

Instruction manual

Original instructions

 **Caution!** Prior to operating the unit, please read the owner's manual carefully, and most importantly, observe all safety rules.

Observe the maintenance guidelines closely to ensure the long service life of your equipment.

Your dealer will be glad to assist you with any questions.

 This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. Persons with medical implants have to consult their physician and the medical implant manufacturer before operating this machine.

EC declaration of conformity → The EC declaration of conformity **on a separate piece of paper** forms part of these operating instructions.

Packaging and disposal

Please keep the original packaging in order to protect the equipment against transport damage in case you ever need to ship it or transport it. If the packaging materials are no longer required then they must be disposed of properly in accordance with applicable local regulations. Cardboard packaging materials are raw materials which can be recycled or reused.

At the end of the equipment's service life, please make sure that you dispose of it properly, in accordance with the official directives and regulations that apply in your area

Type plate



- a: Type designation
- b: Serial number
- c: Build year

Symbols

The following symbols are used in this manual and on the product:



Always handle this power tool with particular care



Keep open flames away from the power tool and the fuel can.



Thoroughly read these operating instructions before undertaking any maintenance, installation and cleaning steps



Wear ear defenders and a face shield before starting the engine



Wear protective gloves when handling and working with the equipment



Wear the prescribed protective clothing.



No-one else may remain in the vicinity of the motor appliance whilst it is operating.



A breathing mask should be worn when using poisonous chemicals



Never smoke near the power tool or where the equipment is refuelled!



Switch off engine



Fuel mixture



Choke open
Operation and warm start



Choke closed,
Cold start position

In the best interest of continued technological progress we reserve the right to change the design and configuration of any product without prior notice.

For that reason, no claims can be accepted with reference to text and illustrations in this manual.

National requirements

The pressure sprayer may be subject to national requirements for regular inspection by designated bodies, as provided for in Directive 2009/128/EC¹.

¹ Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides

Index	Page
1. Workshop service, replacement parts	2
1.1 <i>Maintenance and repair</i>	2
1.2 <i>Replacement parts</i>	2
2. Guarantee	3
3. Parts subject to tear and wear	3
4. Safety regulations	3
4.1 <i>Correct use / Application</i>	3
4.2 <i>General safety instructions</i>	4
4.3 <i>Personal protective equipment for your safety</i>	4
4.4 <i>Operating Hints</i>	4
4.5 <i>Irregularities, incidents, accidents</i>	5
4.6 <i>Safe handling of spraying agents</i>	5
4.7 <i>Protection of Environment</i>	5
5. Important Components.....	6
6. Maintenance and care.....	7
6.1 <i>Carburettor adjustment</i>	7
6.2 <i>Air Filter Maintenance</i>	8
6.3 <i>Spark Plug</i>	8
6.4 <i>Storage Hints / Transport Hints</i>	8
7. Assembly	9
7.1 <i>Active components of the operating handle</i>	9
8. Adjustment of shoulder straps	10
9. Fuel information	10
10. Filling.....	11
11. Starting / Stopping the engine	12
12. Operation hints.....	12
12.1 <i>Misting Hints</i>	12
12.2 <i>Spraying</i>	13
12.3 <i>Residual spray medium</i>	14
12.4 <i>Strainer for accessory sets</i>	14
12.5 <i>Checking the spray medium flow rate</i>	14
12.6 <i>Draining and cleaning the tank</i>	15
13. Accessories	15
14. Maintenance Plan.....	16
15. Technical Specifications	17

1. Workshop service, replacement parts

1.1 *Maintenance and repair*

Maintenance and repair of modern motorized devices, as well as their safety-relevant assemblies, require qualified, specialized training and a workshop equipped with special tools and test devices. Thus SOLO recommends that you have a specialized SOLO workshop carry out all work that is not described in these operating instructions. Your SOLO specialist has the required training, experience, and equipment at his disposal to provide you with the most cost-effective solution and can help you in many ways with advice and service.

1.2 *Replacement parts*

Dependable operation and the safety of your device also depend on the quality of the replacement parts that you use. Use only original SOLO replacement parts. Only original parts come from the production of the device and thus guarantee the highest possible material quality, dimensional accuracy, function, and safety. Original replacement parts and accessory parts are available from your dealer. He also maintains the requisite replacement part lists to determine the required replacement part numbers, and he is constantly provided with information concerning detail improvements and innovations in the replacement part offering. Please note as well that guarantee performances from SOLO are not possible if parts other than SOLO original parts are used.

2. Guarantee

SOLO guarantees problem-free quality and will assume the costs for defect remediation by replacing the defective parts in the case of material or manufacturing defects that occur within the guarantee period after the date of purchase. Please note that specific guarantee conditions apply in some countries. Ask your sales person if you have any questions. As vendor of the products he is responsible for the guarantee. We request your understanding that no guarantee can be assumed for damages due to the following:

- Non-compliance with the operating instructions.
- Neglecting required maintenance and repair work.
- Damages due to improper carburetor adjustment.
- Normal wear and tear.
- Obvious overload through persistently exceeding the upper performance limits.
- Using non-approved tools.
- The use of force, improper handling, misuse, or accident.
- Damages caused by overheating due to dirt build up on the ventilator casing.
- Unauthorized modification or changes made to the device.
- Intervention by non-specialized persons, or improper repair attempts.
- The use of unsuitable replacement parts or parts other than SOLO original parts to the extent that they cause damage.
- Using unsuitable fuel or fuel that has been stored too long.
- Damages that can be traced to implementation conditions from the rental business.

Cleaning, care, and adjustment work are not recognized as guarantee performances. All guarantee work must be carried out by a SOLO dealer.

3. Parts subject to tear and wear

Various parts are subject to application- specific or normal wear and must be replaced in good time, when required. The following parts are subject to normal wear and are not covered by the manufacturer's guarantee:

- Air filter
- Fuel filter
- All rubber parts which come into contact with fuel
- Spark plug
- Starter

4. Safety regulations

4.1 Correct use / Application

This machine must only be used for the purpose of applying approved plant protection agents, pesticides, insecticides, weed killer (herbicides) and liquid fertilizers available from authorised specialist dealers as well as for the purpose of applying clean water

Observe all instructions provided by the spraying agent manufacturer.

We recommend using only spraying agents that have been approved for use as spraying agent for the above mentioned areas of application by the relevant authorities in your country.

The pressure sprayer must not be used for any other purposes, e.g., for the spraying of liquid paint or applying any other media than the above mentioned liquids!

Particularly, aggressive, acid- or solvent-containing liquids, disinfectants or impregnating agents and flammable products must not be sprayed with this device!

Within certain limits, the amount to be applied is subject to the position of the spray tube. During operation, if the spray tube is directed upwards at an angle of more than 30° to the horizontal, use the liquid pump that is available as a special accessory.

According to its type designation, this equipment is suitable for:

Agriculture, horticulture, orchards, green spaces, vineyards, nurseries.

The mistblower may only be used for the jobs it has been designed for – **and no other!**
Always observe all safety hints while using the machine.

4.2 General safety instructions



Some parts on the machine have been removed for transport purposes. Prior to first use, the mistblower has to be completely assembled. This mistblower may only be started and used when completely assembled.



Read the operating instructions carefully before placing in service and keep them in a safe place.

The operating instructions must be kept available at all times wherever the device is used or stored. First time users should be instructed by the seller or an expert.

You can put your life at risk by failing to follow the safety instructions. It is also important to follow any relevant health and safety regulations that apply to your place of work. Anyone who fails to follow the safety instructions, operating instructions or maintenance instructions will make themselves liable for any damage and consequential damage caused as a result.

Never use the device if any part of it is unsafe or if it is not in an overall condition that makes it safe to use. Before using the device always check whether it is safe to use.



The operator is liable towards others within the operating area of the mistblower.

Only operate the mistblower when in good physical condition, well rested and healthy. Fatigue and illness lead to carelessness and accidents. Proceed in a careful and alert manner.

- Never use a machine while under the influence of alcohol, drugs or medication that could impair your reaction speed.
- Persons under the age of 18 are only permitted to use this plant protection device under supervision.
- The air exit speed from the nozzle is very high. Never point the nozzle towards persons or animals.
- This equipment must only be hired out, lent or passed on to persons who are familiar with this type of equipment and its operation and who have read the operating instructions. Always ensure that you hand over the operating instructions together with the device.
- The device must not be altered in any way, as this could adversely affect the safety of the device and potentially cause an accident or injury.

4.3 Personal protective equipment for your safety



Always wear appropriate clothing and protective equipment whenever this power tool is used.



Wear appropriate protective clothing which covers all body parts. This includes gloves, head protection, foot protection, body protection and possibly an apron or breathing mask. Clothing should be suitable, i.e. tight without being obstructive.

Do not wear a scarf, necktie, jewellery or any clothing which can get caught on shrubs or branches.

- Wear firm shoes with good traction, preferably safety shoes.



Wear protective gloves with non-slip grip.



Use personal ear protection (such as ear muffs, ear plugs or similar) and a face mask or safety goggles to protect against spray drift or airborne debris.



Always wear a breathing mask when working in dense and tall plants, in greenhouses, in dips in the ground or in trenches and when using dangerous spraying agents.

- Any clothing soaked with spraying agents or petrol should be changed immediately.
- Wash the work clothing regularly.

4.4 Operating Hints

- While running, the engine produces toxic exhaust gas which is odourless and invisible. Never start or operate the machine in closed rooms. Ensure for adequate ventilation in confined areas such as ditches or dips.
- No other persons should be present within a circle of 15 meters from the operator.
- Keep persons and animals away from areas in which you are working. Never spray in the direction of other persons, animals or objects that could be damaged as a result. Bear in mind that the liquid emerges at high speed from the spray tube. Objects could be kicked up as a result, and this could in some cases represent a risk. The user is responsible for any hazards or accidents involving other persons and/or their property.
- Never operate on unstable ground. Watch out for any obstacles such as tree stumps, tree roots, ditches, etc.
- Take special care while working along slopes.
- Never touch a hot exhaust.

4.5 Irregularities, incidents, accidents

- In case of irregularities, leaks, visible damage or reduced efficiency, do not commence work, but leave the unit from a dealer check.
- When irregularity, leaks or malfunctions occur during operation, turn off the stop switch immediately and put the machine on the ground immediately. The device may only be used again if it is checked by a specialist workshop and the cause of the fault has been eradicated.
- In case of serious disturbances or accidents during operation of the unit as smoke, strong odors from the device or the device is in flames instantly remove the unit from your body and take a safe distance. In case of fire, you have to call the fire department immediately.

4.6 Safe handling of spraying agents

- Avoid contaminating the environment, the mains water supply and/or public sewer systems with spraying agent or cleaner!
Ensure to avoid contamination when mixing, filling, using, draining, cleaning, servicing and transporting by using adequate procedures and suitable containers.
- Spraying agents and cleaners must never be allowed to enter the mains water supply – not even by back-suction when filling, public sewer systems, sprayed onto wastelands, allowed to drain into natural bodies of water or disposed of together with normal domestic waste. This also means that appropriate care must be taken during filling to ensure that none of the spraying agent is drawn back into water pipes. Spraying agents and cleaners and any unused leftovers of spraying agents and cleaners must always be collected in a suitable container and disposed of via approved facilities for household chemical waste. Please contact your local authorities for information about your nearest disposal facilities.
- Avoid any direct contact with spraying agents. In case of contact with harmful pesticides rinse the affected body parts immediately with plenty of water, any clothing soaked with spraying agents should be changed immediately, seek medical advice if needed.
- Stop working immediately if you start to feel unwell while working, or if you become unusually tired. Seek medical advice if the condition persists.
- Never allow children or anybody who is not familiar with handling this type of spraying agent to handle the spraying agent.
- Clean the spraying agent tank and all other spraying agent carrying parts whenever the spraying agent is changed. To flush out any residue from the agent tank and the hose, run the device with clean water after cleaning the spraying agent tank and before the next spraying agent is filled in. This will prevent the risk of any chemical reactions taking place between the different substances.
- Never use the device in narrow or enclosed spaces – spraying agents are toxic and there is a risk of poisoning. Spraying equipment must for example only be used in greenhouses if adequate ventilation is provided. Signs must be put up in greenhouses that have been treated. Nobody should enter the greenhouse again until it has been thoroughly ventilated.
- When you have finished working, prepare the device for storage according to section 12.6, thoroughly wash your face and hands with soap, take off your work clothing and ensure that it is washed regularly. Any unused spraying agent that is left over in the device could cause corrosion and hence damage the device. Special attention must be paid to wearing parts like hoses, filters and seals.

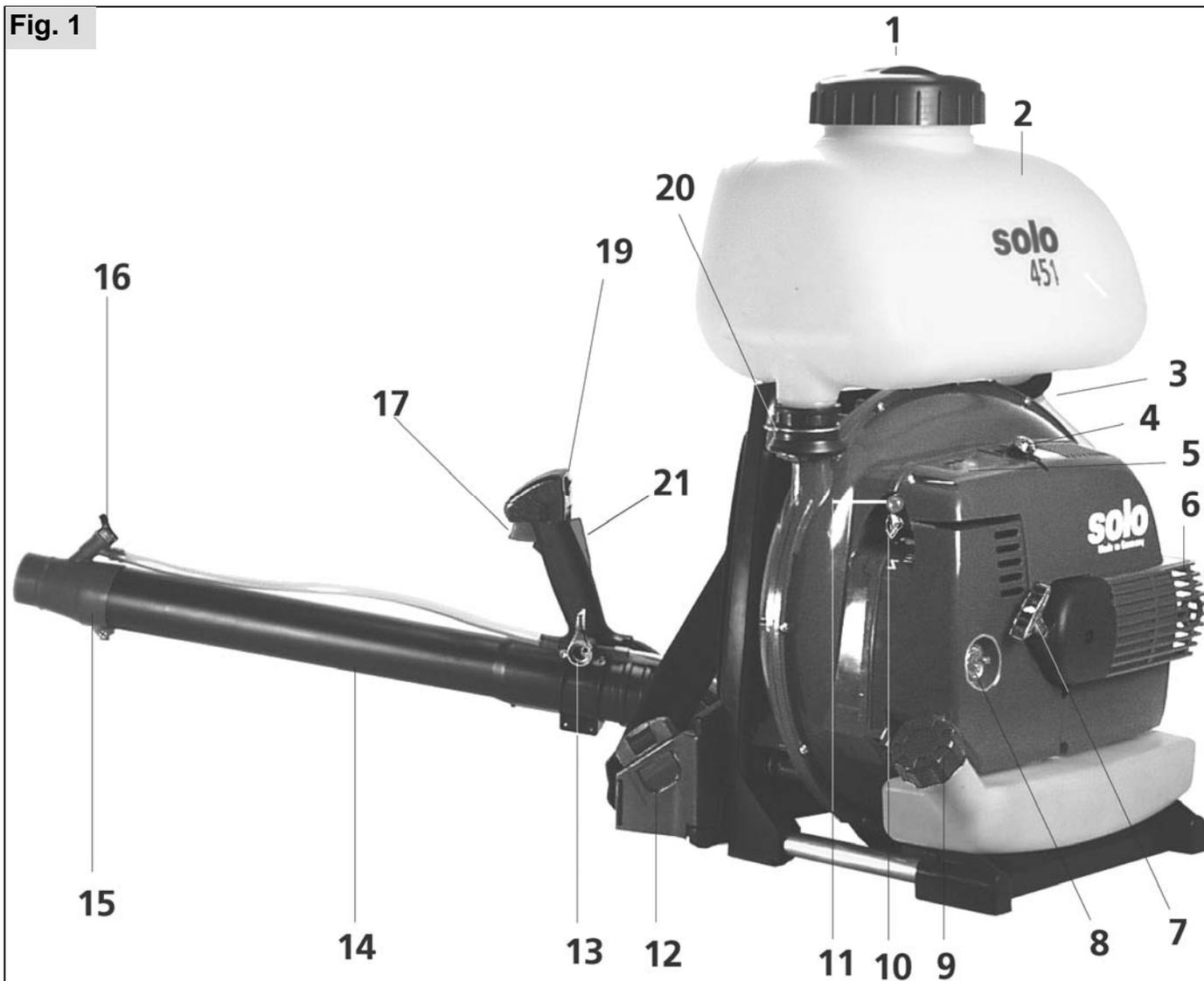
4.7 Protection of Environment

Be aware of your surroundings!

- Watch out for persons and animals which may be within your work area
- Be aware that noise is harmful to the environment. Inquire about and respect possible local rest periods.
- Avoid contaminating the environment, the mains water supply and/or public sewer systems with spraying agent, cleaner, fuel and oil! Ensure to avoid contamination when mixing, filling, using, draining, mixing and filling-in the fuel mixture, cleaning, servicing and transporting by using adequate procedures and suitable containers.
- When applying spraying agent, ensure by using appropriate measures and procedures that the unintended release of agent to other areas is minimized and the drift to the surrounding areas is prevented.

5. Important Components

Fig. 1



1. Tank lid / Filler basket with filter	11. Primer
2. Formula tank	12. Shoulder strap – quickcoupling
3. Formula outlet	13. Liquid tap
4. Spark plug	14. Spray tube
5. Carburetor adjustment screws	15. Spray nozzle
6. Muffler	16. Dosage sleeve
7. Starter handle	17. Throttle lever
8. Air filter cover	19. Stop switch
9. Fuel tank cap	20. Tank ventilation
10. Choke	21. Throttlet control lock

6. Maintenance and care



Any cleaning, maintenance or repair jobs should only be performed when the engine is stopped and with removed spark plug cap.

The exception, of course, is carburetor tuning.

Any service jobs, other than those described in this manual, should only be carried out by an authorized service center. Only original parts may be used for any maintenance and service work.

Never modify your motorized mistblower – your personal safety is at risk.

Never service or store the machine near an open flame.

Regularly check the fuel tank lid for sealing and tank ventilation. Only use recommended spark plugs. Check ignition cable for any damage.

After a running in period of approx. 5 hours, all accessible screws and nuts (except for carburetor mixture adjustment needles) have to be checked and re-tightened if required.

Never operate a motorized mistblower with a damaged muffler or without muffler (fire risk and risk of damage to hearing). Do not touch hot muffler.

6.1 Carburettor adjustment

The carburettor has been adjusted optimally at the factory. Subject to the operational altitude (mountains or low lying areas), the carburettor may require readjustment.



Fig. 2

The carburettor has 3 adjusting screws (Fig. 1 - 5):

- Idling end-stop screw "T"
- Low speed mixture screw "L"
- High speed mixture screw "H"

 Only qualified mechanics must adjust the regulating screws for idle mixture "L" and full load mixture "H".

Turn the idling end-stop screw "T" to adjust the idling speed in accordance with the details provided in the specification. Use an engine rev counter for this job.

- If the idling speed is too high, turn the idling end-stop screw "T" anti-clockwise.
- If the idling speed is too low (engine stops) turn the idling end-stop screw "T" clockwise until the engine runs smoothly.

If the idling speed cannot be set correctly with the idling end-stop screw "T", request an authorised service centre to tune the carburettor.

The following instructions are for authorised service shops

Information about the standard settings can be requested from the specialist workshop of our customer service department or downloaded from our Internet portal for specialist dealers at www.parts-and-more.org.

Use the D-CUT carburettor key to adjust the idle mixture screw "L" and the full load mixture screw "H".

Clean the air filter before adjusting the low speed screw!

Let the engine run warm before adjusting the engine speed.

 The carburettor is tuned for optimum engine performance. Use a rev counter to tune the carburettor correctly!

Do not adjust the engine to a higher speed.

Excessive engine speed can lead to major engine damage!

6.2 Air Filter Maintenance

The air filter separates and retains dirt before the air reaches the combustion chamber. This reduces engine wear.

Regular maintenance increases engine life. Clogged air filters cause performance loss and increased fuel consumption. This leads to a higher toxin level in the exhaust gas and also makes starting more difficult.

When the machine is used all day, the air filter should be cleaned daily. In severe dust conditions clean more often in between.



Undo the screw (Fig. 1, Pos 8) completely (screw is retained inside the filter cover) and remove the filter cover.

For a simple cleaning procedure we recommend tapping the air filter.

Never use a high pressure air cleaner nor wet or moist cleaning. Do not use solvent or oil bath cleaners!

If engine rpm's tend to drop although the carburettor adjustments are perfectly set, the air filter cartridge is clogged and must be replaced by a new one (Order-Nr. 20 48 280).

Never do realignments on the factory carburettor settings in order to balance a clogged air filter system. This procedure would cause engine damages due overload of the engine.

Warranty claims cannot be accepted for damaged engine parts caused by improper care and maintenance

Insert the new or cleaned fabric air filter into the casing.

Secure the filter cover by turning the screw (Fig. 1, Pos 8) clockwise.

6.3 Spark Plug

The correct spark plug with thermal range 200 is available under the following brands:

BOSCH WSR6F

The correct electrode gap is 0.5mm.



Caution: Check the plug after every 50 operating hours and replace if electrodes are worn.

6.4 Storage Hints / Transport Hints

If the unit is to be laid up or kept idle for any length of time, proceed as follows:

- Rinse and clean thoroughly. Never use formula container of your mist blower for storing chemicals.
- Shut off fuel cock and keep engine running until lines and carburetor are empty. Otherwise gasoline evaporates, and the remaining lubricant would clog the carburetor ducts.
- Remove spark plug and squirt an ounce or two of corrosion inhibitor (LPS, WD-40 etc.) or plain engine oil into the cylinder. Crank engine several times to spread the agent, and then reinsert spark plug.
- Please store your machine away from sunlight, order to protect of the materials against influence of ultraviolet radiations.
- Before putting the unit back into service, remove and clean spark plug; crank engine a few times with plug removed.



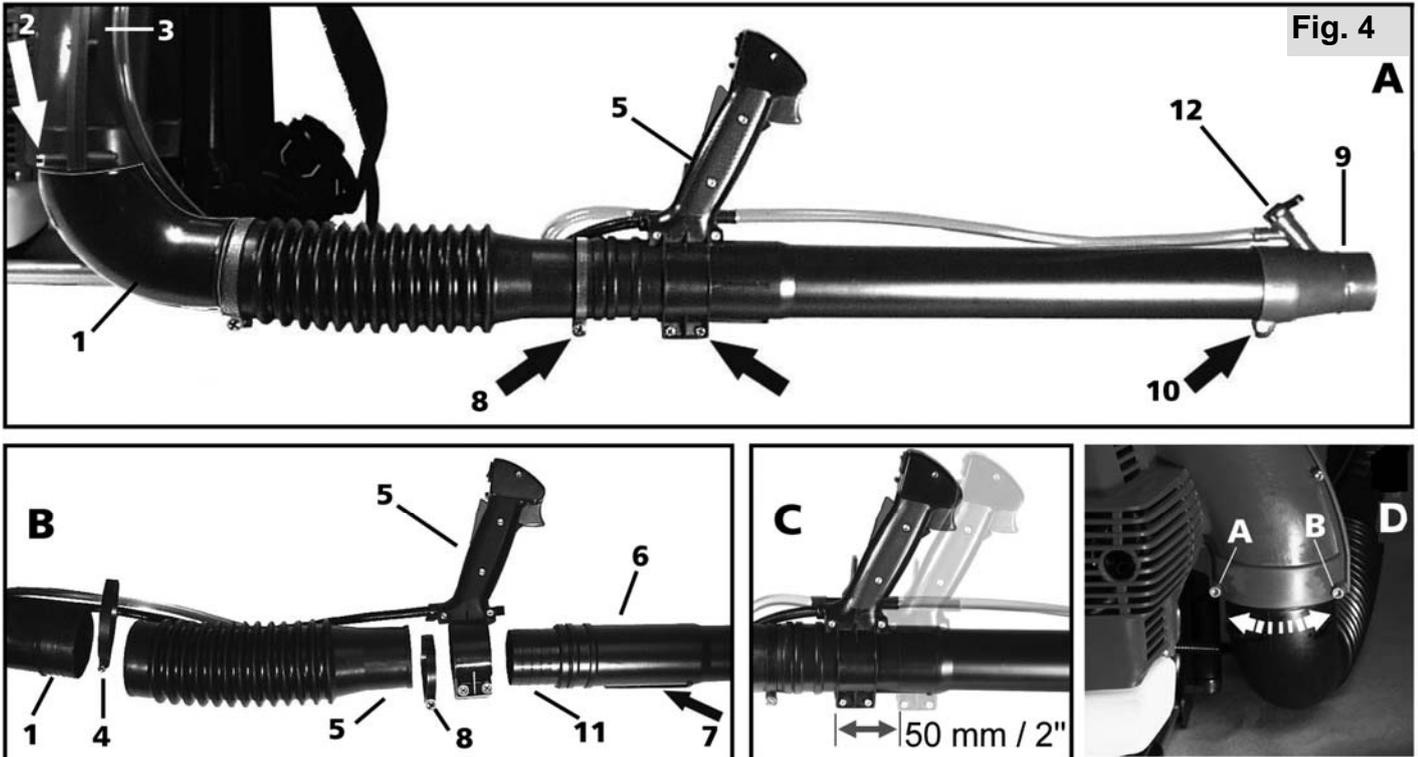
For transport in a vehicle, ensure the mistblower is well secured to avoid fuel spillage.



Completely empty the fuel tank before extended storage or shipment.

7. Assembly

 Completely assembly the mistblower before its first use:



Assembly of misting equipment

Attach the blower elbow (1) to the blower housing and secure with both screws (Fig.4D; A+B). Ensure the elbow can swivel easily. Push pleated hose onto blower elbow and secure with clamp (4).

Assembly of handle, spray tube and spray nozzle

Push handle (5) onto spray tube (start from the front) and fix in the required position (Fig.4C). A guide (7) on the spray tube will ensure vertical positioning.

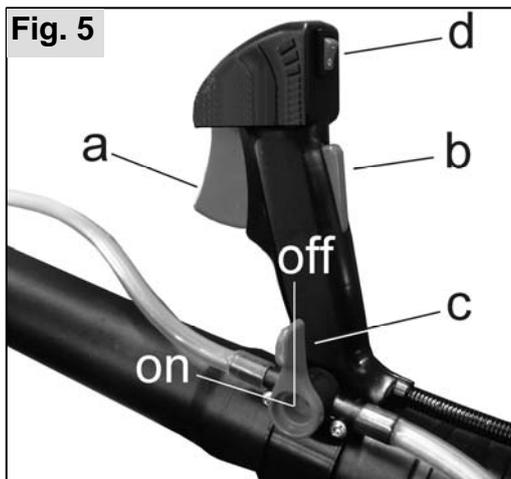
Push the spray tube with twist coupling (11) into the pleated hose (5) until locked. Secure with clamp (8).

Note: The spray tube can be twisted and turned in the pleated hose with the handle. Ensure that all hose and cable connections are safe and without sharp bends.

Place spray nozzle (9) on to spray tube (vertical to handle) and secure (10).

Push formula delivery hose (2 pieces) on nipple of the handle and to the spray nozzle. Secure the hose alongside the pleated hose. Shut on/off tap (vertical position), fill some plain water in formula tank and check for any leakage.

7.1 Active components of the operating handle

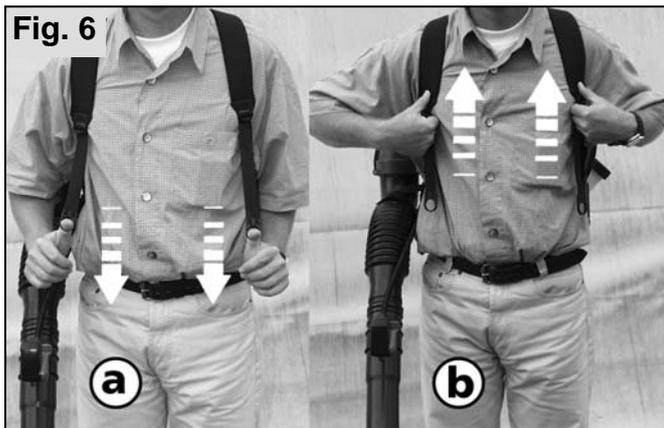


To release the throttle control (a):
Hold the handle with your right hand,
→ the throttle control lock (b) is activated by the flat of your hand, → the throttle control is released.

Open liquid tap (c): Lever in horizontal position → ON
Shut liquid tap (c) s: Lever in vertical position → OFF

Stop switch (d) "1" → operating position
Stop switch (d) "0" → engine off

8. Adjustment of shoulder straps



Place the mistblower on the back and connect to quick couplings on either side.

The straps can be adjusted to the required length with friction slides. Simply pull down both strap ends to tighten straps (a).

Strap tension can be released by lifting both friction slides (b).

Note:

The shoulder straps are correctly adjusted when the back plate of the mist-blower rests firmly against the back of the operator.

9. Fuel information



The engine of your motorized mistblower is a high performance 2-cycle engine and has to be operated with a fuel/oil mix or with a special, pre-mixed fuel for 2-cycle engines available from specialized dealers.

For the fuel mixture, use lead-free regular (standard) petrol, lead-free Euro-petrol or lead-free Super (premium) petrol. The minimum octane rating is 92 ROZ.

Mixing Ratio:

We recommend a mixing ratio of 50 parts fuel to 1 part of oil (1:50 – 2%) with the use of special 2-cycle oil “**SOLO Profi 2T Oil**”. When using other 2-cycle oils we recommend a mixture ratio of 1:25 (4%). Note: Never store fuel mixture for longer than 3-4 weeks.

Fuel mixture table

Petrol in litres	Oil in litres	
	SOLO 2T Oil 2% (1:50)	Other two-stroke oils 4% (1:25)
1	0.020	0.040
5	0.100	0.200
10	0.200	0.400

For the first 5 tank fillings, also when using special -cycle oils, use a mixing ratio of 1:25 (4%)!

- Smoking or open flame is prohibited
- Allow engine to cool before re-fuelling
- Fuel may contain solvent-like substances. Avoid skin and eye contact with mineral products. Wear gloves while refueling. Frequently change and clean protective clothing. Do not inhale fuel vapors.
- Do not spill fuel or oil. In case of spillage, immediately wipe off mistblower. Do not allow fuel mix to contact clothing. If fuel mix is spilled on clothing, change clothing immediately.
- Ensure fuel or oil do not contaminate soil (environmental protection). Always use a suitable protective soil cover.
- Do not re-fuel in unventilated rooms. Fuel vapors collect at ground level (danger of explosion).
- Transport and store fuel and oil only in approved and clearly marked containers. Children should have no access to fuel or oil.
- Ensure you do not inhale exhaust fumes while using the machine. The use of the motorized mistblower is prohibited in closed rooms.



The handling of fuel requires caution and consideration. It is imperative that all safety instructions are observed! Only refuel when the engine has been stopped!

- Clean the area around filler inlet before refueling.
- Remove tank lid and fill fuel mix up to the lower edge of the filler neck. Do not overfill. If possible, always use a fuel funnel with filter.
- Fill in card fully to avoid spilling of fuel or oil.
- Replace and secure fuel tank lid.

10. Filling



When handling the spraying agents, always follow the safety instructions of these operating instructions (pay special attention to section 4.6) and the information provided by the manufacturer of the particular spraying agent.

Spraying agent volume:

Mix the spraying agents according to the instructions provided by the manufacturer of the spraying agent. Choose the appropriate volume according to requirements.

Mixing spraying agents:

Only mix spraying agents out in the open. Never do this inside living spaces, stables or in storage spaces that are used for food or animal feed.

Never mix the spraying agent directly in the spraying agent tank.

Spraying agents in powder form:

- Mix the spraying agent in a separate container, not in the spraying agent tank.
- Ensure that the mixture is thoroughly mixed before pouring it into the spraying agent tank.

Liquid spraying agents:

- Fill 1/4 of the spraying agent tank with clean water.
- Then pre-mix the spraying agent with clean water in a separate container according to the instructions provided by the manufacturer of the spraying agent.
- Pour the pre-mixed spraying agent into the spraying agent tank.
- Top up with the required amount of clean water according to the manufacturer's instructions.

When using spraying agents that have been mixed from herbal preparations, the liquid needs to be pre-filtered.

For filling the equipment, always use the strainer inside the filler neck and observe the filler area through the filling process.

The strainer has a mesh size of 0.55 mm. Only use original SOLO strainers, part no.: 42 00 104 with standard mesh size.

Avoid any direct contact of the filling hose and the contents of the spraying agent tank.

Fill level markings are applied to the side of the spraying agent tank .

When filling up the tank, ensure that you do not fill above the top marking (maximum fill volume).

Never allow the spraying agent tank to overflow or public bodies of water, rainwater drains or sewage

drains to become contaminated. Immediately wipe up any spilled spraying agent.



Identification of the tank contents:

Attach the relevant sticker to the spraying agent tank to indicate the contents of the tank (i.e., herbicide, fungicide or insecticide).

The designation of the spraying agent used has to be attached to the device and has to be updated every time when the spraying agent is changed.

CAUTION: Never fill different spraying agents into the spraying agent tank without first thoroughly cleaning the tank and all parts that come into contact with the spraying agent and flushing the system with plenty of clean water.

Recommendation: Use the special SOLO cleaner for plant protection sprayers (dosing bottle of 500 ml [approx. 16.9 oz], part no.: 49 00 600).

Never use aggressive, acid- or solvent-containing cleaning agents (gasoline for example).

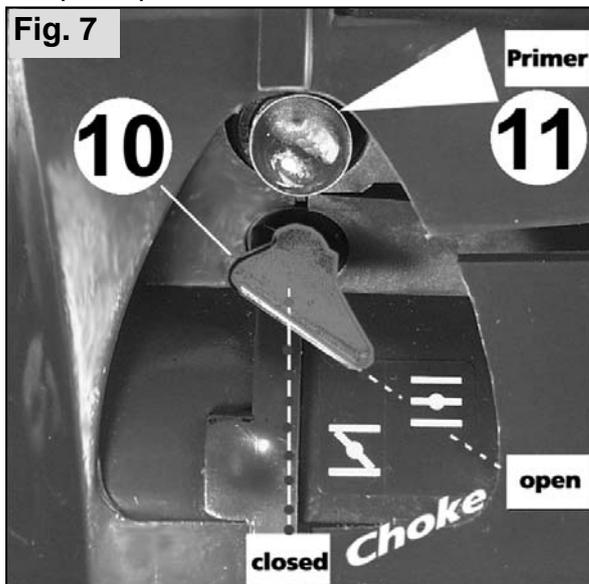
11. Starting / Stopping the engine



- Before every use and before every start of the mistblower check and ensure the machine is in good and safe condition. (throttle operation, ignition switch, safety devices, shoulder strap and check for fuel leaks)
- During the starting procedure and while operating the mistblower, the operator must have secure footing and have a safe body position.
- The engine starting site should be at least 3 meters away from the refueling site.

Starting with cold engine

- Switch ignition switch to "I" position and close liquid tap.



Close choke with choke lever (10). 

- Press primer (11) several times until fuel is visible in the primer.
- Place your left hand on the formula tank of the mistblower. Hold the starter handle (Fig. 1.Pos. 7) with your right hand and pull the handle up slowly until resistance is felt. Then pull up firmly and rapidly until the engine 'fires'.
- Once the engine tries to start, immediately open the choke  and continue to start until the engine is running.

Starting with warm engine after short stop

- Leave choke in "open" position  and start engine.



Shutting off engine

- Release throttle lever and move ignition switch to "Stop" position until engine stops.

12. Operation hints



12.1 Misting Hints

Open liquid tap: Lever in horizontal position → ON
 Shut liquid tap: Lever in vertical position → OFF (fig. 5)

The liquid output volume is adjusted by turning the dosage sleeve to different positions.

When spraying predominantly upwards (tall trees) we recommend using the liquid pump offered as an accessory (part no.: 44 00 235)

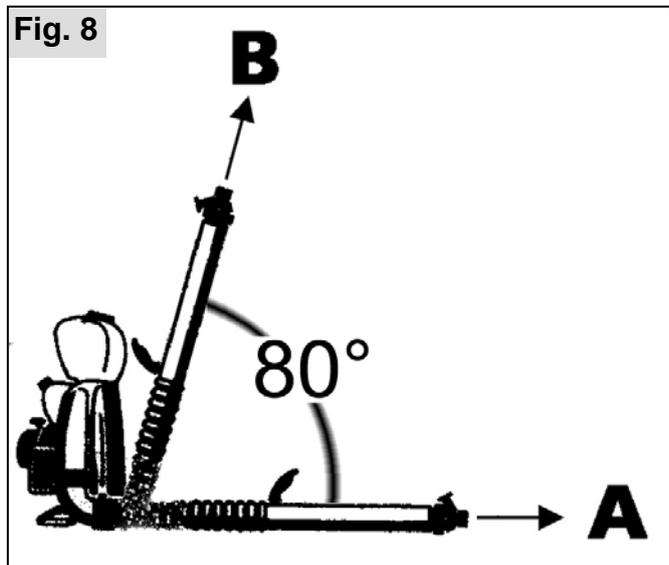
Misting Output Guide

Dosage sleeve	A	B	A	B
	l/min	l/min		
	l/min	l/min	l/min	l/min
Position 1	0.60	0.15	0.55	0.50
Position 2	1.15	0.25	1.20	1.20
Position 3	2.25	0.40	2.30	2.10
Position 4	3.00	0.45	3.05	3.00

With wide-range nozzle (7), wide-angle grille (7a);
 A and B: see Fig. 8

Note: The liquid pump attachment comprises a special metering body, which should be installed when using a liquid pump.

 **Please note: When using a liquid pump, ensure that the tank contains sufficient liquid. The liquid pump can sustain severe damage, if it is permitted to run dry. When using the equipment as a mister and as blower, remove the pump for that reason.**



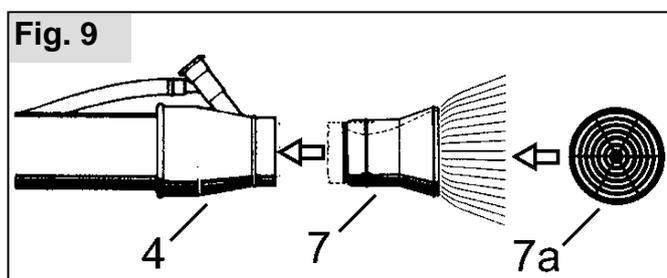
12.2 Spraying

- When applying spraying agent, ensure by using appropriate measures and procedures that the unintended release of agent to other areas is minimized and the drift to the surrounding areas is prevented.
- Always proceed with the greatest care when spraying.
- Never use the device under windy conditions or if it is raining, as this would risk widespread drifting of the spraying agent.
- Check the wind direction before starting work and select the spraying direction downwind of the user.
- It is best to perform spraying work in the morning or evening, as it tends to be less windy then.
- Ensure that you only wet what is in fact intended to be covered with spraying agents.
- Never spray the agent towards persons, animals, open windows or doors, cars or anything else that could be damaged by the spraying agent.

Spraying:

Approach the target object with the engine at idling speed. Accelerate to full engine speed, then open formula on-off tap.

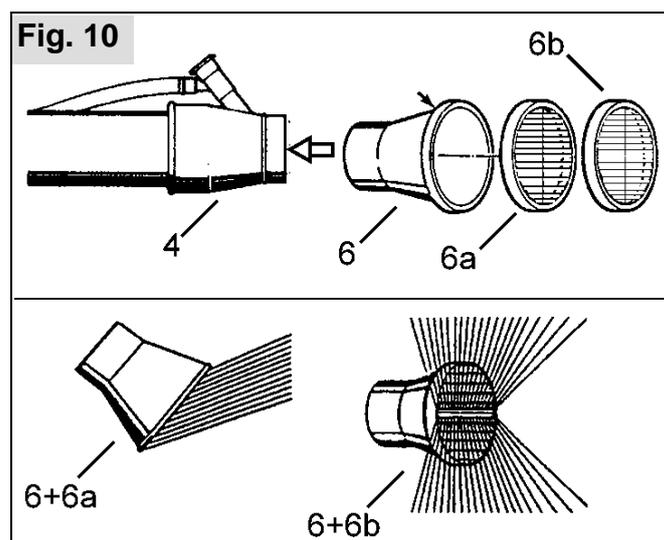
Wide-range nozzle (7):



When spraying plants and trees we recommend fixing the wide-range nozzle (7) onto the red standard nozzle (4). This ensures that a large area can be sprayed at one time. Push the wide-range nozzle onto the standard nozzle, until the bead engages.

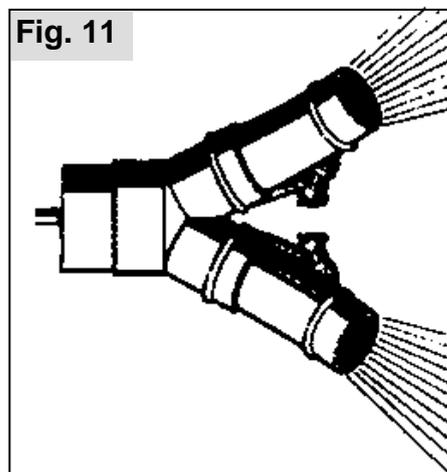
In narrow spaces and for aftercare, we recommend placing the wide-angle grille (7a) onto the wide-range nozzle. This ensures that the spray velocity is reduced and the spray is applied more widespread, to prevent damage to leaves.

Nozzle attachment (6):



The nozzle attachment (6) is positioned onto the standard nozzle (4) with the selected grille. Use the dual grille (6a) when spraying cultures in rows (e.g. vines, tomatoes, nurseries), to achieve a good covering on the underside of the leaves. The deflector grille can be replaced with a dual grille (6b). The dual grille provides a 90° - 110° spray pattern. The dual grille is usually used for spraying two rows at a time. The deflector grille and the dual grille can be placed onto the external diameter of the nozzle, until the bead engages.

Dual nozzle (accessories, part no.: 49 00 137):



Remove standard nozzle (4) from the spray wand and push the dual nozzle onto the spray wand.

12.3 Residual spray medium

Switch off the appliance as soon as no further liquid is expelled, when the metering body is correctly positioned for spraying, or air bubbles are visible inside the lance supply hose.

The tank will then contain less than 100 ml residual medium.

If you don't want to refill the tank with spray medium and you want to terminate spraying, dilute the residual medium with 2 l of water. Dispose of this solution on the treated area.

12.4 Strainer for accessory sets

When using the liquid pump (accessory part no.: 44 00 235) or the ULV accessory (part no.: 49 00 479), a strainer is integrated into the tank connector.

The strainer has a mesh size of 0.32 mm. Only use original strainer part no.: 25 00 198 with standard mesh size when replacing the strainer.

12.5 Checking the spray medium flow rate

At the beginning of the spraying season, check whether the equipment flow rate (l/min) still corresponds to the „Guide values“ table (see also item „Maintenance schedule“).

For this, fill the equipment up to the maximum marker with water, start using the equipment and spray for one minute exactly at maximum operating pressure. Then measure the water volume required to bring the water level back up to the maximum marker.

The actual volume measured represents the flow rate of the equipment in l/min at maximum operating pressure.

It should not deviate by more than 10 % from those listed in the „Guide values“ table. Should the actual value be too low, sediments inside the metering body may be the cause. Clean the corresponding parts and repeat the checking procedure.

Should the actual value be too high, the metering body may be worn or damaged. In that case, replace the metering body with a new one (part no.: 40 74 165).

When using accessory sets (liquid pump part no.: 44 00 235 or ULV accessory, part no.: 49 00 479) a strainer will be integrated into the tank connector.

In that case, an incorrect flow rate can also be due to a contaminated or worn strainer.

Clean or replace the contaminated/worn strainer (part no.: 25 00 198).

12.6 Draining and cleaning the tank

For cleaning purposes, the tank can be fully drained into a suitable container via the supply hose.

For this, the engine must be cooled down.

Position the equipment onto a stable higher support, so that the spray medium can drain into a suitable container below.

Above the container, pull the supply hose from the shut-off valve.

If required, tip the equipment slightly to drain the tank completely.

Ensure that the spray medium does not run over the equipment (especially the engine), but drains directly into the suitable container.

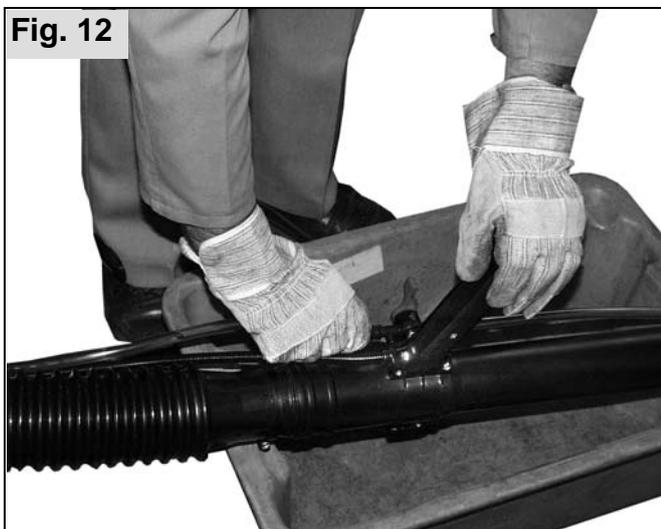


Fig. 12

Dispose of residual spray medium correctly at disposal sites licensed for specialised waste.

Empty the spray medium tank daily after work and flush thoroughly with water.

Observe cleaning instructions supplied with the herbicide/fungicide.

After cleaning, let the spray medium container dry in an open state.

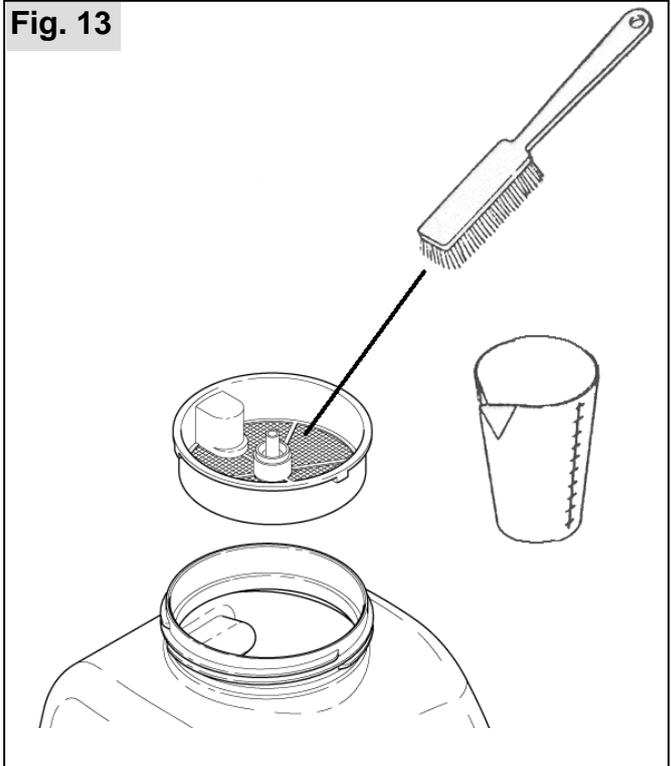


Fig. 13

Occasionally clean the strainer inside the filler neck, the strainer in the accessory set and all parts in contact with the medium, with water and a soft brush.

Please obtain the following practical accessories from your SOLO Dealer:

13. Accessories		Part No.
ULV-nozzle	ULV-Nozzle with ULV dosage selector for application of minute amounts of high concentrated substances (ultra-low volume application technique), with dosage accuracy.	49 00 479
Double Nozzle	To broaden spray stream or to treat two rows simultaneously.	49 00 137
ULV Dosage Selector Attachment for	For application of minute amounts of high concentrated substances (ultra-low volume application technique), with dosage accuracy.	49 00 169
Liquid Booster Pump	Increases formula output and application range.	44 00 235
Extension Tube 60 cm	Multiple Combinations possible with use of Liquid Booster Pump	49 00 333
SOLO plant protection unit cleaner	in a metering bottle 500 ml	49 00 600

14. Maintenance Plan

The following information is based on standard operating conditions.
For special conditions, such as prolonged daily use, the recommended maintenance intervals should be reduced accordingly.

Implement all maintenance jobs regularly. If required, authorise a specialist service centre to maintain the machine for you. The owner of the machine is responsible for:

- Any damage caused by a lack of maintenance, incorrect or late maintenance and repairs
- Consequential losses - including corrosion - from incorrect storage

		before starting work	daily	weekly	after the first 5 hours	after every 50 hours work	as required	before spray season
Carburettor	Check idling speed	X						
	Adjust idling speed						X	
Air filter	Clean		X					X
	Replace						X	
Spark plug	Check the electrode gap and adjust, if required					X		X
	Replace						X	
Cooling air inlet	Clean			X			X	X
Cylinder fins	Clean			X				X
Fuel tank	Clean					X		X
All accessible screws (except for adjusting screws)	Retighten				X		X	X
Operating handle	Check function	X						
Overall Unit	Visual inspection	X						
	Clean						X	X
Spray medium flow rate	Check							X
Spray medium tank	Clean		X					
Strainer inside the filler neck	Clean						X	X
Strainer for accessory sets	Clean						X	X
Metering body	Clean						X	X
Soundness of all equipment parts	Check	X						X
Hand valve function	Check	X						X

15. Technical Specifications

Mistblower		451
Engine type		SOLO single cylinder two-stroke engine
Engine capacity	cm ³	66.5
Bore / stroke	mm	46 / 40
Max Engine power (ISO 8893)	kW at rpm	2.1 / 5750
Fuel tank capacity	l	1.8
Fuel mix ratio:	with SOLO 2T Oil with other two-stroke oils	1:50 (2%) 1:25 (4%)
Carburettor		All-position diaphragm carburettor with primer and integrated fuel pump
Air filter cartridge		Paperstyle
Ignition		Electronically controlled magneto ignition, maintenance free
Total Formula Tank Capacity	l	13 / 21 (Typ 451-02)
Nominal Formula Tank Capacity	l	12 / 20 (Typ 451-02)
Strain funneled mesh size	mm	0.55
Residual volume which the equipment cannot properly apply	ml	< 100
Strainer for accessory sets mesh size	mm	0.32
Max. Blower Air Volume *)	m ³ /h	1400
Weight	m _{net} kg m _{total} kg	11.8 / 12.0 (Typ 451-02) 25.0 / 33.1 (Typ 451-02)
Dimensions without Spray Tube	mm	hight: 690 / width: 550 / depth: 280
Permissible speed	rpm	5600 ± 200
Maximum speed of the fan *)	rpm	4300
Medium idling speed	rpm	2200 ± 200
In determining the following values regarding the acceleration of vibrations and sound, the different operating conditions were weighted in accordance with the current standards		
Sound pressure level L _{Peq} (EN ISO 3744)	dB(A)	94 ± 2,5 dB(A)
Sound power level L _{Weq} (EN ISO 3744)	dB(A)	103 ± 2,5 dB(A)
Weighted effective acceleration a _{hv,eq} (EN ISO 5349)	m/s ²	< 2 ± 1m/s ²

*) without Spray Tube

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