

INSTRUCTION MANUAL

WINNER-TOP

This Patent Mantis Spraying equipment is specially designed for the undiluted application of ROUNDUP®.

Usage:

For weedcontrol in communities, nurseries, orchards, vineyards, forestry, horticulture, agriculture, special cultures.

Please read the instructions of Roundup® before using it.
In case of any questions please consult your chemical supplier and the pesticide authority in your country.

Keep the Winner Top and any chemicals always out of reach for children.

The noise emission of the Winner Top is below 70 dB(A).

Producer:

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USER SAFETY RECOMMENDATIONS

- Always observe the safety recommendations for user protection in the "directions for use" of the chemical and wear the recommended personal protective equipment.
- Do not eat, smoke or drink when working with pesticides.
- Dispose of excess pesticide mix and rinse in accordance with label instructions.
- Always keep pesticides and applicators out of the reach of children.
- After use, thoroughly clean the applicator.

The atomiser is powered by the rechargeable battery. The fluid metering is handled by a metering pump. The droplets are formed by the centrifugal force of the atomiser and discharged downwards through an adjustable segment. Flow rate can be affected by temperature fluctuations, therefore the flow rate specified in the calibration table has to be checked and adjusted as required. Check the atomiser daily to be sure it is clean and operating smoothly. The spray hood should pass closely over the top of the area to be treated. During operation, some of the chemical will collect in the atomiser and will trickle out for approx. 30 sec. after closing the valve on top of the chemical tank. Be sure to close valve about one minute before end of treatment and allow atomiser to continue running. Switch off the atomiser at the end of the treatment.

CAUTION

Before lifting the spray hood, be sure to close valve and switch off atomiser.

Set the Spray band of the atomiser by adjusting the spray limiters (see drawing). The spray band should be set so that the droplets are discharged across the entire compartment width. Fill tank and open the valve. Find a clean dry surface, preferably a concrete base, or place a cardboard panel under the spray hood and check the coverage on the panel. Adjust as required and recheck. Be sure you understand all the functions of the applicator before starting treatment.

WINNER-TOP with 3 piston pump

Function, assembling and calibration

- A. Attach WINNER-TOP to the tractor.
- B. Connect the 2 pole plug into the Euro-socket of the tractor. You may also connect the wires directly to the tractor battery. Blue cable = + and brown cable = -.
- C. Fill the container with Roundup and open the tap.
- D. Switch the unit on.
- E. Position the pump setting according to the volume table (inside the pump box door). Please keep the tractor speed according to the chosen pump position!
- F. For calibration: pull off the hose after the pump, wait until the Roundup comes out at an even speed, catch the Roundup in a calibration container with millilitres measurement during a period of exactly 1 minute. In case the volume does not correspond with the desired value you have to increase or decrease the volume on the pump. Calibrate again for 1 minute and check.

Desired volumes and values for each atomiser (Volume Table).

km/h	m/min	l/ha	Value in ml/min per atomiser	Pump position
4	67	1	2,3	A
		2	6,2	D
		3	9,4	G
5	83	1	3,9	B
		2	7,3	E
		2,5	9,4	G
6	100	1	4,8	C
		2	9,4	G

Differences in the voltage of the tractor can influence the pump speed and liquid volume, the liquid (Roundup) can flow faster or slower because of differences in temperature. There for you have to check this volume Table from time to time. In case of big differences you may have to prepare your own volume Table according to your own specific conditions in the area of operation. During the season you should check the volume from time to time.

Cleaning

Switch the 3-way ball valve to the other side (water container).

Switch WINNER-TOP on and let the pump run until only water comes out of the atomiser.

To remove the water out of the system: cut the water connection by removing the cover of the water tank.

Let the pump run until no water comes out of the atomiser.

Close the 3-way ball valve and switch off the WINNER-TOP and return the cover on the water tank.

EG-Declaration of conformity Council Directive 98/37/EG


Mantis ULV-Sprühgeräte GmbH, Vierlander Straße 11 a, 21502 Geesthacht declares under our sole responsibility that the following products are in conformity with the provisions of the following Council Directive: 98/37/EG

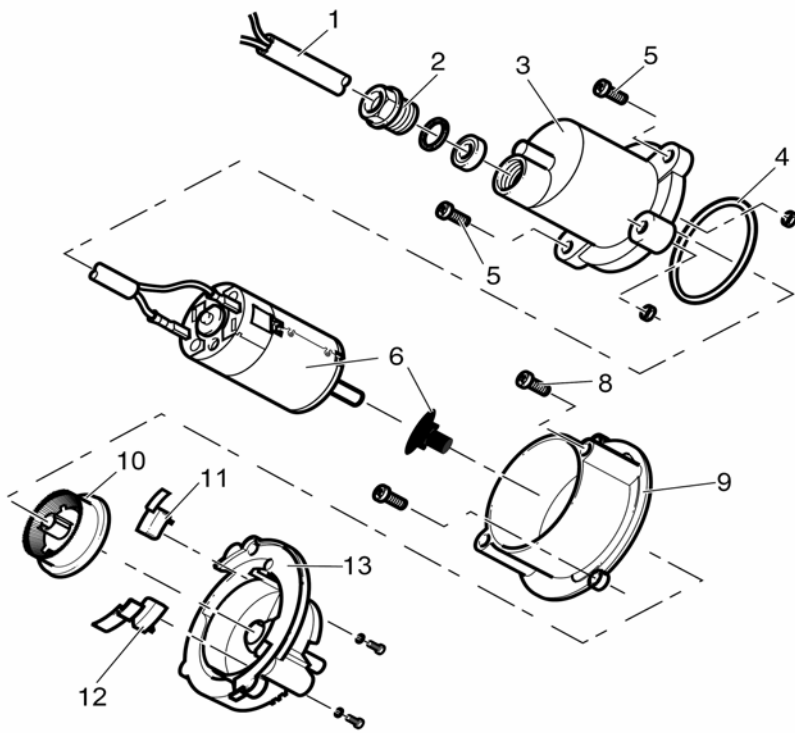
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MANKAR-110 SELECT EL
Typ MANTRA, MINI-MANTRA / PLUS, MICRO-MANTRA, MICRO-VASO
Typ FLEXOMANT-1W, FLEXOMANT-2W, FLEXOMANT-3W, FLEXOMANT-4W,
FLEXOMANT-PLUS, VARIMANT-1, VARIMANT-2, VARIMANT-4 PLUS,
VARIMANT-WINNER-TOP, VARIMANT-WINNER-UNO
Typ MAFEX

André Verder
Managing Director

Geesthacht Mai 2007

(Place and date of signature)

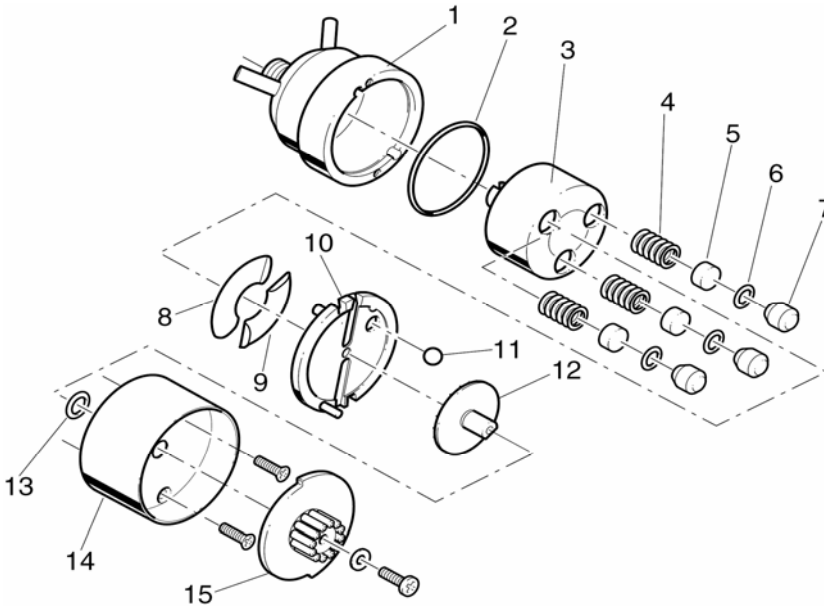

(Name, title and signature)



Item Part No. Description

100320 SEGMENTAL-ATOMISER 2006 for MANKAR

1	100388	Cable
2	100121	Screw fitting PG 7
3	100486	Motor housing
4	100482	Para-Sealing
5	100996	Screw M 4 x 12
6	100345	Motor subassembly for atomiser since 1996
8	100003	Screw M 3 x 10
9	100487	Atomiser housing, front
10	100478	Atomiser disc
11	100479	Spray limiter, right
12	100481	Spray limiter, left
13	100490	Atomiser housing, rear



Item Part No. Description

100492 Mafex-95 MS metering pump

1	100493	Pump housing
2	100498	O-ring 41 x 1,78 mm
3	100138	Rotor, 3 cylinder
4	100529	Spring, bronze
5	100140	Piston
6	100141	O-ring 4,47 x 1,78 mm
7	100142	Distance piece
8	100494	Wobble plate, Mafex-95
9	100530	Wobble plate, Mankar-95
10	100495	Pressure plate, Mafex-95
11	100532	Ball, 6 mm, stainless
12	100496	Selector, Mafex-95
13	100499	O-ring 7,65 x 1,78 mm
14	100534	Pump cover
15	100497	Metering adjustment knob, Mafex-95

GUARANTEE

The manufacturer guarantees that in accordance with the present state of technology the article of purchase is free from defects as regards raw materials and construction. Guarantee is valid for all machines and apparatus for 24 months. The period of guarantee begins from the date of purchase by the user.

The manufacturer will decide to repair or replace faulty parts or issue a credit note.

Parts damaged due to normal wear and tear will not be replaced under guarantee. Carriage costs are borne by the manufacturer for faulty goods.

Unresolved claims do not entitle purchaser to withhold payments or set them against non-approved claims. Parts not manufactured by manufacturer are guaranteed by the original manufacturer under their terms. Warranty claims must be submitted in writing within 4 weeks of the damage being seen.

Repairs will be carried out with original manufacturer spare parts by an approved dealer.

Acknowledgement of a claim by manufacturer is binding only when a written notice is issued. Unless the manufacturer cannot make a repair, there is no right to cancellation of orders or to mitigation.

Compensation for direct or indirect damage will not be given.

Guarantee terminates if the article of purchase is altered by manipulation of third parties or by installing spare parts of extraneous origin and if the ascertained damage is directly caused thereby. Guarantee also terminates if orderer does not observe the operating instructions.

Guarantee does neither apply to natural wear, to damage caused during storage or by corrosion, nor to damage caused by negligent or improper handling. Guarantee does not apply to used machines or apparatus.

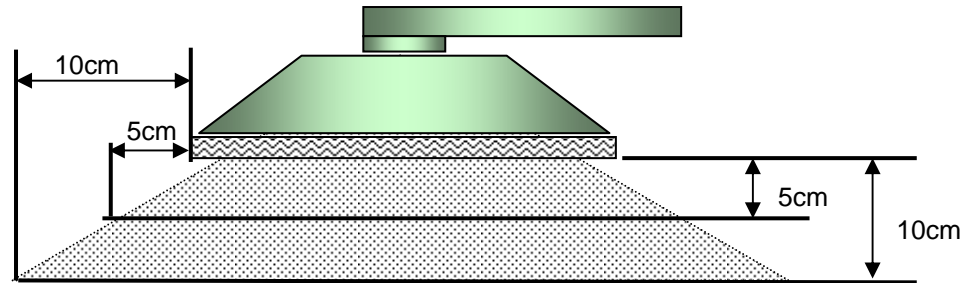
The operation instruction published by the manufacturer has been carefully prepared and is based on extensive tests.

Since manufacturer have no influence on installation and handling of apparatus, the company will not assume any responsibility for lack of success or for damages caused by the apparatus itself or by its use.

Theoretical Spraying Width at various Sprayhood Heights

The height of the sprayhood has to be adjusted according to the height of the weeds.

Sprayhood Flexomant/Varimant



These spray widths are valid for the standard adjustment from our factory when ROUNDUP is applied.

The spray width can be varied by adjusting the screws of the spraywidth adjustment on the head of the atomiser (see drawing)

