

**RESISTENT EXTRA 3592, 3602**  
**RESISTENT EXTRA PLUS 3592P, 3602P**



MESTO



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

RESISTENT EXTRA 3592

RESISTENT EXTRA PLUS 3592P

RESISTENT EXTRA 3602

RESISTENT EXTRA PLUS 3602P

6232 (3592)

6232W (3592P)

6229K

6300 (3590)

6300L (3592P)

6165 (3592)

6165L (3592P)

1711

6701

6725

6703K

6124

3658 (3592)

3655 (3592P)

6107

6232 (3602)

6232W (3602P)

6229K

6300 (3602)

6300L (3602P)

6165 (3502)

6165L (3602P)

1711

6701

6725

6703K

6138

6107

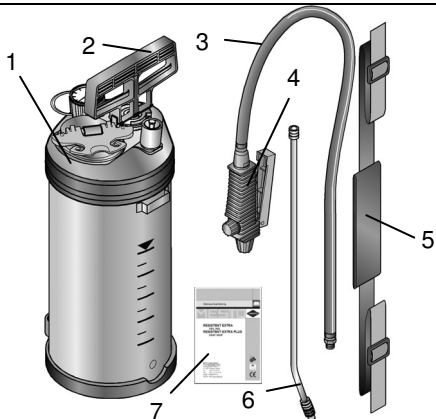
6123

3658 (3602)

3655 (3602P)

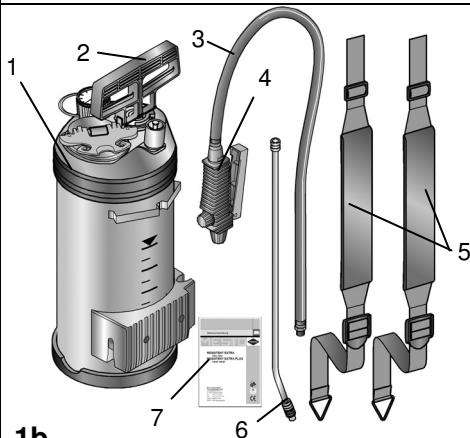
2

**RESISTENT EXTRA 3592  
RESISTENT EXTRA PLUS 3592P**

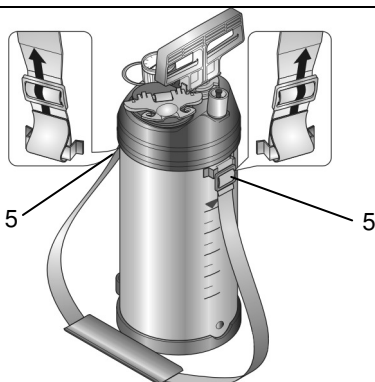


**1a**

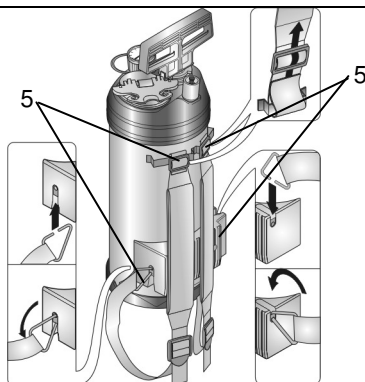
**RESISTENT EXTRA 3602  
RESISTENT EXTRA PLUS 3602P**



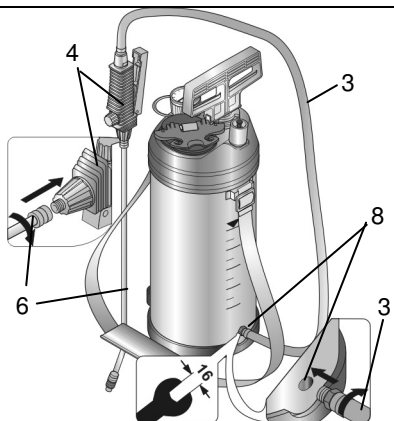
**1b**



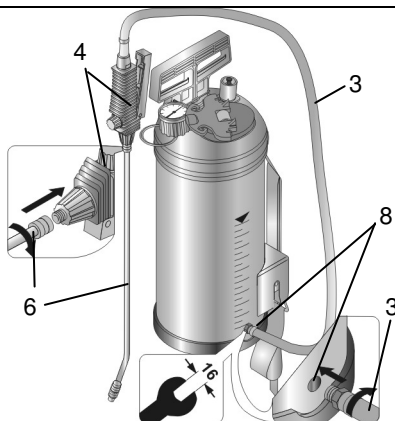
**2a**



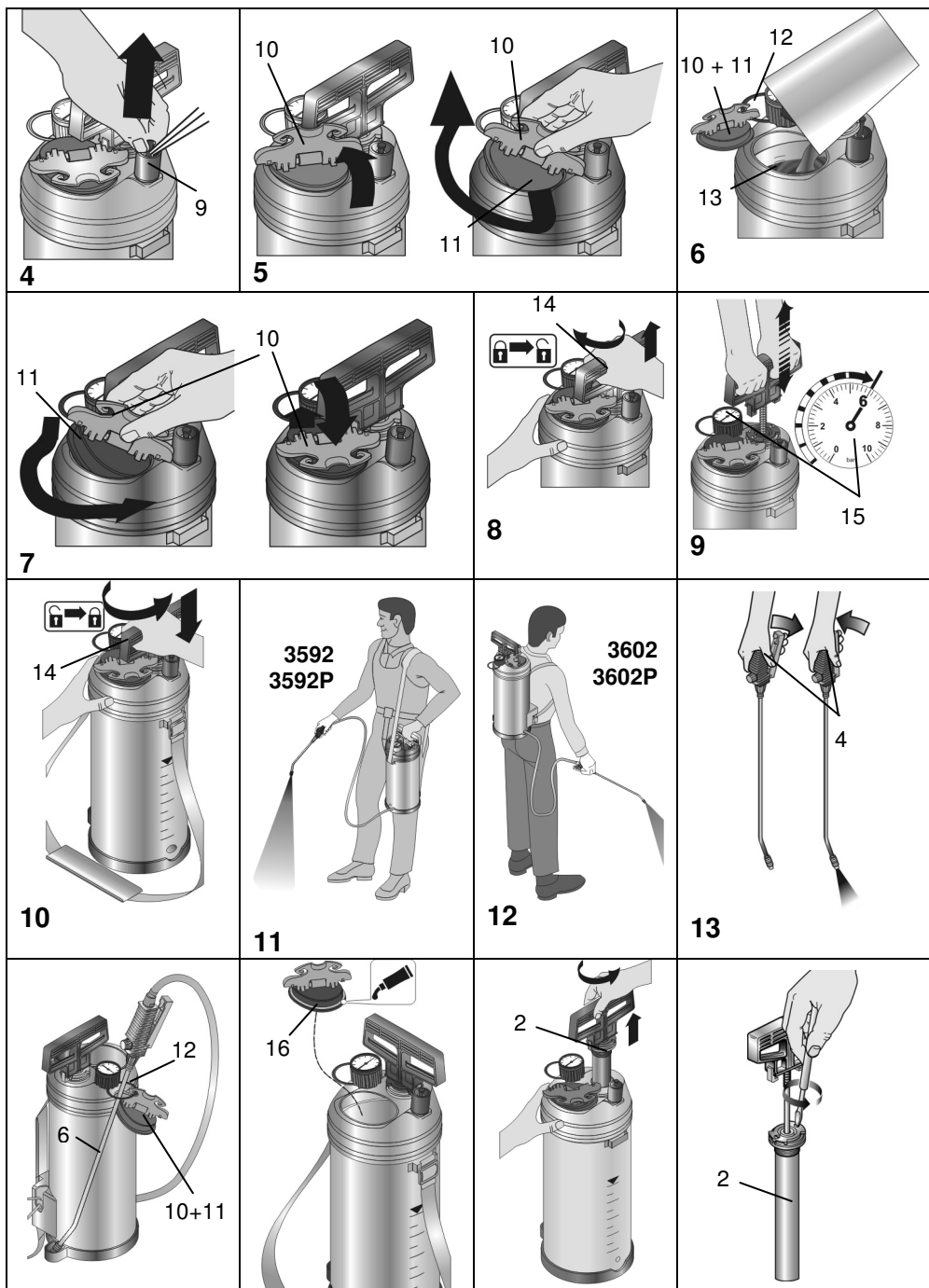
**2b**

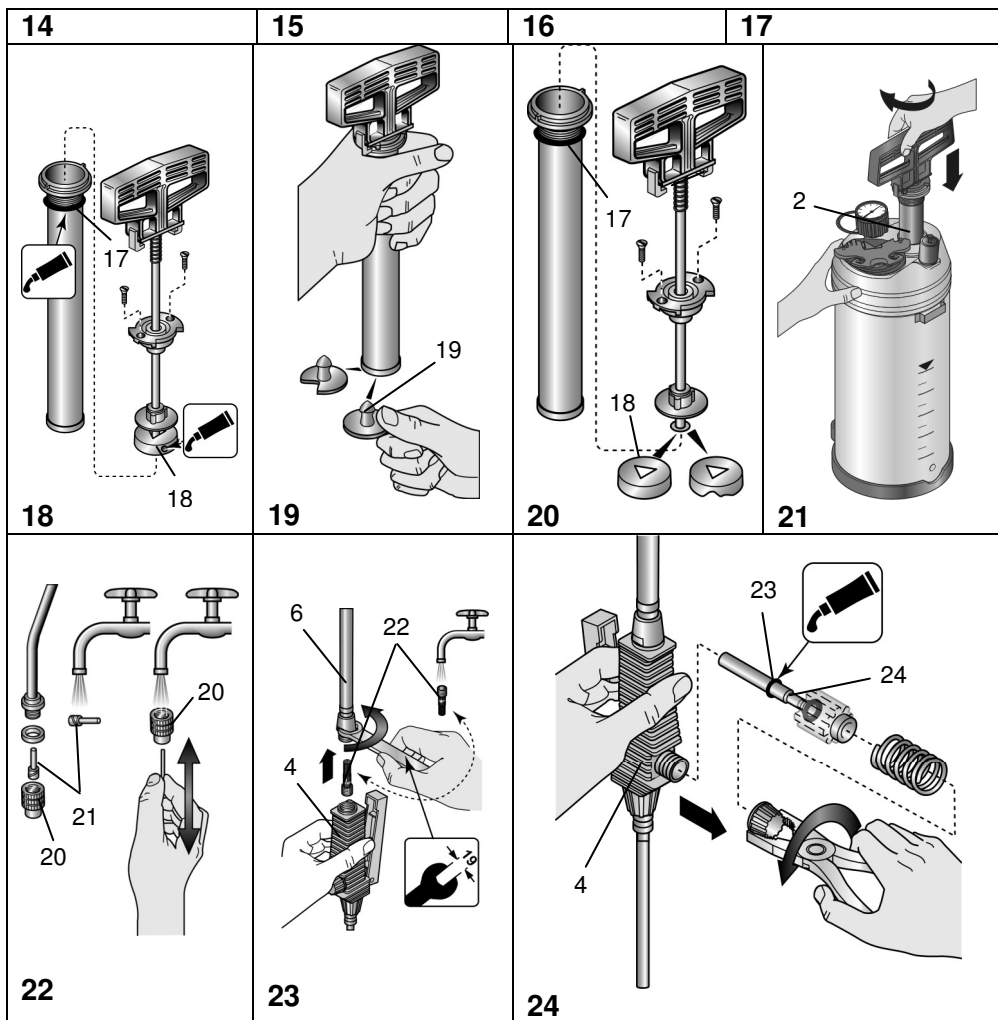


**3a**



**3b**





## Welcome and congratulations

for purchasing your new MESTO spraying device. 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 EXTRA 3592, 3602 and RESISTENT EXTRA PLUS 3592P, 3602P are designed for the spraying of forming oils and low-viscosity mineral oils, slightly alkaline construction chemicals ( $\text{pH} \leq 9$ ) as well as plant protection products, including weed killers, in the stipulated concentrations. RESISTENT EXTRA PLUS 3592P and 3602P can also be used for solvent-free and chloride-free, neutral cleaning agents as well as low-viscosity, solvent-free emulsion paints and paints.

Observe the manufacturer's instructions for using the product before each application. The spraying devices must only be used in the exterior.

As of the time of manufacture, there are no known harmful effects to the device caused by plant protection products approved by the German Federal Biological Institute (the Biologische Bundesanstalt or BBA in German).



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. Upon request, we will provide you with a list of active ingredients used in the spraying device.

## Not suitable for

- Combustible liquids with a flashpoint below 55 °C
- 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 spraying devices 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.



Avoid ignition sources in the environment if you spray combustible liquids.



Contact between spraying device 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. (→ *Table 1 below*).



Never blow through the nozzles or valves with your mouth.



Use only MESTO spare and accessory parts.

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 (→ *Table 1 below*).

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

## Scope of delivery

Tank [1] with pump [2], pressure hose [3] with shut-off valve [4], carrying strap [5], spray lance with nozzle [6], instructions for use [7] (*Figs. 1a and 1b*)

 You will find the illustrations referred to above in the front fold-out pages 3 – 5 of these Instructions for Use.

## Technical data

Device family	RESISTENT EXTRA		RESISTENT EXTRA PLUS	
	3592	3602	3592P	3602P
Max. filling amount	5 l			
Total contents	approx. 8,75 l			
Max. spraying pressure	6 bar (87 psi)			
Max. operating temperature	50 °C (130.00 °F)			
Weight when empty	approx. 4 kg			
Material of tank	Stainless steel 18/9			
Where device is carried	Shoulder	Back	Shoulder	Back
Technical residual quantity	0.03 l			
Max. volume flow	0.78 l/min			
Recoil force	< 5 N			


Table 1

## Assembly

1. Fasten the carrying strap [5] on the tank [1]. (Figs. 2a + 2b)
2. Screw the pressure hose [3] securely into the outlet opening [8] with a size 16 (metric) wrench. (Figs. 3a + 3b)
3. Screw the spray lance [6] onto the shut-off valve [4]. (Figs. 3a + 3b)
4. Close the cover (→ *chapter entitled "Preparation", Points 6 - 7, Fig. 7*)

## Checks

**Visual inspection:** Are the tank [1], pump [2], pressure hose [3] with shut-off valve [4], pressure gage [15] and spray lance [6] undamaged? (Figs. 1, 9)

 Pay special attention to the connections between the tank – pressure hose and the pressure hose – shut-off valve and to the condition of the pump thread and pressure hose.

**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. 4)

- ▶ The pressure must dissipate.  
Activate the shut-off valve [4]. (Fig. 13)
- ▶ The shut-off valve must open and close.

## Making preparations



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. 4)
  2. Raise the locking cap [10], tilt the cover [11], screw it in a clockwise direction and take out of the filling opening. (Fig. 5)
  3. Hook the cover [10+11] onto the spray lance holder [12]. (Fig. 6)
-  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.
4. Add the spraying liquid to the tank. (Fig. 6)
  5. Check the filling height on the scale stamped on the tank [13]. (Fig. 6)
  6. Insert the tilted cover [12] into the filling opening and rotate the cover in a counter-clockwise direction. (Fig. 7)
  7. Tighten the cover in the tank upwards onto the filling opening and fold down the locking cap [10]. (Fig. 7)
    - ▶ Filling opening is sealed. (Fig. 7)
  8. Press the pump handle [14] down and turn it clockwise.
    - ▶ The pump handle is unlocked. (Fig. 8)
  9. Create the desired pressure (→ *Table 2, next page*) in the tank (Fig. 9).
-  The maximum pressure should not exceed 6 bar (red line on the pressure gauge [15], Fig. 9). If the maximum pressure is exceeded, the safety valve will engage and release the excess pressure.
10. Press the pump handle [14] down and turn it counterclockwise.
    - ▶ The pump handle is locked in place. (Fig. 10)



## Spraying




Observe the instructions in the section entitled "Safety".

Operate the device only while it is vertical or suspended upright and nearly vertical.

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

Observe the instructions of the spray product manufacturer!

1. Suspend the device from your shoulder or place it on your back. (Fig. 11 and/or 12)

 *To prevent dripping, hold the spray lance up when first spraying and activate the shut-off valve until no more liquid mixed with air is emerging.*

2. Activate the shut-off valve [4]. (Fig. 13)

► Spraying may now begin.

3. Make certain the optimum spraying pressure is set (→ Table 2) on the pressure gauge [15].

Spraying pressure	Spraying quantity with nozzle 1302
1.5 bar (22 psi)	0,49 l/min
2.0 bar (29 psi)	0,56 l/min
3.0 bar (43,5 psi)	0,69 l/min

Table 2. Linear dependence: spraying rate and spraying pressure

4. 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. 4)
2. Remove the cover [10+11]. (Chapter entitled "Preparation" Points 2-3, Fig. 5)
3. Dilute the remaining quantity twice in a row with 1/2 liter of water each time and spray the resulting liquid onto the treated area.

 *In the case of plant protection products dilute the remaining quantity twice in a row with 1/2 liter of water each time and spray the resulting liquid onto the treated area.*



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

4. Empty and rinse the device with clear water.
5. Wipe off the device with a moist cloth.
6. For drying and storing the device, keep the tank and pump in a dry place protected from sunlight and freezing temperatures. (Fig. 14)



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 [2] and grease the diaphragm [18]. (*Fig. 18*)
- Clean the nozzle [20] and insert [21] under flowing water. If necessary use a needle. (*Fig. 22*)
- Remove the filter [22] between the shut-off valve [4] and hose [6] and clean it under flowing water. (*Fig. 23*)
- Grease the O-rings [16], [17] and [23]. (*Figures 15, 18, 24*)



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.

## Faults



Use only MESTO spare and accessory parts.

Fault	Cause	Remedy
No pressure builds up in the device	Cover leaking	Close cover properly ( <i>Fig. 7</i> ) Grease or replace O-ring [16] ( <i>Fig. 15</i> )
	The pump is not screwed on tightly	Screw the pump on tightly
	O-ring [17] on the pump is faulty	Replace O-ring ( <i>Fig. 20</i> )
	Diaphragm [18] is defective	Replace diaphragm ( <i>Fig. 20</i> )
Liquid is forced up out of the air pump	Valve disk [19] dirty or defective	Clean or replace valve disk ( <i>Fig. 19</i> )
The nozzle does not spray even though pressure is present	Filter [22] or / and nozzle [20] blocked	Clean filter ( <i>Fig. 23</i> ) or / and nozzle ( <i>Fig. 22</i> )
Only spray, no atomization	Insert [21] is missing	Position the insert in the nozzle ( <i>Fig. 22</i> )
The shut-off valve does not close. Liquid emerges without the lever being activated.	O-ring [23] of the pressure bolt is not greased / lubricated Faulty pressure bolt [24] or O-ring [23]	Grease O-ring of the pressure bolt ( <i>Fig. 24</i> ) Replace pressure bolt or O-ring ( <i>Fig. 24</i> )

Contact address for additional information → *see title page*.

## 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.

Wear parts (seals, O-rings, diaphragm, etc.) are excluded from the warranty, as are defects that occur due to improper use or unforeseeable circumstances.

## CE Declaration of Conformity

Products of series

**RESISTENT EXTRA 3592, 3602** as well as **RESISTENT EXTRA PLUS 3592P, 3602P** meet the requirements of the Pressure Vessel Regulations 97/23/CE and bear the CE label.