# RESISTENT PLUS

3594



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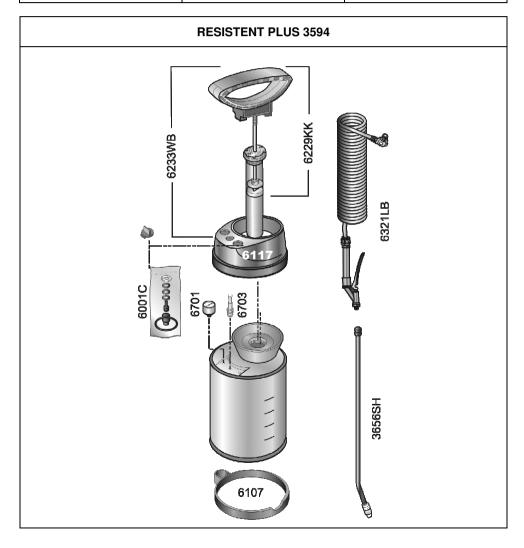
MESTO Spritzenfabrik Ernst Stockburger GmbH Ludwigsburger Straße 71 D 71691 Freiberg / Neckar Tel: +49 71 41 27 20 Fax:+49 71 41 27 21 00 E-mail:info@mesto.de

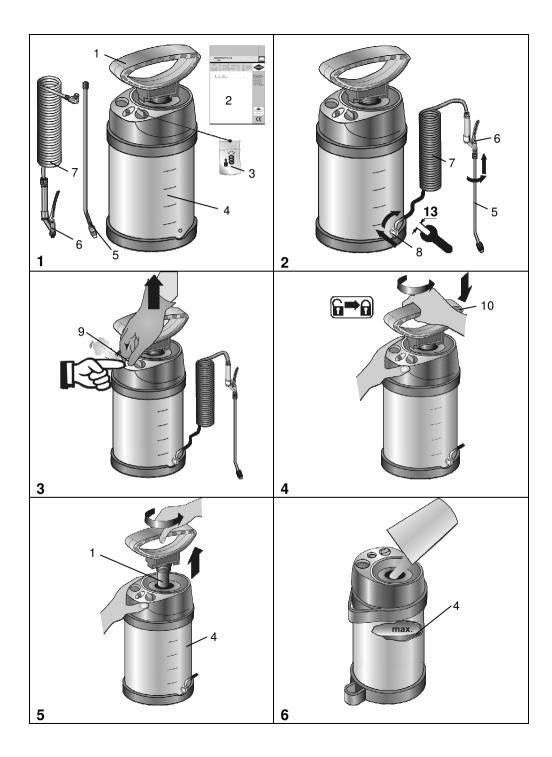
Internet: http://www.mesto.de

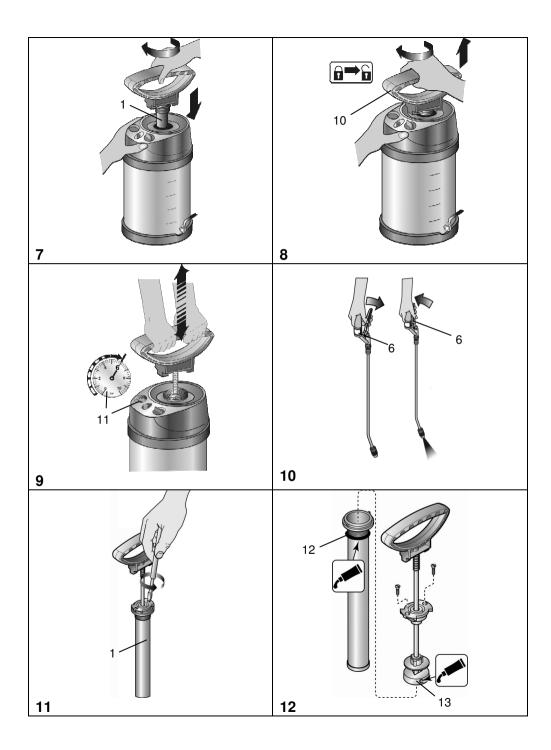
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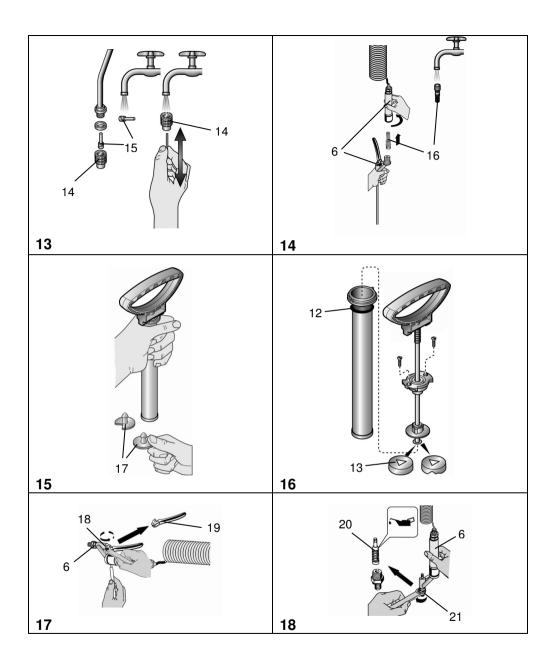


Ersatzteile	Spare Parts	Pièces de Rechange		
Varaosat	Reserve-onderdelen	Varuosade		
Pezzi di ricambio	Reservdelar	Reservedele		









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## Welcome and congratulations

for purchasing your new MESTO sprayer. Thank you for the trust you have shown in our brand. Your satisfaction with MESTO products and services is very important for us.

Please contact us if your expectations are not met.

You will find our address on the title page of these instructions for use.



Make certain to read the instructions for use before using the device!

Keep the instructions for use in a safe place where they can be easily found.

## Usage

Spraying devices RESISTENT PLUS 3594 are designed for the spraying of professional pesticides, plant protection products including weed killers, forming oil and low-viscosity mineral oils, slightly alkaline construction chemicals (pH ≤ 9) and neutral, solvent- and chlorine-free cleaning agents. Observe the manufacturer's instructions for using the product before each application. The sprayers must only be used in the exterior.

At the time of manufacturing, there are no known harmful effects to the device caused by plant protection products approved by the Federal Office of Consumer Protection and Food Safety.



Improper use may result in dangerous injuries and environmental damage.

You should only use other products if harmful effects on the device and endangerment of people and the environment can be excluded. On request, we will provide you with a list of active ingredients used in the sprayer.

#### Not suitable for

- Inflammable liquids
- Hydrogen peroxide and similar substances that give off oxygen
- Corrosive substances (certain disinfecting and impregnating agents, acids and bases)
- Liquids containing ammonia
- Solvents and liquids containing solvents
- Viscous or sticky liquids or liquids that form residues (dyes, greases)
- · Use in applications for foodstuffs.

## Under no circumstances should you use

- external pressure sources without a MESTO compressed air valve
- for flaming
- for storing and holding liquids
- · as an eyewash.

# Safety



Children and adolescents who have not been properly instructed must not use the device.



Keep the sprayers safe from access to children.

Take precautions to prevent hazardous substances from being misused.



Never spray on people, animals, electrical devices and lines, into the wind, or into bodies of water.



Repairs and modifications to the tank are not permitted.

The effect of the safety valve must not be bypassed or made inoperative.



Contact between sprayer materials and hydrogen peroxide or other agents that give off oxygen may result in increased pressure similar in nature to an explosion. Never place such agents in the device.



Have damaged parts or parts that do not work properly repaired immediately by our customer service department or by service partners authorized by us.



Do not allow the device to remain under pressure and/or exposed directly to sunlight. Make certain the device is not heated beyond the maximum operating temperature. ( $\rightarrow$  *Table 1 below*).



Never blow through the nozzles or valves with your mouth.



Use only MESTO spare and accessories.

We cannot assume any liability resulting from the use of third-party parts.



Wear suitable protective equipment when working with hazardous substances.



When pumping, always observe the pressure gauge to ensure the maximum spraying pressure is not exceeded  $(\rightarrow Table\ 1\ below)$ .

Before filling, after use and before maintenance work, allow the residual pressure in the tank to dissipate completely ( $\rightarrow$  Section "After Use", Section 1).



Collect and dispose of the spraying agents according to all applicable laws, requirements and regulations.

## Scope of delivery

Tank [4] with pump [1], instructions for use [2], spare parts pouch [3], spray wand [5], shut-off valve [6], spray line [7] (Fig. 1)

You will find the illustrations referred to in the text in the front fold-out pages 3 – 5 of these instructions for use.

#### Technical data

Device family	RESISTENT		
Туре	3594		
Max. filling amount	4		
Total contents	5		
Max. spraying pressure	6 bar		
Max. operating temperature	50 ℃		
Weight when empty	2.8 kg		
Material of tank	Stainless steel		
Technical residual quantity	0.03		
Max. volume flow	4.5 l/min		
Recoil force	< 5 N		

Table 3

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### **Assembly**

- 1. Screw the spray line [7] securely into the tank [4] with a size 13 (metric) wrench. (Fig. 2)
- 2. Screw the spray wand [5] onto the shut-off valve [6]. (Fig. 2)

#### Checks

Visual inspection: Are the tank [4], pump [1], spray line [7] with shut-off valve [6], pressure gauge [11] and spray wand [5] undamaged? (Figs. 2, 9)

Pay special attention to the connections between the tank – spray line and the spray line – shut-off valve and to the condition of the pump threading and spray line.

No leaks: Pump up the empty device to 2 bar.

▶ The pressure must not decrease more than 0.5 bar within 30 minutes.

Function: Pull the red button on the safety valve [9]. (Fig. 3)

► The pressure must dissipate.

Activate the shut-off valve [6]. (Fig. 10)

► The shut-off valve must open and close.

# **Making preparations**



Observe the instructions in the section entitled "Safety".

- Pull up the red button on the safety valve [9] until all excess pressure is released from the tank. (Fig. 3)
- 4. Press the pump handle [10] down and turn it counterclockwise.
  - ► The pump handle is locked in place. (Fig. 4)
- 5. Unscrew the pump [1] from the tank [4]. (Fig. 5)

We recommend you mix the spraying liquid in the device or premix it in an external tank: Fill to 1/3 with water, pour in the spraying agent, and then add more water until full.

- 6. Add the spraying liquid to the tank [4]. (Fig. 6)
- 7. Screw the pump [1] onto the tank [4]. (Fig. 7)
- 8. Press the pump handle [10] down and turn it clockwise.
  - ► The pump handle is unlocked. (Fig. 8)
- 9. Generate the required pressure  $(\rightarrow Table\ 2)$  in the tank [4] (Fig. 9).

The maximum pressure should not exceed 6 bar (red line on the pressure gauge [11], Fig. 9). If the maximum pressure is exceeded, the safety valve will engage and release the excess pressure.

- 10. Press the pump handle [10] down and turn it counterclockwise.
  - ► The pump handle is locked in place. (Fig. 4)

# Spraying



Observe the instructions in the section entitled "Safety".

Operate the device upright only.

Avoid allowing drops of spray to drift onto areas that are not being treated.

Observe the instructions of the spray product manufacturer!

To prevent dripping, hold the spray wand up when first spraying and activate the shutoff valve until no more liquid mixed with air is emerging from the nozzle.

- 1. Activate the shut-off valve [6]. (Fig. 10)
  - Spraying may now begin.

2. Make certain the optimum spraying pressure is set  $(\rightarrow Table\ 2)$  on the pressure gauge [11].

Spraying	Spraying quantity with nozzle 1302		
pressure			
1.5 bar	0.49 l/min		
2.0 bar	0.56 l/min		
3.0 bar	0.69 l/min		

Table 4. Linear relationship of: spraying rate and spraying pressure

3. If the spraying pressure decreases more than 0.5 bar from the optimum level, pump some more.

If liquid mixed with air emerges from the nozzle, the tank is empty.

## After Usage



Observe the instructions in the section entitled "Safety".

- 1. Pull up the red button on the safety valve [9] until all excess pressure is released from the tank. (Fig. 3)
- 2. Lock the pump handle in place [10]. (Fig. 4)
- 3. Unscrew the pump [1] from the tank [4]. (Fig. 6)



Collect and dispose of the residual liquid according to all applicable laws, requirements and regulations. Observe the instructions of the spray product manufacturer!

- 4. Wipe off the device with a moist cloth.
- 5. For drying and storing the device, keep the tank and pump separate in a dry place protected from sunlight and freezing temperatures.



Clean the protective equipment and yourself every time after usage.

## Care and maintenance



Observe the instructions in the section entitled "Safety".

After using the device 50 times or at least once a year:

- Disassemble the pump [1] and grease the diaphragm [13]. (Figs. 11 12)
- Clean the nozzle [14] and insert [15] under flowing water. If necessary, use a needle. (Fig. 13)
- Take the filter [16] out of the shut-off valve [6] and clean it under running water. (Fig. 14)
- Grease the O-ring [12]. (Fig. 12)



Observe the legal requirements of your country for accident prevention and check the device in regular intervals.

If there are no special rules, we recommend you have the device examined externally by a competent professional every 2 years and subject it to an internal inspection every 5 years.

We would be happy to provide you with an inspection schedule in German or English.

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## **Faults**



Use only MESTO spare parts and accessories (you will find some in the spare-parts pouch [3], Fig. 1).

Fault	Cause	Remedy	
No pressure builds up in the device	The pump is not screwed on tightly	Screw the pump on tightly	
	O-ring [12] on the pump is faulty (Fig. 16)	Replace the O-ring	
	Diaphragm [13] is defective (Fig. 16)	Replace the diaphragm	
Liquid flows out of the pump	The valve disc [17] is dirty or faulty (Fig. 15)	Clean or replace the valve disc	
The nozzle does not spray even though pressure is present	Filter [16] (Fig. 14) or / and nozzle [14] (Fig. 13) is clogged	Clean filter or / and nozzle (Figs. 13 + 14)	
Only spray, no atomization	Insert [15] missing (Fig. 13)	Position the insert in the nozzle	
The shut-off valve does not close. Liquid emerges without the lever being activated.	Seal of the tension bolt [20] not greased Tension bolt [20] or seal defective(Fig. 18)	Unscrew screw [18] from the shut-off valve [6] to remove the lever [19]. (Fig. 17) Unscrew screw seat [21] and press out tension bolt [20]. (Fig. 18) Clean and grease seal of the tension bolt [20] or renew tension bolt [20]. (Fig. 18) Install in reverse sequence.	

Contact address for additional information  $\rightarrow$  *see title page*.

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# Warranty

We guarantee that from the time it is first purchased for a period of the legally valid required warranty period (maximum 3 years) this device will not exhibit any material or processing errors. If defects are discovered during the warranty period, MESTO or the distributor in your country will repair the device without charging for the labor or material or (at the discretion of MESTO) replace the device itself or its defective parts.

If such defects are discovered, please contact us immediately. We require the invoice or cash register receipt for purchase of the device.

The warranty does not include wearing parts (seals, O-rings, diaphragm, etc.) or defects, which have occurred due to improper use or unforeseeable circumstances.

## **CE Declaration of Conformity**

In accordance with EC Directive 2006/42/EC, Annex II, No. 1A.

We, MESTO Spritzenfabrik Ernst Stockburger GmbH

Ludwigsburger Straße 71, D-71691 Freiberg

declare under our sole responsibility that the Series 3594 high pressure sprayers as supplied from factory number 1289536 meet all the relevant requirements of Directive 2006/42/EC of the EU. Furthermore the devices correspond to Directive 97/23/EC for Pressure Equipment.

Rolf Rehkugler, Ludwigsburger Straße 71, D-71691 Freiberg is authorized to compile the technical documentation.

Freiberg, 21.10.2012

Bernd Stockburger

- Managing Director -