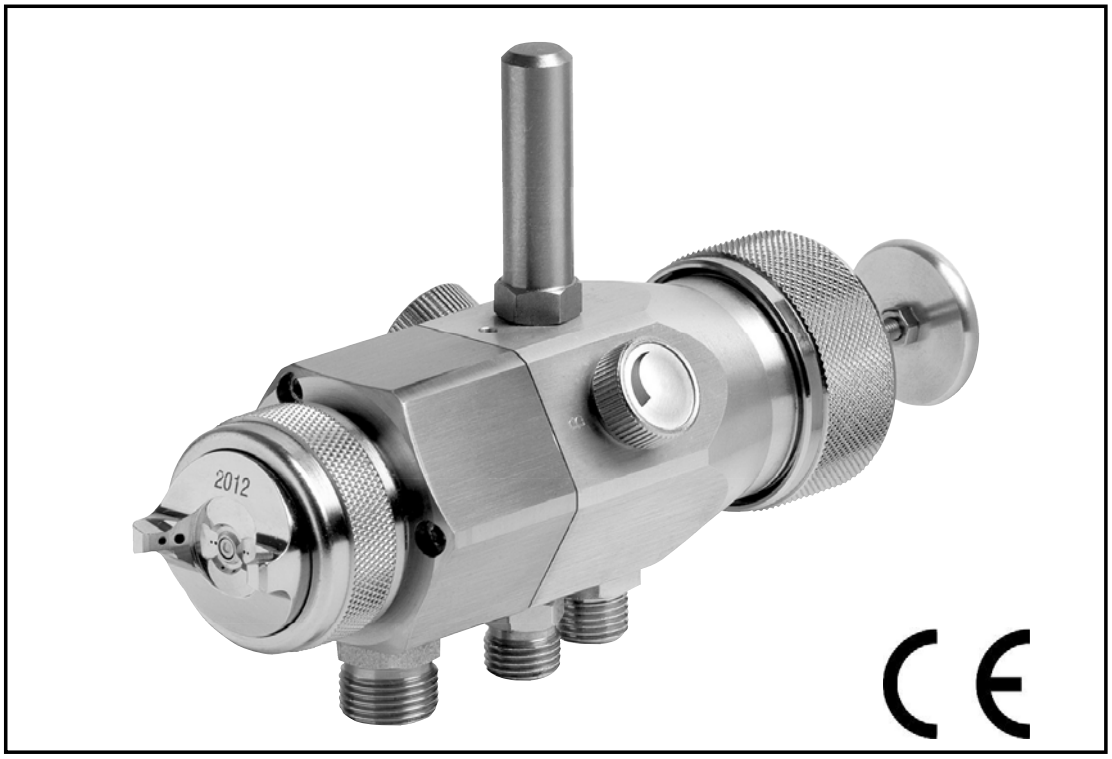
WALTHER PILOT

Betriebsanleitung / Operating Instructions /
Instructions de Service / Gebruiksaanwijzing

D GB F NL

Automatische Spritzpistolen / Automatic Spray Guns /
Pistolets de Pulvérisation Automatiques / Automatische Spuitpistolen

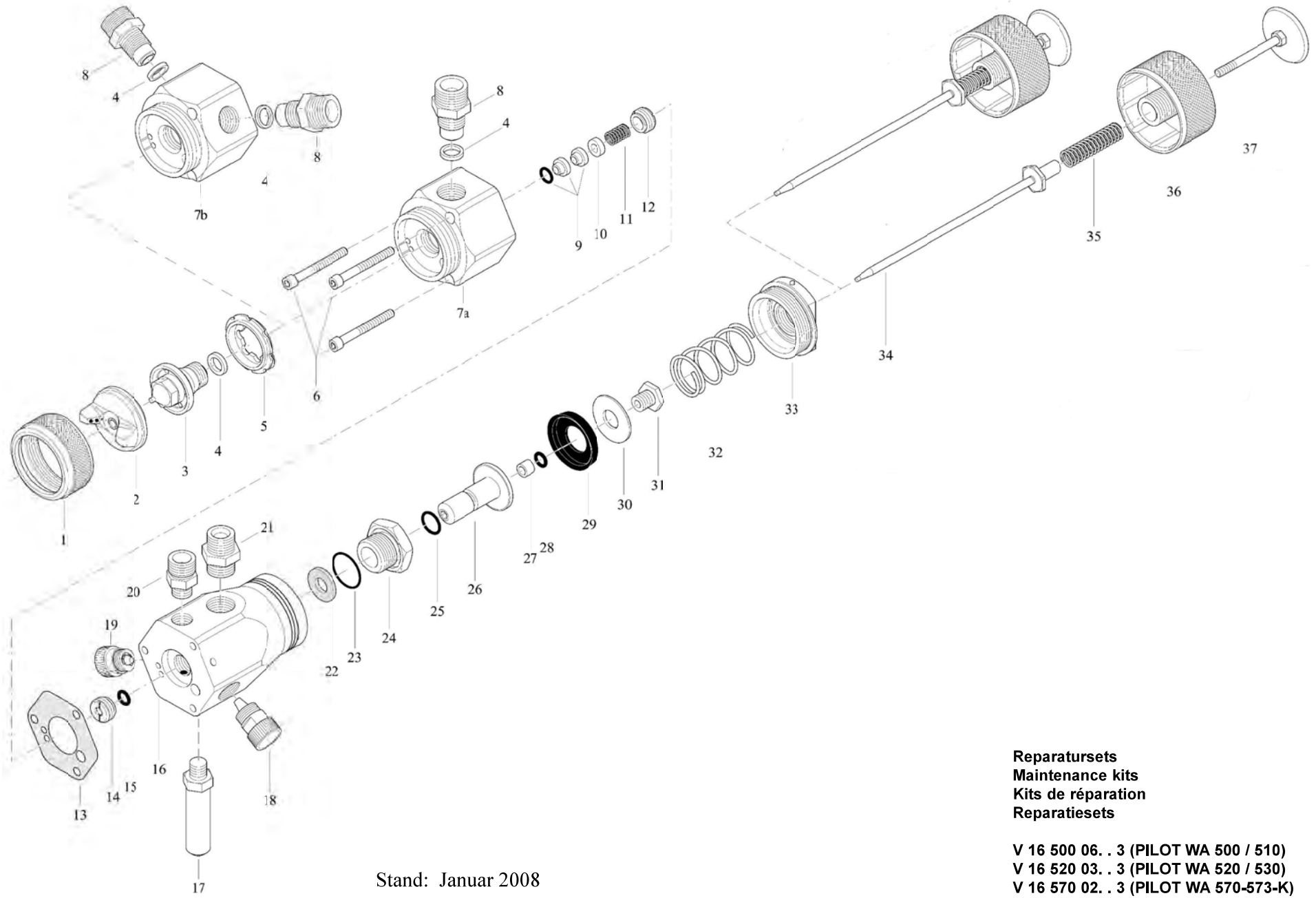
PILOT WA 500 / PILOT WA 510 / PILOT WA 520 / PILOT WA 530 / PILOT WA 570-K / PILOT WA 571-K / PILOT WA 572-K / PILOT WA 573-K



REV. 07/11

WALTHER PILOT®

Die Beschichtungs-Experten



Reparatursets
Maintenance kits
Kits de réparation
Reparatiesets

V 16 500 06. . 3 (PILOT WA 500 / 510)
V 16 520 03. . 3 (PILOT WA 520 / 530)
V 16 570 02. . 3 (PILOT WA 570-573-K)

Stand: Januar 2008

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Declaration of CE-Conformity

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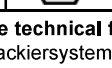
We, the manufacturers of the equipment, hereby declare under our sole responsibility that the product(s) described below conform to the essential safety requirements. This declaration will be rendered invalid if any changes are made to the equipment without prior consultation with us.

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 Gun PILOT WA 500 (Standard version) PILOT WA 510 (Circulation version) PILOT WA 520 (HVLP version) PILOT WA 530 (HVLP and circultion version) PILOT WA 570-K (Adhesive application version - standard) PILOT WA 571-K (Adhesive application version - circulation syst.) PILOT WA 572-K (Adhesive application version - system HVLP) PILOT WA 573-K (Adhesive application version - system HVLP for circulation systems)
Intended purpose	Processing of sprayable media

Applied Standards and Directives

EU-Mechanical Engineering Directives 2006 / 42 / EC
94 / 9 EC (ATEX Directives)
EN ISO 12100-1
EN ISO 12100-2 — DIN EN 1953
DIN EN 1127-1 — DIN EN 13463-1

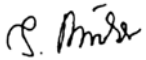
Specification according 94 / 9 / EC

Category 2	**Part marking**		**II 2 G c T 5**	**Tech.File,Ref.: 2402**

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.

Listing of Replacement Parts: PILOT WA 500

Item No.	Parts No.	Description
1	V 11 360 04 300	Retaining Ring
2	**option of**	**Air Control Head** **
	V 11 360 30 060	**f. noozles 0.3 - 1.8 mm ø**
	V 11 360 30 210	**f. noozles 2.0 - 2.5 mm ø**
3	**option of**	**Material Outlet Nozzle**
	V 11 601 40 . . 3*	**,***
4	**V 09 002 16 000**	**Sealing Washer**
5	V 11 601 04 000	Air Distribution Ring
6	V 20 510 14 003	Fastening Screw
7a	V 20 510 10 500	Front Body
8	V 20 510 13 003	Material Connection Nipple
9	**V 09 001 72 000**	**Needle Seal Packing** compl.
10	V 10 361 07 000	Pressure Ring
11	**V 20 510 12 003**	**Packing Spring**
12	V 20 510 11 003	Packing Screw
13	**V 09 001 70 000**	**Seal**
14	V 20 510 42 003	Sealing Screw
15	**V 09 102 02 007**	**O-Ring**
16	V 20 510 40 000	Piston Casing
17	option of	
	V 20 510 21 003	Mounting Pin 12 mm ø
	V 20 510 21 103	Mounting Pin 14 mm ø
18	V 11 601 20 000	Round Jet Control
19	V 11 601 20 000	Flat Jet Control
20	V 00 101 70 005	Barrel Nipple
21	V 00 101 01 000	Barrel Nipple
22	**V 09 230 01 000**	**Piston Casing Sealing**
23	**V 09 103 27 001**	**O-Ring**
24	V 20 510 24 004	Piston-Boss Bushing
25	**V 09 102 09 000**	**O-Ring**
26	V 20 510 23 004	Piston
27	V 20 510 47 004	Bushing
28	**V 09 102 02 001**	**O-Ring**
29	**V 20 651 06 000**	**Cup Seal**
30	V 20 510 18 004	Clamping Washer
31	V 20 510 16 004	Piston End Nut
32	V 20 606 11 000	Piston Spring
33	V 20 510 33 000	Threaded Ring
34	**option of**	**Material Control Needle**
	V 20 510 30 . . 3*	**,***
35	**V 20 510 29 003**	**Needle Spring**
36	V 20 510 32 000	Cap
37	V 20 510 34 000	Drawbar

Listing of Replacement Parts for Models PILOT WA 510 / 520 / 530 (deviating from PILOT WA 500)

PILOT WA 510 (Circulation Version)

Item No.	Parts No.	Description
7b	V 20 510 19 510	Front body

PILOT WA 520 (HVLP Version)

Item No.	Parts No.	Description
2	option of	HVLP Air Control Head
	V 11 631 15 011	High-finishing air head nozzle sizes 0,5-1,8 mm ø
	V 11 631 15 012	High-finishing air head nozzle sizes 2,0-2,5 mm ø
	V 11 631 10 060	for fillers - 0,3-1,8 mm ø
	V 11 631 10 210	for fillers - 2,0-2,5 mm ø
	V 11 631 11 061	**for paints - 0,3-1,8 mm ø** ***
	V 11 631 11 211	for paints - 2,0-2,5 mm ø
5	V 11 631 04 000	Air Distribution Ring
7a	V 20 510 10 520	Front Body
16	V 20 510 50 000	Piston Casing

PILOT WA 530 (HVLP Version for Circulation Operation)

Item No.	Parts No.	Description
2	option of	Low-Pressure Air Control Head
	V 11 631 15 011	High-finishing air head nozzle sizes 0,5-1,8 mm ø
	V 11 631 15 012	High-finishing air head nozzle sizes 2,0-2,5 mm ø
	V 11 631 10 060	for fillers - 0,3-1,8 mm ø
	V 11 631 10 210	for fillers - 2,0-2,5 mm ø
	V 11 631 11 061	**for paints - 0,3-1,8 mm ø***
	V 11 631 11 211	for paints - 2,0-2,5 mm ø
5	V 11 631 04 000	Air Distribution Ring
7b	V 20 510 10 530	Front Body
16	V 20 510 50 000	Piston Casing

PILOT WA 570-K, 571-K, 572-K, 573-K (Spray Guns for Adhesives)

Item No.	Parts No.	Description
2	option of	Air Control Head
	V 11 631 12 055	(0,8 - 1,0 mm ø)
	V 11 631 12 205	(1,2 - 1,8 mm ø)
	V 11 631 12 255	(2,0 - 2,5 mm ø)
3	**V 11 641 40 . . 3***	**Material Outlet Nozzle** ****
4	**Sealing washer**	**is not applicable**
7a	V 20 570 10 500	Front Body WA 570-K
7a	V 20 570 10 510	Front Body WA 571-K
7a	V 20 570 10 520	Front Body WA 572-K
7a	V 20 570 10 530	Front Body WA 573-K
34	**V 20 570 30 . . 3***	**Material Control Needle** ****

*Please indicate noozle size when ordering.
We recommend that repair sets are held on stock.
Repair sets include all wearing parts shown in boldface print.

** contained in Noozle sets: **V 15 500 06 . . 3**
*** contained in Noozle sets: **V 15 520 03 . . 3**
**** contained in Noozle sets: **V 15 572 02 . . 3**

1 General

1.1 Identification of Model Versions

Models: Automatic Spray Gun PILOT WA 500, WA 510, WA 520, WA 530 WA 570-K, WA 571-K, WA 572-K, WA 573-K

Type Series:

20 500	WA 500	(Standard)
20 510	WA 510	(Circulation Systems)
20 520	WA 520	(System HVLP)
20 530	WA 530	(System HVLP - circulation systems)
20 570	WA 570-K	(Adhesive application version)
20 571	WA 571-K	(Adhesive application version - circulation systems)
20 572	WA 572-K	Adhesive application version - System HVLP)
20 573	WA 573-K	(Adhesive application version - System HVLP - circulation systems)

Manufacturer: WALTHER Spritz- und Lackiersysteme GmbH
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D-42327 Wuppertal (Germany)
Tel.: 0202/787-0
Fax: 0202/787-2217
www.walther-pilot.de • Email:info@walther-pilot.de

1.2 Normal Use

The automatic spray guns of the series PILOT WA 500 are exclusively designed for use with sprayable material types and grades. All wetted parts are made of stainless steel so as to permit handling of watersoluble and/or agressive media such as:

- paints and lacquers
- greases, oils and corrosion preventives
- adhesive compounds
- ceramic glazes
- acidiferous media and
- 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 materials may only be applied to work pieces and/or similar items. The temperature of the spraying materials shall never exceed 80 degrees Celsius. The models of the series PILOT WA 500 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 Spritz- und Lackiersysteme 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 Ω).

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 spray guns of the series PILOT WA 500 are all 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 and the material input.
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.
The material flow rate and the spray jet contour (flat / wide / round) are adjusted at the gun by way of regulating screws.
The material inlet duct of the series PILOT WA 500 can be opened manually so as to permit, for example, cleaning of a clogged material outlet nozzle.
The models PILOT WA 510/571-K and WA 530/573-K permit connection to circulation systems. Thus, several spray guns can be supplied with spraying material through the closed loop layout at the same timeThe spray guns PILOT WA 500/570-K and WA 520/572-K can be connected to material pressure tanks and pumping systems.

The models PILOT WA 520/572-K and WA 530/573-K are solely HVLP spray guns and operate with a spraying pressure of 0.7 bar using an inlet pressure of 4.5 bar.

3 Safety Warnings

3.1 Safety Warning Symbols

Warning
This pictograph and the accompanying warning note „**Warning**“ indicate possible risks and dangers for yourself.
Possible consequences: Injuries of any kind.

Caution
This pictograph and the accompanying warning note „**Caution**“ indicate possible damage to equipment.
Possible consequences: Damage to equipment, workpieces, etc.

Notice
This pictograph and the accompanying note „**Notice**“ indicate additional and useful information to help you handling the spray gun with even greater confidence and efficiency.

3.2 Generally Applicable Safety Precautions

It is important that all applicable accident prevention directives as well as industrial safety and health rules and regulations are duly complied with.

Use this spray gun in well ventilated rooms. Open fires, naked lights and smoking are prohibited in the working area. Spraying of readily flammable media such as paints, lacquers, cleaning agents, etc., causes a potential health, explosion and fire risk.
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 Ω).
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.
Keep your hands and other extremities away from the front of the spray gun - imminent risk of injury.
Never point the spray gun at persons or animals - imminent risk of injury.
It is important that all processing specifications and safety warnings issued by the manufacturers of spraying and cleaning media are duly complied with. Especially aggressive and corrosive media can cause personal health problems.
Wear suitable hearing protections while working with the spray gun. Spray guns produce sound levels of up to 86 dB (A), which may cause hearing defects.
Air-borne particles must be kept away from the working area and personnel. Wear proper respiratory protection masks and protective overalls when working with spraying media.Air-borne particles represent a health hazard.
Check that nuts and screws are tightened properly after performing servicing and repair work.

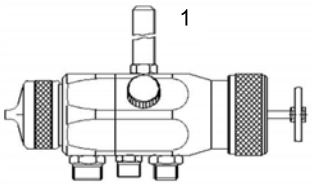
Make sure you use original WALTHER replacement parts designed for functional reliability and efficiency.
Should you have any questions concerning the safe operation of the spray gun, please contact WALTHER Spritz- und Lackiersysteme GmbH, D-42327 Wuppertal.

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

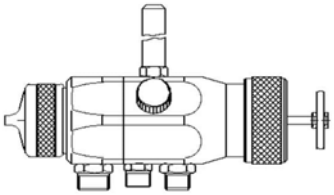
Install the gun in a suitable and stable mounting device as shown in the following example:



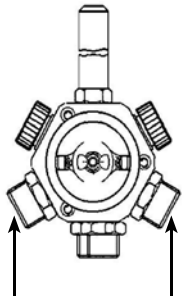
Use mounting pin 1, diameter 12 mm.
Other mounting devices upon request.

4.2 Connection of Input Lines

Warning
Make sure not to confuse the control and atomizing air connections -risk of injury.



M = Material inlet fitting G 3/8“
ST = Control air inlet fitting G 1/4“
Z = Atomizing air inlet fitting G 1/4“



Material inlet fitting for the circulation versions:
PILOT WA 510 / 571-K and
WA 530 / 573-K (G 3/8“)

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) 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 must be availabe at the gun
- material pressure must be availabe at the gun.

Caution
The material pressure shall not exceed
- **10 bar**, as, otherwise, the functional reliability of the spray gun will suffer.

Adjust the control air pressure to
- at least **4 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*).

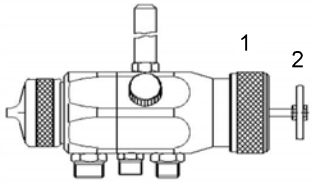
5.4 Spray Pattern Adjustments

The spray pattern of the PILOT WA 500-series can be adjusted as follows:

Adjusting the jet pattern

An optimun spray pattern can be adjusted by using control screws (1) and (2).
The control screw (1) regulates the round jet, the control screw (2) the wide/flat jet.

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, 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 Atomizing Air Pressure

The atomizing air pressure is adjusted at the air pressure reducing valve of the compressor system. Please comply with the operating instructions and safety warnings issued by the 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 control head/-material control nozzle/needle combinations for this purpose.

Correcting of Spray Pattern Imperfections

The following table shows what to do to correct a spray pattern.

 **desired spray result**

Spray pattern test	Deviation	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 control head, 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.

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

Replacement of Air Control Head

1. Unscrew the knurled air control head retaining ring in (Item 1) from the front part.
2. Pull the air control head in (Item 2) of the gun front.
3. Position the required air control head on the front.
4. Screw the air control head retaining ring in (pos. 1) onto the front.

Replacement of Material Control Nozzle and Needle

1. Remove the air control head (see *5.5 Replacement of Air Control Head*).
2. Unscrew the material nozzle in (Item 3) from the front (width over flats of hex nut 13). Remove the sealing washer in (Item 4) and the air distribution ring in (Item 5).
3. Unscrew the cap in (Item 36) from the threaded ring in (Item 33).
4. Pull off the material control needle in (Item 34) including the Items 35-37 from the gun body.
5. Unscrew the material control needle (Item 34) from the draw bar in (Item 37).

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 represent 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 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 Control Nozzle and Needle.*
2. Use a soft brush together with a compatible cleaning sulotion to clean the air control head 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 needle
   - 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).

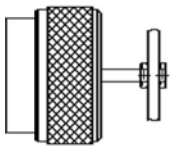
Notice
Clean and lubricate the spray gun frequently in accordance with Chapter *6.2 Cleaning - Complete*. This will ensure functional reliability of the spray gun.

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

1. The material tank must be clean and then be filled with a compatible cleaning solution. 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 500-series 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 the material control neddle 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.

Notice
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 all pressures from the gun.
2. Unscrew the 3 mounting screws in (Item 6) from the front body in (Item 7) (width over flats of hex. nut 3).
3. Pull the front body in (Item 7) off the piston casing in (Item 16).
4. Remove the sealing in position 13.
5. Unsrew the packing screw into position 12 from the front part in (Item 7) (screw driver).
6. Remove the packing spring in (Item 11) (replace, if damaged) and the pressure ring in (Item 10) from the threaded socket.
7. Pull out the needle seal packing in (Item 9) with an auxilliary tool. Use a strong wire on which one end is bent making a small hook.
8. Lubricate the new needle seal packing with non-acidic, non-resinogenic grease.
9. Install the new needle seal packing in the gun body.

Installation of the remaining parts is performed in reverse order.

Notice
Never reinstall a used needle seal packing 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 *7.2 Repalcement of Material Control Nozzle and Needle*, if the following components have to be replaced:

- Material Control Nozzle
- Piston Spring
- Material Control Needle*
- Needle Spring*
- Piston Sealing Collar*
- Piston O-Ring*

Notice
Parts marked with * must be lubricated with non-acidic, non-resinogenic grease prior to installation.

WALTHER Spritz- und Lackiersysteme repair kits are available for PILOT WA 500- series spray guns including all wearing parts:

Article No.: V 16 500 06 . . 3 (WA 500 / WA 510)
Article No.: V 16 520 03 . . 3 (WA 520 / WA 530)
Article No.: V 16 570 02 . . 3 (WA 570 / WA 571 / WA 572 / WA 573)

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 control nozzle or needle fouled	see *5.5 Removing Material* Control Nozzle or Needle and cleaning
	Material control nozzle or needle damaged	see *7.2 Replacing Material* Control Nozzle or Needle
	Packing gland too tight	Loosen packing screw in (Item 12) slightly with a screw driver
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 (Item 12) slightly with a screwdriver
Spray jet pulsating or unsteady	Level in material tank too low	Top-up material level (see operating instructions of plant systems manufacturer)

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 Specification Data

Weight: 680 g

Nozzle Sizes: 0,3 - 0,5 - 0,8 - 1,0 - 1,2 - 1,4 - 1,5 - 1,8 - 2,0 - 2,2 - 2,5 mm ø

Connections:

Atomizing Air	G 1/4 inch
Control Air	G 1/4 inch
Material Inlet	G 3/8 inch

Pressure Ranges:

Control Air Pressure	min. 4 bar
Material pressure	max. 10 bar
Atomizing Air	max. 8 bar
max. Operating Temperature of Spray gun	80 degs. C
Sound Level (measured at a distance of 1 m from the spray gun)	86 dB (A)

Air Consumption:

Models PILOT WA 500/570-K and WA 510/571-K		Models PILOT WA 520/572-K and WA 530/573-K	
Air control head: twelve-bore version		Air control head: HVLP	
Atomizing air pressure	Air consumption	Air input of the spray gun	Air consumption
1,0 bar	18,0 m³/h	1,0 bar	12,0 m³/h
2,0 bar	24,6 m³/h	2,0 bar	16,2 m³/h
3,0 bar	29,4 m³/h	3,0 bar	18,6 m³/h
4,0 bar	33,0 m³/h	4,0 bar	21,6 m³/h
5,0 bar	36,0 m³/h	**4,5 bar**	**22,8 m³/h***
6,0 bar	39,0 m³/h	5,0 bar	24,0 m³/h
		6,0 bar	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

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

D

The WALTHER PILOT Programme

- Hand-Held Spray Guns
- Automatic Spray Guns
- Low Pressure Spray Guns (System HVLP)
- 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
- Dryers
- Ventilation Systems
- Protective Respiratory Systems and Accessory Items

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Le Programme de WALTHER PILOT

- Pistolets de pulvérisation manuels
- Pistolets de pulvérisation automatiques
- Pistolets de pulvérisation (Système HVLP)
- Réservoirs sous pression
- Récipients de mélange et de stockage
- Appareils de pulvérisation sans air
- Pompes de transfert
- Murs à aspiration sèche
- Murs à rideau d'eau
- Cabines de poudrage
- Cabines mixtes peinture-séchage
- Installations de soufflage
- Etuves
- Très nombreux accessoires

F

Het WALTHER PILOT Programma

- Manuele spuitpistolen
- Automatische spuitpistolen
- Lagedruk-spuitpistolen (systeem HVLP)
- Airless apparaten en vloeistofpompen
- Druktanks
- Drukloze tanks
- Circulatiesystemen
- Roersystemen
- Gecombineered spuit- en droogboxen
- Verfnevelafzuigsystemen met droge afscheiding
- Verfnevelafzuigsystemen met natte afscheiding
- Verluchtingsinstallaties
- Allerlei accessoires

NL

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Freiwillige Zertifizierung