

WALTHER PILOT

Betriebsanleitung / Operating Instructions /
Instructions de Service / Gebruiksaanwijzing

D GB F NL I

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

PILOT WA XV

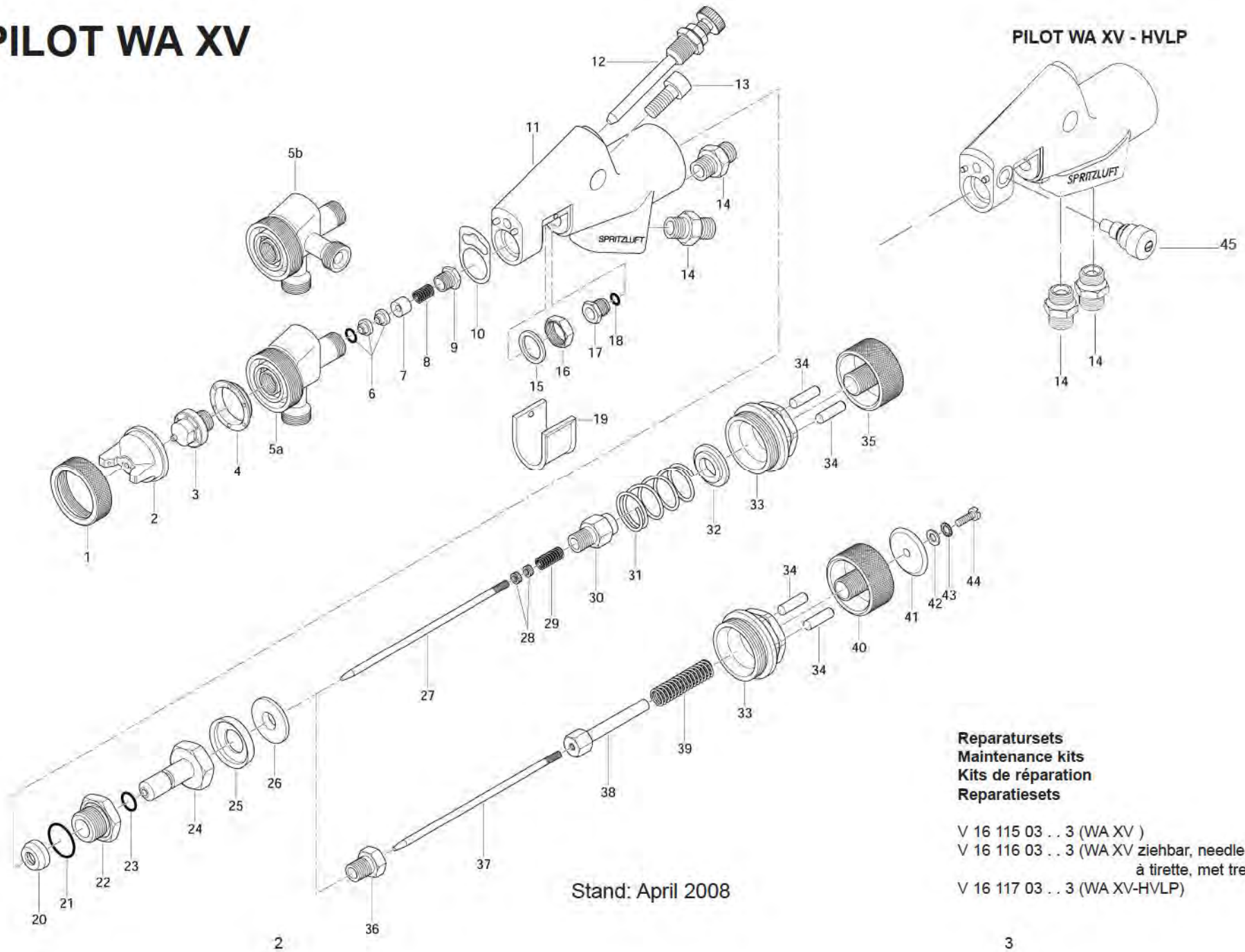


REV 07/12



Die Beschichtungs-Experten

PILOT WA XV



Stand: April 2008

Reparatursets
Maintenance kits
Kits de réparation
Reparatiesets

V 16 115 03 ... 3 (WA XV)

V 16 116 03 ... 3 (WA XV ziehbar, needle-pull
à tirette, met trekker)


V 16 117 03 ... 3 (WA XV-HVLP)

Listing of Contents

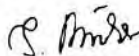
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Declaration of CE-Conformity

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 XV WA XV WA XV needle-pull WA XV-HVLP	V 20 660 V 20 664 V 20 672	
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 1127-1 DIN EN 1953 DIN EN 13463-1			
Specification according 94 / 9 / EC			
Category 2	Part marking		Tech.File,Ref.: 2411
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 for Model WA XV

Item	Part-No.	Description
1	V 01 101 03 000	Air Cap Nut
2	optional V 01 101 02 . . 6*	6-Bore-Air Cap other Air Cap Versions upon request
3	optional V 01 101 07 . . 3*	Material Nozzle
4	V 11 301 02 000	Air Distribution Ring
5a	V 20 660 02 000	Gun Front Attachment
5b	V 20 661 02 000	Gun Front Attachment (Circulation Systems only)
6	V 09 001 72 000	Needle Seal Packing
7	V 20 660 05 000	Mating Bush
8	V 20 660 06 000	Compression Spring
9	V 20 660 07 000	Compression Gland
10	V 09 001 67 000	Seal
11	V 20 660 01 000	Gun Body
12	V 20 660 20 000	Flat-Jet Adjustment compl.
13	V 20 660 08 000	Cylinder Head Screw
14	V 00 101 01 000	Double Nipple
15	V 09 002 07 000	Usit-Ring
16	V 20 660 04 003	Hexagonal Nut
17	V 20 201 02 000	Sealing Screw
18	V 09 102 02 000	O-Ring
19	V 20 660 42 000	Blanking Cap
20	V 20 660 32 000	Sealing Collar
21	V 09 102 11 000	O-Ring
22	V 20 660 33 000	Screw Plug
23	V 09 102 09 000	O-Ring
24	V 20 660 31 000	Control Piston
25	V 20 651 06 000	Sealing Collar
26	V 20 660 34 000	Backup Washer
27	optional V 20 660 51 . . 3*	Material Needle
28	V 10 506 02 000	Needle Retaining Nut
29	V 20 651 07 000	Needle Spring
30	V 20 660 36 003	Piston End Nut
31	V 20 606 11 000	Piston Spring
32	V 20 660 35 000	Spring Retainer
33	V 20 660 37 000	Spring Bush
34	V 20 660 38 000	Spring Pin
35	V 20 660 39 120	Adjustment Screw

Replacement Parts - other than given values of PILOT WA XV

Replacement Parts PILOT WA XV needle-pull Type V 20 664

Item	Part-No.	Description
27-35	Parts	not applicable
36	V 20 664 05 000	Piston End Nut
37	optional V 20 664 43 . . 3*	Material Needle
38	V 20 664 02 000	Stop Pin
39	V 20 206 04 000	Needle Spring
40	V 20 664 04 000	Adjustment Screw
41	V 20 664 03 000	Washer
42	V 20 679 85 000	Flat Washer
43	V 20 679 84 000	Serrated Lock Washer
44	V 20 660 41 684	Cylinder Head Screw

Replacement Parts PILOT WA XV- HVLP Type V 20 672

2	optional V 01 101 86 086* V 01 101 86 256*	Air Cap for Nozzle Size 0.3 - 2.0 mm ø 2.5 - 3.0 mm ø
3	V 01 101 85 . . 3*	Material Nozzle
11	V 20 671 01 000	Gun Body
20	V 20 671 32 000	Sealing Collar
30	V 20 664 05 000	Piston End Nut
37	optional V 20 664 43 033 V 20 664 43 053	Material Needle 0,3 ø for 0,3-Nozzle 0,5 ø for 0,5-Nozzle for Nozzle Size
	V 20 664 43 083*	0.8 - 1.5 mm ø
	V 20 664 43 123*	1.8 - 2.0 mm ø
	V 20 664 43 253*	2.5 - 3.0 mm ø
38	V 20 664 02 000	Stop Pin
39	V 20 206 04 000	Needle Spring
40	V 20 664 04 000	Adjustment Screw
41	V 20 664 03 000	Washer
42	V 20 679 85 000	Flat Washer
43	V 20 679 84 000	Serrated Lock Washer
44	V 20 660 41 684	Cylinder Head Screw
45	V 20 671 40 000	Middle-Air Regulation

* Please make sure to always quote the required size(s) when placing an order for Replacement Parts! We recommend that BOLD-faced replacement parts (i.e. wearing parts) are held in stock to avoid work stoppages.

1 General

1.1 Identification of Model Version

Model:	Automatic Spray Gun PILOT WA XV	
Type series:	WA XV	V 20 660
	WA XV needle-pull	V 20 664
	WA XV-HVLP	V 20 672

Manufacturer: WALTHER Spritz- und Lackiersysteme GmbH
Kärntner Str. 18-30
D-42327 Wuppertal
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1.2 Normal Use

The automatic spray guns of the WA XV type series are exclusively designed for use with sprayable material types and grades. All wetted parts are made of stainless speciality steel so as to permit handling of hydrous and/or aggressive media such as, for example:

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

If your specific material is not listed above, please contact us for further and detailed information.

Please note that sprayable material may only be applied to workpieces and/or similar items.

The temperature of the spraying material shall never exceed 80 degs. C.

The WA XV needle-pull gun is not designed for manual operation, but 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 contained in these Operating Instructions, are 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 $10^6\Omega$).

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 and considered as improper use in contrast to the original engineering design concept. The term improper use also includes such operations as may be:

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

2 Technical Description

Spray guns of the WALTHER PILOT Type Series WA XV are all automatic air-controlled guns operating in combination with a 3/2-way control valve in the form of hand-, foot- or solenoid-actuated valves.

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 (i.e. flat, wide or round) are adjusted at the gun by way of regulating screws.

The material inlet duct of the WA XV needle-pull can be opened by hand so as to permit, for example, cleaning of a clogged material nozzle.

The model PILOT WA XV-HVLP is a low pressure spray gun and operate with a spraying pressure of 0.7 bar using an inlet pressure of 3.5 bar.

The gun front attachment with twin connector for material input permits inclusion of the PILOT spray gun in a circulation system the closed loop layout of which is designed to operate several spray guns.

This spray gun can be connected to material pressure tanks, pumping and circulation systems.

3 Safety Instructions

3.1 Safety Warning Symbols



Warning

This pictograph and the accompanying warning note "Warning" indicates possible risks and dangers for yourself and others, likely to result in injuries of any description.



Caution

This pictograph and the accompanying warning note "Caution"-indicates possible damage to equipment, workpieces, etc.



Notice

This pictograph and the accompanying note "Notice" indicates additional and useful information to help you handling the spray gun with even greater confidence and efficiency.

3.2 General Safety Instructions

- 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 (max. 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 depressurised. 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. 86 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.

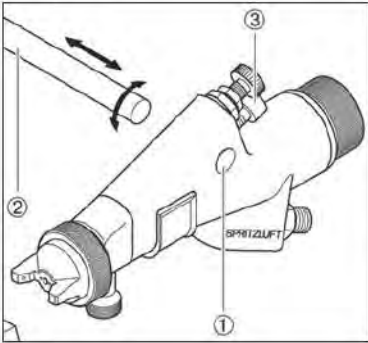
For further information on the safe use of the spray gun and the spraying materials, please contact WALTHER Spritz- und Lackiersysteme GmbH, D-42327 Wuppertal, Germany.

4 Assembly / Installation

This WALTHER PILOT spray gun is delivered in completely assembled condition - but requires the following preparations before it can be taken into operation:

4.1 Mounting of Spray Gun

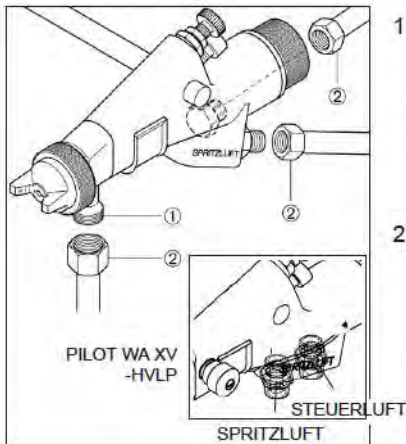
Install the gun in a suitable and stable mounting device as shown in the following example:



1. Slide the gun with its 12 mm \varnothing mounting bore ① onto the rod ② of the mounting device.
2. Adjust the gun on the mounting rod to point at the workpiece. Point the gun on the mounting rod - by sliding and turning it up or down - at the workpiece.
3. Lock the gun in the desired position by tightening the cap screw ③ with a Size 8 mm hex. hd. socket wrench.

4.2 Connection of Input Lines

Warning Make sure not to confuse the control and atomizing air connections - Risk of Injury.



1. Connect the Input line for
 - Atomizing air to the "SPRITZLUFT" inlet fitting (G 1/4") of the gun.
 - Control air to the "STEUERLUFT" inlet fitting (G 1/4") of the gun.
 - Material to inlet Fitting ① (G 3/8") of the gun.
2. Use the tool wrench to tighten the three hex. nuts ②.

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

5 Operational Handling

5.1 Safety Instructions

Your special attention is drawn to the following Safety Warnings prior to taking this spray gun into operation!

- Make sure to wear proper respiratory protection masks and protective Overalls whenever you are operating this spray gun. Remember: Air-Borne particles represent a health hazard.
- Make sure to wear suitable Hearing protectors. Remember: Spray guns produce sound levels of up to about 86 dB (A), which are highly likely to cause hearing defects.
- Make sure your working area is absolutely free from open fires and naked lights -and anybody smoking. Remember: Spraying of readily flammable media such as, for example, paints, adhesive compounds, cleaning solutions, etc., is always accompanied by the risk of fire and explosion.

5.2 Starting / Stopping Requirements

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

- atomizing air must be available at the gun.
- material pressure must be available at the gun.
- control air must be available at the gun.



Caution

The material pressure shall not exceed

- 10 bar in the WA XV
- 15 bar in the WA XV needle-pull / WA XV-HVLP

as, otherwise, the functional reliability of the spray gun will suffer.

Adjust the control air pressure to

- 8 bar maximal

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 is best tested using a workpiece sample, a sheet of metal, cardboard or paper.

Warning
Keep away from the front of the spray gun - imminent Risk of Injury.

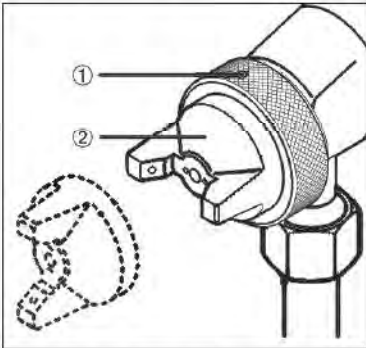
Warning
Make sure that nobody is present in the spraying zone when the gun is started - imminent Risk of Injury.

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 XV / WA XV needle-pull / WA XV-HVLP can be adjusted as follows.

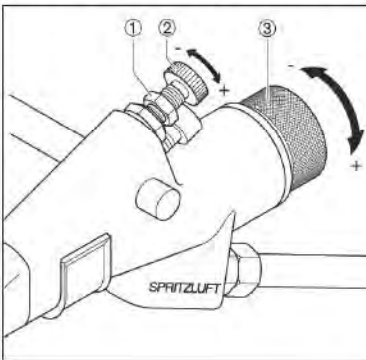
Wide and / or Flat Jet Pattern



1. Loosen the knurled air cap retaining ring ① slightly.
2. Rotate the air cap ② horns into
 - a vertical position = flat jet pattern
 - a horizontal position = wide jet pattern
3. Tighten the air cap retaining ring ①.

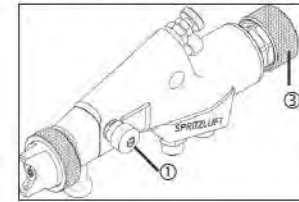


Wide / Flat and / or Round Jet Pattern



4. Loosen the lock nut ① using a Size 11 mm wrench.
5. Turn the fine-adjusting screw ② in
 - - direction = increase roundness of spray jet contour
 - + direction = increase wideness/flatness of spray jet contour
6. Once the desired spray jet contour is adjusted tighten the lock nut ①.

Middle-air adjustment (only PILOT WA XV-HVLP)



The adjusting screw ① is used to adjust the middle-air.

Adjustment of the Material Flow Rate

1. Turn the material input regulating screw ① from its normal position (= notch mark on the material needle adjuster) in
 - - direction = decrease of flow rate.
 - + direction = increase of flow rate.

Adjustment of the Material Pressure

This adjustment can only be made at the controls of the pumping or circulation system or material pressure tank. Please comply with the Operating Instructions and Safety Warnings issued by the manufacturers concerned.

Adjustment of the Atomisation Air Pressure

The atomizing air Pressure is to be 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 offer a great variety of air cap/material nozzle/-needle combinations for this purpose.

Correcting of Spray Pattern Imperfections

The table below shows what to do to correct a 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 atomising air pressure
	Material application in the centre of the spray pattern is very thin	• Decrease the atomising air pressure
	Spray pattern is split in the centre	• Increase the nozzle diameter • Reduce atomising air pressure • Increase material pressure
	Spray pattern is very spherical	• Reduce material pressure • Increase atomising air pressure

5.5 Retooling of Spray Gun

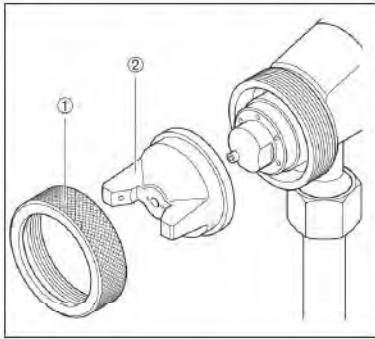
Combinations of air cap, material nozzle + needle, designed to match specific spraying media types and grades, form a unit - namely the nozzle insert assembly, which must always be interchanged as a complete assembly to maintain the desired spray- finish quality standard.



Warning

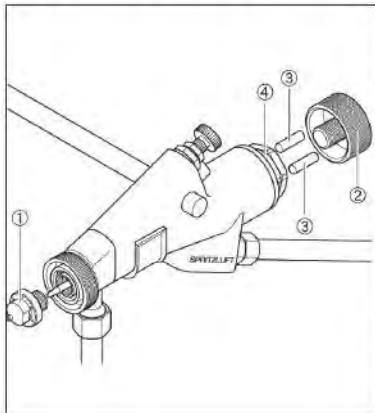
Prior to retooling: make sure that the spray gun is in unpressurized condition, i.e. all air and material inputs must be shut off - if not, imminent Risk of Injury.

Replacement of Air Cap

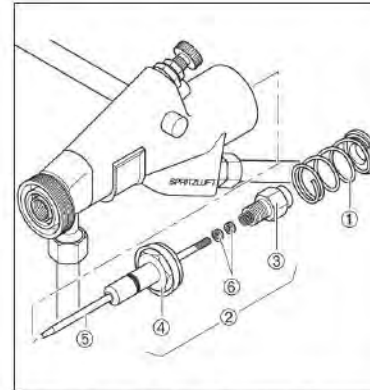


1. Unscrew the knurled air cap retaining ring ①.
2. Pull the air cap ② off the gun front attachment.
3. Position the required air cap on the gun front attachment.
4. Screw the air cap retaining ring ① onto the gun front attachment.

Replacement of Material Nozzle and Needle WA XV / WA XV-HVLP:

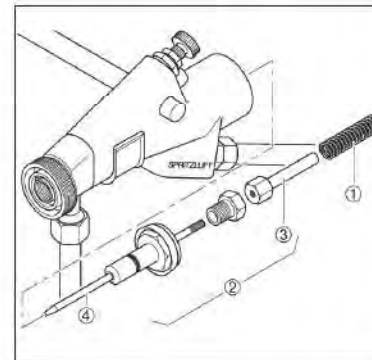


1. Remove all Pressures from the gun (see 5.2 Starting / Stopping Requirements).
2. Remove the air control head (see 5.5 Replacement of Air Cap).
3. Unscrew the material nozzle ① from the gun front attachment (use a Size 12 mm wrench).
4. Unscrew the material Input regulating screw ②.
5. Pull the two spring pins ③ off.
6. Unscrew the spring retaining bush ④ (use a Size 27 mm wrench).
7. Remove the compression spring ① from the gun body.



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

WA XV needle-pull / WA XV-HVLP:



8. Remove the piston ② very carefully from the gun body (use a suitable pair of pliers).
9. Remove the piston end nute from the control piston ④ (use Size 13 mm and 22 mm wrenches). The material needle ⑤ is now freely accessible and can be pulled out.
10. Unscrew the two needle retaining nuts ⑥.

1. Remove all pressures from the gun (see 5.2 Starting / Stopping Requirements).
2. Remove the air control head (see 5.5 Replacement of Air Cap).
3. Unscrew the material nozzle from the gun front attachment (12 mm wrench).
4. Remove the cap screw and pull the washer off.
5. Remove the material input regulating screw.
6. Pull the needle spring ① out.
7. Pull the stop piston ② plus material needle ④ out.
8. Unscrew the material needle ④ from the stop pin ③.

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

6 Cleaning and Maintenance

6.1 Safety Instructions

- Prior to any servicing and repair work: Make sure that the spray gun is in unpressurised condition, i.e. all air and material inputs must be shut off - if not, imminent Risk of Injury .
- No open fires and naked lights as well as smoking are allowed in the work area. This is a major requirement to prevent the ever present risk of fire and explosion, particularly when spraying readily flammable media such as, for example cleaning solutions, etc.
- It is important that all processing specifications and safety warnings issued by the manufacturer of cleaning media are duly complied with. Remember: Aggressive and corrosive media represents risks and hazards to personal health.

6.2 Cleaning - Complete

The spray gun should be frequently cleaned and lubricated so as to ensure a long service life and functional reliability. Cleaning of 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 electroplated components resulting in corrosion damage.

WALTHER Spritz- und Lackiersysteme is not liable for any damages resulting from improper treatment of the gun.

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 as such measure is highly likely to affect the functional reliability and efficiency of the gun.



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 (see 5.5 *Retooling the Spray Gun*).
2. Use a soft brush together with a compatible cleaning solution to clean the air cap and nozzle.

3. Use a suitable cloth with a compatible cleaning solution to clean the gun body and all remaining parts.
4. Apply a thin film of the appropriate grease type/grade to the:
 - sealing collar of the piston
 - O-ring of the piston
 - material control needle
 - needle spring
 - inside of the gun body

Make sure to use a non-acidic, non-resinogenic grease type/ grade and apply same with a soft brush. Assemble the spray gun 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, of course, on the material used).



Notice

It is recommended practice to clean and lubricate the spray gun frequently in accordance with Chapter 6.2 *Cleaning - Complete*, as this will greatly help towards ensuring a long service life and functional reliability.

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

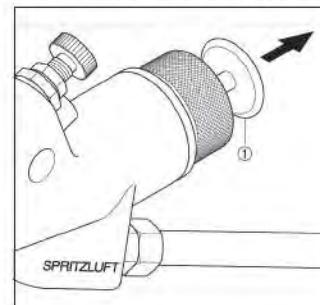
- the material tank must be clean and then filled with a compatible cleaning solution.
- cleaning solution should never be sprayed - yet the material pressure must be available at the gun.

The spraying system must be in Operation if a spray gun is to be cleaned.

1. Take the spray gun into Operation (see 5.2 *Starting / Stopping Requirements*).
2. Do not stop the spray gun until clear cleaning solution emerges from the nozzle.

Only WA XV needle-pull / WA XV-HVLP

The material input can be released by hand so that the complete spraying system must not be taken into operation.



1. Pull the disk ① at the end of the spray gun back. The material inlet is now open and both the material duct and the material needle will be washed clean.
2. Do not let go of the disk ② until clear cleaning solution emerges from the nozzle.

All pressures should now be removed from the complete spraying system - which should be left in this condition until it is taken into operation again.

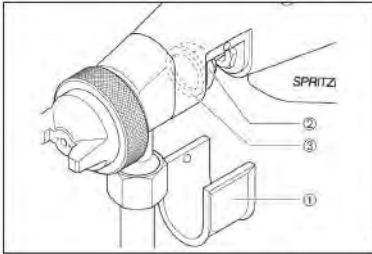
7 Repairs / Replacements



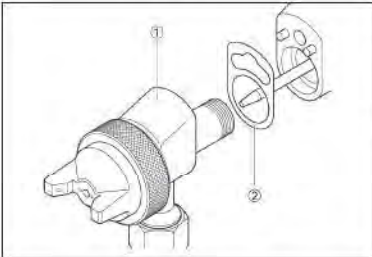
Warning

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

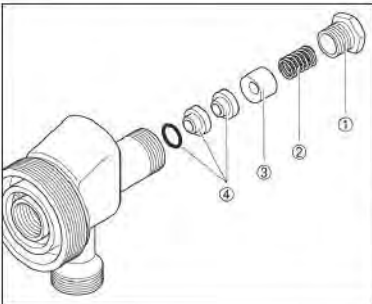
7.1 Replacement of defective Needle Seal Packings



1. Remove all pressures from the gun -see 5.2 Starting / Stopping Requirements.
2. Pull the white protective cover ① off the gun body.
3. Unscrew the hex. nut ② with a Size 17 mm wrench.
4. Pull the "USIT" ring ③ off.



5. Pull the gun front attachment ① carefully off the gun body.
6. Remove the gasket ② - and replace same if damaged.



7. Unscrew the packing seal ① with a Size 11 mm from the gun front attachment.
8. Remove the compression spring ② (replace if damaged) and the counter bush ③ from the threaded socket.
9. Remove the needle seal packing ④ from its seat - use a strong wire with one end bent to form a small hook.

10. Lubricate the new needle seal packing with a non-acidic, non-resinogenic grease type / grade.

11. Install the new needle seal packing in the gun body. Installation of the remaining parts in reverse order.



Caution

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

For replacement of any of the following parts dismantle the spray gun in accordance with 5.5 Replacement of Material Nozzle and Needle:

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



Caution

Parts marked * must be lubricated with a non-acidic, non-resinogenic grease type / grade prior to installation.

WALTHER Repair kits are also available for WA XV, WA XV needle-pull and WA XV-HVLP spray guns. Wearing parts are also shown (in boldface) in the Listing of Replacement Parts.

Repair kit-material side:

WA XV:

Art. No.: V 16 115 03 . . 3

WA XV needle pull:

Art. No.: V 16 116 03 . . 3

WA XV-HVLP:

Art. No.: V 16 117 03 . . 3

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	Remedy
Gun is dripping	Material nozzle or needle fouled or damaged	Remove see 5.5 Material Nozzle or Needle and clean or replace
	Packing gland too tight	Loosen packing gland slightly use a Size 11 wrench
Gun fails to open	Control air pressure too low	Increase control air pressure to max. 8 bar (see operating Instructions of plant systems manufacturer)
Spray jet pulsating or unsteady	Level in material tank too low	Top-up material level (see operating Instructions of plant systems manufacturer)
Material leaks from packing gland	Needle seal packing leaks	Replace see 7.1 Needle Seal packing
	Packing gland to loose	Tighten packing gland slightly use a Size 11 mm wrench

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

Particular attention is drawn to all processing specifications and safety warnings issued by the manufacturers of spraying and cleaning media. Remember: 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: 920 g

Connections:

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

Pressure Ranges:

Control Air Pressure max. 8 bar
Material Pressure max. 10 bar (WA XV)
max. 15 bar (WA XV needle-pull / WA XV-HVLP)
Atomising Air Pressure see table

max. Operating Temperature of Spray Gun

80 °C

Sound Level

(measured at a distance of
1 m from the spray gun) 86 dB (A)

Air consumption (six-bore air cap):

1.0 bar Atomizing Air Input	8.2 m ³ /h
2.0 bar Atomizing Air Input	12.1 m ³ /h
3.0 bar Atomizing Air Input	16.0 m ³ /h
4.0 bar Atomizing Air Input	20.1 m ³ /h
5.0 bar Atomizing Air Input	24.0 m ³ /h
6.0 bar Atomizing Air Input	28.0 m ³ /h

Right to effect technical changes reserved.