



English
version



Agroplast



P-100 Pump

User's manual
(with Warranty)

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DEAR CLIENTS,

We would like to thank you for having bought P-100 pump from the **AGROPLAST** offer. This appliance has been designed and produced with the use of the most advanced technologies and has undergone a series of rigorous quality controls. It is our target to ensure for our clients the life-long satisfaction derived from the use of **AGROPLAST** products.

Warrantor will eliminate a possible malfunction of the appliance free of charge under the condition that it was used appropriately, according to its purpose and in accordance with the User's Manual instructions.

The condition of taking advantage of the **AGROPLAST** warranty is the submission of the warranty card, correctly filled out by the seller, to the place of purchase (or producer's premises), which should contain the following information: type of product, serial number, date of purchase, seller's stamp and signature.

AGROPLAST warranty is applicable for all the purchased appliances in the country of their purchase, and remains valid on this same territory through the medium of the importer.

WARRANTY REGULATIONS:

Warranty period begins on the day of item purchase written on the warranty card and encompasses machine's flaws, which have arisen during its usage. Warranty period lasts for: 24 months.

The machine's flaws, which arise during its warranty period, will be eliminated for free. The servicing will be carried out on the company's premises by the producer as soon as it is possible.

The warranty does not cover the operations mentioned in the User's Manual or normal activities of exploitative servicing, i.e. the control of oil level and its exchange, the control of pressure in the pressure manifold.

AGROPLAST warranty may not be taken advantage of if:

- the data on the warranty card does not correspond to the appliance data
- the serial number located on the appliance is destroyed or illegible
- third party or unauthorized service interference is ascertained
- the damage is caused by inappropriate use (not in accordance with its purpose)
- the damage is caused due to external causes: atmospheric phenomena, inappropriate use, mechanical damage, use of improper replacement parts, unsuitable power supply (i.e. the use of damaged power transmission shaft)

AGROPLAST reserves the right to waive from delivering the punctual warranty service if the company undergoes unexpected disruptions in its functioning, i.e. social unrest, elemental disaster, etc. **AGROPLAST** is not responsible for the damages and losses caused by the inability to use the appliance undergoing servicing. The warranty for the sold consumerist product does not exclude, limit or suspend the faculties of the buyer resulting from the incompatibility of the product with the contract agreement.

Dear Client,

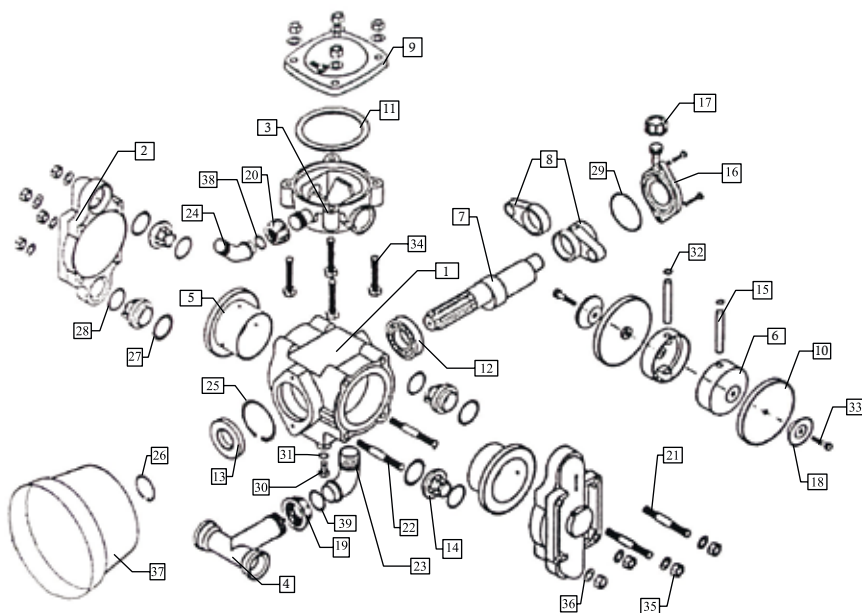
In case of finding any malfunctions covered by this warranty in the purchased appliance, please contact our sale outlet or our company.

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We offer an ongoing sale of genuine replacement parts and post-warranty servicing.

P-100 Pump – Construction



Legend:

- | | |
|--|--|
| 1. P-100 Pump housing, cat. no. 220028 | 20. Fastening nut 1" nut, cat. no. 221278 |
| 2. Pump head, cat. no. 221384 | 21. M12x260 stud-bolt |
| 3. Accumulator manifold, cat. no. 221131 | 22. M12x320 stud-bolt |
| 4. Suction manifold, cat. no. 221148 | 23. Ø 32/90 1 ¼" elbow, cat. no. 221292 |
| 5. Sleeve, cat. no. 220431 | 24. Ø 25/30 1" elbow, cat. no. 221285 |
| 6. Pump piston, cat. no. 221179 | 25. W72x3 edging ring |
| 7. Pump shaft, cat. no. 221346 | 26. Z35 edging ring |
| 8. Connecting rod, cat. no. 221339 | 27. 35x5 O-ring, cat. no. 221438 |
| 9. Discharge manifold cover, cat. no. 221124 | 28. 38x4 O-ring, cat. no. 221391 |
| 10. Diaphragm, cat. no. 221230 | 29. 70x3 O-ring, cat. no. 221407 |
| 11. Accumulator diaphragm, cat. no. 221193 | 30. M10x14 drain plug |
| 12. 6207 ball bearing | 31. 8x2,5 O-ring |
| 13. Simmering 35 x 72 x 10, cat. no. 221360 | 32. W17 edging ring |
| 14. Complete valve, cat. no. 221209 | 33. M10x20 bolt |
| 15. Piston pin, cat. no. 221117 | 34. M12x55 bolt |
| 16. Oil level indicator with a filling valve, cat. no. 221162 | 35. M12 nut |
| 17. Oil gate plug | 36. 12 washer |
| 18. Washer, cat. no. 221247 | 37. Shaft's shield, cat. no. 221353 |
| 19. Fastening nut 1 ¼", cat. no. 221261 | 38. 19x3 O-ring, cat. no. 221414 |
| | 39. 25x3 O-ring, cat. no. 221421 |

Technical data:	
min. rev.	350 rev/min
max. rev.	550 rev/min
engine oil	CB SAE 40
oil amount	0,50 L
weight	10,13 kg
height	320 mm
width	320 mm

CHARACTERISTICS OF THE P-100 PUMP:

- the use of needle bearing on rotating elements contributes to the prolonged and failure-free pump running and the decrease of the heat production to the minimum
- aluminum piston working in the iron bushing ensures the best cooperative properties of these elements
- small amount of exuded heat allows for a long constant pump usage

USE:

Membrane-pressure pump is intended for use in field spraying machines. It may be used with legalized plant protection agents and liquid mineral fertilizer.

FIRST START-UP:

After pump installation on the spraying machine, trial start-up is necessary as well as check-up and the potential adjustment:

- the level of oil visible in the observation glass should not be lower than its half or its marked minimum,
- a potential deficiency should be supplemented with CB SAE 40 oil or engine oil of similar parameters
- check the pressure in the pump's air vessel with the use of a manometer connected to the air valve. The pressure in the air vessel of a stagnant pump should equal 1/3 to 1/2 of its working pressure. Drain or pump up air with the use of a compressor or automotive pump complete with a manometer.

SERVICING AND THE CONDITIONS OF SAFE USAGE:

In order to ensure long term and failure-free running of the pump:

- every time before start-up check and potentially adjust the oil level in the pump and the pressure of the pressure manifold air vessel in accordance with prior instructions included in this manual,
- every time after finishing work rinse the pressure system with water,
- after the termination of the exploitative season and during the period of frost in early spring, autumn and winter, drain the remainder water from the manifold (remove the suction cord of the pump and use it for several seconds (15-20), in order to remove all the water from the inside,
- control the wear of the pressure cables – replace them in case of their rupture or tear
- check the durability of the elbow pipe connections supplying and draining the liquid to and from the pump



ATTENTION

Water that has not been drained off might freeze which might result in pump failure.

- adhere to the servicing schedule of oil exchange every one year,
- once a year, preferably before beginning the exploitation season, replace the following elements: pump membranes, check valves and the air vessel diaphragm,
- for the first 16 hours of work, pump's elements are breaking in and one should not exceed the working pressure of 0.6 Mpa,
- during the whole period of pump usage, it is not recommended to exceed the working pressure of 1.0 Mpa

OIL EXCHANGE:

In order to exchange oil in the pump:

- undo the oil gate plug in the pump,
- disassemble the drain plug, which is located at the bottom of the pump's housing, from the housing
- drain the used oil to stable dish (oil should be drained when the pump has heated up),
- after draining the oil and screwing in the drain plug, fill in the oil through the oil gate to a level between min. and max.

REPLACEMENT OF CHECK VALVES:

Before attempting to replace the check valves:

- unplug the suction and pressure cord,
- drain the remainder water from the heads,
- undo the nuts and bolts holding the head,
- remove the check valves,
- while installing new check valves pay attention to their accurate positioning in reference to the direction of liquid flow,
- reassemble the elements in reverse order

REPLACEMENT OF PUMP MEMBRANE:

- disassemble the pump from the spraying machine and drain the oil,
- perform the same instructions as in the case of check valves replacement,
- unscrew the membranes from the pump piston,
- install new membranes,
- reassemble the elements in reverse order



ATTENTION

Leaking of white opaque oil from the pump's filler hole is an evidence of emergency membrane rupture and the immediate need to turn off the pump. In such a case, the replacement of all the membranes and oil is recommended.

AIR VESSEL DIAPHRAGM REPLACEMENT:

In order to replace the air vessel diaphragm:

- release air by pushing down the vent valve,
- unscrew the nuts holding the manifold cap,

- replace the diaphragm,
- tighten up the clamp nuts of the manifold cap,
- fill up air in the air vessel



REMEMBER

When repairing or refurbishing always use only genuine parts from the pump's producer. If the need for the disassembling of the shaft arises, first position the center holes on its top front horizontally.

WARRANTY CARD

Name, type

Serial no.

Purchase date

Seller's stamp, signature

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GPS

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E 23°25'34"

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