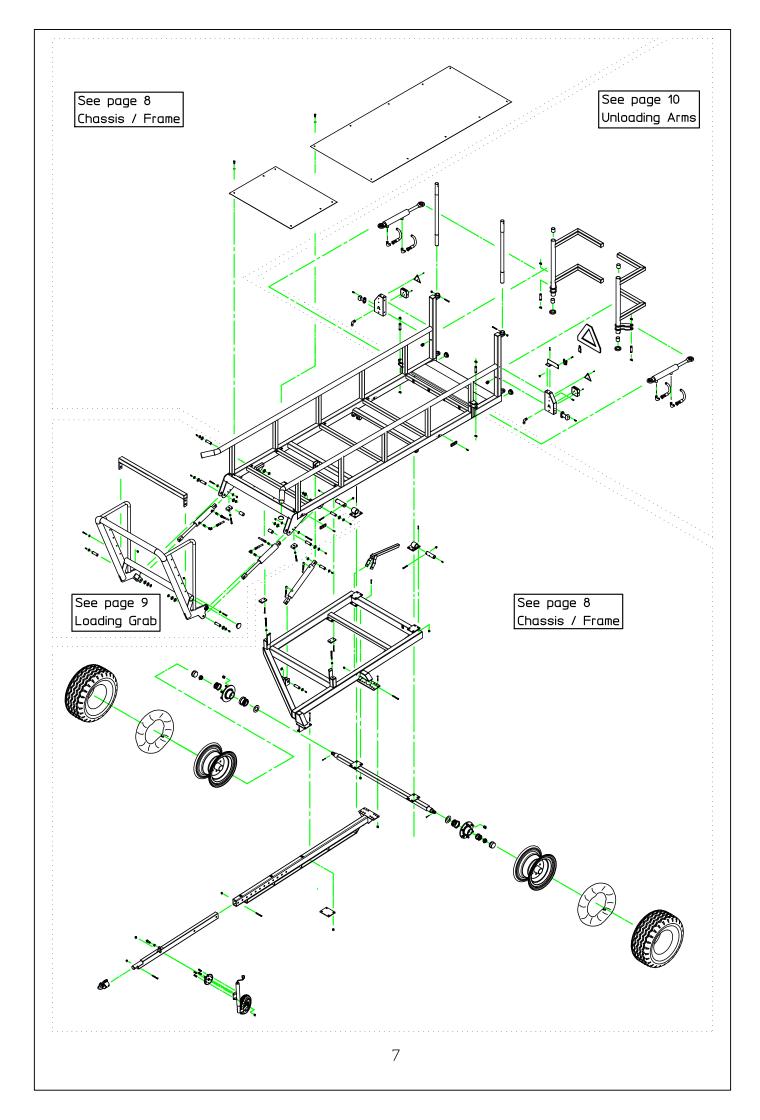
#### 6. Technical data:

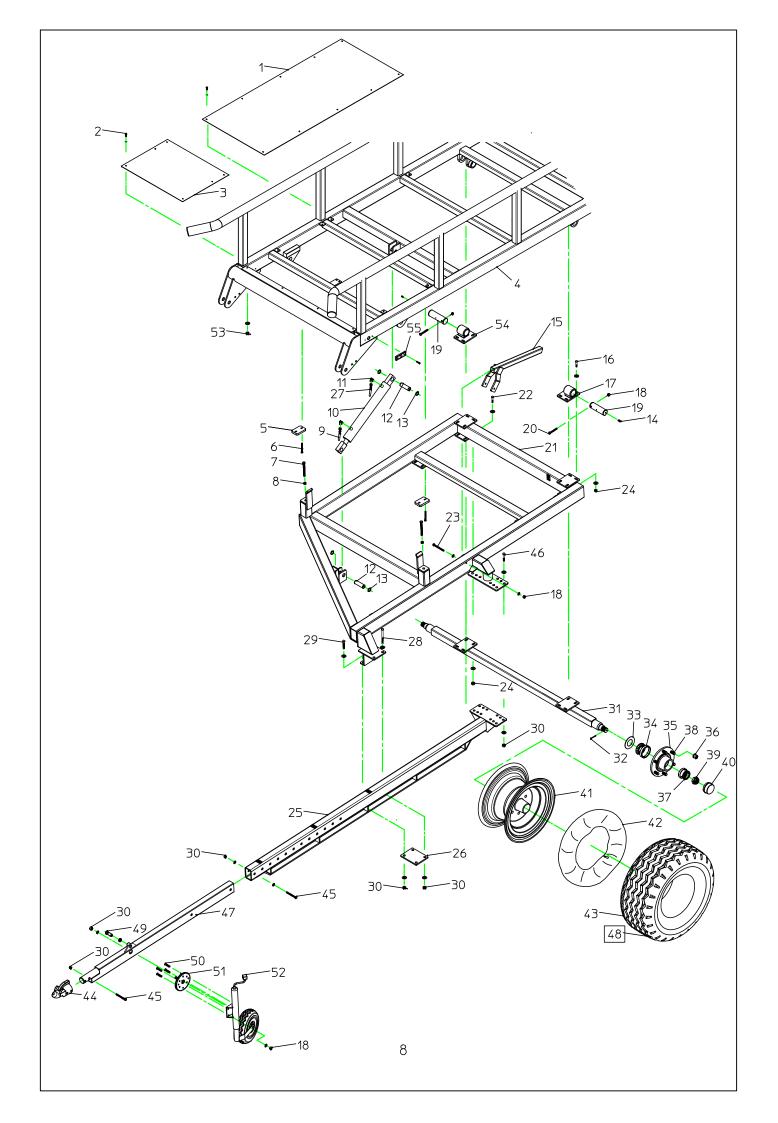
The wagon is designed for bales with the following measures:

Width:	120 cm
Diameter	Ø150 cm
Maximum weight per bale	800 kg
Width - body	135 cm
Length - body	440 cm
Length w/pull	820 cm
Height w/pull	35 cm
Tire pressure	70 psi
Maximum load	2400 kg

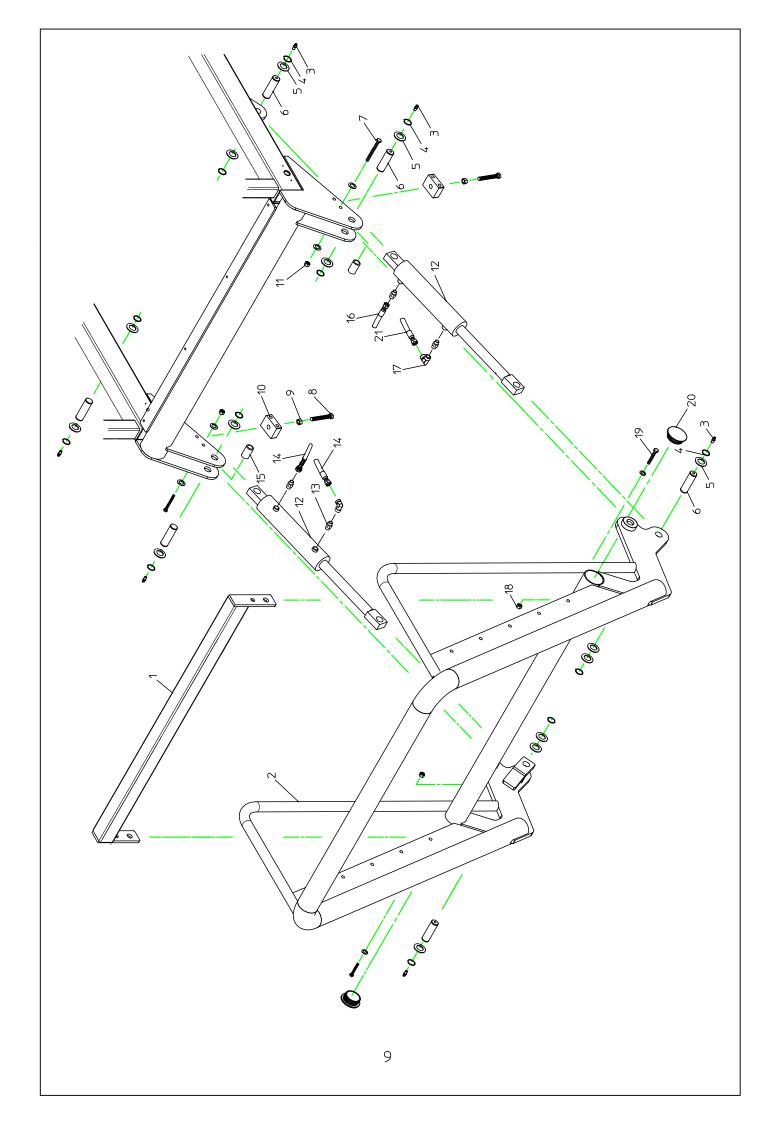
#### Noise:

The sound level of the RB3 Round Bale Wagon is below 70 dB(A). 1

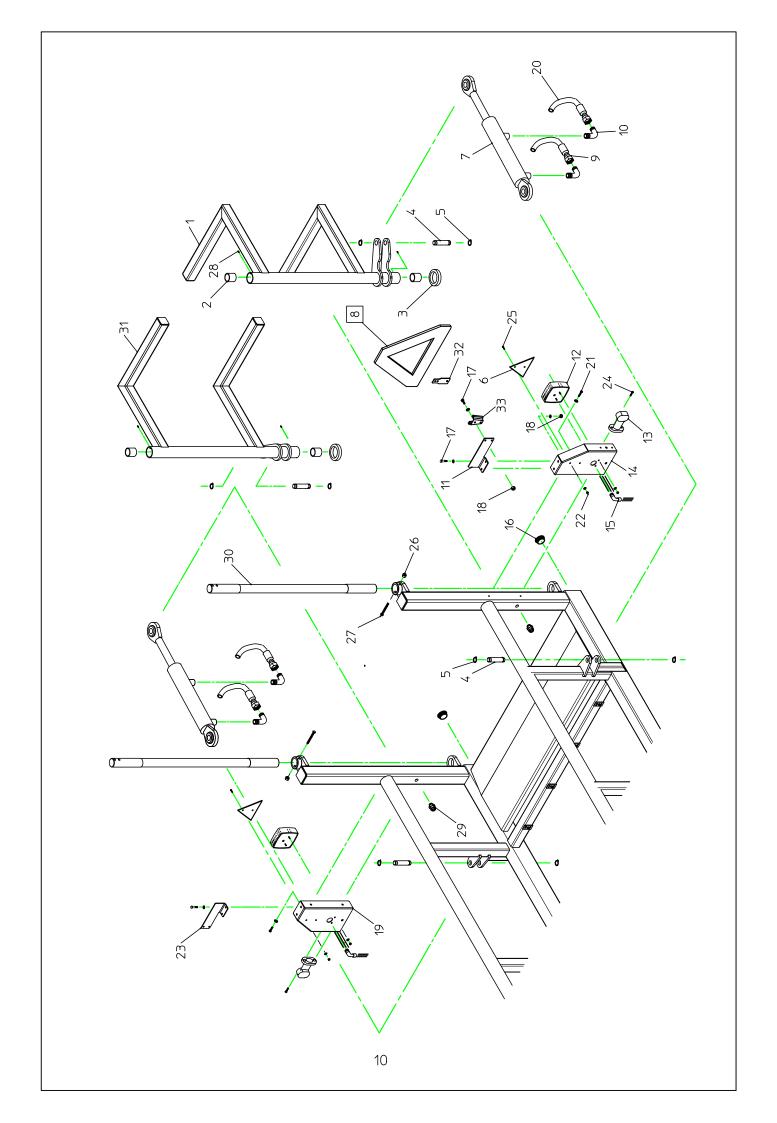




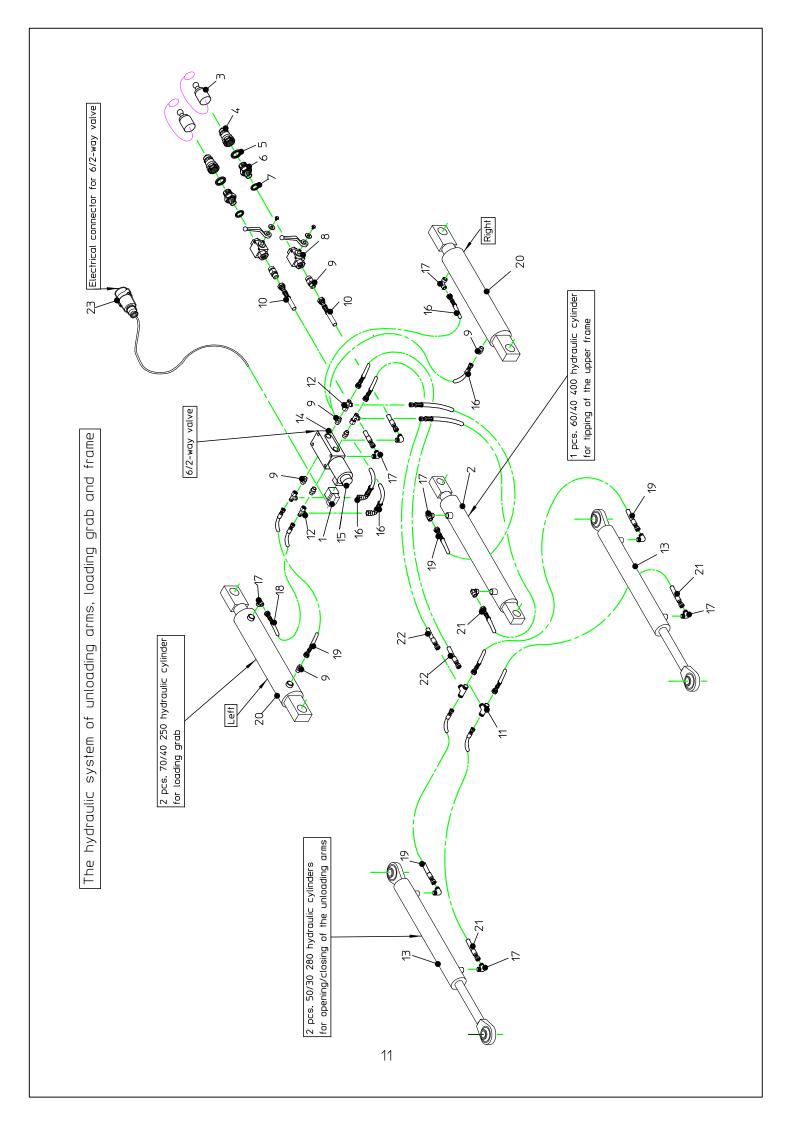
Pos. No.	Part No.	Description	Remark
1	875080	Long base plate	
2	-	Allen screw	M8 x 30 mm
3 4	875085 875000	Short base plate Upper frame	
5	875006	POM-plate	
6	-	Bolt	
7	-	Bolt	M20 x 80 mm
8 9	1008600	Nut Hydraulic hose	M20 3/8" x 1050 mm 2 x Ø12
10	550002	Hydraulic cylinder	60/40 x 400 (Tipping of the upper frame)
11	1007544	Angle	3/8" x Ø12
12	04000880	Pin for hydraulic cylinder	Ø30 x 70 mm
13	700030	Ext. circlip Oiler	Udv. Ø30 mm Stainless
14 _15	761286 875015	Security bracket	M6 Ø30 mm
16	_	Bolt	M12 x 40 mm
17	875014	Bushing plate, Left	Ø55
18	-	Locknut	M10
19 20	897135 -	Shaft Bolt	Ø50 x 164 mm M10 x 90 mm
21 22	875010	Chassis Bolt	M12 x 50 mm
23	_	Bolt	M10 x 120 mm
24		Locknut	M12
25	875100	Drawbar	-
26	875010-23	Bolt plate for draw bar	
27 28	1008601	Hydraulic hose Bolt	3/8" x 1600 mm 2 x Ø12 M16 x 50 mm
20 29	-	Bolt	M16 x 30 mm
30	-	Locknut	M16
31	875750	Wheel axle cpl.	Center distance 2000 mm
32	895500-1	Locking split	
33	890150-12	Seal	
34 35	890150-11 890150-10	Bearing Hub	
36	1009181-4	Hub nut	M18 x 1.5
37	890150-13	Bearing	30208
38	1009181-3	Hub bolt	M18 x 1.5 x 50 mm
39 _40	890150-14 898150-15	Nut Hub Cap	
41	872905	Rim	161/205 x 6 Silver
42	872915	Tube	1400 x 16"
43	890800-1	Tyre	14.0/65X16" x 14
44	875900	Ball coupling	Support load 200 kg
45	-	Bolt	M16 x 100 mm
46	-	Bolt	M16 x 45 mm
47 48	875150 890800	Drawbar Wheel cpl.	14.00/65X16" x 14
49	895518	Locking latch – Jockey wheel	M20 x 1.5
50	· <del>-</del>	Allen screw, countersunk	M10 x 25 mm
51	875021	Flange for jockey wheel	M16 gevind
52	875940	Jockey wheel cpl.	Support load 250 kg. Ø200 x 60 MM.
53 54	- 875013	Locknut Bushing plate, Right	M8 Ø55
5 <del>4</del> 55	895445	Side marker light	ຂອວ Yellow, 300 mm cable
		1,79***	, , , , , , , , , , , , , , , , , ,



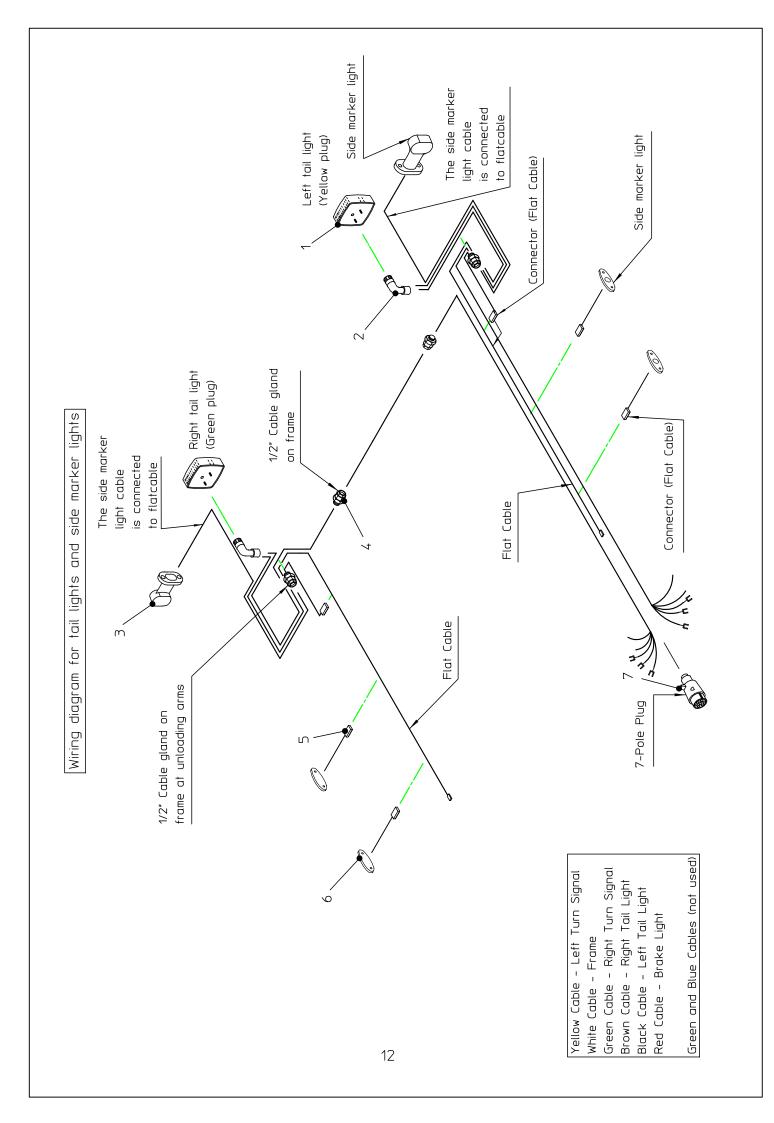
Pos. N	lo. Part No.	Description	Remark
1	875052	Tube for small bales	
2	875050	Loading grab	
3	761286	Oiler	M6
4	700030	Ext. circlip	Ø30 mm Stainless
5	-	Washer	
6	875066	Shaft	Ø30 x 95 mm
7	-	Bolt	M12 x 100 mm
8	-	Bolt	M20 x 60 mm
9	-	Nut	M20
10	875005	Adjustement plate	M20
11	-	Lock nut	M12
12	875810	Hydraulic cylinder	70/40 x 250 mm
13	1007724	Fitting	3/8" x Ø12
14	1007521	Hydraulic hose	3/8" x 800 mm, 90', 2 x Ø12
_15	1008102	Bushing	Ø30/35 x 40 mm
16	1008600	Hydraulic hose	3/8" x 1050 mm , 2 x Ø12
17	1007544	Angle	3/8" x Ø12
18	-	Lock nut	M10
19	-	Bolt	M10 x 40 mm
20	684090	Plug	Ø90/85
21	1008612	Hydraulic hose	3/8" x 600 mm, 2 x Ø12



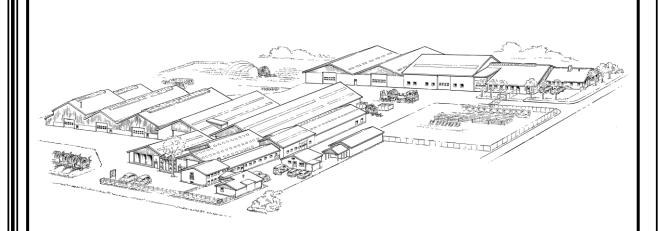
Pos. No	Part No.	Description	Remark
1	875055	Arm for unloading arm, left	
2	1008101	Bushing	Ø50/55 x 40 mm
3	875058	POM washer for unloading arm	Ø80/51 x 12 mm
4	875065	Shaft for unloading arm	Ø25 x 110 mm
5	700025	Ext. circlip	Ø25 mm Stainless
6	872210	Warning triangle, Red	160 x 160 x 160 mm
7	1008585	Hydraulic cylinder	50/30 x 280 mm
		,	(Opening/closing of the unloading arms)
8	1008966	Warning triangle, cpl.	
9	1008600	Hydraulic hose	3/8" x 1050 mm 2 x Ø12
10	1007544	Angle	3/8" x Ø12
11	875823	Holder f. warning triangle, left	
12	890480	Tail light	With glass
	890480-1	Tail light glass	g
	895420	Light bulb, brake light and turn signal	21 W
	895415	Light bulb, tail light	10 W
13	890477	Side marker light, cpl	With 300 mm cable
14	875821	Light console, left	
15	875920	Cable set, cpl.	
16	684050	Plug	Ø50/45
17	-	Bolt	M8 x 20
18		Lock nut	M8
19	875820	Light console, right	
20	1008601	Hydraulic hose	3/8" x 1600 mm 2 x Ø12
21	-	Bolt	
22	-	Lock nut	M5
23	875822	Holder f. warning triangle, right	
24	-	Phillips screw	
25	-	Phillips screw	M5 x 20 mm
26	-	Lock nut	M10
27	-	Bolt	M10 x 80 mm
28	761286	Oiler	M6
29	895315	Cable gland	½" RG
30	875060	Shaft for unloading arms	Ø50 x 1150 mm
31	875056	Arm for unloading arm, right	
32		Holder, male , SMV-reflex	
33	1415100060	Holder, female, SMV-reflex	



Pos. N	o. Part No.	Designation	Remark
1	875807	Connector	12V (6/2 way valve)
2	550002	Hydraulic cylinder	60/40 x 400 mm (Tipping of the upper frame)
3	801711	Plastic stopper	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
4	801710	Male Coupling	1/2"
5	-	Washer	
6	1007538	Fitting	3/8" x ½"
7	-	Washer	
8	1007510	Ball valve	2 x 3/8"
9	1007724	Fitting	3/8" x Ø12
10	556013	Hydraulic hose	3/8" x 9800 mm 2 x Ø12
11	1007503	Tee	Ø12 ext - ext - ext
12	1007531	Tee	Ø12 ext - ext - int
13	1008585	Hydraulic cylinder	50/30 x 280 mm
		•	(Opening/closing of the unloading arms)
14	875800	6/2 way valve	3/8"
15	875805	Spool	12V for 6/2 way valve 3/8"
16	1007521	Hydraulic hose	3/8" x 800 mm, 90', 2 x Ø12
17	1007544	Angle	3/8" x Ø12 mm
18	1008612	Hydraulic hose	3/8" x 600 mm 2 x Ø12
19	1008600	Hydraulic hose	3/8" x 1050 mm 2 x Ø12
20	875810	Hydraulic cylinder	70/40 x 250 mm (Loading grab)
04	4000004	Ulvelnovilio le op o	2/0" + 4000 2 + 642
21	1008601	Hydraulic hose	3/8" x 1600 mm 2 x Ø12
22	556006	Hydraulic hose	3/8" x 3500 mm 2 x Ø12
23	895400-2	7-pin connector	



Pos. N	lo. Part. No.	Description	Remark
1	890480	Tail light	With glass
	890480-1	Tail light glass	
	895420	Light bulb, brake light and turn signal	21 W
2	875920	Cable set, cpl.	
3	890477	Side marker light, cpl.	With 300 mm cable
4	895315	Cable gland	½" RG
5	-	Connector	
6	895445	Side marker light	4 pcs. screws, yellow w. 300 mm cable
7	895400-2	7-pin connector	, , ,



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