

# solo®

## 461 / 462 / 463

### **Originalbetriebsanleitung**

Gebrauchsanweisung

### **Original instructions**

Instruction manual

### **Notice original**

Instructions d'emploi

### **Manual original**

Manual del usuario

### **Istruzioni originali**

Istruzioni d'impiego

### **Oorspronkelijke gebruiksaanwijzing**

Gebruiksaanwijzing

### **Achtung!**

Lesen Sie vor der ersten Inbetriebnahme diese Gebrauchsanweisung gründlich durch und beachten Sie unbedingt die Sicherheitsvorschriften!

### **Attention!**

Read this instruction manual carefully before first operation and strictly observe the safety regulations!

### **Attention!**

Lire attentivement le présent manuel avant la première mise en service et observer impérativement les consignes de sécurité !

### **Atención!**

¡Lea atentamente este manual de empleo antes de la primera puesta en funcionamiento y respete imprescindiblemente las prescripciones de seguridad!

### **Attenzione!**

Prima della prima messa in funzione leggere a fondo le presenti istruzioni per l'uso e osservare assolutamente le norme di sicurezza!

### **Druckspritze**

### **Pressure Sprayer**

### **Pulvérisateur à pression préable**

### **Pulverizadora de presión**

### **Pompe ad alta pressione**

### **Drukspuit**



### **Attentie!**

Lees vóór de eerste inbedrijfstelling deze handleiding zorgvuldig door en let absoluut op de veiligheidsvoorschriften!

de

en

fr

es

it

nl

**DEUTSCH**

- 1 Behälter
- 2 Flanschgehäuse
- 3 Pumpengriff
- 4 Sicherheitsventil
- 5 Handventil
- 6 Spritzrohr
- 7 Spritzdrüse
- 8 Trageriemen

**ENGLISH**

- 1 Container
- 2 Flange housing
- 3 Pump Handle
- 4 Safety valve
- 5 Shut-off valve
- 6 Spray tube
- 7 Spray nozzle
- 8 Carrying strap

**FRANÇAIS**

- 1 Réservoir
- 2 Couvercle
- 3 Poignée de pompe
- 4 Soupape de sécurité
- 5 Valve à gâchette
- 6 Lance
- 7 Buse
- 8 Sangle de portage

**ESPAÑOL**

- 1 Depósito
- 2 Acoplamiento
- 3 Empuñadura de la bomba
- 4 Valvula de seguridad
- 5 Grifo de cierre
- 6 Tubo atomizadora
- 7 Tobera atomizadora
- 8 Bandolera

**ITALIANO**

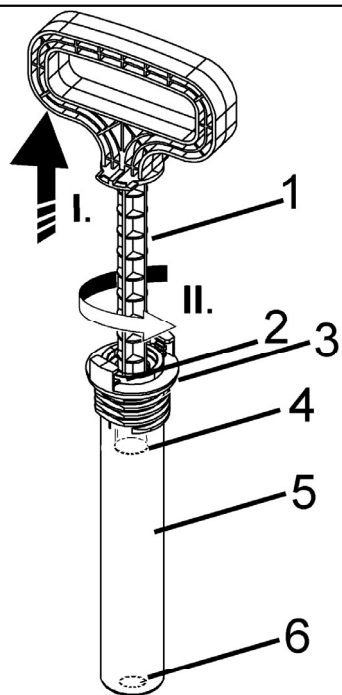
- 1 Contenitore
- 2 Scocca flangiata
- 3 Impugnatura pompa
- 4 Valvola di sicurezza
- 5 Valvola manuale
- 6 Tubo irrorazione
- 7 Ugello irrorazione
- 8 Cinghia

**NEDERLANDS**

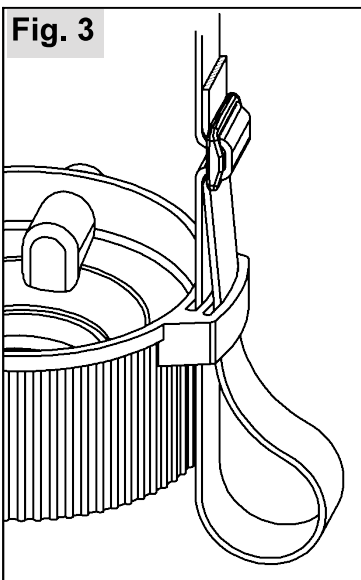
- 1 Reservoir
- 2 Flensbehuizing
- 3 Pompgreep
- 4 Veiligheidsventiel
- 5 Hand ventiel
- 6 Spuitstok
- 7 Spuitdop
- 8 Draagriemen

**Fig. 1**

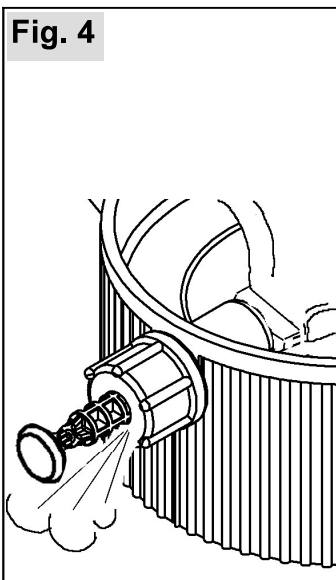
**Fig. 8**



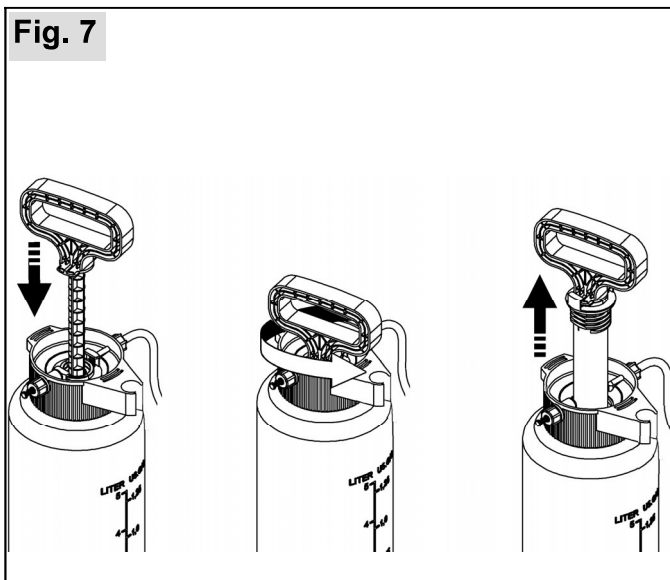
**Fig. 3**



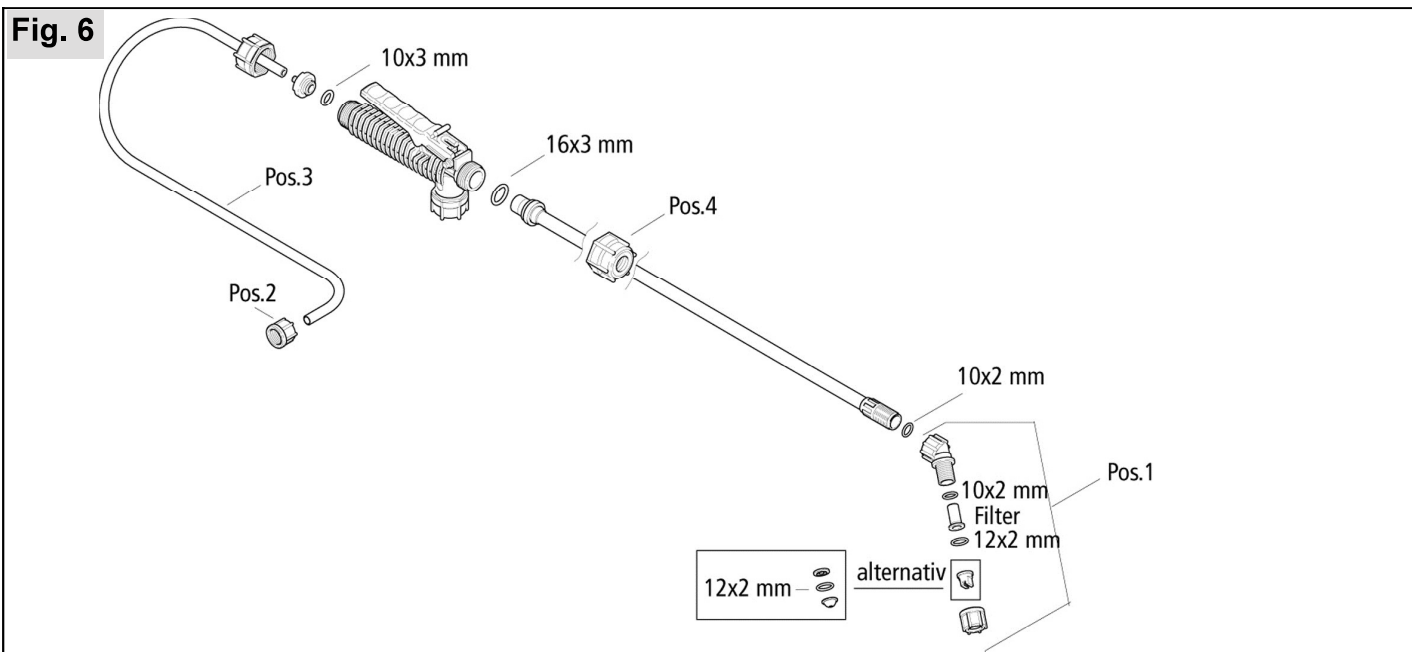
**Fig. 4**



**Fig. 7**



**Fig. 6**



## Instruction manual

Original instructions

### 1. Safety directives and general instructions

- Compliance with this safety manual is a prerequisite for proper operation of the sprayer.
- The pressure sprayer must be checked before each use.
- This pressure sprayer is suitable for applying approved liquid plant protection, insecticides, and weed killing substances, as well as liquid fertilizers that are available from authorized dealers. We recommend using only plant protection substances that are approved by the German BBA (German Federal Biological Institute).
- Solvent-free window cleaners, car wax, and conservation substances are also suitable for cleaning and care in private households.
- The sprayer must be cleaned when changing the spray substance. This avoids possible chemical reactions.
- Do not use liquids over 40°C.
- Due to bodily hazard, only the abovementioned liquid substances may be applied with this sprayer. Disinfectants and impregnation substances may not be used.
- Never leave the filled and /or pressurized pressure sprayer unattended for longer periods.
- For safety reasons, children, young people under the age of 16, and persons that are not familiar with these operating instructions, may not use this pressure sprayer.
- The pressure sprayer must be kept out of the reach of children.
- The user is responsible relative to third persons.
- The pressure sprayer must be de-pressurized before disassembly of any component, and before opening the pump, by pulling on the pressure valve (Fig.4)! Before pulling on the pressure valve, the sprayer must always be in an upright position. Attention: keep the sprayer away from your face!
- Do not expose the pressure sprayer to high temperatures.
- The upper red flange housing may not be removed from the container.

Malfunctions of any kind, such as, for example

- leaks at the tank, spray pipe and tubing,
- signs of damage, cracks, etc.,
- other irregularities,

is the syringe immediately make pressure on the safety valve. The sprayer must not be reused, but must be checked by a qualified person.

The manufacturer was not aware of any harmful effects on the product materials caused by plant protection substances at the time the product was manufactured.

### 2. Assembly

You will find the following parts in the packaging

- Handle with shut-off valve and hose
- threaded collar
- Spray tube
- Alternative nozzle set with associated gasket



- 1 pc. each symbolic label for container content: herbicide, fungicide and insecticide.

**NOTE:** Affix the appropriate label to identify the container content.

#### PLEASE NOTE:

Never pour different agents at the same time into the container. Before using a different agent, thoroughly clean out the container and all parts in contact with the spray agent, then flush with plenty of water. We recommend the SOLO horticultural equipment cleaner in 500 ml bottles; part no. 49 00 600.

For model 461 and 462, the complete nozzle (Fig.6 Pos.1) with O-Ring (10x2 mm) must be screwed on the spray tube.

Push the hose completely onto the provided connector of the red-flanged housing, by using strong pressure and turning the hose. You secure the hose (Fig.6 Pos.2) by screwing on the threaded collar (Fig.6 Pos.3).

Insure that you have completely pushed the hose on before tightening the threaded collar.

Firmly screw the spray tube with O-Ring (16x3 mm) onto the shut-off valve. In the process, -fasten the threaded collar (Fig.6 Pos.4) on straight and firmly tighten it by hand – do not use force and do not use any tools to firmly fasten the collar!

When your work is completed, the spray tube should be fitted into the holding clamp. Please put the nozzle completely up (Fig 1).

Fig. 3 Thread both ends of the carrying strap through the slits provided on the red flanged housing.

### 3. Placing in service

The pressure sprayer must be de-pressurized before disassembling any component, and before opening the pump, by pulling on the pressure valve (Fig.4)! Before pulling on the pressure valve the sprayer must always be in an upright position.

Fig. 7 The pump must be removed to fill the spray liquid. To do this, push the pump handle down and turn it to the left (counterclockwise) until the handle clicks into position. Unscrew pump by turning it counter clockwise. Do not use any tools!

Fill the spray liquid to the fill mark maximum.

Model 461: 5 liters

Model 462: 7 liters

Model 463: 10 liters

In this regard, follow the safety directives and insure the correct dosing according to the instructions provided by the manufacturer of the spray substance!

Thoroughly mix the liquid, insert pump and refasten firmly by turning clockwise. Firmly tighten by turning pump handle clockwise until it clicks into position.

To pump, loosen the pump handle by turning out of the stop position. Pump the unit until the operating pressure is reached in the container. Excessive pressure escapes automatically through the safety valve. (Fig. 4) Take the spray tube in your hand and start the spray process by pressing the shut-off valve. Releasing the shut-off valve stops the spray process.

The shut-off valve can be blocked in the rest position with the red clamp, to prevent unintended spraying.

Alternativ spray nozzles see the accessory overview on the original packaging.

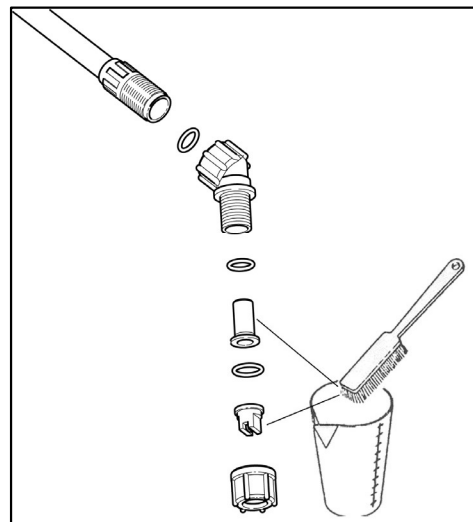
The spray tube can be rotated in the shut-off valve – after loosening the threaded collar – this is useful for spraying under leaves.

The pressure sprayer can also be carried by the pump handle, if the pump handle is pressed down completely, and it is turned to the right and clicked into position.

### 4. Cleaning, care and storage

After each use, release pressure, always keeping the sprayer in vertical position. Empty the container, carefully clean, and rinse well with clean water. Do not empty residual quantities of spray liquid into watercourses; rather dispose of them via communal disposal systems.

For cleaning nozzle, spray tube, and shut-off valve, operate the sprayer using clean water (add dishwashing detergent if required).



Occasionally clean the filter and spray nozzle with water and a soft brush. Never use your mouth to blow through the spray nozzle!

Never use aggressive, acidcontaining, solvent-containing cleaning substances (gasoline for example).

Always empty the sprayer completely and store it in a location that is dry, frost-free, and protected from direct sunlight.

### 5. Technical data

|                                   |                  |
|-----------------------------------|------------------|
| Maximum fill volume               | 5 l (Model 461)  |
|                                   | 7 l (Model 462)  |
|                                   | 10 l (Model 463) |
| Permissible operating pressure    | 3 bar            |
| Permissible operating temperature | 0°C - 40°C       |

### 6. Malfunctions



#### Note:

It may be required to remove the pump plunger from the cylinder to resolve the malfunctions.

To do this, proceed as follows: Fig. 7 First screw the pump out of the container (release pressure first!)

Fig. 8 To remove the pump plunger, (Fig. 8.1) turn it counter-clockwise and pull it completely out of the pump cylinder. (Fig. 8.5).

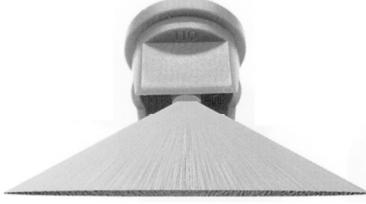
Do not use force, and do not use any tools.

To assemble, push the pump plunger into the pump cylinder. Guide the plunger into the plunger socket (Fig.8.2) and hold it with your thumb. Carefully pull the pump plunger completely up and hold the plunger socket in the pump cylinder. Turn the plunger socket clockwise until the plunger socket clicks into place in the pump cylinder. Do not use force and do not use tools! Consult your dealer if you have questions.

| Malfunction                                                                                               | Remedy                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pumping does not produce pressure                                                                         | <ul style="list-style-type: none"> <li>- Screw the pump in more tightly</li> <li>- Firmly fasten the threaded collar on the spray tube (shut-off valve and container).</li> <li>- Firmly fasten the safety valve.</li> <li>- Unscrew it and apply Vaseline, reinstall. Firmly fasten the threaded collar, check the O-ring (Fig. 8.4) on the pump plunger, check the pressure valve (Fig. 8.6) on the pump plunger.</li> <li>- clean nozzle</li> <li>- clean filter</li> </ul> |
| Safety valve opens too soon, does not spray in spite of pressure, or it only sprays with a poor spray jet | Clean and lubricate O-ring on the pump plunger with Vaseline, also possibly clean the interior of the cylinder and lubricate with Vaseline (Fig. 8.4)                                                                                                                                                                                                                                                                                                                          |
| Difficult pump movement when pumping / pump is difficult to screw in and out                              | Lubricate the O-ring on the upper pump end with Vaseline (Fig.8.3), lubricate threads                                                                                                                                                                                                                                                                                                                                                                                          |

For other malfunctions, please consult a specialized workshop. We expressly state that the manufacturer is not liable, according to the German Product Liability Law, for damages caused by this device, if such damages are caused by unprofessional repair, or by the replacement of parts that are not original replacement parts specified for this device, or parts have been used that are not approved by the manufacturer, and repair has not been executed by the manufacturer or by an authorized dealer.

## 7. Specification of nozzle tips

| Specification                                  | Order-No. | Delivery<br>l/min                         | Pressure<br>bar   | Angle     | Applications                                                                                                                      |
|------------------------------------------------|-----------|-------------------------------------------|-------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------|
| Hollow Cone Tip 1 mm<br>orifice grey *)        | 49 00 209 | 0.4<br>0.55                               | 1.0<br>2.0        | 50° - 70° | For treatment of shrubs, bushes<br>          |
| Hollow Cone Jet 1,4 mm<br>orifice black<br>**) | 49 00 252 | 0.64<br>0.91<br>1.11                      | 1.0<br>2.0<br>3.0 | 50° - 70° |                                                                                                                                   |
| Hollow Cone Jet 1,8mm<br>orifice blue<br>**)   | 49 00 322 | 0.88<br>1.25<br>1.53                      | 1.0<br>2.0<br>3.0 | 50° - 70° |                                                                                                                                   |
| No-Drift DT 1,0 yellow<br>**)                  | 40 74 385 | 0.46<br>0.65<br>0.80                      | 1.0<br>2.0<br>3.0 | 105°      | Mainly for herbicides at low<br>pressure<br> |
| No-drift DT 1,0 red<br>**)                     | 40 74 386 | 0.91<br>1.29<br>1.60                      | 1.0<br>2.0<br>3.0 | 105°      |                                                                                                                                   |
| Adjustable nozzle brass<br>**)                 | 49 00 206 | 0.44 - 1.10<br>0.55 - 1.45<br>0.66 - 1.75 | 1.0<br>2.0<br>3.0 |           |                                                                                                                                   |
| Flat Spray Tip green<br>**)                    | 40 74 504 | 0.39<br>0.49<br>0.60                      | 1.0<br>2.0<br>3.0 | 80°       | Areal and row treatment<br>                  |
| Flat Spray Tip yellow<br>**)                   | 40 74 501 | 0.46<br>0.65<br>0.80                      | 1.0<br>2.0<br>3.0 | 80°       |                                                                                                                                   |
| Flat Spray Tip red *)                          | 40 74 263 | 0.92<br>1.31<br>1.60                      | 1.0<br>2.0<br>3.0 | 110°      |                                                                                                                                   |

\*) Standard equipment \*\*) Accessories

## 8. Workshop service, replacement parts and guarantee

### 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.

### 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.

### 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 and cutting fixtures.
- Using non-approved cutting bar and chain lengths in the case of chain saws.
- The use of force, improper handling, misuse, or accident.
- Damages caused by overheating due to dirt build up on the ventilator casing.
- 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.

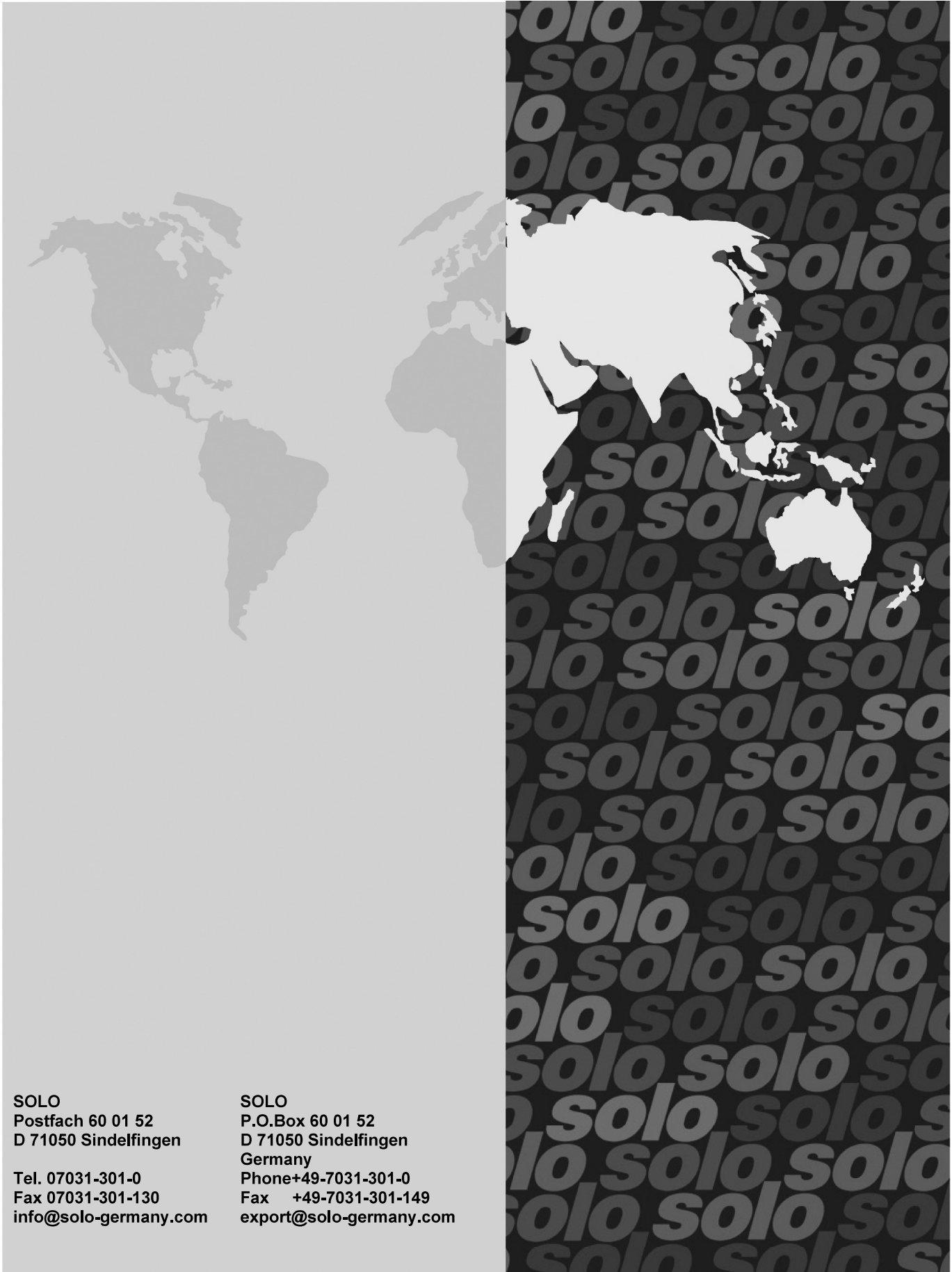
Cleaning, care, and adjustment work are not recognized as guarantee performances. All guarantee work must be carried out by a SOLO dealer.

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.

# ***solo***<sup>®</sup>

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