Operating manual
for
Material pressure tanks
Vol./1 and Vol./2

Read this manual carefully before installing, operating or servicing this equipment.
Keep always handy for further use.

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- Spritztechnik – Spraytechnology -

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1 Introduction

The material pressure tank **Vol./1** resp. **Vol./2** is suitable for the output of fluids, f.i. colours, release agents or oils. In combination with a spray gun or an automatic spray valve fluids can be sprayed continuously in considerable volume. The increased output of fluid gives far more efficiency.
This material pressure tank is a precision tool. Please observe following instructions to maintain a long useful life.

2 Safety

2.1 Duties of the user

- The user must read this service manual carefully before performing any operations.
- Application and service operations should not be carried out if the user is not absolutely sure of the purpose and consequence of the operations.

2.2 Definitive Use

The pressure tank **Vol./1** resp. **Vol./2** is to be used in connection with a spray gun, when continuous spraying jobs suggest steady feeding of fluid to the gun. The tanks are made of aluminium.
Generally they are suitable for spraying materials. They are not suitable for spraying aggressive or headed materials. In case of doubt, contact the manufacturer.

Gases, fluidise gases, under pressure soluted gases, vapours and fluids, whose vapour Pressure at maximum allowed temperature is more than 0,5 bar higher as normal atmosphere pressure (1013mbar), are not at all allowed to use!

2.3 Warning against danger

This operating manual warns users of operations which may put their health at risk. The warnings are indicated by combinations of text and symbols corresponding to the different danger classes.

WARNING!

Signs a possible dangerous situation.
If you don´t avoid, *death or severe injuries* can follow.

CAUTION!

Indicates a situation which may be dangerous.
Failure to heed the caution may result in *personal injury*. This indication is also used where material damage is possible.

IMPORTANT!

Indicates tips for usage and other helpful information.

3 Function Description

Vol./1 stands for a pressure tank of 1 litre capacity, **Vol./2** for 2 litres capacity. The outlets to the spray gun lead fluid (at max. 2,5 bar) and the atomizing air (at max. 4 bar) via hose (inner diameter Ø 4mm) to the gun.
Regulating of both pressures by means of the two respective reducing valves. The spray unit gives outstanding advantages in comparison to spray guns with mounted fluid cup:

less spray interruption for refilling
pressure feeding of spray material gives more throughput per unit of time
weight of gun reduced by approx. 50%
free handling of gun allows spraying in any position

The thread lid of the tank takes all installations as reducing valves, safety valve and also air and fluid cocks.

4 Opening operations

Please follow the undermentioned steps.

1. Unscrew tank (9.0) from lid (10.0) and pour spraying fluid into the tank. Screw lid on tightly.
2. Connect atomizing air outlet (21.0) via hose to spray gun.
3. Connect material outlet (21.0) via hose to spray gun.
4. Plug in air supply hose (from compressor or pressure line) at coupling nipple (7.0).
5. Open atomizing air cock (1.0) and fluid cock (1.0).
6. Regulate air pressure flowing into the tank at reducing valve knob (5.0) down to the minimum required to feed sufficient fluid volume to the gun. The atomizing air is to be regulated at the other reducing valve knob (5.0) in accordance with the required size of droplets. To reduce pressure turn knobs (5.0) anticlockwise until air escapes. To adjust to higher pressure turn knob (5.0) clockwise.
7. Start spraying by pulling trigger of gun. If necessary, re-adjust fluid feeding and atomizing air as per no. 6.
8. Previous to refilling the tank it is an Absolute requirement to evacuate the tank from any air pressure. Pull quick coupler off nipple (7.0)

4.2 Operating instructions

CAUTION!
Never point the spray guns against persons. Wearing eye protection is strongly recommended. Spraying procedures cause noises depending on the used pressure. If necessary wearing of ear protection is recommended.

WARNING!
Danger caused by combustible and noxious spraying material. Safety instructions on fluid can and material data of fluid manufacturer must definitely be observed.

IMPORTANT!
The pressure tank has to be secured in an upright position.

5 Repair and Maintenance

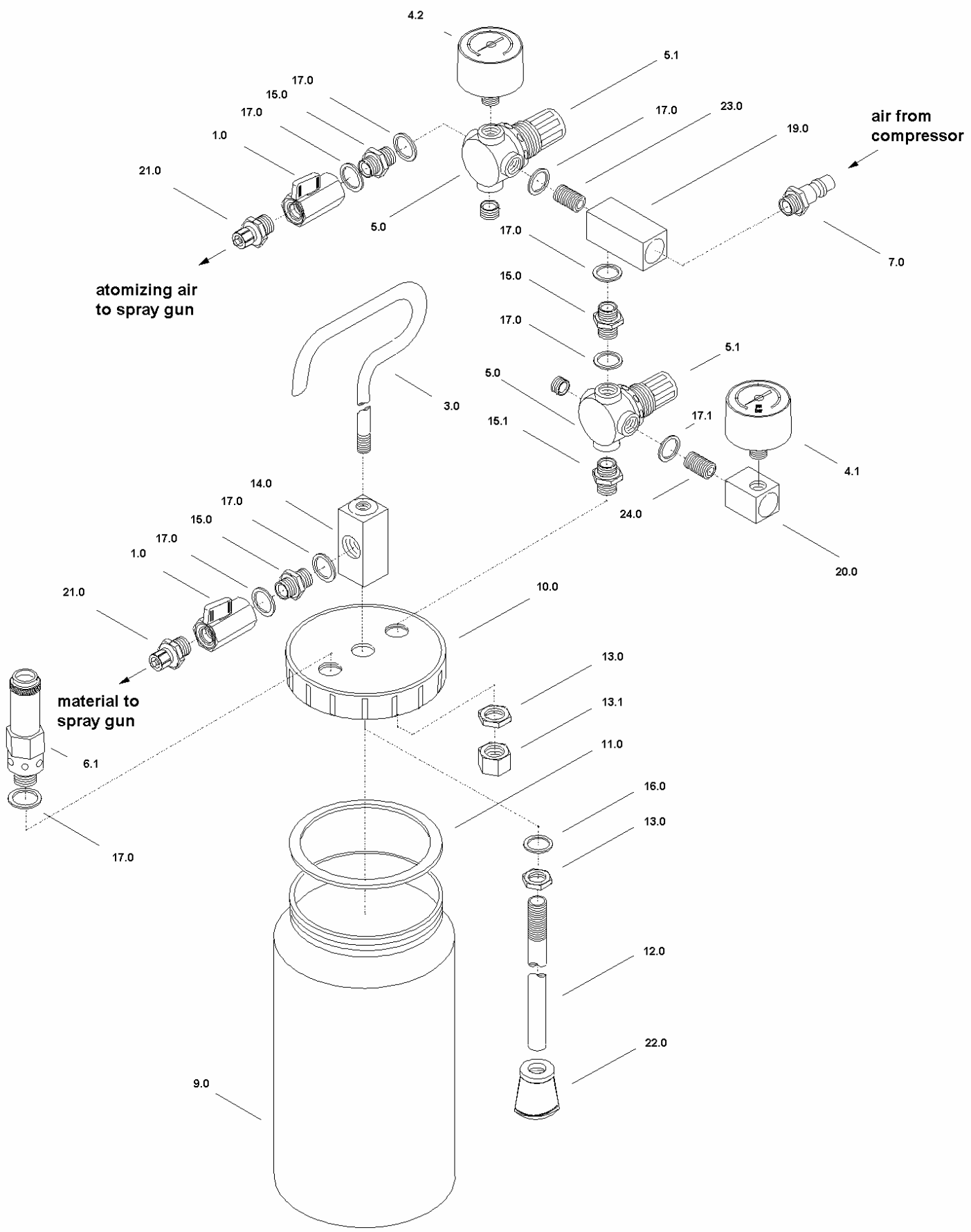
Before starting maintenance or repair work, ensure that all air operated tools are disconnected from the air supply.

WARNING!
Never try to unscrew the tank from the lid unless you have made sure, that air pressure has been evacuated completely

The pressure tank **Vol./1** resp. **Vol./2** is of sturdy quality. Unit has always to be kept clean. A minimum of effort ensures a long useful life. The tank is largely maintenance-free. It is recommended to use fluid in a clean and filtered condition only. Atomizing air should also be clean and led to the guns or spray valves following their individual manuals.

5.1 Cleaning

To clean pressure tank, spray solvent until pure solvent leaves nozzles of either spray gun or spray valve. Do not submerge the entire unit in solvent. If necessary use a soft brush.


4.2
5.1
17.0
15.0
17.0
1.0
21.0
5.0
17.0
23.0
19.0
air from
compressor
7.0
atomizing air
to spray gun
15.0
17.0
5.1
5.0
3.0
15.1
17.1
4.1
24.0
20.0
14.0
17.0
15.0
17.0
1.0
21.0
10.0
material to
spray gun
6.1
17.0
13.0
13.1
11.0
16.0
13.0
12.0
22.0
9.0

6. Sparepartslist

draw no.	part no.	Qty.	Description
1.0	380000	2	cock 1/4"
3.0	910000	1	handle
4.1	450000	1	gauge 0-2,5 bar
4.2	450002	1	gauge 0-4 bar
5.0	800000	2	pressure reducer 0-3,5 bar
5.1	800002	2	adjustment knob with spring housing
6.1	630001	1	safety valve 1/4", type approved
7.0	220025	1	connection nipple for quick coupler
9.0	*	1	tank
10.0	350096	1	lid
11.0	640056	1	seal 101,5 x 85 x 3mm
12.0	*	1	standpipe
13.0	410000	2	nut for lid 1/4"
13.1	220005	1	air distributor
14.0	220011	1	T-fitting 1/4", M8
15.0	220035	3	double nipple 1/4", short
15.1	220007	1	double nipple 1/4", long
16.0	640057	1	copper washer 1/4"
17.0	640082	8	plastic washer 1/4"
17.1	640089	1	plastic washer 1/8"
19.0	220012	1	air inlet 1/4"
20.0	220017	1	mount for gauge
21.0	*	2	air and fluid outlet
22.0	530000	1	filter for standpipe
23.0	220004	1	fitting 1/4"
24.0	220006	1	fitting 1/8"

*** tank**		
draw no.	part no.	Description
9.0	350043	tank 1 litre
9.0	350033	tank 2 litres

*** standpipe**		
draw no.	part no.	Description
12.0	850027	standpipe for 1 litre tank
12.0	850004	standpipe for 2 litres tank

*** air and fluid outlet**		
draw no.	part no.	Description
21.0	220023	for hose 6/4 (standard version)
21.0	220298	for hose 8/6

7. Technical Data

volume	: Vol./1 = 1litre Vol./2 = 2litres
max. pressure	: 2,5 bar
material of tank	: Aluminium
high of tank (with armatures)	: Vol./1 = approx. 360mm Vol./2 = approx. 430mm
diameter	: both tanks 125mm
max. temperature	: 50° C
min. temperature	: 5° C

Special designs on request. Technical alterations reserved. april 2001

8. Manufacturer Declaration

The material pressure tank **Vol./1** resp. **Vol./2** was constructed and produced by **ALFRED SCHÜTZE Apparatebau GmbH, Hannoversche Straße 69-71, 28309 Bremen-Germany** in accordance with the guidelines and standards of DIN EN 292. The tank can be combined with other modules or machines, which comply to DIN EN 292, without limiting the conformity.

Place	Date	Signature of Manufacturer
Bremen	6.04.2001