WALTHER PILOT

Betriebsanleitung / Operating Instructions

D GB

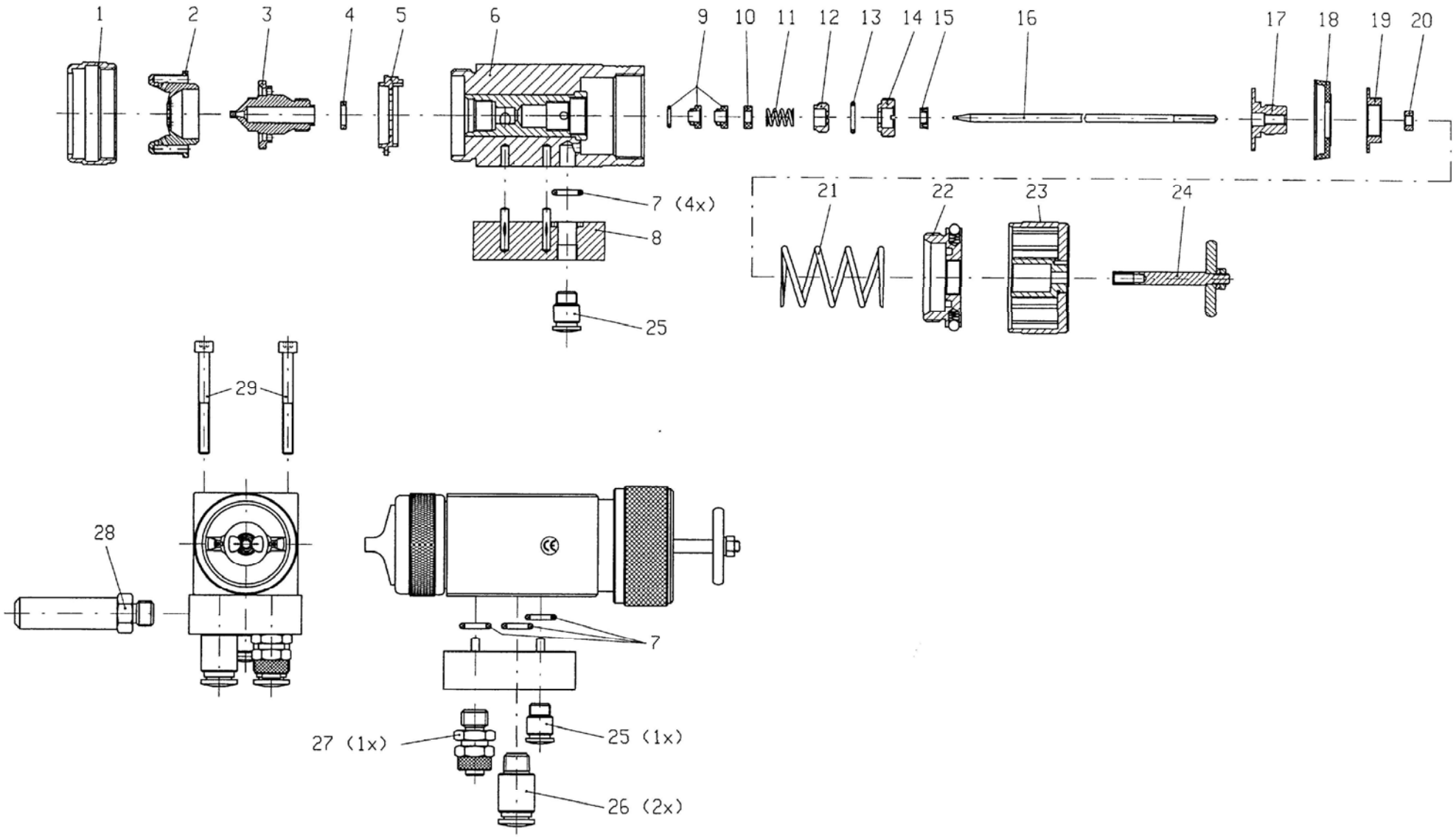
Automatische Spritzpistolen / Automatic Spray Gun

PILOT WA 450 / PILOT WA 451 / PILOT WA 452 / PILOT WA 453

REV. 01/12

Die Beschichtungs-Experten

PILOT WA 450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GB

Contents

Declaration of CE-Conformity

GB

We, the manufacturers of the equipment, hereby declare under our sole responsibility that the product(s) described below conform to the essential safety requirements. This declaration will be rendered invalid if any changes are made to the equipment without prior consultation with us.

Manufacturer	WALTHER Spritz- und Lackiersysteme GmbH Kärntner Str. 18 - 30 D - 42327 Wuppertal Tel.: +49(0)202 / 787 - 0 Fax: +49(0)202 / 787 - 2217 www.walther-pilot.de • e-mail: info@walther-pilot.de
Type Designation	**Automatic Spray Guns PILOT WA 450** PILOT WA 450 (Standard version) V 20 545 PILOT WA 451-U (Circulation version) V 20 546 PILOT WA 452 HVLP (Low pressure version) V 20 547 PILOT WA 452 HVLP-U (Low pressure-Circulat. vers.) V 20 548
Intended purpose	Processing of sprayable media
Applied Standards and Directives	
EU-Mechanical Engineering Directives 2006 / 42 / EC 94 / 9 EC (ATEX Directives) DIN EN ISO 12100-1 DIN EN ISO 12100-2 DIN EN 1953 EN 1127-1 DIN EN 13463-1	
Specification according 94 / 9 / EC	

Category 2	**Part marking**	⟨Ex⟩	**II 2 G c T 5**	Tech.File,Ref.: 2407

Authorized with the compilation of the technical file:
Nico Kowalski, WALTHER Spritz- und Lackiersysteme GmbH, Kärntner Str. 18 - 30
D- 42327 Wuppertal

Special remarks :
The named product is intended for installation in other equipment. Commissioning is prohibited until such time as the end product has been proved to conform to the provision of the Directives 2006 / 42 / EC.

Wuppertal, the 1st of January 2010

i.V.

Name: Torsten Bröker
Position: Manager, Design and Development

This Declaration does not give assurance of properties in the sense of product liability. The safety instructions provided in the product documentation must be observed at all times.

Replacements parts:

GB		WA 450		WA 451-U	
		V 20 545		V 20 546	
Pos.	Description	Stck.	Part No.	Stck.	Part No.
1	Air cap nut	1	V 11 360 04 300	1	V 11 360 04 300
2	**Air cap (optional)**				
	0,3 - 1,8 mm ø	1	**V 11 360 30 050***	1	**V 11 360 30 050***
	2,0 - 2,5 mm ø		**V 11 360 30 200***		**V 11 360 30 200***
3	**Material nozzle (optional)**	**1**	**V 11 601 40 . . 3***	**1**	**V 11 601 40 . . 3***
4	**Sealing washer**	**1**	**V 09 002 16 000**	**1**	**V 09 002 16 000**
5	Air distribution ring	1	V 11 601 04 000	1	V 11 601 04 000
6	Gun body compl.	1	V 20 545 01 000	1	V 20 546 01 000
7	**O-Ring**	**4**	**V 09 102 50 001**	**5**	**V 09 102 50 001**
8	Adapter plate compl.	1	V 20 545 15 000	1	V 20 546 15 000
9	**Needle packing compl.**	**1**	**V 09 001 72 000**	**1**	**V 09 001 72 000**
10	Pressure ring	1	V 10 361 07 000	1	V 10 361 07 000
11	**Packing spring**	**1**	**V 20 510 12 003**	**1**	**V 20 510 12 003**
12	Packing screw	1	V 20 510 11 003	1	V 20 510 11 003
13	**O-Ring**	**1**	**V 09 103 30 001**	**1**	**V 09 103 30 001**
14	Sealing screw	1	V 20 540 23 004	1	V 20 540 23 004
15	**Guide ring**	**1**	**V 09 222 00 000**	**1**	**V 09 222 00 000**
16	**Material control needle (optinal)**	**1**	**V 20 540 20 . . 3***	**1**	**V 20 540 20 . . 3***
17	Piston	1	V 20 540 26 004	1	V 20 540 26 004
18	**Cup seal**	**1**	**V 20 651 06 000**	**1**	**V 20 651 06 000**
19	Clambing ring	1	V 20 540 25 004	1	V 20 540 25 004
20	Nut	1	V 20 540 17 003	1	V 20 540 17 003
21	**Piston spring**	**1**	**V 20 540 16 003**	**1**	**V 20 540 16 003**
22	Threated bushing compl.	1	V 20 540 31 000	1	V 20 540 31 000
23	Cap compl.	1	V 20 540 35 000	1	V 20 540 35 000
24	Drawbar compl.	1	V 20 540 39 000	1	V 20 540 39 000
25	Control air inlet	1	V 66 101 53 322	1	V 66 101 53 322
26	Atomizing air inlet	2	V 66 101 53 015	2	V 66 101 53 015
27	Material inlet	1	V 66 100 06 255	2	V 66 100 06 255
28	Mounting pin	1	V 20 510 21 003	1	V 20 510 21 003
29	Screw	2	V 20 545 20 003	2	V 20 545 20 003

We recommend that repair sets are held on stock. Repair kit includes all wearing parts shown in boldface print.

Repair-Kit WA 450 / 451:	**V 16 545 06 . . 3**
Repair-Kit WA 452 / 453:	**V 16 547 03 . . 3**

* Please make sure to quote the required size(s) when placing an order for replacement parts.

Replacements parts:

GB		WA 452 HVLP		WA 453 HVLP-U	
		V 20 547		V 20 548	
Pos.	Description	Qty.	Part No.	Qty.	Part No.
1	Air cap nut	1	V 11 360 04 300	1	V 11 360 04 300
2	**Air cap (optional)**				
	0,3 - 1,8 mm ø	1	**V 11 631 11 051**	1	**V 11 631 11 051**
	2,0 - 2,5 mm ø		**V 11 631 11 201**		**V 11 631 11 201**
3	**Material nozzle (optional)**	**1**	**V 11 601 40 . . 3***	**1**	**V 11 601 40 . . 3***
4	**Sealing washer**	**1**	**V 09 002 16 000**	**1**	**V 09 002 16 000**
5	Air distribution ring	1	V 11 631 04 000	1	V 11 631 04 000
6	Gun body compl.	1	V 20 547 01 000	1	V 20 548 01 000
7	**O-Ring**	**4**	**V 09 102 50 001**	**5**	**V 09 102 50 001**
8	Adapter plate compl.	1	V 20 545 15 000	1	V 20 546 15 000
9	**Needle packing compl.**	**1**	**V 09 001 72 000**	**1**	**V 09 001 72 000**
10	Pressure ring	1	V 10 361 07 000	1	V 10 361 07 000
11	**Packing spring**	**1**	**V 20 510 12 003**	**1**	**V 20 510 12 003**
12	Packing screw	1	V 20 510 11 003	1	V 20 510 11 003
13	**O-Ring**	**1**	**V 09 103 30 001**	**1**	**V 09 103 30 001**
14	Sealing screw	1	V 20 540 23 004	1	V 20 540 23 004
15	**Guide ring**	**1**	**V 09 222 00 000**	**1**	**V 09 222 00 000**
16	**Material control needle (optinal)**	**1**	**V 20 540 20 . . 3***	**1**	**V 20 540 20 . . 3***
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24	Drawbar compl.	1	V 20 540 39 000	1	V 20 540 39 000
25	Control air inlet	1	V 66 101 53 322	1	V 66 101 53 322
26	Atomizing air inlet	2	V 66 101 53 015	2	V 66 101 53 015
27	Material inlet	1	V 66 100 06 255	2	V 66 100 06 255
28	Mounting pin	1	V 20 510 21 003	1	V 20 510 21 003
29	Screw	2	V 20 545 20 003	2	V 20 545 20 003

Nozzle sets:	**V 15 400 06 . . 3**

Nozzle sets consist of air cap, material nozzle and material needle.

Nozzle sizes optional: 0.3 • 0.5 • 0.8 • 1.0 • 1.2 • 1.5 • 1.8 • 2.0 • 2.2 • 2.5

1 General

1.1 Identification of Model Version

Models: Automatic Spray Guns PILOT WA 450 / PILOT WA 451 / PILOT WA 452 / PILOT WA 453

Type series:		
PILOT WA 450	(Standard version)	V 20 545
PILOT WA 451-U	(Circulation version)	V 20 546
PILOT WA 452 HVLP	(Low pressure version)	V 20 547
PILOT WA 452 HVLP-U	(Low pressure-Circul.vers.)	V 20 548

Manufacturer: WALTHER Spritz-und Lackiersysteme GmbH
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www.walther-pilot.de • Email: info@walther-pilot.de

1.2 Normal Use

The automatic spray guns of the series PILOT WA 450 are exclusively designed for use with sprayable material types and grades. All material conduction parts are made of stainless steel so as to permit handling of hydrous and/or agressive media such as:

- paints and lacquers
- greases, oils and corrosion preventives
- adhesive compounds
- ceramic glazes
- pickling solutions

Should the materials which you want to spray not be listed above, please contact us for further and detailed information.
Plase note that sprayable material may only be applied to work pieces and/or similar items.
The temperature of the spraying materials shall never exceed 80° C. The models PILOT WA 450, WA 451, WA 452 and WA 453 are not designed for manual operation, and must be installed in a suitable gun mounting device.
The term normal use also implies that any and all safety warnings, operational handling details, etc., as stated in these operating instructions, must be carefully read, understood and duly complied with.
This equipment complies with the explosion protection requirements of Directive 94/9/EC (ATEX) for the explosion group, equipment category and temperature class indicated on the type plate. When using the equipment, the requirements specified in these Operating Instructions must be observed at all times.
The technical data indicated on the equipment rating plates and the specifications in the chapter "Technical Data" must be complied with at all times and must not be exceeded. An overloading of the equipment must be ruled out.

The equipment may be used in potentially explosive atmospheres only with the authorisation of the relevant supervisory authority.

The relevant supervisory authority or the operator of the equipment are responsible for determining the explosion hazard (zone classification).

The operator must check and ensure that all technical data and the marking of the equipment in accordance with ATEX are compliant with the necessary requirements.
The operator must provide corresponding safety measures for all applications in which the breakdown of the equipment might lead to danger to persons.
If any irregularities are observed while the equipment is in operation, the equipment must be put out of operation immediately and WALTHER PILOT must be consulted.
Grounding / Equipotential Bonding
You must ensure that the spray gun is properly earthed (grounded) either separately or in connection with the equipment with which it is being used (maximum resistance $10^6\Omega$).

1.3 Improper Use

This spray gun shall not be used for purposes other than set forth in the above Chapter *Normal Use*. Any other form of use and/or application is prohibited.
Improper use is for example:

- spraying of material onto persons and animals
- spraying of liquid nitrogen, etc.

2 Technical Description

The models PILOT WA 450, WA 451, WA 452 and WA 453 are automatic air-controlled guns operating in combination with a 3/2-way control valve. Hand, foot or solenoid-actuated valves can be used.

Actuation of the 3/2-way valve directs control air into the cylinder inside the gun so as to open - in sequence - the atomizing air (round - and wide/flat air) and the material input.The control air, round jet and wide/flat jet are adjusted external by the plant (see Operating instructions of the plant systems manufacturer).

Closing of the 3/2-way valve is followed by the control air escaping from the cylinder inside the gun, upon which the spring-loaded material control needle returns to its initial position, where it shuts the material and atomizing air input off.
After this, the atomising air is switched off by the 3/2-way valve.

The models PILOT WA 452 and WA 453 are solely low-pressure spray guns and operate with a spraying pressure of 0.7 bar using an inlet pressure of 4.5 bar.

3 Safety instructions

3.1 Identification of safety instructions

Warning
The pictogram and the urgency level "**Warning**" identify a possible danger to persons.
Possible consequences: Slight to severe injuries.

Attention
The pictogram and the urgency level "**Attention**" identify a possible danger to material assets.
Possible consequences: Damage to material assets.

Note
The pictogram and the urgency level "**Note**" identify additional information for the safe and efficient operation of the spray gun.

3.2 Generally Applicable Safety Precautions

All applicable accident prevention rules and regulations as well as other recognised industrial safety and health rules and regulations must be observed at all times.

Use the spray gun only in well-ventilated rooms. Fire, naked flames and smoking are strictly prohibited within the working area. WARNING – during the spraying of flammable materials (e.g. lacquers, adhesives, cleaning agents, etc.), there is an increased risk to health as well as an increased risk of explosion and fire.

You must ensure that the spray gun is properly earthed (grounded) either separately or in connection with the equipment with which it is being used (maximum resistance $10^6\Omega$).

Before carrying out maintenance or servicing work, always ensure that the air and material feed to the spray gun have been de-pressurised. Risk of injury!

When spraying materials, do not place your hands or other parts of the body in front of the pressurised nozzle or the spray gun. Risk of injury!

Never point the spray gun at persons or animals. Risk of injury!

Always observe the spraying and safety instructions given by the manufacturers of the spraying material and the cleaning agent. Aggressive and corrosive materials in particular can be harmful to health.

Exhaust air containing particles (overspray) must be kept away from the working area and personnel. In spite of these measures, always wear the regulation breathing masks and protective overalls when using the gun. Airborne particles represent a serious health hazard!

Always wear hearing protection when using the gun or when in the vicinity of a gun that is in use. The noise level generated by the spray gun is approx. 83 dB (A).

After carrying out assembly or maintenance work, always ensure that all nuts, bolts and screw connections have been fully tightened before the gun is used.

Use only original replacement parts, since WALTHER can only guarantee safe and

fault-free operation for original parts.

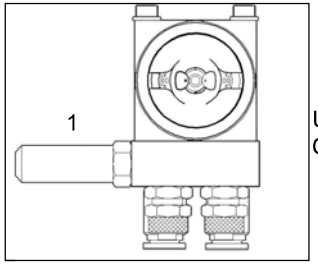
For further information on the safe use of the spray gun and the spraying materials, please contact WALTHER Spritz- und Lackiersysteme GmbH, D-42327 Wuppertal, Germany.

4 Assembly / Installation

This spray gun is delivered in completely assembled condition. Before taking the spray gun into operation perform the following preparations:

4.1 Mounting of Spray Gun

Install the gun in a suitable and stable mounting device as shown in the following example:

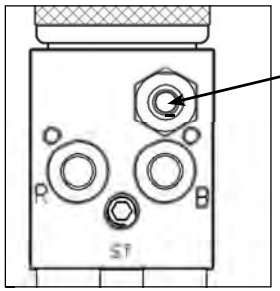


Use mounting pin 1, diameter 12 mm.
Other mounting devices upon request.

4.2 Connection of Input Lines

Warning
Make sure not to confuse the control and atomizing air (round - and wide/flat air) connections -risk of injury.

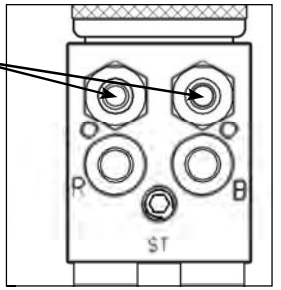
Standard version



Material inlet

Inlets:
R - Round jet
B - Wide/flat jet
ST - Control air

Circulation version



The spray gun is now properly installed and connected and ready for operation.

5 Operational Handling

5.1 Safety Warnings

Please pay special attention to the following safety warnings prior to taking this spray gun into operation!

- Wear proper respiratory protection masks and protective overalls, whenever you are operating this spray gun. Air-borne particles represent a health hazard.
- Make sure to wear suitable haering protectors. The gun produces sound levels of up to 86 dB (A) which may cause hearing defects.
- Open fires, naked lights and smoking prohibited in the working area. Spraying of readily flammable media such as paints and adhesive compounds is always accompanied by the risk of fire and explosion.

5.2 Starting / Stopping Requirements

The following requirements must be met before taking this spray gun into operation:

- control air must be available at the gun
- atomizing air (round - and wide/flat air) must be available at the gun
- material pressure must be available at the gun.

Caution
The material pressure shall not exceed

- **6 bar**, as, otherwise, the functional reliability of the spray gun will suffer.

Adjust the control air pressure to

- **at least 4,5 bar**, in order to operate the spray gun.

The operation of the spray gun can be started/stopped by way of the 3/2-way control valve (see the Operating Instructions of the plant systems manufacturer).

Warning
It is important to remember that the spray gun must be relieved of all pressures whenever work is terminated. Lines left in pressurized condition could burst, with their contents likely to injure anybody present nearby.

5.3 Spray Pattern Test

Spray pattern tests should be performed whenever:

- the spray gun is taken into operation for the first time
- the spraying medium is changed
- the spray gun was taken apart for servicing or repairs.

The spray pattern can be tested using a work piece sample, a sheet of metal, cardboard or paper.

Warning
Keep away from the front of the spray gun - imminent risk of injury.

Warning
Make sure that nobody is present in the spraying zone when the gun is started - imminent Risk of Injury.

1. Start the gun to produce a spray pattern sample (see *5.2. Starting/Stopping Requirements*).
2. Inspect the sample and readjust the settings of the gun as may be required (see *5.4 Spray Pattern Adjustments*).

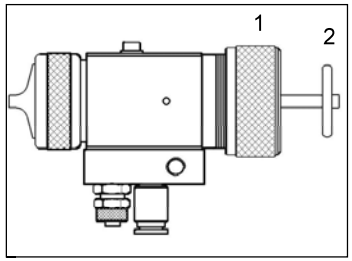
5.4 Spray Pattern Adjustments

The spray pattern of the PILOT WA 450, WA 451, WA 452 and WA 453 can be adjusted as follows:

Adjustment of the Control Air

The control air is adjusted external by the plant (see Operating instructions of the plant systems manufacturer).

Adjustment of the Material Flow Rate



Turn cap (1) from the standard position (= notch mark on the piston housing)

- to the inside in order to decrease the material flow rate.
- to the outside in order to increase the material flow rate.

The material flow through the nozzle can be performed without using atomizing air (round - and wide/flat air), when the drawbar (2) is used.

Adjustment of the Material Pressure

This adjustment can only be made at the controls of the pump or the material pressure tank. Please comply with the operating instructions and safety warnings issued by the manufacturers concerned.

Adjustment of the Round Jet and Wide/Flat Jet

The round jet and wide/flat jet are adjusted external by the plant (see Operating instructions of the plant systems manufacturer).

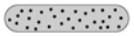
If you wish to change the spraying pattern beyond the adjustments outlined so far, you must retool the spray gun (See *5.5 Retooling of Spray Gun*).

WALTHER offers a great variety of air cap / material nozzle / -needle combinations for this purpose.

Correction of Spray Pattern Imperfections

The following table shows how to correct a defective spray pattern.

Desired spray pattern

Spray pattern test	Fault	Required adjustment
	Spray pattern is split in the centre	• setting a wider spray pattern
	Spray pattern is too thick at the ends	• Setting a more rounded spray pattern
	The spray pattern shows rather large droplets	• Increase the nozzle air pressure
	Material application in the centre of the spray pattern is very thin	• Decrease the nozzle air pressure
	Spray pattern is split in the centre	• Increase the nozzle diameter • Reduce nozzle air pressure • Increase material pressure
	Spray pattern is very spherical	• Reduce material pressure • Increase nozzle air pressure

5.5 Retooling of Spray Gun

Combinations of air cap, material control nozzle and needle, designed to match specific spraying media tpyes and grades, form a unit - namely the nozzle insert assembly. In order maintain the desired spray-finish quality standard always replace the complete nozzle insert assembly.

Warning
Prior to retooling: Make sure that the spray gun is in unpressurized condition, i.e. all air and material inputs must be shut off - if not, imminent risk of injury.

Note
In order to perform the following procedures please use the drawing at the beginning of these operating instructions.

Replacement of Air Cap

1. Unscrew the knurled air cap nut in (pos. 1) from the front part.
2. Pull the air cap in (pos. 2) of the gun front.
3. Position the required air cap on the front.
4. Screw the air cap nut in (pos. 1) onto the front.

Replacement of Material Nozzle and Needle

1. Remove the air cap (see *5.5 Replacement of Air Cap*).
2. Unscrew the material nozzle (pos. 3) from the gun body (pos. 6). Remove the sealing washer (pos.4) and the air distribution ring in (pos. 5).
3. Unscrew the drawbar (pos. 24).
4. Unscrew the cap (pos. 23) and the threaded bushing (pos. 22) from the gun body.
5. Pull off the material control needle with the Parts (pos. 17-20) from the gun body.

Installation of the new nozzle insert assembly and the remaining parts is performed in the reverse order.

6 Cleaning

6.1 Safety Warnings

- Prior to any servicing and repair work: Make sure that the spray gun is in unpressurized condition, i.e. all air and material inputs must be shut off - if not, imminent risk of injury.
- No open fires, naked light and smoking allowed in the work area. When spraying readily flammable media such as cleaning solutions, there is an increased risk of fire and explosion.
- Observe the safety warnings issued by the manufacturer. Aggressive and corrosive media represents risks and hazards to personal health.

6.2 Cleaning - Complete

Regular cleaning and lubrication of the spray gun has to be performed, in order to increase the service life and the function of the spray gun.

Clean the gun only with cleaning solutions recommended by the manufacturer of the spraying material used at the time. It is important to make sure that cleaning solutions do not contain any of the following constituents:

- halogenated hydrocarbons (e.g. 1,1,1-trichloroethane, methylene chloride, etc.)
- acids and acidiferous cleaning solutions
- regenerated solvents (so-called cleaning dilutions)
- paint removers.

The above constituents cause chemical reactions with the electroplated components resulting in corrosion damage.
WALTHER Spritz-und Lackiersysteme is not responsible for any damages resulting from such treatment.

Clean the spray gun

- prior to each change of the spraying medium
- at least once a week
- as often as may be required by the spraying medium handled and the resultant degree of fouling.

Caution
Never immerse the spray gun in solvent or any other cleaning solution. The functional reliability and efficiency of the gun can otherwise not be guaranteed.

Caution
Do not use any hard, pointed or sharp-edged objects when cleaning the spray gun. Any damage of the precision-made parts are likely to affect your spraying results.

1. Dismantle the spray gun in accordance with *5.5 Replacement of Material Nozzle and Needle.*
2. Use a soft brush together with a compatible cleaning sulotion to clean the air cap and nozzle.
3. Clean the remaining parts and the spray gun body with a suitable cloth and cleaning solution.
4. Apply a thin film of the appropriate grease to the:
   - sealing collar of the piston
   - O-ring of the piston
   - material control nee
   - needle spring

Make sure to use a non-acidic, non-resinogenic grease and a soft brush. The spray gun is then reassembled in reverse order.

6.3 Cleaning - Routine

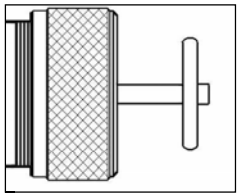
The spray gun need not necessarily be dismantled for cleaning if and when the spraying medium is changed in regular intervals or upon termination of work (depending on the material used).

Note
Clean and lubricate the spray gun frequently in accordance with Chapter *6.2 Cleaning - Complete*. This will ensure functional reliability of the spray gun.

The following requirements must be met before the routine cleaning work can be performed:

1. The material tank must be claen and then be filled with a compatible cleaning aolution. Material pressure has to be available at the spray gun. The cleaning solution should not be sprayed.
2. Take the spray gun into operation (see *5.2 Starting the Spray Gun*).
3. Do not stop the spray gun until clear cleaning solution emerges from the nozzle.

The material supply of the PILOT WA 450, WA 451, WA 452 and WA 453 can be manually released so that it is not necessary to operate the complete spraying system. All pressures should then be removed from the complete spraying system until the next operation.



1. Pull back the draw bar of the spray gun. The material inlet is now open and both material duct and material nozzle will be cleaned.
2. Do not let go of the drawbar until clear cleaning solution emerges from the nozzle.

7 Repairs / Replacements

Warning
Prior to any repairs / replacements: Make sure that the spray gun is in unpressurized condition, i.e. all air and material inputs must be shut off - if not, imminent risk of injury.

Note
Please use the drawing at the beginning of these operating instructions to perform the following procedures.

7.1 Replacement of defective Needle Seal Packings

1. Remove the material needle (see *5.5 Retooling the Spray Gun*).
2. Unscrew the sealing screw in (pos. 14) with the O-ring and the packing screw (pos. 13).
3. Remove the packing spring in (pos. 11) (replace, if damaged) and the pressure ring in (pos. 10).
4. Pull out the needle seal packing in (pos. 9) with an auxilliary tool. Use a strong wire on which one end is bent making a small hook.
5. Lubricate the new needle seal packing with non-acidic, non-resinogenic grease.
6. Install the new needle seal packing in the gun body.

Installation of the remaining parts is performed in reverse order.

Note
Never reinstall a used needle seal packing (pos. 9) as otherwise the functional sealing reliability of the spray gun will suffer.

7.2 Replacement of Nozzles, Needles, Springs and Seals

Dismantle the spray gun in accordance with Chapter *Replacement of Material Nozzle and Needle*, if the following components have to be replaced:
- Material nozzle
- Piston spring
- Material needle*
- Needle spring*
- Cup seal*
- Piston O-ring*

Note
Parts marked with * must be lubricated with non-acidic, non-resinogenic grease prior to installation. WALTHER PILOT repair kits are available for PILOT WA 450, WA 451, WA 452 and WA 453 spray guns including all wearing parts:

Article No.: V 16 545 06 . . 3 - WA 450 / 451
Article No.: V 16 547 03 . . 3 - WA 452 / 453

Wearing parts are also shown in the listing of replacement parts (in bold face).

8 Troubleshooting and Corrective Action

Warning
Prior to any servicing and repair work: Make sure that the spray gun is in unpressurized condition, i.e. all air and material inputs must be shut off - if not, imminent risk of injury.

Fault	Cause	Corrective Action
Gun is dripping	Material nozzle or needle fouled or damaged	- Removing, cleaning, if need be - replacing
Gun fails to open	Control air pressure too low	- Increaese control air pressure to at least 4.5 bar
Material leaks from leakage boring	Needle seal packing leaks	- see 7.1 Replacing Needle Seal Packing
	Packing gland too loose	- Tighten packing screw in (pos. 12) slightly with a screw- driver
Spray jet pulsating or unsteady	Level in material tank too low	- Top-up material level (see operating instructions of plan systems manufacturer)
Gun keeps blowing in off-position	Cup seal (pos. 18) damaged	- Replace cup seal
Spray jet one-side	Horn boring soiled at air cap	- Remove and clean

9 Disposal of Cleaning / Servicing Substances

Disposal of any such substances must be in accordance with all applicable local and national regulations, directives and laws.

Warning
Pay special attention to all processing specifications and safety warnings issued by the manufacturers of spraying and cleaning media. The improper disposal of any toxic waste material represents a serious threat to the environment, i.e. to the health of mankind and animal life.

10 Technical Data

Gewicht: 600 gr

Weight:
Round jet air: 1/8 PK 6
Wide/flat jet air: 1/8 PK 6
Control air: M8 x 0,75
Material inlet: 1/8 PK 6

Pressure ranges:
Control air pressure: min. 4,5 bar
Material pressure: max. 6 bar
Atomizing air
(Round - and Wide/flat air): max. 6 bar

Sound Level (measured at a distance of 1 m from the spray gun) 83 dB (A)

Air consumption:

Atomizing (Round - and Wide/flat air)	Standard	Low pressure
1,0 bar	18,0 m³/h	12,0 m³/h
2,0 bar	24,6 m³/h	16,2 m³/h
3,0 bar	29,4 m³/h	18,6 m³/h
4,0 bar	33,0 m³/h	21,6 m³/h
4,5 bar	**34,5 m³/h**	**22,8 m³/h***
5,0 bar	36,0 m³/h	22,8 m³/h
6,0 bar	39,0 m³/h	26,4 m³/h

* The spraying pressure is 0.7 bar with an air input pressure of 4.5 bar.

Right to effect technical changes reserved.

Das WALTHER PILOT-Programm

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- Hand-Spritzpistolen
- Automatik-Spritzpistolen
- Niederdruck-Spritzpistolen (System HVLP)
- Zweikomponenten-Spritzpistolen
- Materialdruckbehälter
- Drucklose Behälter
- Rührwerk-Systeme
- Airless-Geräte und Flüssigkeitspumpen
- Materialumlaufsysteme
- Kombinierte Spritz- und Trockenboxen
- Absaugsysteme mit Trockenabscheidung
- Absaugsysteme mit Nassabscheidung
- Pulversprühstände
- Trockner
- Zuluft-Systeme
- Atemschutzsysteme und Zubehör

The WALTHER PILOT Programme

GB

- Hand-Held Spray Guns
- Automatic Spray Guns
- Low Pressure Spray Guns (System HVLP)
- Two-Component Spray Guns
- Material Pressure Tanks
- Nonpressurized Tanks
- Agitator Systems
- Airless Equipment and Transfer Pumps
- Material Circulation Systems
- Combined Spraying and Drying Booths
- Dry Back Overspray Extraction Systems
- Wet Back Overspray Extraction Systems
- Powder Spray Stands
- Dryers
- Ventilation Systems
- Protective Respiratory Systems and Accessory Items

WALTHER PILOT®
Die Beschichtungs-Experten

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Freiwillige Zertifizierung