

HE-VA

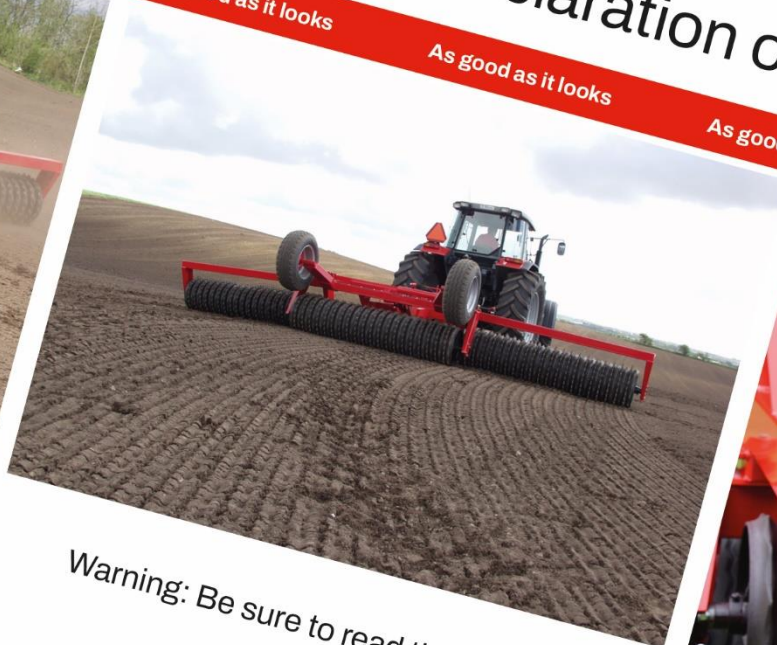
Operating Instructions
Spare Parts List
Declaration of Conformity

As good as it looks



As good as it looks

As good as it looks



As good as it looks

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Warning: Be sure to read the operation instructions before using the machine.

Vip-Roller

5.40 - 6.30 - 7.30 - 7.60 - 8.20 m



N. A. Christensensvej 34
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www.he-va.com

CONTENTS

EC DECLARATION OF CONFORMITY.....	3
DESCRIPTION OF THE MACHINE.....	4
DELIVERY CHECK	4
TRANSPORT BRACKETS.....	4
SPECIFICATIONS	5
TECHNICAL SPECIFICATIONS	5
OPERATING INSTRUCTIONS.....	6
ATTACHMENT	6
TRANSPORT	6
MAINTENANCE	7
ROLLING.....	7
LUBRICATION	7
SAFETY – AND OTHER MARKINGS ON THE MACHINE	8
SPARE PART LIST	9
DRAWBAR	9
CENTER SECTION – W WING SECTION – WINGCYLINDER ETC.....	11
AXLES AND BEARINGS.....	14
ROLLER RINGS	15
HYDRAULICS 5.4 M - 6.3 M - 7.3 M - 7.6 M - 8.2 M	18
LED - LIGHTING SET	19
HYDRAULIC DIAGRAM.....	20
HYDRAULIC DIAGRAM FOR 5.4 M – 6.3 M – 7.3M – 7.6M AND 8.2M	20
LIGHTING SET: EL. DIAGRAM	21
EXTRA EQUIPMENT	22
HYDRAULIC BRAKES	22
7.2 AIR BRAKE.....	23
NOTES	25



EC DECLARATION OF CONFORMITY

in accordance with the EU Machinery Directive 2006/42/EC
applicable as from December 29th 2009:

HE-VA ApS
N. A. Christensensvej 34,
DK-7900 Nykøbing Mors

hereby confirms that the following machine has been manufactured in accordance with the Council
Directive 2006/42/EC.

The declaration comprises the following machine:

Vip – Roller 5.4m – 6.3m – 7.3m – 7.6m – 8.2m

Nykøbing the 29th December 2009

A handwritten signature in black ink, appearing to read 'Villy Christiansen', is written over a horizontal line.

Villy Christiansen

The undersigned is furthermore authorised to compile technical documentation for the above
machine.

Description of the machine

Simple and strong roller.

Vip-Roller is a maneuverable roller with a low traction requirement and a strong and robust construction that ensures a long service life and high operational reliability. The roller follows the contours of the field using the movable side joints and the horizontal position of the side joints in the transport brackets means that the roller is automatically locked during transport and the hydraulic system is relieved.

Read the manual before operating the roller and strictly follow the safety instructions

Delivery Check

Check the roller for any damages. Check the hydraulic hoses for cuts and squeezing damages. Check also that the other hydraulic components have not been damaged during transport.

Check that the frame construction has not been damaged. You should also check that the roller blocks have not been exposed to impacts, which may have damaged the cast roller rings or the double-sealed ball bearings.

Finally check that the transport wheels are tightened and OK.

Check the air pressure in the tyres: approx. 3.8 bar / 55 psi

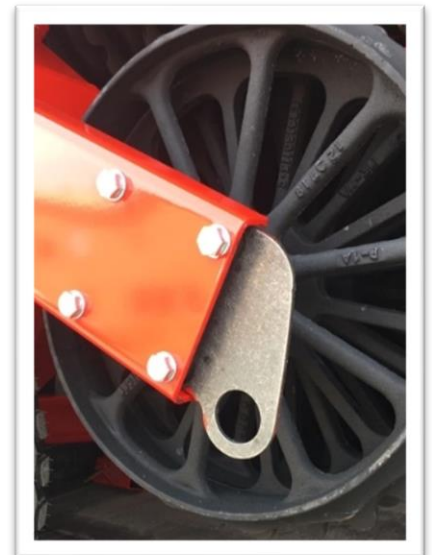
Instructions for unloading and final assembly

In order to minimize the roller's space during transport, the roller is supplied partially separated from the factory. If the machine is delivered unassembled, it must therefore be completely installed first.

Transport Brackets

At delivery the machine is mounted with brackets for hoisting gear, which is not painted.

These brackets are for attachment of chains or straps, when loading or unloading the machine from the transport vehicle, and they must be dismantled before use.



Specifications

3-section hydraulic wheel-mounted field roller with free movability in all sections. Used for rolling of stones and packing of the top soil. The roller is available with a working width of 5.4 m or 6.3 m and with three different ring types: Cambridge, cam and Crosskill rings.

Technical Specifications

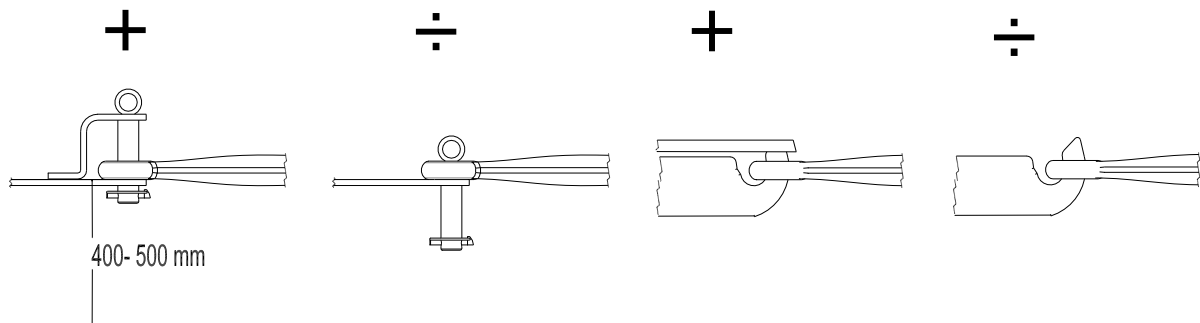
	5.4 m	6.3m	7.3 m	7.6 m	8.2 m
Working With	5.7 m	6.6 m	7.6 m	7,9 m	8,2 m
Length	3.4 m	3.8 m	4.8 m	4,8 m	5,3 m
Transport width	2.45 m	2.45 m	2.45 m	2,45 m	2,45 m
Transport height	1,6 m	1,6 m	1,6 m	1,6 m	1,6 m
Pressure on pintle eye in transport position (% of total weight)	ca. 40 %	ca. 40 %	ca. 40 %	Ca. 40%	Ca. 40%
Wheel assembly, standard	10.0/75x15.3 – 10 PLY	10.0/75x15.3 – 10 PLY	11.5/80x15.3 - 10 PLY	11.5/80x15.3 - 10 PLY	11.5/80x15.3 - 10 PLY
Tyre pressure	3,8 bar / 55 psi				
Oil pressure	min. 150 bar				
Hydraulic outlets	1 single-acting and 1 double-acting				
Quick-couplings, standard	Sterling type E 402				
Hydraulic oil: system is filled with	Hydro Texaco HD32				

	Width 5.4 m		Width 6.3 m		Width 7.3 m		Width 7.6 m		Width 8.2 m	
Ringtype	Pcs rings	Weight kg	Pcs rings	Weight kg	Pcs rings	Weight kg	Pcs rings	Weight kg	Pcs rings	Weight kg
Cambridge, Ø510 mm	105	2015	129	2670	143	3030	151	3614	157	3820
Cambridge, Ø560 mm	105	3020	129	3610	143	4190	151	4368		
Star ring 450/500 mm	98	2520	120	2890	140	3590	148	3730	152	3820
Cam, Ø550 mm	36	1530	42	2120	48	2285	50	2588	55	2920
Crosskill, Ø485/Ø530 mm	54	1980	63	2550	73	2830	79	3370	81	3495
2D-Bølgering 500 mm	69	2340	78	2730	90	3380	99	3490	102	3690
2D-Bølgering 550 mm	69	2880	78	3140	90	3750	99	3872		

Operating Instructions

Attachment

On delivery the roller is in transport position. When the roller is attached, check that the towing hook height is 400-500 mm. Reverse the tractor, put in and secure the draw bolt.



Raise the support leg and place it in the transport fittings on top of the tail. Now fit the three hydraulic hoses. The roller requires one double-acting and one single-acting PTO.

Now fit the hydraulic in the hydraulic outlets of the tractor.

IMPORTANT: Check that the male end mounted by the factory fits the female end of the tractor.

Now pressurise the tip cylinder so that the side sections are tipped free of the transport fittings. Then the side sections are turned out by means of the wing cylinder.

Now the roller is hydraulically tipped into working position by means of the tip cylinder.

Transport

At change-over for transport, the roller is tipped totally backward by pressurising the tip cylinder. Now pressurise the wing cylinder so that the side sections turn forward, towards the stop on the transport fittings of the tail.

When both sides lie in parallel with the tail, they are lowered down into the transport fittings by unpressurising the tip cylinder.

Now relieve the hydraulics totally, and the roller is ready for transport.

Maintenance

- After approximately 10 hours of operation, the wheels, ball bearings, check pawl console and stop rings must be retightened. Check hoses, fittings and cylinders for any leaks and retighten.
- After every approximately 30 hours of operation, lubricate the tip cylinder rivets and the two lubricating points of the side sections with grease.
- After the season, clean the roller and lubricate with grease and oil.

NOTE:

The double-sealed ball bearing should only be greased 1-2 strokes so that the sealing rings are not pressed out.

Rolling

Speed: max. 10 km/h.

When turning, drive in wide curves as far as possible. The turning should not be performed so sharply that all roller rings cannot still rotate forward.

Only lower the wheels in connection with folding up for transport position.

Do not drive over large and earthfast stones.

Lubrication

- | | |
|--|--|
| After every 10 hours of operation, lubricate | - the suspension of the individual roller sections |
| | - the hinges of the outer sections on the inner section. |
| After every 30 hours of operation, lubricate | - the vertical hinge of the inner wings |
| | - the ball bearings |
| | - the cylinders |
| | - the hinges of the wheel frame on the chassis |
| Once a year, lubricate | - the support leg |

IMPORTANT

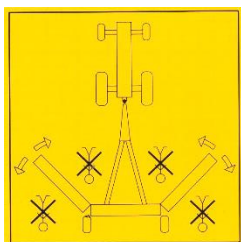
Only lubricate the ball bearings 1-2 strokes as the sealing rings may otherwise be pushed out.

Safety – and other markings on the machine



Study the Operating Instructions thoroughly before any operation of the machine and observe all safety instructions.

Item no: 1305028

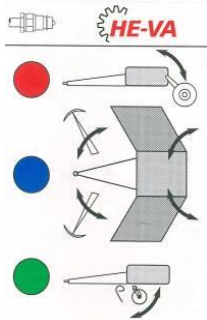


Take care that no persons are within the machine's hazardous area during the unfolding and folding procedure..

Item no: 1305029



Plate with number and year of manufacture



Indication Labels for the machine's hydraulic systems:

Item number: 1305031



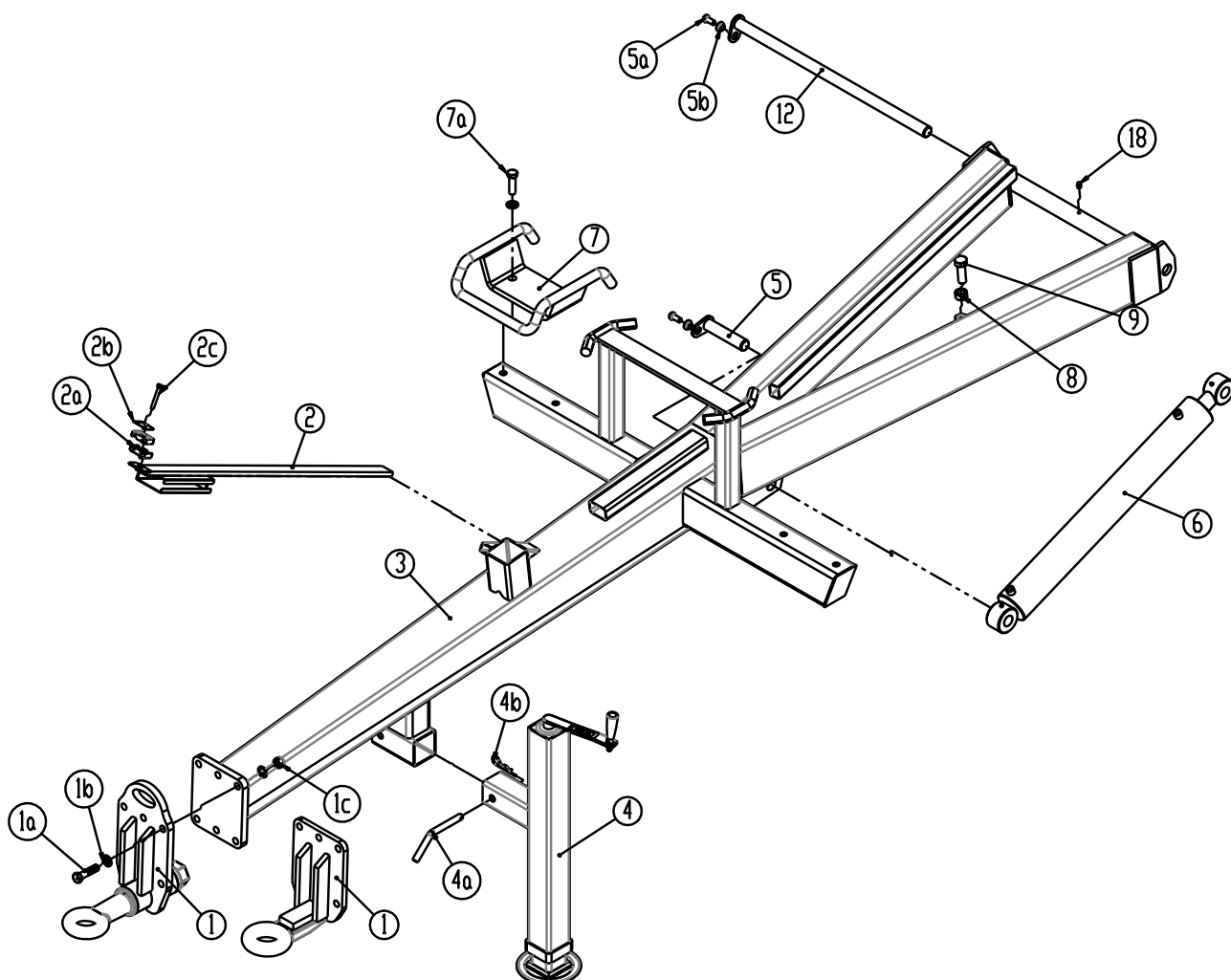
Tighten up the bolts regularly. If this is not performed, our warranty obligations will no longer apply.

Item number: 1305030

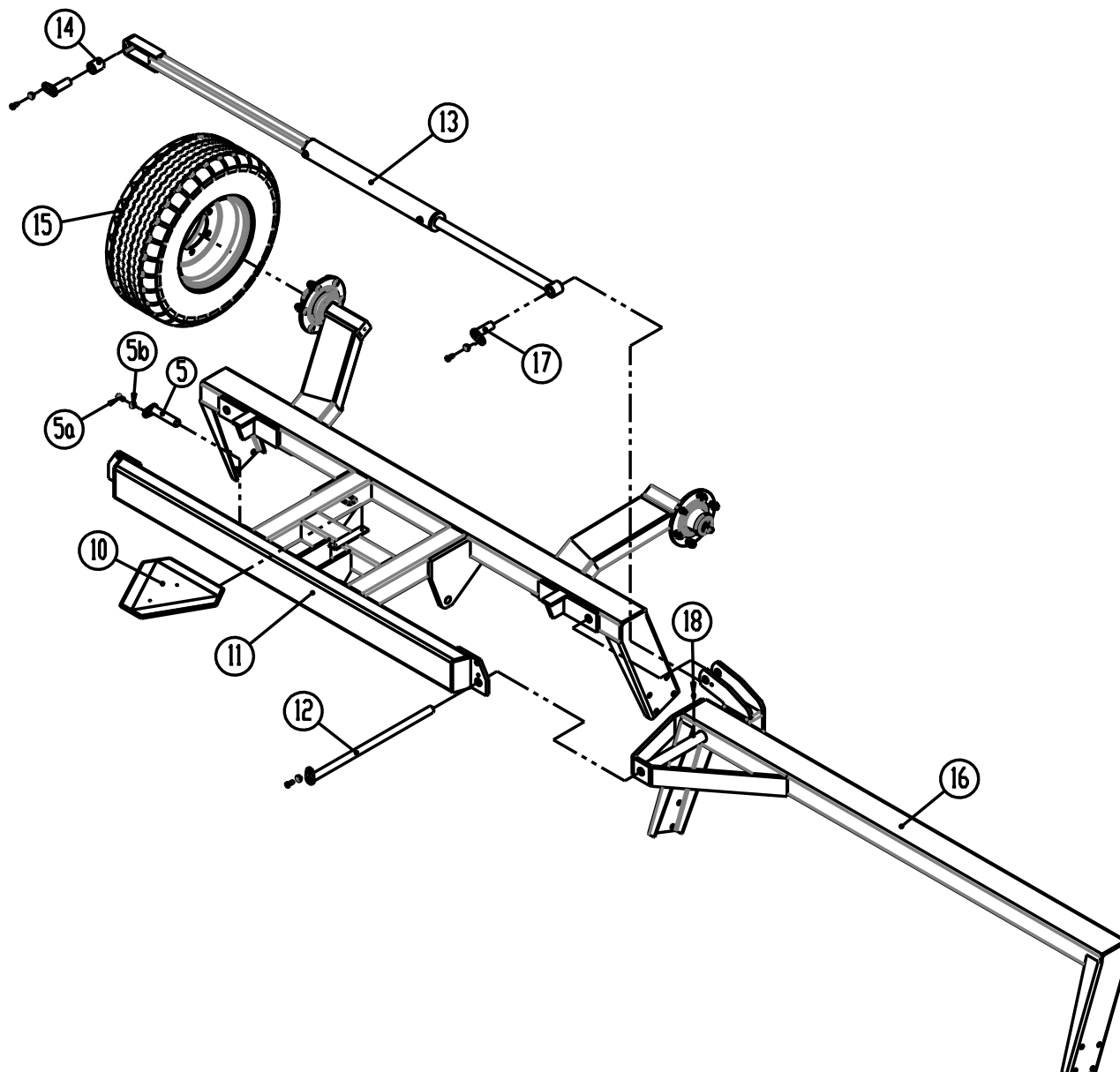
Maximum torque in Nm. w/lubricated thread			
Metric thread	Quality 8.8	Quality 10.9	Quality 12.9
M10x1,5	47	65	79
M12x1,75	81	114	136
M14x2,0	128	181	217
M16x2,0	197	277	333
M18x2,5	275	386	463
M20x2,5	385	541	649
M22x2,5	518	728	874
M24x3,0	665	935	1120
Wheel nut M18x1,5 fine thread		385 Nm	
Wheel nut M22x1,5 fine thread		550 Nm	

Spare Part List

Drawbar

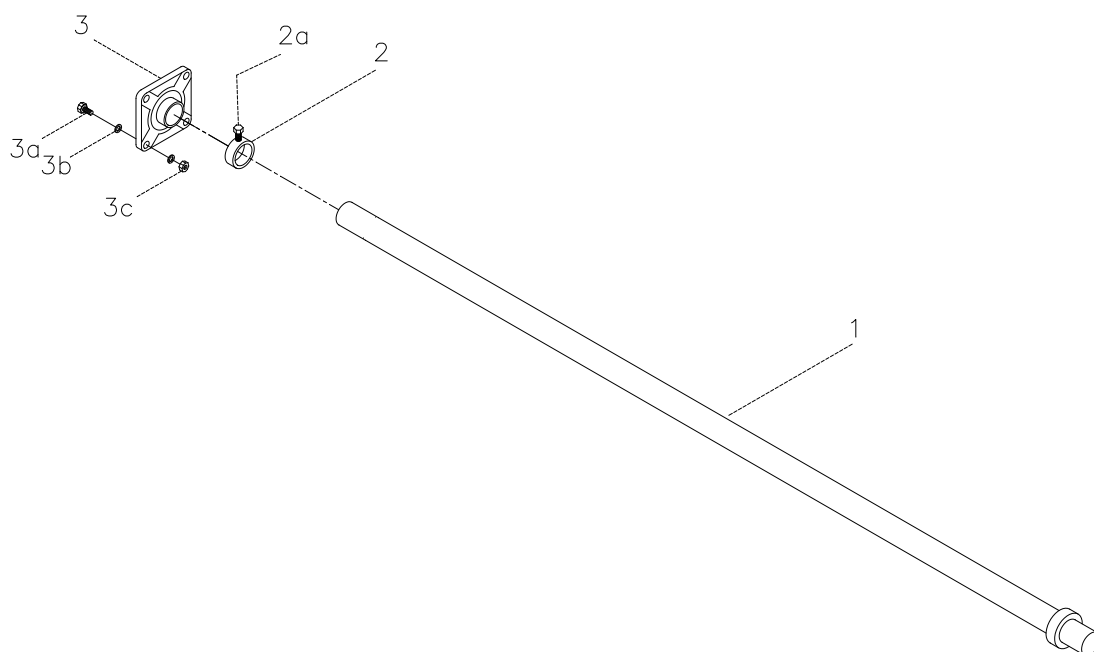


Pos	Item No.	Designation	5,4	6,3	7,3	7,6	8,2
1	630757025	Towing eye, cpl. homologated, (R) From machin no: 343424	1	1	1	1	1
1	630757019	Towing eye cpl. Before machin no: 343424	1	1	1	1	1
1a	0235850	Bolt M16x65mm 8.8 From machin no: 343424	6	6	6	6	6
1b	0272290	Facet washer Ø16 From machin no: 343424	16	16	16	16	16
1c	0264090	Self locking nut M16 From machin no: 343424	6	6	6	6	6
2	630771200	Parking device f/hydr. hose on drawbar	1	1	1	1	1
2a	690210210	Double hose support Ø14 mm	2	2	2	2	2
2b	690210211	Top plate	1	1	1	1	1
2c	0234830	Bolt M8x60	1	1	1	1	1
3	630650106	Drawbar From machin no: 343424	1	1	1	1	1
4	690141095	Support leg 3500 kg	1	1	1	1	1
4a	69516094A	Pin Ø16	1	1	1	1	1
4b	690133005	Split-pin Ø4	1	1	1	1	1
5	69430135G	Pin Ø30 L=135	1	1			
5	69440135G	Pin Ø40 L=135			1	1	1
5a	630532600	Locking sleeve for pin head	2	2	2	2	2
5b	690101101	Bolt M12x25 8,8	2	2	2	2	2
6	690200120	Cylinder 80/40x600, Ø30/Ø30	1	1			
6	690200113	Cylinder 100/50x600 Ø40/Ø40			1	1	1
6a	690200143	Gasket set 80/40	1	1			
6a	690200285	Gasket set 100/50			1	1	1
7	630530300	Transport brackets Ø470mm	2	2	2	2	2
7	630530400	Transport brackets Ø530mm	2	2	2	2	2
7	630530500	Transport brackets Ø550mm	2	2	2	2	2
7a	0235830	Bolt M16x55 8,8	4	4	4	4	4
8	0261410	Nut M20	1	1	1	1	1
9	0236130	Bolt M20x60	1	1	1	1	1
12	69430685G	Pin Ø30 L=685 mm	1	1			
12	69440685G	Pin Ø40 L=685 mm			1	1	1
18	0432510	Lubrication nipple	1	1	1	1	1

Center section – WWing section – Wingcylinder etc.

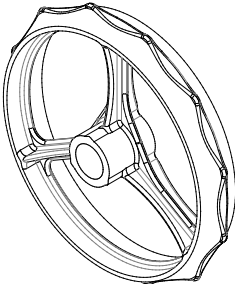
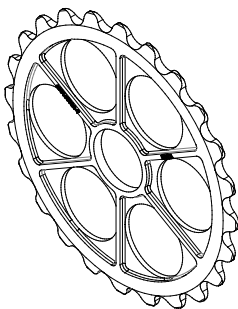
Pos	Item no.	Designation	5,4m	6,3m	7,3m	7,6m	8,2m
5	69430135G	Pin Ø30 L=135	2	2			
5	69440135G	Pin Ø40 L=135			2	2	2
5a	690101101	Bolt M12x25	2	2	2	2	2
5b	630532600	Locking sleeve for pin head	2	2	2	2	2
10	690142001	Warning triangle	1	1	1	1	1
10a	690103015	Bolt M5x25	2	2	2	2	2
10b	690117002	Facet washer Ø5	2	2	2	2	2
10c	690113002	Self locking nut M5	2	2	2	2	2
11	630651000	Center frame for axle Ø60 turned down to Ø45	1	1			
11	630660210	Center frame			1	1	1
11a	0395440	Hub 1700 kg 6-M18/160-205 HEVA/Partap	2	2	2	2	2
11a	690141032	Hub w/brakes 3750 kg	2	2	2	2	2
11b	690141039	Hub bolt M18 x 1.5 x 49	12	12	12	12	12
11c	690141055	Hub nut M18 x 1.5	12	12	12	12	12
11d	0478990	Bearing 30207	2	2	2	2	2
11e	0479010	Bearing 30210	2	2	2	2	2
11f	0395433	Seal cassette	2	2	2	2	2
11g	0395436	Hub cover w/thread	2	2	2	2	2
12	69430685G	Pin Ø30 L=685 mm	2	2			
12	69440685G	Pin Ø40 L=685 mm			2	2	2
12a	690101101	Bolt M12x25	3	3	3	3	3
12b	630532600	Locking sleeve for pin head	3	3	3	3	3
13	630650500	Wing cylinder 70/40x600, Ø30	1	1	1	1	1
13a	690200068	Gasket set 70/40 mm	1	1	1	1	1
14	630650600	Bush Ø45/Ø31 L=50mm	1	1	1	1	1
15	690141310	Wheel 10.0/75x15.3 – 10 PLY	2	2			
15	690141215	Wheel 11.5/80x15,3 - 14 PLY			2	2	2
16	630640900	Outer left section f/ axle Ø60	1				
16	630650900	Outer left section f/ axle Ø60		1			
16	630660400	Outer left section f/ axle Ø60			1		
16	1205236	Outer left section f/ axle Ø60				1	
16	631660200	Outer left section f/ axle Ø60					1
16	630640800	Outer right section f/ axle Ø60	1				

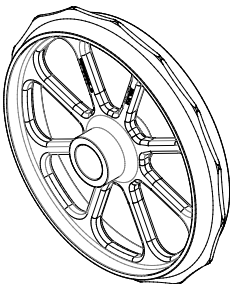
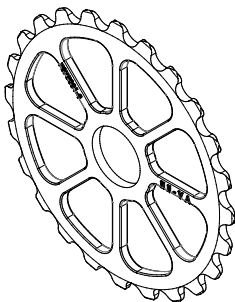
Pos	Varenummer	Betegnelse	5,4m	6,3m	7,3m	7,6m	8,2m
16	630650800	Outer right section f/ axle Ø60		1			
16	630660700	Outer right section f/ axle Ø60			1		
16	1205235	Outer right section f/ axle Ø60				1	
16	631660300	Outer right section f/ axle Ø60					1
17	69430090G	Pin Ø30 L=90	2	2			
17	69440090G	Pin Ø40 L=90			2	2	2
17a	690101101	Bolt M12x25	2	2	2	2	2
17b	630532600	Locking sleeve for pin head	2	2	2	2	2
18	690113029	Lubrication nipple M8x1,25	3	3	3	3	3

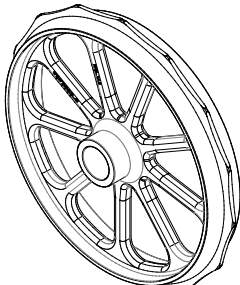
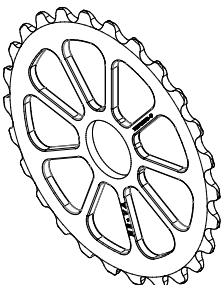
Axles and Bearings

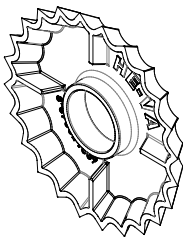
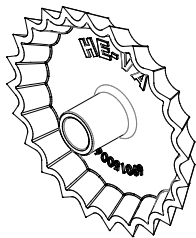
Pos	Item no.	Designation	5,4	6,3	7,3	7,6	8,2
1	678652370	Axle for center section Ø60 St70 L=2370	1				
1	678651940	Axle for side section Ø60 St70 L=1940	2				
1	678652370	Axle for center/side section Ø60 St70 L=2370		3	1	1	1
1	678602913	Axle for side section Ø60 St70 L=2913			2		
1	1205306	Axle for side section Ø60 St70 L=3010				2	
1	678603283	Axle for center/side section Ø60 St70 L=3283					2
2	630651200	Stopring w/bolt Ø60mm	6	6	6	6	6
2a	690101080	Bolt M12x25	12	12	12	12	12
3	690140075	Bearing UCF209 (4 holes)	6	6	6	6	6
3a	690103128	Bolt M16x55 8.8	24	24	24	24	24
3b	690117013	Faceted plate Ø16	48	48	48	48	48
3c	690113008	Self locking nut	24	24	24	24	24

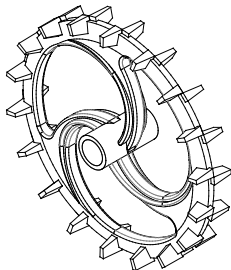
Roller rings

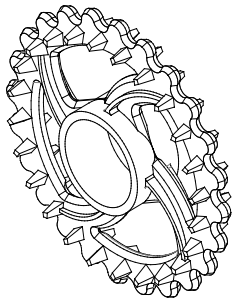
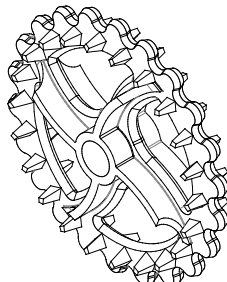
Cambridge rings Ø510 mm with 3 spokes		Description	Quality	Part no.
		Pos. 3 Hub 104 mm	GG25	690150030
		Pos. 3 Hub 104 mm	GGG50	690150088
		Pos. 3 Hub 80 mm	GGG50	690150087
		Pos. 3 Hub 72 mm □	GGG50	630764031
		Pos. 3 Hub 82 mm □	GGG50	630764030
		Pos. 4	GG25	690150032
Pos. 3 510 mm Lenient (3 spokes)	Pos. 4 510 mm Breaker			

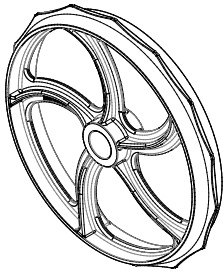
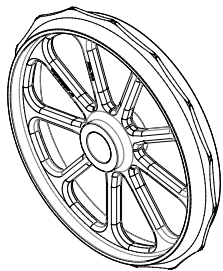
Cambridge rings Ø510 mm with 8 spokes		Description	Quality	Part no.
		Pos. 8 Hub 104 mm	GG25	7375003
		Pos. 8 Hub 104 mm	GGG50	7375010
		Pos. 8 Hub 80 mm	GG25	7375004
		Pos. 8 Hub 80 mm	GGG50	7375008
		Pos. 8 Hub 72 mm □	GGG50	7375025
		Pos. 8 Hub 82 mm □	GGG50	7375026
		Pos. 9	GG25	7375001
		Pos. 9	GGG50	7375013
Pos. 8 510 mm Lenient (8 spokes)	Pos. 9 510 mm Breaker (8 spokes)			

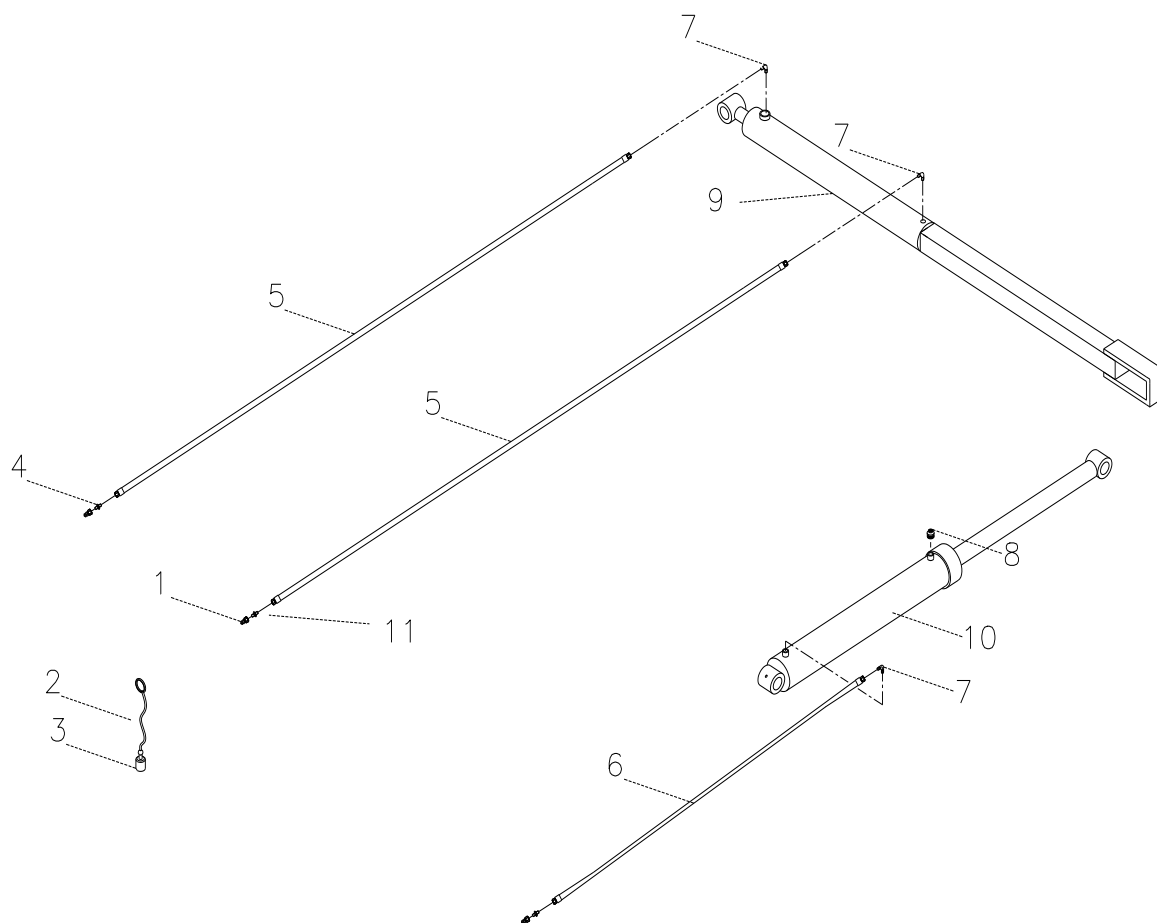
Cambridge rings Ø560 mm with 9 spokes		Description	Quality	Part no.
		Pos. 10 Hub 104 mm	GG25	7375005
		Pos. 10 Hub 104 mm	GGG50	7375009
		Pos. 10 Hub 80 mm	GG25	7375007
		Pos. 10 Hub 80 mm	GGG50	7375011
		Pos. 10 Hub 72 mm	GGG50	7375023
		Pos. 10 Hub 82 mm	GGG50	7375024
		Pos. 11	GG25	7375000
		Pos. 11	GGG50	7375012
Pos. 10 560 mm Lenient (9 spokes)	Pos. 11 560 mm Breaker (9 spokes)			

Star ring Ø450/Ø500 mm			Description	Quality	Part no.
			Pos. 17 Ø500/Ø135	GGG50	690150063
			Pos. 18 Ø450	GGG50	690150064
			Pos. 19 Mountingplate		690150112
Pos. 17 500 mm	Pos. 18 450 mm	Pos. 19 235 mm			

Cam ring 550 mm		Description	Quality	Part no.
		Pos. 16 Hub 155 mm	GG25	690150007
Pos. 16 550 mm Cam ring				

Crosskill 485/530 mm – 550/600 mm			Beskrivelse	Kvalitet	Varenr.
			Pos. 22 530 mm	GG25	690150011
			Pos. 23 485 mm	GG25	690150034
			Pos. 22 600 mm	GG25	690150075
			Pos. 23 550 mm	GG25	690150074
			Pos. 24 Nav Ø104	GG25	690150076
Pos. 22 Loose Crosskill	Pos. 23 Fixed Crosskill	Pos. 24 Hub			

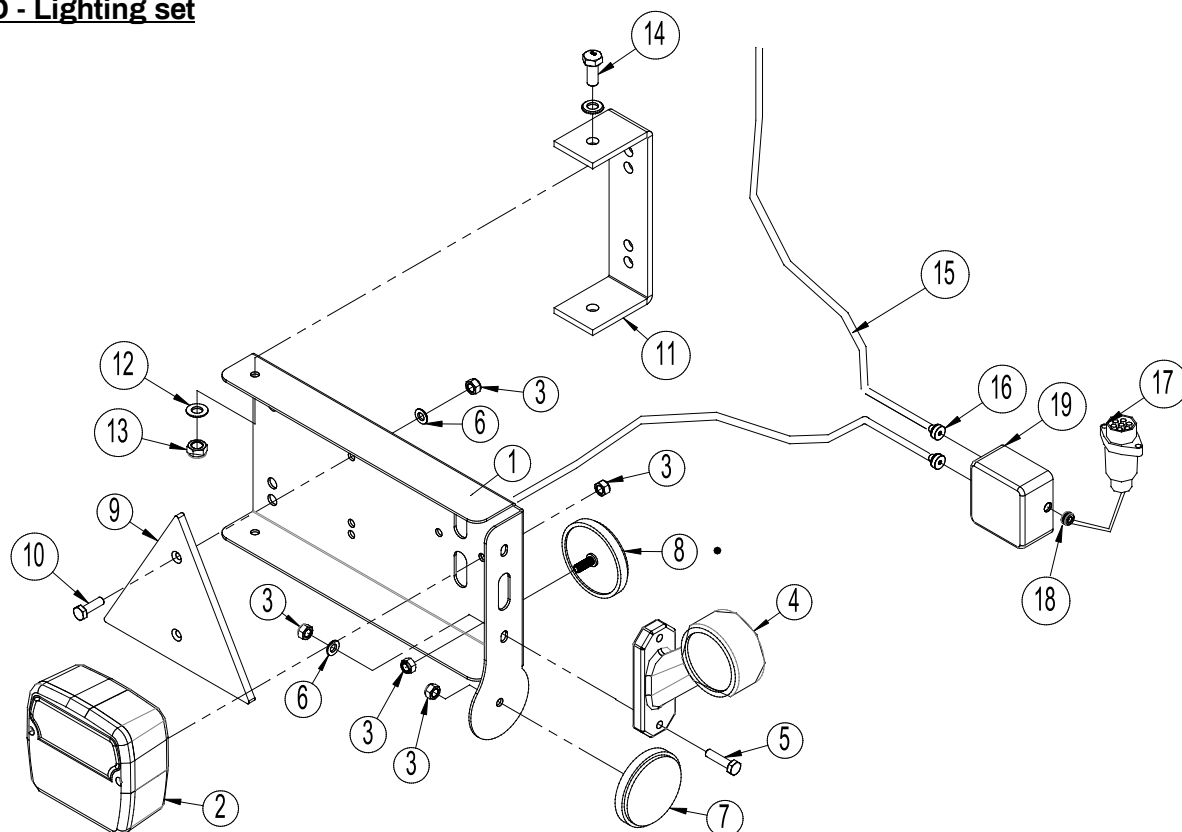
2D Rings with 8-9-10 spokes		Description	Quality	Part no.
		Pos. 14 Ø500	GG25	690150105
		Pos. 14 Ø550	GGG50	690150109
		Pos. 14 Ø600	GGG50	690150082
Pos. 14 2D ring (5 spokes)	OBSOLETE!	Description	Quality	Part no.
		Pos. 15 Ø500	GG25	7375004
		Pos. 15 Ø550	GG25	7375007
		Pos. 15 Ø600	GG25	690150111
		Pos. 15 Ø500 Hub 67 mm a/bearing	GGG50	7375049
		Pos. 15 Ø500 Hub 72 mm a/bearing	GGG50	7375025
		Pos. 15 Ø550 Hub 67mm a/bearing	GGG50	7375050
		Pos. 15 Ø550 Hub 72 mm a/bearing	GGG50	7375023
		Pos. 15 Ø600 Hub 67mm a/bearing	GGG50	7375051
		Pos. 15 Ø600 Hub 72 mm a/bearing	GGG50	7375021
Pos. 15 2D rings (8-9-10 spokes)				

Hydraulics 5.4 m - 6.3 m - 7.3 m - 7.6 m - 8.2 m

Pos.	Itemnumber	Designation	Qtr.
1	690203001	Quick-coupling ½" E402	3
2	690210001	Dust cap blue (END)	2
3	690210002	Dust cap red (END)	1
4	690203003	Fitting straight 10-1/2" BSP	3
5	690201011	Hydr.hose. 1/4" L=5350 mm	2
6	690201005	Hydr. hose ¼" L=3300 mm	1
7	690203006	Fitting , 90° 10-3/8" BSP	3
8	690206001	Filter plug (ventilation) 3/8"	1
9	630650500	Wing cylinder complete, 70/40x600 ø30	1
10	690200xxx	See position 6 page 8	1
11	690207901	Throttle 1 mm	2

Note:

Check number and measurements of all hoses before ordering the spare parts.

LED - Lighting set

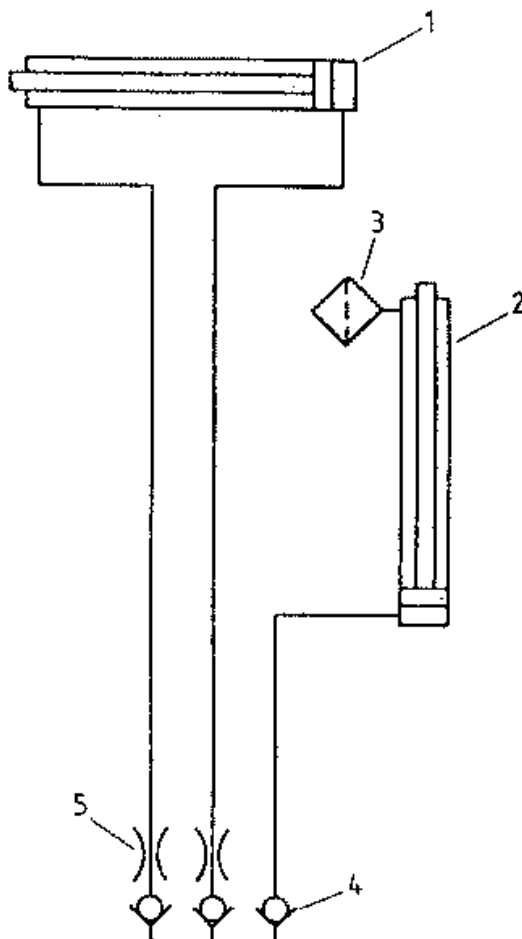
Pos	Itemnumber	Designation	Quantity
1	7357505	Lightbox (L)	1
	7357508	Lightbox (R)	1
2	7357504	Rear light	2
3	0264030	Locking nut M5	16
4	7357507	Marking lights (L)	1
	7357509	Marking lights (R)	1
5	0234340	Bolt M5x25	4
6	0272240	Facet plate Ø5	8
7	0656240	Reflex, yellow	2
8	0656250	Reflex, white	2
9	690160017	Reflex, red	2
10	0234330	Bolt M6x20	4
11	7357516	Bracket	2
12	0272250	Facetplate Ø8	16
13	0264050	Locking nut M8	8
14	0234750	Bolt M8x20	4
15	690160080	Cable 5 x 1mm ² (Inform about lenght by ordering sparepart)	
16	7357545	Rutaseal nipple M20 8-12mm Grey RAL7001	2
17	690160070	Plug 7 poles DIN 72 577 – ISO 1724	1
18	7357546	Rubberbushing Nr. 38A Ø10/3 black	1
19	0520492	Junction box 105x105x60	1

Note:

Check number and measurements of all cables before ordering the spare parts.

Hydraulic Diagram

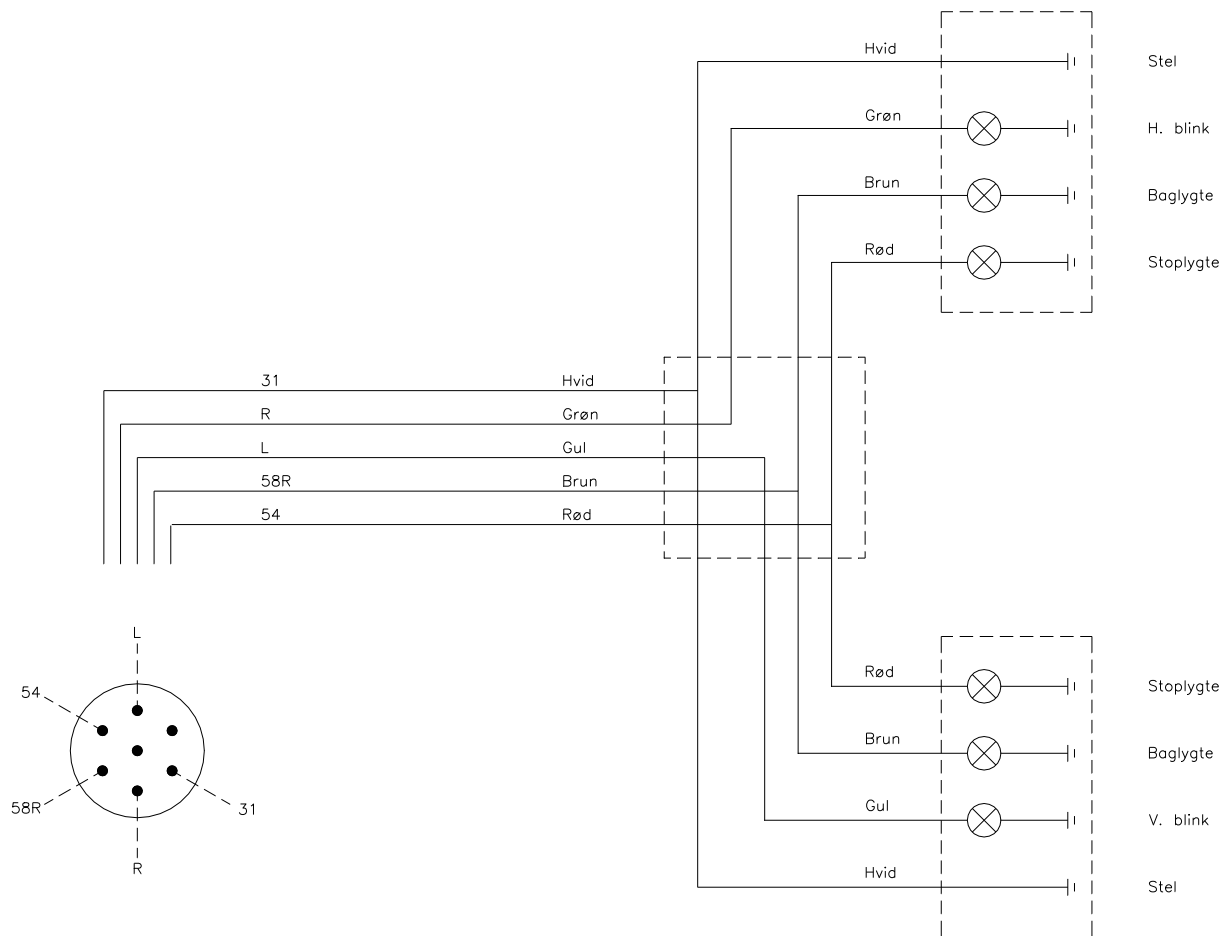
Hydraulic Diagram for 5.4 m – 6.3 m – 7.3m – 7.6m and 8.2m



Pos.	Itemnumber	Designation	Qty.
1	630650600	Wing cylinder 70/40x600 ø30	1
2	690200120	Cylinder 80/40x600 ø30/ø30 (see position 6 page 8)	1
3	690206001	Filter plug F38 3/8"	1
4	690203001	Quick-coupling E402	3
5	690207901	Throttle 1 mm	2

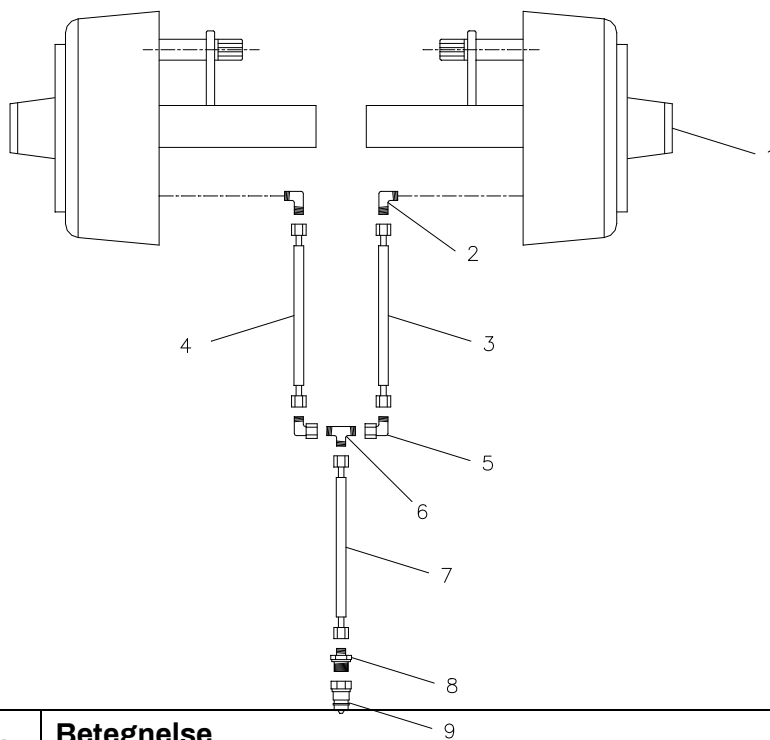
Note:

Check number and measurements of all cables before ordering the spare parts.

Lighting set: El. diagram

Extra equipment

Hydraulisc brakes



Pos.	Vare nr.	Betegnelse	Stk.
2	690203006	Fitting 90 ° 10-3/8" BSP	2
3	690201018	Hydraulic hose 1480mm ¼" st/st	1
4	690201053	Hydraulic hose 1260mm ¼" st/st	1
5	690203016	Fitting 10mm	2
6	690203015	Fitting T10	1
7	690201025	Hydraulic hose 5640mm ¼" st/st	1
8	690203003	Fitting straight 10-1/2" BSP	2
9	690203001	Quick coupling E402 ½"	2

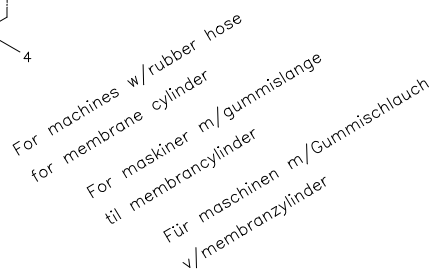
Note:

Check number and measurements of all hoses before ordering the spare parts.

For machines w/nylon tube
for membrane cylinder

For maskiner m/kunstofrør
til membrancylinder

Für Maschinen m/Nylon-Rohr
v/membranzylinder



Pos.	Item no.	Designation	w/nylon tube f/ membrane cyl.	w/rubber hose for membrane cyl.
1	690190001	Membrane cylinder 16"	2	2
2	690190070	Hose fitting M16x1,5 m/ Ø12 fitting	0	2
3	690190005	Test fitting, straight M16x1,5	2	2
4	690208102	Bonded seal PP 45-12	1	3
5	690190010	Mounting set, short U-bracket	2	2
6	690202930	Fitting, straight, lige M16x1,5, Ø15 hose	2	0
7	690190015	Relay valve M22x1,5	1	1
8	690202941	Fitting, straight M22x1,5, Ø15 hose	6	4
9	690202940	Fitting, straight M22x1,5, Ø10 hose	2	2
10	690190080	Nylon tube Ø10x1mm	1	1
11	690190085	Nylon tube Ø15x1,5mm	4	2
12	690190105	Hose Ø14,5x5mm	2	4
13	690190073	Hose fitting M22x1,5, m/Ø12 fitting	4	6
14	690190090	Support bushing for tube Ø10x1,5mm	2	2
15	690190095	Support bushing for tube Ø15x1,5mm	8	4
16	690190020	Brake power regulator M22x1,5	1	1
17	690190025	Trailer air brake valve M22x1,5	1	1
18	690190026	Plug	2	2
19	690190035	Relief valve	1	1
20	690203420	Fitting, straight M16x1,5+M22x1,5	1	1
21	690190040	Filter M22x1,5	2	2
22	690190045	Hose coupling M22x1,5 (red)	1	1
23	690190046	Hose coupling M22x1,5 (yellow)	1	1
24	690190030	V-Fitting M22x1,5	1	1
25	690190050	Air receiver 40ltr	1	1
26	690190051	Drainage valve	1	1
27	690190052	Suspension for air receiver	2	2
28	690190060	Pressure ring M22x1,5	15	15
29	690190065	O-ring M22x1,5	15	15
30	690109305	Clamp 15-24 mm	4	8

Notes

as it looks

As good as it looks

As good as it looks

As good as it looks

As good as it looks



The design is subject to modification without notice.