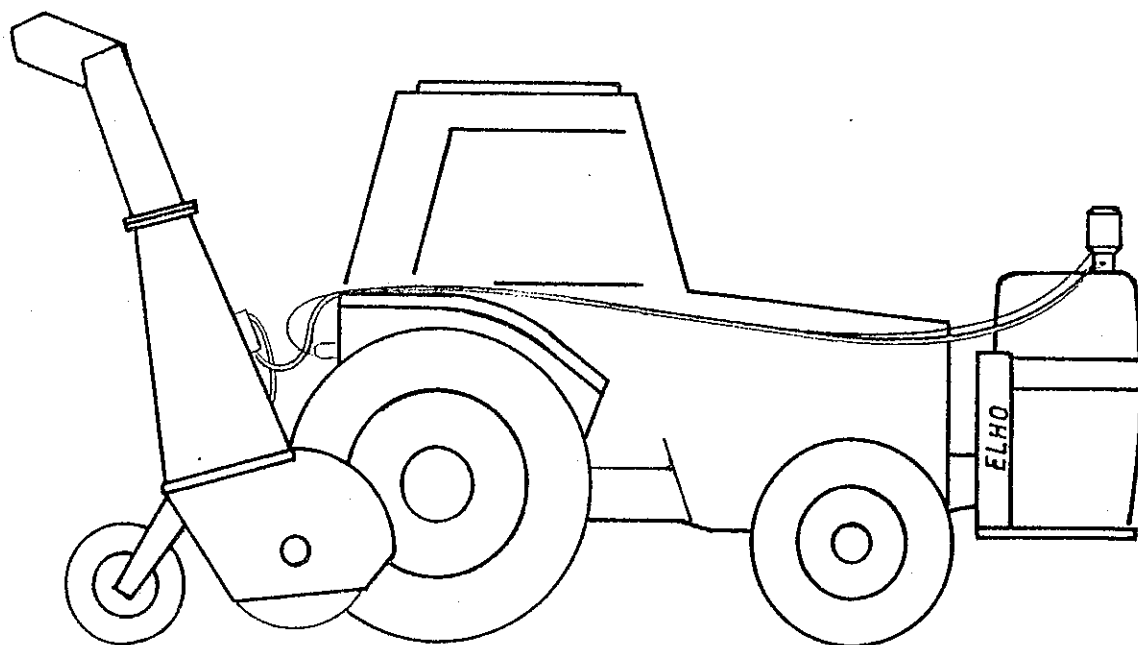


ELHO

Tuhti
Silage additive pump
P 20



OY ELHO AB
68910 BENNÄS
Finland

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Technical specification
Mounting
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Electric connection
Use of pump
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Technical specifications

Electric rating	12 Volt
Max pressure	0,5 bar
Max free flow	15-20 l/min
Adapted for 200 liter barrels	

Warranty

The ELHO pumps have a warranty for one season. The warranty covers faulty materials and workmanship. The warranty is not valid for spare parts.

Parts not of ELHO's manufacture, i.e. electrical components, etc. are subject to the original manufacturers guarantee and conditions.

Parts subject to warranty claims are changed or repaired free of cost if they are sent to us or to our importer, carriage paid and properly identified.

The warranty do not cover labour or travel costs.

The warranty is valid only if the fault is reported to us or our importer within 14 days of occurrence.

According to normal practice we do not accept any responsibility for damage which occurs as a result of one or more of the following circumstances:

- Unauthorised modification.
- Non-original parts are fitted.
- The machine is not maintained correctly.
- The machine is operated incorrectly.
- The machine is used for purposes other than for which it has been designed.

The warranty excludes any secondary damage to machine or any consequential losses caused as a result of faulty material or manufacture.

As the use of ELHO products is outside of our control, we can only guarantee quality and do not accept liability in respect of performance.

ELHO reserves the right to improve or change the construction of the pumps, without liability in respect of pumps previously supplied.

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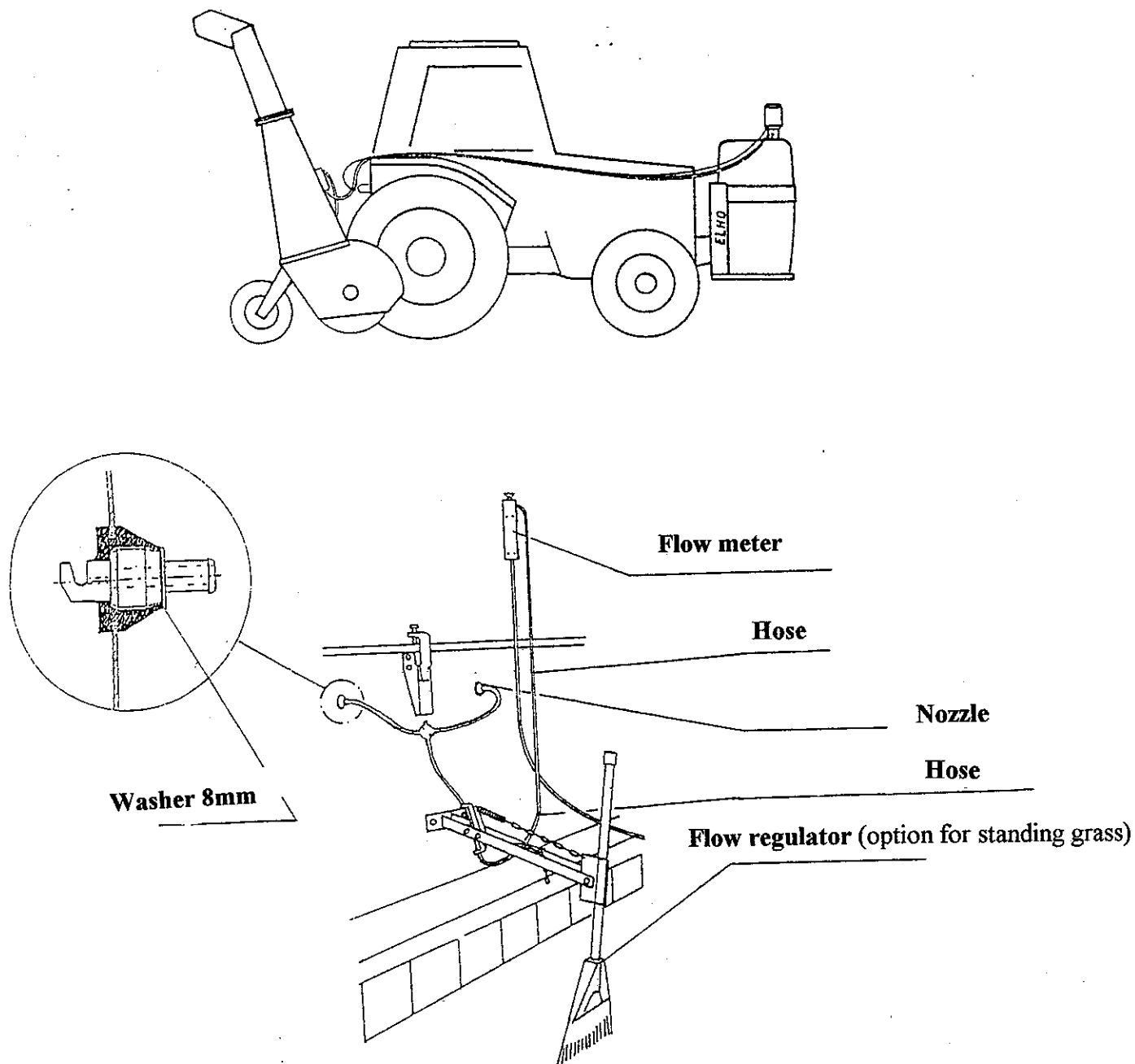


Fig. 1

Mounting of pump

The fluid barrel holder can be mounted to the tractor according the fig.

The flow meter shall be mounted vertically, on a suitable place on the forage harvester, with the adjusting screw upwards.

For the mounting of the nozzles a corresponding numbers of Ø 22 mm holes shall be drilled in the forage harvester. See fig 1.

The pump shall be mounted in the fluid barrel and screwed hand tight. Please check that the bottom end of the pump do not touch the bottom. Note, that the mounting screw can slide up and down on the pump tube, to fit different barrel size.

The plastic hoses are cut in suitable lengths and from the pump the hose is connected to the tap and further to the flow meter. The hose from the top outlet of the flow meter can either be connected to the T junction or to the anti drop valve, and further to the nozzles.

Nozzles

For the wanted application rates, a suitable nozzle size can be found from the following approximate list:

White	Ø 1,5 mm	0,0 - 1,5 litre/min
Yellow	Ø 1,7 mm	0,5 - 2,0 litre/min
Blue	Ø 2,0 mm	1,0 - 2,5 litre/min
Green	Ø 2,4 mm	1,5 - 3,0 litre/min
Red	Ø 2,7 mm	2,0 - 3,5 litre/min

Electric connection

The electric cable can be connected to the tractor through the trailer light contact. The park light switch can then be used to start the pump. Please check that the pump will rotate in the right direction. The right direction is when the pump is most effective.

All pumps are tested at the factory, but to ensure the right connection it is recommended to test the system with pure water before final use.

Do never run the pump dry!!!

Use of the pump

The pump is started with the park light switch of the tractor. To save liquid the pump shall be used only when the forage harvester do have grass to chop.

When the pump is removed from the barrel the pump motor should always be kept higher than the pump to avoid acid from entering the motor or to drop on the hands. Do not turn the pump upside down.

Before the different parts of the pump are touched by hand, they should be washed with plenty of water.

The pump is intended only for use with agricultural silage additives, as formic acid or its equivalents. The use for other purpose may damage the inner parts of the pump. The pump may not be used for inflammable liquids.

Clean water must always be kept in the water can for first aid in case of accident!

Flow adjustment

The flow is depended of the number and size of the nozzles as well as of the setting of the adjusting screw on the top of the flow meter. The numbers indicates liter / minute.

Maintenance

The pump must be cleaned with plenty of clean water after each period of use.

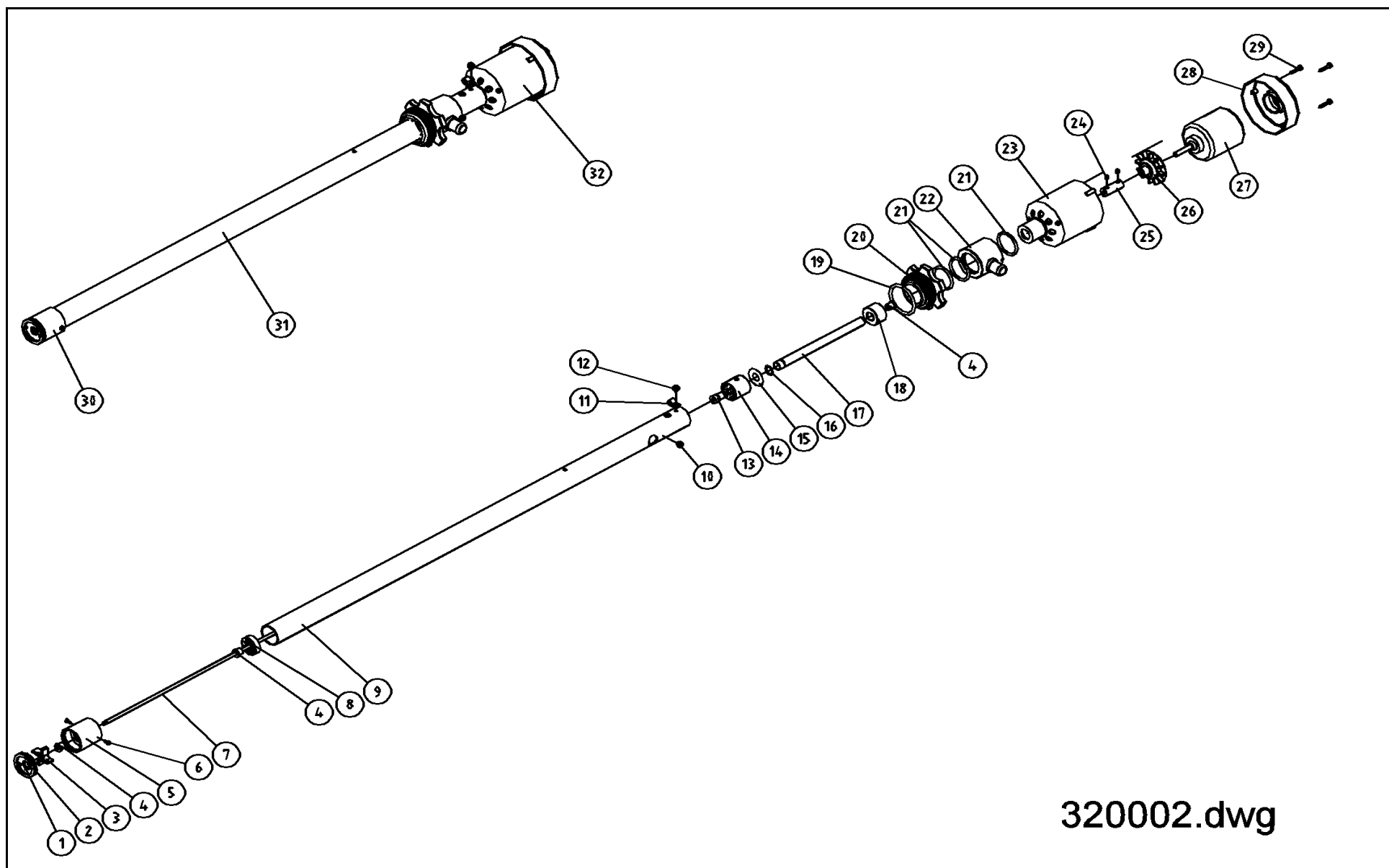


TUHTI HP 20

Spare Parts / Ersatzteile / Resevdelar / Varaosat

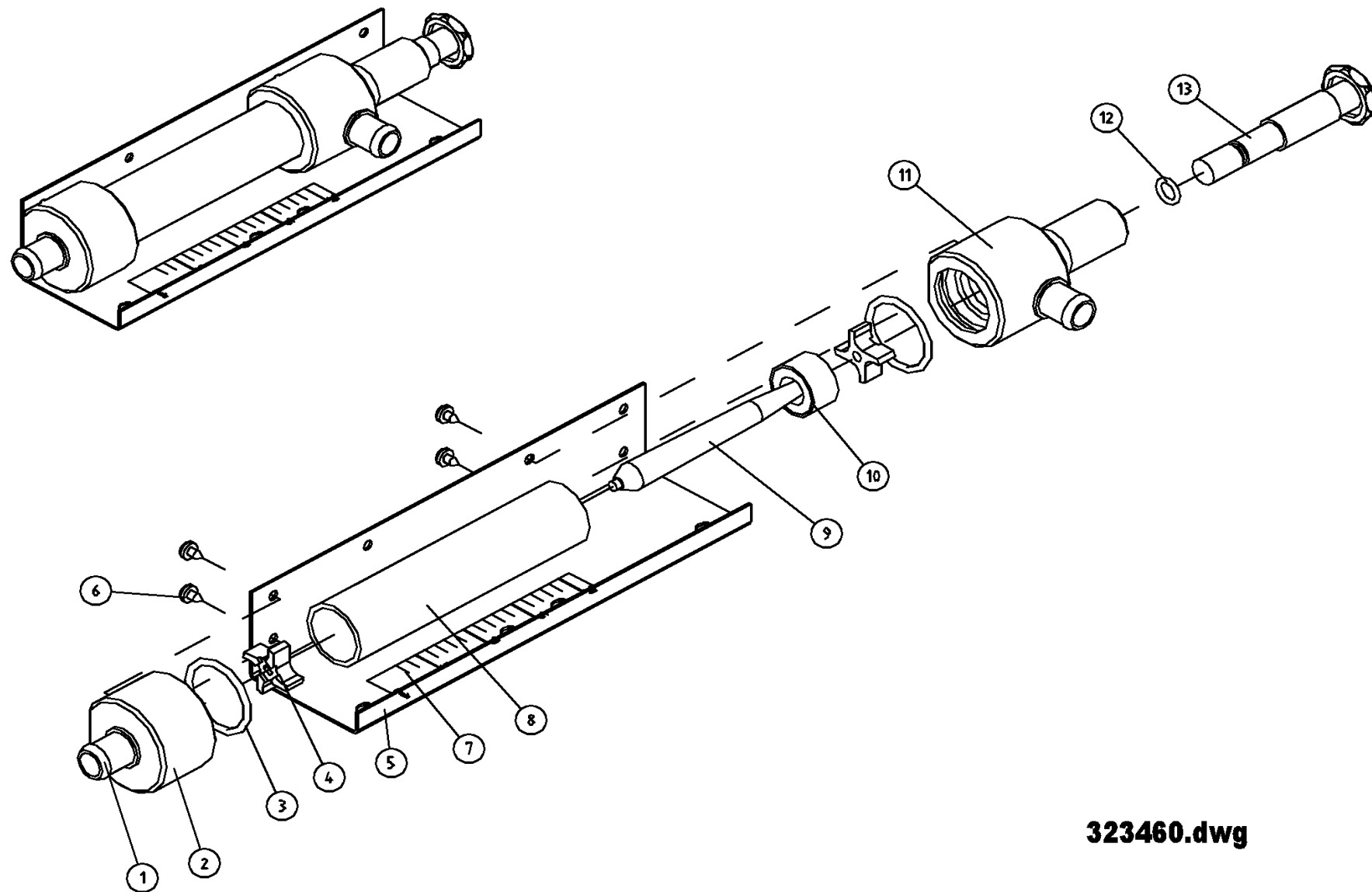


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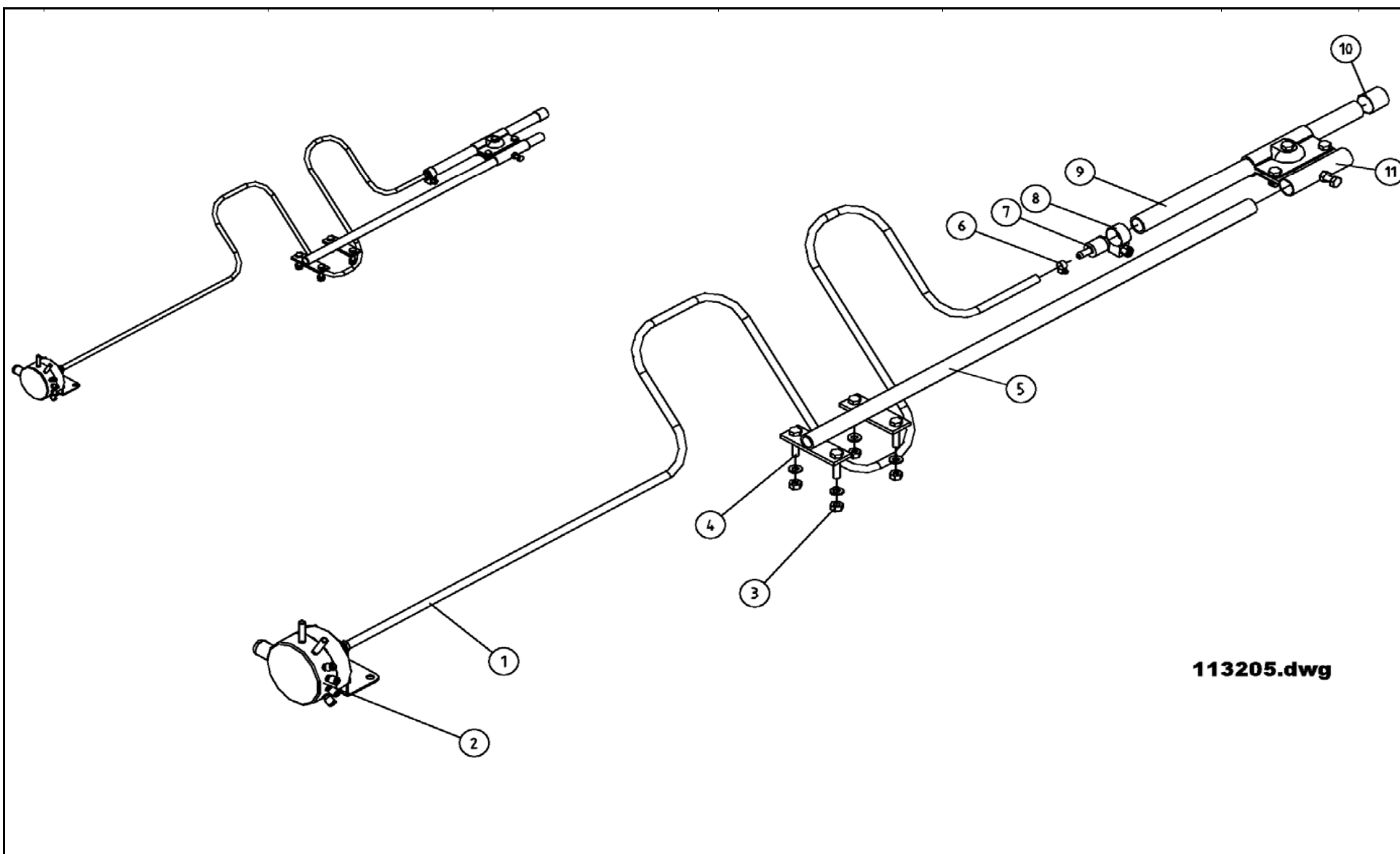


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Pump	Pumpe	Pump	Pumppu	HP 20	320002		
Pos	Name	Nahme	Benämning	Nimike	Kvalitet	NO	Pcs
1	Screw	Schraube	Plåtskruv	Uralevyruuvvi	DIN 7983 2,9X9,5 A4 POZ	133121	2
2	Endplate		Bottenplatta	Pohjalevy		320090	1
3	Propeller	Propeller	Propeller , 6mm hål	Siipi		303471	1
4	Bearing	Lager	Lagerbussning	Liukulaakeri		303171	3
5	Pumphousing	Pumpgehäuse	Pumphus	Pumpunpää		320080	1
6	Screw	Schraube	Plåtskruv	Uralevyruuvi	DIN 7981 C 2,9X9,5 A4 POZ	133120	2
7	Axel	Welle	Aksel L=980 mm	Akseli		303142	1
8	Bearngsupport	Lagergehäuse	Lagerhus	Tuki		320070	1
9	Pipe	Rohr	Pumprör	Putki		320060	1
10	Screw	Schraube	Plåtskruv	Uralevyruuvvi	DIN 7981 C 2,9X13 A4 POZ	133124	1
11			Dragavlastare	Vedonpoistaja		303110	1
12	Screw	Schraube	Plåtskruv	Uralevyruuvi	DIN 7981 C 4,8X9,5 A4 POZ	133130	1
13	Bearing	Lager	Lagerbussning HP 20	Liukulaakeri		303173	1
14	Pressurehousing	Drückgehäuse	Flödesholk	Virtausholkki		320050	1
15	Membrane	Membrane	Flödesmembran HP 20	Kalvo		320055	1
16	O-Ring	O-Ring	O-Ring	O-rengas	Ø16x2	144980	1
17	Pressurepipe	Drückrohr	Tryckrör	Paineputki		320040	1
18	Housing	Gehäuse	Holk	Holkki		320010	1
19	O-Ring	O-Ring	O-Ring 53x5	O-rengas	NBR70 Ø53x5	144976	1
20	Nut	Muttern	Mutter	Mutteri		320030	1
21	O-Ring	O-Ring	O-Ring	O-Rengas	Ø40x4	144985	3
22	Ring	Ring	Ring	Rengas		320020	1
23	Cover	Gehäuse	Motorhölje	Moottorinsuoja		303080	1
24	Socket set screw	Gewindestifte	Låsskruv, insex	Pidätinruuvi	DIN 913 45H M6X6	132500	2
25	Case	Hülse	Holk 6mm/8mm	Holkki		303071	1
26	Fan	Lüfter	Fläkt	Tuuletin		303050	1
27	Motor	Motor	Motor	Moottori		303040	1
28	Cap	Deckel	Hatt	Hattu		303030	1
29	Screw	Schraube	Plåtskruv	Peltiruuvi		303010	3
30	Pumphousing	Pumpgehäuse	Pumphus	Pumpunpesä		320085	1
31	Lower pump	Unterepumpe	Nedre pumpdel	Pumpun alaosa		113200	1
32	Motor, compl.	Motor	Motor, komplett	Moottori, täyd		303055	1

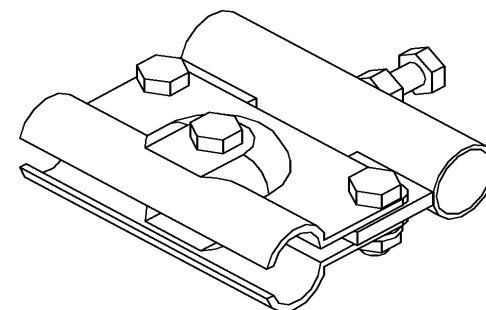
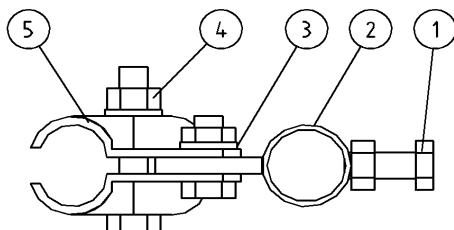
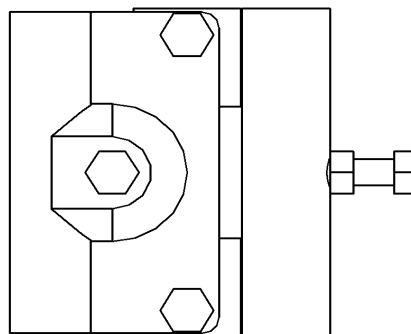
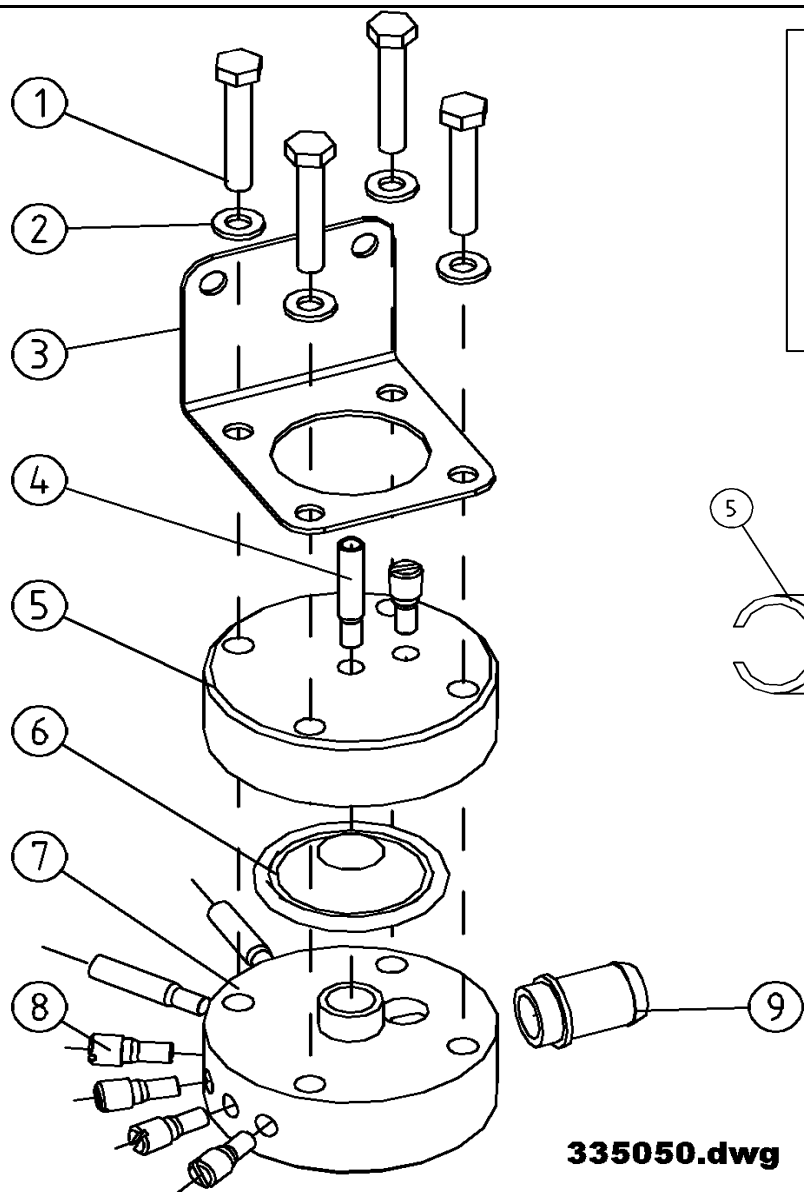


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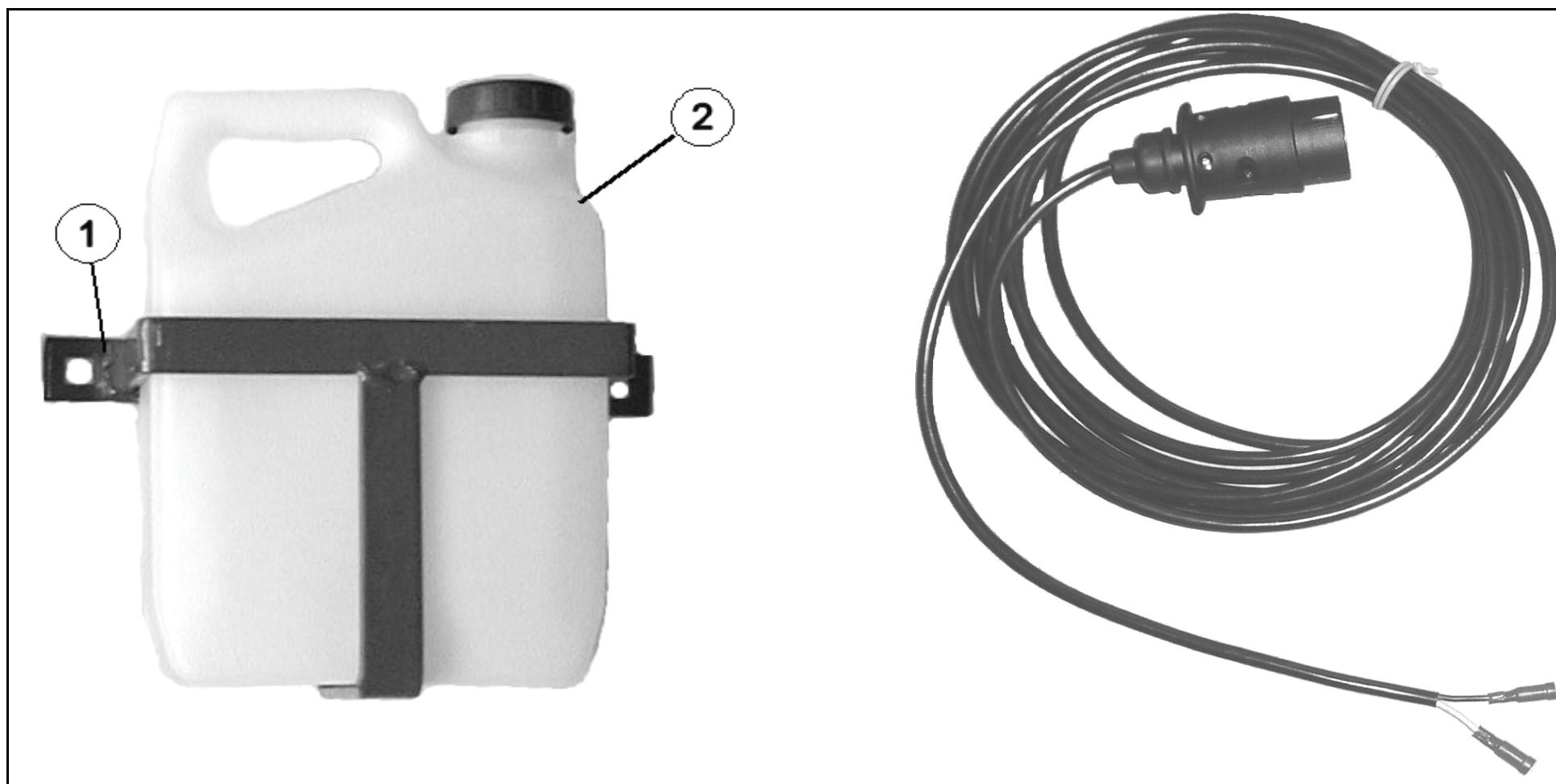
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Pos	Name	Nahme	Benämning	Nimike	Kvalitet	NO	Pcs
1	Bracket	Befestigung	Fäste	Kiinnitys		304245	1
2	Waterbottle		Vattendunk	Vesikanisteri		304248	1
3	Powercable	Kabel	Strömkabel	Virtakaapeli		303045	1