

Compression sprayer

**Profi Star 5 ITB**

**Operating manual**  
Please read these instructions carefully and keep them in a safe place

English

06/2015/11862210

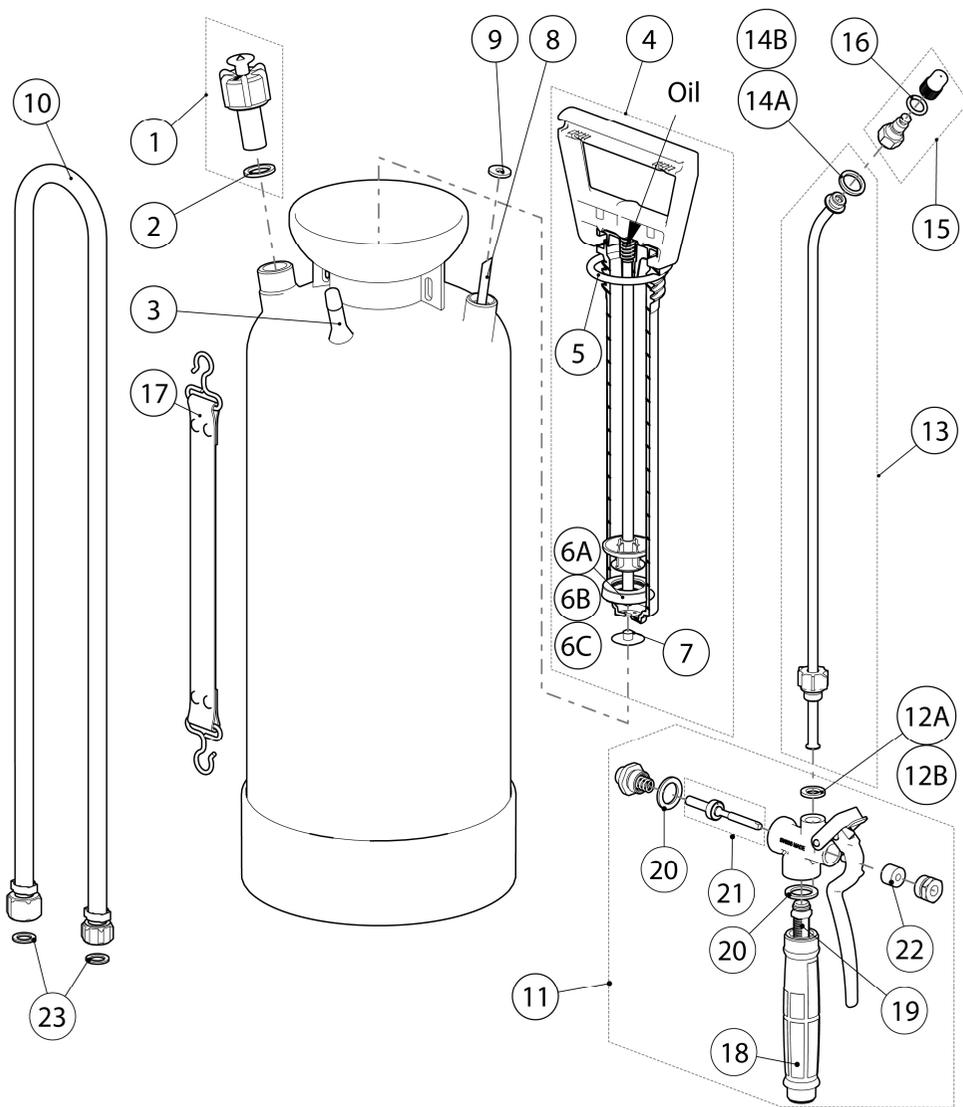
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## Declaration of Conformity

over Manufacturing and Approval for Pressure Vessels in according to Directive 97/23 EG

**Dwg for Manufact**  
**Profi Star 5:** 118 622 Rev. B Date 22.01.2015

**Pressure vessel:** Category I, according diagram 1, in the attachment 2 of Directive 97/23 EC  
 Fluid-Group 1 acc. Article 9

**Fabricant:** Birchmeier Sprühtechnik AG, CH-5608 Stetten

Apparatus		Profi Star 5, ITB
Condition of fluid		Air
Max allowable pressure	<b>PS</b>	4 bar
Max allowable temperature	<b>TS</b>	30°C
Min allowable temperature	<b>TS</b>	5°C
Volume	<b>V</b>	7.5 l
Test-pressure	<b>PT</b>	concerning the control of series
Capacity of filling		5 l
Point of application		Sprayer
Peculiarity		portable
Marked		CE
Safety control equipment		with pressure relief valve

We declare, that the pressure vessel without equipment to which this declaration is referring to is in compliance with the Directive 97/23 EC of European Parliament and of the Council of 29 May 1997.

The declaration based of EC-Certificate of conformity relating:  
 Birchmeier Sprühtechnik AG, CH-5608 Stetten

Advices for operators are in the operating manual.

Stetten, 23.01.2015

M. Zaugg  
 Head of Development & Design

## Guarantee

- We make a warranty of 24 months from the date of sale. During this warranty period we will repair free of charge defects of the sprayer which are due to deficiencies in material and manufacturing, either by repair or replacement of parts, or of the entire sprayer.
- Prerequisite to the honoring of warranties is the appropriate storage and use of our equipment strictly in accordance with the operating instructions which were valid on delivery (including the instructions given on the appliances themselves). These instructions constitute an integral part of our contract. Any and all damages which fall within our scope of responsibility must be reported to us in writing immediately after they have been discovered.
- Expressly excluded from the warranty and liability are damages and deficiencies:
- Resulting from the non-adherence to our instructions and usage recommendations in the operating manuals such as the improper use or inadequate maintenance of our equipment;
- Resulting from chemical attack, or due to normal wear;
- Due to damages, the causes of which are beyond the scope of our responsibility and influence, e.g. mechanical damage, force majeure.
- The warranty becomes null and void and any and all liabilities are disclaimed if the user or any third party alters or makes inexpert repairs to the sprayer.
- Excluded from the warranty and liability are all incidents which extend beyond the obligations set forth above. Any and all liability is expressly excluded to the extent of the law. Expressly excluded is in particular any and all liability for damages which are purely asset-related such as lost profit, loss of use, operating outage etc.

Place of jurisdiction: Baden, Switzerland  
 Applicable law: Swiss law

- For any further information concerning use or maintenance of the equipment please refer to your dealer.

## Technical data

Permissible operating pressure	4 bar max.	(max. 58.02 psi)
Permissible operating temperature	5°C - 30°C	(41°F - 86°F)
Tank volume	7.5 litres	(1.98 US Gal)
Maximum tank contents	5 litres	(1.32 US Gal)
Spraying-rate at 4 bar	Mist, 0.53 litre/min	(0.13 US Gal / min.)
Regulating nozzle	Jet, 1.41 litre/min	(0.36 US Gal / min.)

## Spare parts list

Pos.	Description	Parts number
1	Pressure relief valve 4 bar	116 179 02-SB
2 a	Flat gasket 21x15.4x2	
3	Valve 1 ¼"	501 375 31
4	Pump H handle, black	116 253 01-SB
5 a	O-Ring 50.16x5.34	
6A a	Sleeve	
6B	Sleeve PE-LD (6 pcs.)	116 427 01-SB
6C	Sleeve with guide (6 pcs.)	108 532 03-SB
7 a	Pump gasket	
8	Suction tube L = 435 mm	104 505 02
9 a	Flat gasket 15x5.5x2	
10	Hose line assy.	103 960 16
11	Pistol valve assy.	119 555 01
12A a	Flat gasket 11.9x7x1.5	
12B	Flat gasket 11.9x7x1.5 FPM (12 pcs.)	116 424 04-SB
13	Spray tube, 50 cm curved	113 707 04
14A a	Flat gasket 17x12.7x2	
14B	Flat gasket 17x12.7x2 PE (10 pcs.)	116 424 03
15	Adjustable nozzle 1.3mm	285 025 98-SB
16 a	O-Ring 7.66x1.78	
17	Carrying belt	104 536 01
18	Handle plastic	103 922 01-SB
19 b	Filter	108 283 01
20 b	Gasket 24x16.2x2	
21 b	Valve with Gasket	
22 b	Gland packing	
23 b	Gasket 17x11x1.5	

**a Gasket set 103 990 03-SB**  
**b Gasket set Trigger valve 106 002 02**

## Important!

Before taking the sprayer into service for the first time, make sure to read the operating manual thoroughly.

The user is liable for damages resulting from failure to observe these instructions.

Failure to observe the safety and warning alerts can result in injury to or death of persons!



- Do not use the sprayer while other persons are still in the working area.
- Do not blow out a clogged nozzle or clogged valves with the mouth (danger of poisoning).
- Clean the sprayer after each use, making sure not to cause pollution to water.
- Do not fill chemicals into other containers (bottles, cans or the like). Store equipment and chemicals such that they cannot be reached by children and household animals.
- When the sprayer is passed on to third parties, definitely make sure that it is accompanied by the operating manual.
- The user is responsible versus third parties, and in particular domestic animals and children, that when taking the sprayer into service any escaping media as a result of the opening of the safety relief valve, as well as the spray jet during spraying operations, are not directed at said third parties.
- When spraying the agent avoid contact with the spraying liquid. During this work make sure to wear protective clothing, a protective mask and safety glasses and to protect the hands.
- Do not spray against the wind, as well as during strong winds. Do not spray any more of the agent than necessary for the surface to be treated.

## Safety Instructions

- Before each use check to ensure that the sprayer has been correctly assembled, and that it is in a functional and undamaged condition. Special attention must be given to the tightness of the hose connections, as well as to the correct functioning/freedom of movement of the safety relief valve (1).
- The sprayer is equipped with a pressure relief valve (1) which discharges excessive pressure. The pressure relief valve is adjusted to 4 bar / 58.02 psi. It is noted expressly that any and all manipulation of the pressure relief valve is prohibited. In this case, any and all warranties of BIRCHMEIER Sprühtechnik AG become null and void, and all liabilities are disclaimed by BIRCHMEIER Sprühtechnik AG.
- Make sure that the desired agent is suitable for this sprayer. The safety and handling instructions of the chemical manufacturer are to be observed and adhered to. The use of any and all chemicals is at your own responsibility and risk. If you should have any doubts in this respect, please consult our after-sales service.
- The sprayer must not be filled with caustic substances (e.g. disinfectants and impregnating liquids which attack the skin or materials), corrosive substances (acids) or highly inflammable or combustible substances.
- The sprayer must not be filled with liquids at a temperature greater than 30°C / 86°F. Do not leave the appliance standing in the sun under pressure. The effects of frost can damage the equipment.
- Before unscrewing the pump (4) always first release the pressure via the pressure relief valve (1), holding the sprayer away from the body at an angle.

## Applications

The equipment can be used to spray the recognized pesticides, weed-killers and liquid fertilizers, as used in the home, in the garden, on the farm, or in vineyards.

## Preparing the equipment for use

Fit the spray pipe according the spare parts diagram. Screw the stop valve (11) on to the hose (10) and then insert the spray tube (13) with nozzle (15) in the stop valve and screw up tight. Finally, make sure all joints are tight.

## Operation

### Filling the tank:

On each occasion first fully release the pressure in the tank by lifting the pressure relief valve (1). Unscrew the pump (4) and fill the tank; the maximum permissible volume of liquid must not be exceeded (see level-mark on the tank), so that sufficient space remains for the air-cushion. The maximum permissible operating temperature is 30°C / 86°F.

### Pressurizing the tank:

Screw in the pump (4) and tighten the connection firmly. Release the pump handle from the locked position by pressing down on it slightly and turning it to the left. Pump up until the red mark appears on the pressure relief valve (1). Operating pressure has then been reached. Fasten the pump handle in the locked position again.

**Compressed air:** In order to pump up the appliance using an external pressure source a pressure-reducing valve must be used, set to a maximum pressure of 4 bar / 58.02 psi. When a pressure of 4 bar / 58.02 psi has been reached the pressure source must be removed.

### Spraying:

The liquid is sprayed by operating the spray-gun. The spray-pattern can be matched to the particular requirement by turning the milled part of the adjustable regulating nozzle.

### Releasing the pressure:

When spraying is completed or before unscrewing the pump in order to re-fill or empty the tank the pressure must be fully released by lifting the pressure relief valve (1). When doing this, hold the appliance at an angle, away from the body.

## Care and maintenance

- After use the appliance must be emptied; never store the spray-liquid in the sprayer.
- Unscrew the pump and empty the tank.
- The appliance must be washed out using a suitable agent and then rinsed with clean water; do not use hot water (max. 30°C / 86°F).
- Store the equipment away from the effects of frost. For storage the spray-tube may be hooked onto the pump handle.
- Particular attention must be given to parts which are subject to wear, such as the nozzle and gaskets. The nozzle (15) must be cleaned periodically. These parts are easily replaceable.
- Periodically apply a little oil to the piston-rod, the thread of the pump-tube and the O-ring (5) (see -> oil). Screw in the pump only loosely when the appliance is not in use.
- Do not clean the nozzle with hard objects, nor blow through it using the mouth. The most suitable cleaning device is a nail-brush or tooth-brush.
- To dry the sprayer, place it upside down, without the pump (4), and leave it standing open to the air.

## Spare parts and repairs

If any part shows signs of damage or wear, replace it immediately. Use only BIRCHMEIER original parts (see spare parts list).