



Translation of the Original Operating Manual

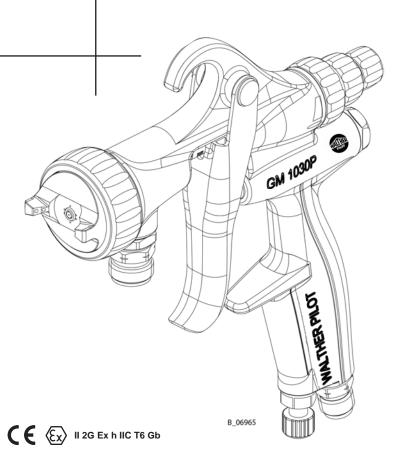
For professional use.

Always follow the information in this manual, particularly the safety instructions and the warning instructions. Store the manual in a safe place.

Version 09/2022

PILOT GM 1030P PILOT GM 1030P ADH

Spray Gun





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1 ABOUT THESE INSTRUCTIONS

1.1 PREFACE

The operating manual contains information about safely operating, maintaining, cleaning and repairing the device.

The operating manual is part of the device and must be available to the operating and service personnel.

The device may only be operated by trained personnel and in compliance with this operating manual.

Operating and service personnel should be instructed according to the safety instructions. This equipment can be dangerous if it is not operated according to the instructions in this operating manual.

1.2 WARNINGS, NOTICES AND SYMBOLS IN THESE INSTRUCTIONS

Warning instructions in this manual highlight particular dangers to users and to the device and state measures for avoiding the hazard. These warning instructions fall into the following categories:

↑ DANGER Immediate risk of danger.

Non-observance will result in death or serious injury.

MARNING Potential danger.

Non-observance may result in death or serious injury.

↑ CAUTION Potentially dangerous situation.

Non-observance may result in minor injury.

(!) NOTICE Potentially dangerous situation.

Non-observance may result in damage to property.

Note: Provides information about particular characteristics and

how to proceed.

Explanation of warning notice:

LEVEL OF DANGER

This notice warns you of a danger!

Possible consequences of not observing the warning notice.

→ The measures for preventing the hazard and its consequences.





1.3 LANGUAGES

The operating manual is available in the following languages:

Original operating manual

Language	Order no.
German	2422131

Translation of the original operating manual

Language	Order no.
English	2422648
French	2422650
Italian	2422655
Spanish	2422656

Language	Order no.
Russian	2422658
Chinese	2422659
Polish	2438472

Additional languages on request or at: $\underline{www.walther\text{-}pilot.de}$

1.4 ABBREVIATIONS

Order no.	Order number
ET	Spare part
K	Marking in the spare parts lists
Pos	Position
Stk	Number of pieces
ADH	Adhesive

SW	Wrench size
LV	for low-viscosity (LV) products
HV	for high-viscosity (HV) products
LA	Low air
GM	Manual gun

1.5 TERMINOLOGY FOR THE PURPOSE OF THIS MANUAL

Cleaning	
Cleaning	Manual cleaning of devices and device parts with cleaning
	agent.
Flushing	Internal flushing of paint-wetted parts with flushing agent.
Product pressure	Pump or pressure tank.
generator	
Personnel qualificatio	ns
Trained person	Is instructed in the tasks assigned to him/her, the potential risks
	associated with improper behavior as well as the necessary
	protective devices and measures.
Electrically trained	Is instructed by an electrician about the tasks assigned to him/her,
person	the potential risks associated with improper behavior as well as
	the necessary protective devices and measures.
Electrician	Can assess the work assigned to him/her and detect possible
	hazards based on his/her technical training, knowledge and
	experience in relevant provisions.
Skilled person in	A person who, based on his/her technical training, experience
accordance with	and recent vocational experience, has sufficient technical
TRBS 1203	knowledge in the areas of explosion protection, protection
(2010/Revision 2012)	from pressure hazards and electric hazards (if applicable) and
	is familiar with the relevant and generally accepted rules of
	technology so that he/she can inspect and assess the status of
	devices and coating systems based on workplace safety.



2 CORRECT USE

2.1 DEVICE TYPE

Manual gun for manually coating work pieces.

PILOT GM 1030P/ 1030P ADH

2.2 TYPE OF USE

The spray gun is suitable for atomizing liquid products, particularly coating products, using the Airspray process:

- Non-ignitable products.
- Ignitable products.

WALTHER explicitly prohibits any other use!

The device may only be operated under the following conditions:

- → Use the device only to work with the products recommended by WALTHER.
- → Do not deactivate safety fixtures.
- → Use only WALTHER original spare parts and accessories.
- → The operating personnel must be trained on the basis of this operating manual.

2.3 FOR USE IN POTENTIALLY EXPLOSIVE AREAS

The device is suitable for use in potentially explosive areas as defined in Directive 2014/34/EU (ATEX), (see Explosion protection marking Chapter 3.1).



2.4 PROCESSIBLE WORKING MATERIALS

Lacquers and paints, greases, oils and corrosion inhibitor, glue, ceramic glazes, stains. If you want to spray working materials other than the aforementioned, contact a WALTHER Spritz- and Lackiersysteme representative.

Note:

Contact your local WALTHER Spritz- and Lackier systeme dealer and the material manufacturer if you encounter application problems.

2.5 MISUSE

Misuse can lead to physical injury and/or property damage! Special attention must be paid that:

→ No dry coating products, e.g., powder are processed.



3 IDENTIFICATION

3.1 EXPLOSION PROTECTION IDENTIFICATION

As defined in the Directive 2014/34/EU (ATEX), the device is suitable for use in potentially explosive areas.

Device type: Manual gun PILOT GM 1030P/ 1030P ADH Manufacturer: WALTHER Spritz- und Lackiersysteme GmbH

Kärntner Str. 18-30 D-42327 Wuppertal

(€⟨€x⟩ II 2G X

CE European Communities

Ex Symbol for explosion protection

II Device class II
 2 Category 2 (zone 1)
 G Ex-atmosphere gas
 X Special notice



3.2 IDENTIFICATION,,X"

The maximum surface temperature corresponds to the permissible product temperature. This and the permissible ambient temperature can be found in Chapter <u>5.4.2</u>.

Safe Handling of WALTHER Spray Devices

Mechanical sparks can form if the device comes into contact with metal. In an explosive atmosphere:

- → knocking or pushing metal against metal is to be avoided;
- → do not drop the device.

Ignition temperature of the coating product

→ Ensure that the ignition temperature of the coating product is above the maximum surface temperature.

Medium supporting atomizing

→ To atomize the product, use only weakly oxidizing gases, e.g., air.

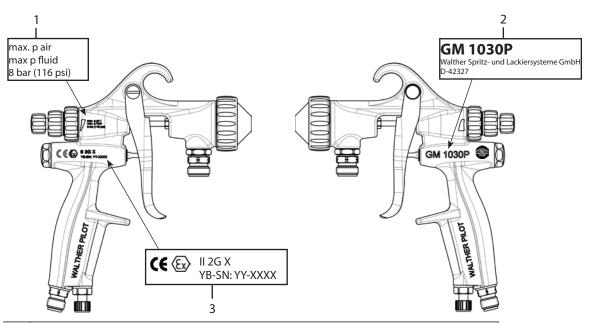
Cleaning

If there are deposits on the surfaces, the device may form electrostatic charges. Flames or sparks can form during discharge.

- → Remove deposits from the surfaces to maintain conductivity.
- → Use only a damp cloth to clean the device.



3.3 TYPE PLATE



Pos	Designation
1	Maximum air inlet pressure/product pressure
2	Spray gun model and manufacturer
3	Explosion protection identification and year of manufacture serial number (YR-SN)



4 **BASIC SAFETY INSTRUCTIONS**

SAFETY INSTRUCTIONS FOR THE OPERATOR

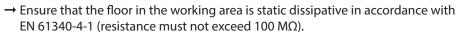
- → Keep this operating manual at hand near the device at all times.
- → Always follow local regulations concerning accident prevention regulations.

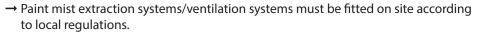


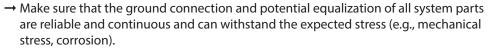
4.1.1 A SAFE WORK ENVIRONMENT

Hazard due to dangerous fluids or vapors!

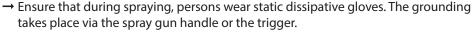
Severe or fatal injuries due to explosion hazard or inhalation, swallowing or contact with the skin or eyes.







- → Ensure that product hoses/air hoses adapted to the working pressure are used.
- \rightarrow Ensure that personal protective equipment (see Chapter 4.2.1) is available and is
- → Ensure that all persons within the working area wear static dissipative shoes. Footwear must comply with EN 20344. The measured insulation resistance must not exceed 100 MΩ.



- → Protective clothing, including gloves, must comply with EN 1149-5. The measured insulation resistance must not exceed 100 M Ω .
- → Ensure that there are no ignition sources such as naked flames, sparks, glowing wires, or hot surfaces in the vicinity. No smoking.
- → Ensure that the pipe joints, hoses, equipment parts and connections are permanently, technically leak-proof:
 - Periodic preventative maintenance and service (replacing hoses, checking tightness of connections, etc.).
 - Regular monitoring of leaks and defects via visual inspection and odor testing, e.g., daily before commissioning, at the end of work or weekly.
- → Ensure that maintenance and safety checks are performed regularly.
- → In the event of defects, immediately bring the device or system to a stop and arrange to have repairs carried out immediately.









4.1.2 PERSONNEL QUALIFICATIONS

Danger due to incorrect use of device!

Risk of death due to untrained personnel.

→ Ensure that the operating personnel has been instructed by the operator in accordance with the operating manual and the operating instructions. The device must only be operated, maintained and repaired by trained personnel. Refer to the operating instructions for information about the required personnel qualifications.

4.2 SAFETY INSTRUCTIONS FOR THE PERSONNEL

- → Always follow the information in this manual, particularly the safety instructions and the warning instructions.
- → Always follow local regulations concerning accident prevention regulations.

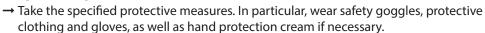


4.2.1 PERSONAL SAFETY EQUIPMENT

Hazard due to dangerous fluids or vapors!

Serious or fatal injuries due to inhalation, swallowing or contact with the skin or eyes.

→ When preparing or working with material and when cleaning the device, follow the processing instructions of the manufacturer of the materials, solvents and cleaning agents being used.



- → Use a mask or breathing apparatus if necessary.
- → For sufficient health and environmental safety: Operate the device in a spray booth or on a spraying wall with the ventilation (extraction) switched on.
- → Wear suitable protective clothing when working with hot products.





4.2.2 SAFE HANDLING OF WALTHER SPRAY DEVICES

Hazard due to injection of material or flushing agent into the skin!

The spray jet is under pressure and can cause dangerous injuries. Avoid injection of material or flushing agents:

- → Never point the spray gun at people.
- → Never reach into the spray jet.
- → Before any work on the device, in the event of work interruptions and malfunctions:
 - Switch off the energy/compressed air supply.
 - Relieve the pressure from the spray gun and device.
 - Disconnect the control unit from the mains.
 - In the event of functional faults: remedy the fault as described in Chapter, 9 Troubleshooting and Rectification".
- → If needed, the liquid ejection devices must be checked by experts (e.g., WALTHER service technician) at least every 12 months for their work-safe condition in accordance with DGUV regulation 100-500 Chapter 2.29 and Chapter 2.36.
 - For shut down devices, the examination can be suspended until the next start-up.

In the event of skin injuries caused by material or flushing agents:

- → Note the material or flushing agent that you have been using.
- → Consult a doctor immediately.

4.2.3 GROUNDING THE DEVICE

Danger due to electrostatic charge!

Explosion hazard and damage to the device.

Friction, flowing liquids and air or electrostatic coating processes create charges. Flames or sparks can form during discharge.

Correct grounding of the entire spraying system prevents electrostatic charges.

- → Ensure that all devices and tanks are grounded before each spraying process.
- → Ground the work pieces to be coated.
- → Ensure that all persons inside the working area are grounded, e.g., that they are wearing static dissipative shoes.
- → Wear static dissipative gloves when spraying. The grounding takes place via the spray gun handle or the trigger.







4.2.4 PRODUCT HOSES

Hazard due to bursting of product hose!

The product hose is under pressure and may cause dangerous injuries.

- → Ensure that the hose material is chemically resistant to the sprayed products and the flushing agents used.
- → Ensure that the product hoses and the fittings are suitable for the pressure generated.
- → Ensure that the following information can be seen on the pressure hose used:
 - manufacturer,
 - permissible operating pressure,
 - date of manufacture.
- → Make sure that the hoses are laid only in suitable places. Hoses should not be laid in the following places under any circumstances:
 - in high-traffic areas,
 - on sharp edges,
 - on moving parts or
 - on hot surfaces.
- → Ensure that the hoses are never run over by vehicles (e.g., fork lifts), or that the hoses are never put under pressure from the outside in any other way.
- → Ensure that the hoses are never kinked. Observe maximum bending radii.
- → Ensure that no work is ever performed with a damaged hose.
- → Make sure that the hoses are never used to pull or move the device.
- → The electrical resistance of the product hose, measured at both valves, must be less than 1 MO.
- → Suction hoses may not be subjected to pressure.

4.2.5 CLEANING AND FLUSHING

Danger due to cleaning and flushing!

Explosion hazard and damage to the device.

- → Preference should be given to non-ignitable cleaning and flushing agents.
- → When carrying out cleaning work with flammable cleaning agents, make sure that all equipment and resources (e.g., collection tank, funnel, transport cart) are conductive or static dissipative and grounded.
- → Observe the specifications of the material manufacturer.
- → Ensure that the flash point of the cleaning agent is at least 15 K above the ambient temperature or that cleaning is undertaken at a cleaning station with technical ventilation.
- → Never use chloride or halogenated solvents (such as trichloroethane and methylene chloride) with devices containing aluminium or galvanized/zinc-plated parts.

 They may react chemically thus producing an explosion danger.
- \rightarrow Take measures for workplace safety (see Chapter 4.1.2).
- → When commissioning or emptying the device, please note that:
 - depending upon the coating product used,
 - depending on the flushing agent (solvent) used.

an explosive mixture may temporarily exist inside the lines and items of equipment.

- → Only electrically conductive tanks may be used for cleaning and flushing agents.
- \rightarrow The tanks must be grounded.

An explosive gas/air mixture forms in closed tanks.

→ Never spray into a closed tank when using solvents for flushing.









External Cleaning

When cleaning the exterior of the device or its parts, also observe the following:

- → Relieve the pressure from the device.
- → De-energize the device electrically.
- → Disconnect the pneumatic supply line.
- → Use only moistened cloths and brushes. Never use abrasive agents or hard objects and never spray cleaning agents with a gun. Cleaning the device must not damage it in any way.
- → Ensure that no electric component is cleaned with or immersed into solvent.

4.2.6 MAINTENANCE AND REPAIR

Danger due to improper maintenance and repair!

Danger to life and equipment damage.

- → Only a WALTHER Spritz- and Lackiersysteme service center or a suitably trained person may carry out repairs and replace parts.
- → Use only WALTHER original spare parts and accessories.
- → Do not change or modify the device; if change is necessary, contact WALTHER.
- → Only repair and replace parts that are listed in Chapter 13 and Chapter 14 that are assigned to the device.
- → Do not use any defective components.
- → Before all work on the device and in the event of work interruptions:
 - Relieve the pressure from the spray gun, pressure hoses and all devices.
 - Secure the spray gun against actuation.
 - Switch off the energy and compressed air supply.
 - Disconnect the control unit from the mains.
- → Observe the operating and service manual for all work.

4.2.7 PROTECTIVE AND MONITORING EQUIPMENT

Danger due to removal of protective and monitoring equipment!

Danger to life and equipment damage.

- → Protective and monitoring equipment must not be removed, modified or rendered unusable.
- → Regularly check for perfect functioning.
- → If defects are detected on protective and monitoring equipment, the system must not be operated until these defects are remedied.

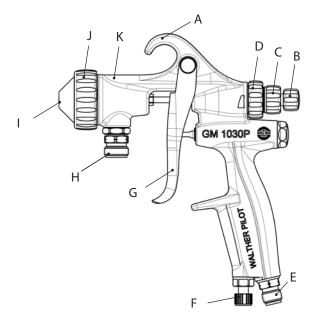




5 DESCRIPTION

5.1 COMPONENTS

Pos	Designation
Α	Suspension hook
В	Needle stroke regulator
C	Needle stroke regulator lock
D	Shaping air regulator
Е	Air connection
F	Air regulation
G	Trigger
Н	Fluid inlet
I	Nozzle / air cap
J	Air cap nut
K	Spray gun housing



5.2 MODE OF OPERATION

When pressing the trigger (G), first the atomizing air is released and then the material needle is retracted. In this way, the spray product moves through the nozzle (I) to the workpiece surface to be coated. The closing of the spray gun takes place in the reverse order. The product flow rate is dependent on the diameter of the nozzle (I) and the setting of the material pressure on the pressure vessel or product pressure regulator. The spray pattern is adjusted optimally to suit the object being sprayed using the shaping air regulator (D). The flow rate can be regulated by rotating the needle stroke regulator (B) and this setting can be fixed using the needle stroke regulator lock (C). The air supply is regulated using the air regulator (D).

5.3 STANDARD EQUIPMENT

Stk	Designation
1	CE Declaration of Conformity
1	Operating manual, in German
1	Operating manual in local language see Chapter 1.3

For special versions the delivery note applies.



5.4 DATA

5.4.1 MATERIALS OF PAINT-WETTED PARTS

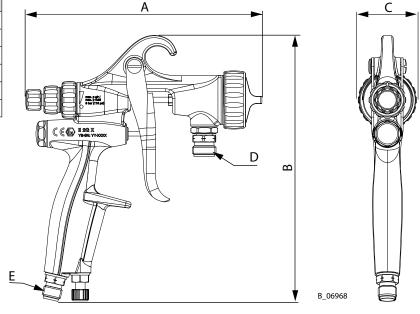
Metals	Plastics
Stainless steel 1.4305	PE-UHMW

5.4.2 TECHNICAL DATA

Description	Units	Value	
Maximum air inlet pressure	bar; MPa; psi	8; 0.8; 116	
		recommended: 2; 0.2; 29	
Maximum product pressure	bar; MPa; psi	8; 0.8; 116	
Fluid inlet	inch	G3/8"	
Air connection	inch	G1/4"	
Weight	g; oz	486; 17.1	
pH range of the product	рН	3.5-9.0	
Maximum product temperature	°C; °F	40; 104	
Operating temperature	°C; °F	5–40; 41–104	

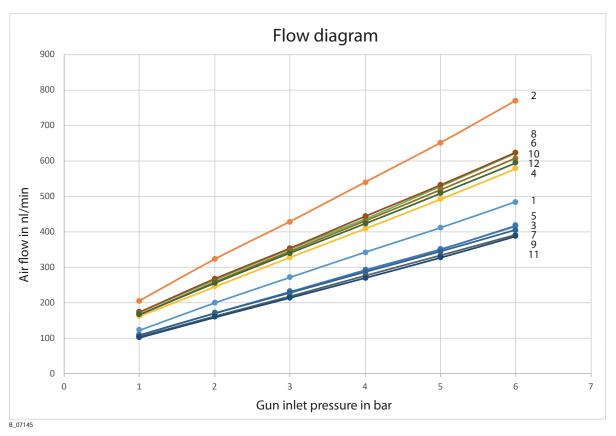
5.4.3 DIMENSIONS AND CONNECTIONS

	Dimensions			
Pos	mm; inch			
Α	168; 6.61			
В	189; 7.44			
C	41; 1.61			
D	G3/8"			
Е	G1/4"			





5.4.4 AIR FLOW



Inlet pressure (MPa; bar	; psi)	0.1; 1; 14.5	0.2; 2; 29.0	0.3; 3; 43.5	0.4; 4; 58.0	0.5; 5; 72.5	0.6; 6; 87.0
HVLP, round	1	123	200	272	343	412	485
HVLP, flat	2	206	323	429	540	651	770
HVLP+, round	3	109	171	230	293	352	416
HVLP+, flat	4	163	246	329	410	493	579
Conv12, round	5	110	172	232	293	351	418
Conv12, flat	6	173	264	352	437	529	623
Conv14, round	7	108	170	228	287	345	406
Conv14, flat	8	174	268	354	444	532	624
Conv10, round	9	105	163	219	277	334	392
Conv10, flat	10	168	259	346	431	518	607
Conv8, round	11	103	160	215	271	328	388
Conv8, flat	12	167	256	341	424	509	595

Information on air flow in nl/min with an inlet pressure between 0.1; 1; 14.5 and 0.6; 6; 87.0 (MPa; bar; psi).



6 ASSEMBLY AND COMMISSIONING

6.1 TRAINING OF ASSEMBLY/COMMISSIONING PERSONNEL

- → The assembly and commissioning personnel must have the technical skills to safely commission the device.
- → When assembling, commissioning and carrying out all work, read and follow the operating manuals and safety regulations for the additionally required system components.

A skilled person must check to ensure that the device is in a reliable state after it is assembled and commissioned.

6.2 STORAGE CONDITIONS

Until the point of assembly, the device must be stored in a dry location, free from vibrations and with a minimum of dust. The device must be stored in closed rooms.

The air temperature at the storage location must be between -20 $^{\circ}$ C and 60 $^{\circ}$ C (-4 $^{\circ}$ F and 140 $^{\circ}$ F).

The relative air humidity at the storage location must be between 10 and 95% (without condensation).

6.3 INSTALLATION CONDITIONS

The air temperature at the installation site must be in a range between 5 $^{\circ}$ C and 40 $^{\circ}$ C (41 $^{\circ}$ F and 104 $^{\circ}$ F).

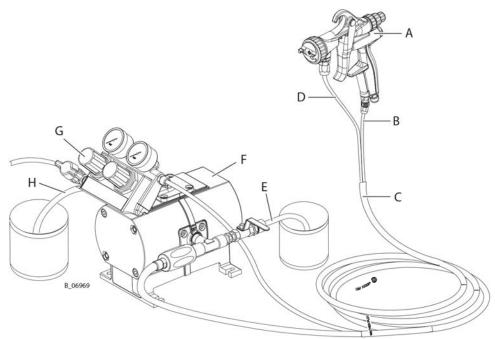
The relative air humidity at the installation site must be between 10 and 95% (without condensation).

6.4 INSTALLATION AND CONNECTION

The manual gun PILOT GM 1030P must be supplemented with various components to make up a spraying system. The system shown in the figure is only one example of a spraying system. Your WALTHER Spritz- and Lackiersysteme distributor would be happy to assist you in creating a spraying system solution that meets your individual needs. You must familiarize yourself with the operating manuals and the safety regulations of all additional system components before starting commissioning.



6.4.1 TYPICAL SPRAYING SYSTEM



Pos	Designation
Α	Spray gun
В	Air hose, electrically conductive
С	Protective hose
D	Product hose

Pos	Designation
Е	Return line
F	Product pump
G	Pressure regulator
Н	Suction system

6.4.2 VENTILATION OF THE SPRAY BOOTH

- → Operate the device in a spray booth approved for the working materials.
- → Operate the device on an appropriate spraying wall with the ventilation (extraction) switched on.
- → Observe national and local regulations for the exhaust air speed.

6.4.3 AIR SUPPLY LINES

Ensure that only dry, clean atomizing air is used in the spray gun! Dirt and moisture in the atomizing air worsens the spraying quality and spray pattern.

! WARNING

Hose connections!

Risk of injury and damage to the device.

→ Do not mix up hose connections of product hose and air hose.





6.4.4 PRODUCT SUPPLY LINES

(!) NOTICE

Impurities in the spraying system!

Spray gun blockage, products harden in the spraying system.

→ Flush the spray gun and paint supply with a suitable flushing agent.

M DANGER

Bursting hose, bursting threaded joints!

Danger to life from injection of product.

- $\boldsymbol{\rightarrow}$ Ensure that the hose material is chemically resistant to the sprayed products.
- → Ensure that the spray gun, fittings and product hose between the device and the spray gun are suitable for the pressure generated in the device.
- → Ensure that the following information can be seen on the pressure hose:
 - manufacturer,
 - permissible operating pressure,
 - date of manufacture.

6.5 GROUNDING

№ WARNING

Heavy paint mist if grounding is insufficient!

Danger of poisoning.

Insufficient paint application quality.

- → Ground all device components.
- → Ground the work pieces to be coated.

A conductive connection (potential equalization cable) must be established between original tank and the equipment.

6.6 SAFETY CHECKS

→ Carry out safety checks in accordance with Chapter 8.2.3.

6.7 MATERIAL PREPARATIONS

The viscosity of the material is of great importance.

Please read the technical data sheet of the material for optimal processing, viscosity adjustment and intermixing of the product.







6.8 COMMISSIONING

(!) NOTICE

Impurities in the spraying system!

Spray gun blockage.

→ Flush the spray gun and paint supply with a suitable flushing agent before commissioning.

6.8.1 PROCEDURE

- 1. Connect the product hose to the spray gun and product supply system.
- 2. Connect air hose to spray gun and to oil-free, dry air supply.
- 3. Fit air cap over nozzle.
- 4. Fit the air cap nut and tighten by hand.
 Visually check the permissible pressures for all the system components.
- 5. Make sure that the device and all other conductive parts within the work area are grounded.
- 6. To perform a tightness check on the entire installation, the product pressure is slowly increased in increments using a suitable medium until the maximum pressure indicated on the type plate is reached.

Note:

Set the operating pressure to 8 bar; 0.8 MPa; 116 psi.

Pull the trigger and check whether the spray gun closes cleanly upon release.

7. Relieve the pressure from the spray gun and device.

6.8.2 VERIFYING A SAFE OPERATIONAL CONDITION

A skilled person must check to ensure that the device is in a reliable state after it is assembled and commissioned.

This includes:

– Carry out safety checks in accordance with Chapter <u>8.2.3</u>.





7 OPERATION

7.1 TRAINING THE OPERATING PERSONNEL

- → The operating personnel must be qualified to operate the entire system.
- → The operating staff must be familiar with the potential risks associated with improper behavior as well as the necessary protective devices and measures.
- → Before work commences, the operating personnel must receive appropriate system training.

7.2 TASKS

Ensure that:

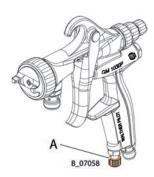
- → the regular safety checks are carried out in accordance with Chapter 8.2.3,
- → commissioning is carried out in accordance with Chapter 6.8.

7.2.1 STARTING TO SPRAY

- 1. Start up with product supply set to approx. 0.05 to 0.15 MPa; 0.5 to 1.5 bar; 7 to 22 psi operating pressure. See corresponding operating manual.
- 2. Set air pressure regulator to approx. 0.1 to 0.4 MPa; 1 to 4 bar; 14.5 to 58 psi.
- 3. Open air regulation (A) below on the gun.
- 4. Spray on a test object (pull trigger).
- 5. Adjust the product pressure and air pressure in accordance with the nozzle and object.
- 6. Use the shaping air controller on the spray gun to adjust the shaping air to atomizing air ratio, until the optimal spray pattern is achieved.

Note:

Repeat points 4 and 6 until the optimum spray pattern is reached (iterative process).





7.3 ADJUSTING THE SPRAY PATTERN

Desired spraying result



Rectifying defects in a spray pattern

Spray pattern	Deviation	Required setting
	Spray pattern is too wide in the middle	– Set a wider spray shape
	Spray pattern is too wide on the ends	– Set a rounder spray shape
	Spray pattern has very coarse droplet distribution	– Increase the atomizing air pressure
	Material application is very thin in the middle of the spray pattern	– Reduce the atomizing air pressure
	The spray pattern is divided in the middle	 Increase the nozzle diameter Reduce the atomizing air pressure Increase the product pressure
	Spray patter is too round	Reduce product pressureIncrease the atomizing air pressure

Note:

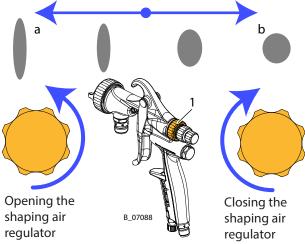
The flow rate can be changed by:

- Changing the product pressure or limiting the needle stroke.
- Use of another nozzle (see Chapter 10.9 and 13.2).



7.3.1 ADJUSTING SPRAY PATTERN

The spray pattern can be optimally adjusted to suit the object being sprayed using the shaping air regulator (1). The illustration shows the influence of the shaping air regulator (1) on the spray pattern.

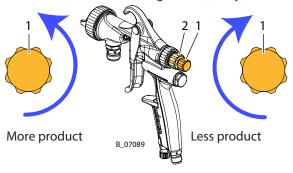


Pos	Description
а	If the shaping air regulator (1) is rotated counterclockwise, the spray pattern is widened and increasingly oval shaped.
b	If the shaping air regulator (1) is rotated clockwise, the spray pattern is narrowed and increasingly round.

7.3.2 SETTING THE PRODUCT FLOW RATE

The flow rate can be adjusted by screwing the needle stroke regulator (1) in or out. The flow rate is increased by rotating it in a counterclockwise direction and is decreased by rotating it in a clockwise direction. If the desired flow rate is reached, the needle stroke regulator (1) can be fixed using the lock (2), to prevent adjustments.

Note: the desired flow rate is primarily to be specified by selecting the corresponding nozzle. The needle stroke regulator (1) only serves to make fine adjustments.





7.4 PRESSURE RELIEF / WORK INTERRUPTION

The pressure must always be relieved:

- after the spraying tasks are finished,
- before servicing or repairing the spraying system,
- before carrying out cleaning tasks on the spraying system,
- before moving the spraying system to another location,
- before something must be checked on the spraying system,
- before the nozzle, needle or filter is removed on the spray gun.

The components for pressure relief on a CE-compliant spraying system include:

- Air cock with pressure relief hole mounted between compressed air source and pneumatic pump.
- Outlet equipment (return valve) mounted between pump and spray gun.

Pressure relief procedure

- 1. Close the spray gun.
- 2. Relieve the air and product pressure in the product pressure generator in accordance with the respective operating manual.
- 3. Point the spray gun into the grounded metal tank for return product.
- 4. Open spray gun to relieve the pressure. Avoid splashback.
- 5. When no further overpressure is detected, close the spray gun.
- In the case of a clogged nozzle, proceed in accordance with Chapter 7.5.
- If the product hose is obstructed: slowly loosen the hose connection to release the remaining pressure.



7.5 CLEANING THE NOZZLE AND ELIMINATING NOZZLE CLOGGING

(!) NOTICE

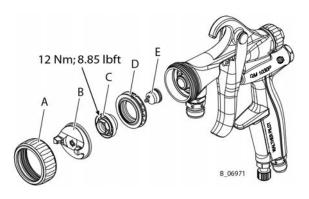
Defective Nozzle!

Change nozzle in case of leaking.

→ Do not use sharp-edged objects on the nozzle.

Note: The nozzle and the needle are normally always changed at the same time! For more information, also see Chapter <u>10.9</u>, Repair. Only loosen and tighten nozzle with the trigger pulled.

- 1. Relieve the pressure on the spray gun and product pressure generator.
- 2. Unscrew air cap nut (A).
- 3. Remove air cap (B).
- 4. Unscrew nozzle nut (C) with a size 13 wrench, remove air control ring (D) and nozzle (E).
- 5. Treat nozzle nut (C) and nozzle (E) with cleaning agent until all the remaining paint has been dissolved (in case of stubborn soiling, leave them in cleaning agent for a longer period of time).
- 6. Insert nozzle (E) in nozzle nut (C). Insert air control ring (D) in spray gun and mount nozzle nut (C) on spray gun with size 13 wrench and tighten it with 12 Nm, 8.85 lbft.
- 7. Fit air cap (B) on nozzle nut (C).
- 8. Fit the the air cap nut (A) and tighten by hand.





8 CLEANING AND MAINTENANCE

8.1 CLEANING

8.1.1 SAFETY INSTRUCTIONS

MARNING

Incompatibility of the solvent with the product used!

Risk of explosion and danger of poisoning by toxic gases.

→ Examine the compatibility of the solvent when in contact with the used products on the basis of the safety data sheets.



8.1.2 CLEANING PERSONNEL

Cleaning work should be undertaken regularly and carefully by qualified and trained personnel. They should be informed of specific hazards during their training.

The following hazards may arise during cleaning work:

- Health hazard from inhaling solvent vapors.
- Use of unsuitable cleaning tools and aids.

8.1.3 FLUSHING AND CLEANING THE SPRAY GUN

The spray gun and the device must be cleaned and flushed daily. The cleaning/flushing agents used for cleaning or flushing must correspond with the working material.

- 1. Visual check: personal safety equipment, grounding and all devices ready to use.
- 2. Relieve the pressure of the product pressure generator and of the spray gun in accordance with Chapter 7.4.
- 3. Close air pressure regulator.
- 4. Dismount air cap and clean separately (see Chapter 7.5).
- 5. Connect spraying system to flushing agent supply in accordance with operating manual for the product pressure generator.
- 6. Set product pressure generator to a maximum product pressure of 0.8 MPa; 8 bar; 116 psi.
- 7. Flush product pressure generator in accordance with the respective operating manual.
- 8. Point the spray gun into the grounded metal tank for return product.
- 9. Thoroughly flush out the spray gun.
- 10. Relieve the pressure of the product pressure generator and of the spray gun in accordance with Chapter <u>7.4</u>.
- 11. Clean the gun body with a cleaning agent recommended by the material manufacturer.
- 12. Switch on compressed air supply and open air pressure regulator.
- 13. Press the trigger of the spray gun and thoroughly blow out the air passages.
- 14. Close the compressed air supply.
- 15. Dry with a cloth or a blow gun.
- 16. Dispose of the contents of the tank for return product according to the local regulations.



8.2 MAINTENANCE

8.2.1 MAINTENANCE PERSONNEL

Maintenance work should be undertaken regularly and carefully by qualified and trained personnel. They should be informed of specific hazards during their training.

The following hazards may arise during maintenance work:

- risk to health from inhaling solvent vapors,
- use of unsuitable tools and aids.

A skilled person must ensure that the device is checked for being in a reliable state after maintenance work is completed.

8.2.2 SAFETY INSTRUCTIONS

⚠ DANGER

Incorrect maintenance/repair!

Danger to life and equipment damage.



- → Only a WALTHER service center or a suitably trained person may carry out repairs and replace parts.
- → Use only WALTHER original spare parts and accessories.
- → Only repair and replace parts that are listed in the "Spare parts" chapter and that are assigned to the unit.
- → Before all work on the device and in the event of work interruptions:
 - Relieve the pressure from the spray gun, pressure hoses and all devices.
 - Secure the spray gun against actuation.
 - Switch off the energy and compressed air supply.
 - Disconnect the control unit from the mains.
- → Observe the operating and service manual for all work.

Prior to maintenance

- Flush and clean the system. → Chapter 8.1.3
- Interrupt the air supply.

After maintenance

- Carry out safety checks in accordance with Chapter 8.2.3.
- Put the system into operation and check for leaks as described in Chapter 6.8.
- Have the system checked for safe condition by a skilled person.
- Function test in accordance with Chapter 11.



8.2.3 SAFETY CHECKS AND MAINTENANCE INTERVALS

Every day

- → Check grounding: see Chapter 6.5.
- \rightarrow Check hoses, tubes and couplings: see Chapter <u>8.2.4</u>.
- \rightarrow Flush and clean the spray gun in accordance with Chapter 8.1.3.

Weekly

→ Check spray guns for damage.

Yearly or as required

- → In accordance with DGUV regulation 100-500 Chapter 2.29 and 2.36:
 - The liquid ejection devices should be checked by an expert (e.g., WALTHER service technician) for their safe working conditions as required and at least every 12 months.
 - For shut down devices, the examination can be suspended until the next start-up.

8.2.3.1 PRODUCT HOSES, PIPES AND COUPLINGS

The service life of the complete hoses between product pressure generator and application device is reduced due to environmental influences even when handled correctly.

- → Check hoses, pipes, and couplings every day and replace if necessary.
- → Before every commissioning, check all connections for leaks.
- → Additionally, the operator must regularly check the complete hoses for wear and tear as well as for damage at intervals that he/she has set. Records of these checks must be kept.
- → The complete hose is to be replaced as soon as one of the two following intervals has been exceeded:
 - 2 years from the date of the hose crimping (see fitting embossing).
 - 2 years from the date of the hose imprinting.

Fitting embossing	Meaning
xxx bar	Pressure
yymm	Crimping date (year/month)
XX	Internal code

Hose imprinting	Meaning	
WALTHER	Name/Manufacturer	
yymm	Date of manufacture (year/month)	
xxx bar (xx MPa)	Pressure	
e.g., 8 bar (0.8 MPa)		
XX	Internal code	
DNxx (e.g., DN10)	Nominal diameter	



8.2.4 REPLACING THE PRODUCT HOSE OR AIR HOSE

- 1. Flush and clean the spray gun in accordance with Chapter 8.1.3.
- 2. Relieve the pressure of the spray gun and device.

Product hose

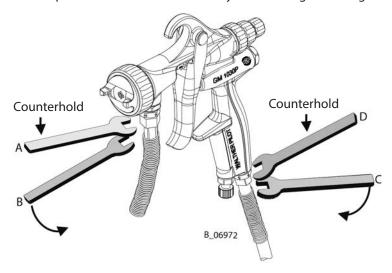
- 4. Place the size A wrench on the upper part of the product connection and hold it in place.
- 5. Unscrew the product hose nut using the size B wrench.

Air hose

- 4. Place the size D wrench on the air connection and hold it in place.
- 5. Unscrew the air hose nut using the size C wrench.

Assembly:

6. Fit product hose and/or air hose by hand and tighten using two wrenches.



Description	Wrench A	Wrench B	Wrench C	Wrench D
Wrench size	16 mm; 0.62 inch	19 mm; 0.75 inch	17 mm; 0.67 inch	14 mm; 0.55 inch



9 TROUBLESHOOTING AND RECTIFICATION

Functional fault	Cause	Remedy	See Chapter
Insufficient product	Nozzle too small	Select larger nozzle.	<u>13.2</u>
output	Product pressure too low	Increase product pressure.	
	Filter on product pressure generator blocked	Clean or replace filter.	
	Nozzle is clogged	Clean or replace nozzle.	<u>7.5, 10.9</u>
	Product valve travel set too low	Increase product valve travel by turning the adjusting screw.	
Poor spray pattern	Incorrectly adjusted atomizing air	Readjust the atomizing air.	
	Unfavorable nozzle size	Select a different nozzle.	<u>13.2</u>
	Product pressure too high/too low	Adapt product pressure.	
	Spray product viscosity too high	Thin product in accordance with	
		the spray product manufacturer's	
		instructions.	
	Damaged nozzle	Attach new nozzle.	<u>10.9</u>
Needle or needle	Needle packing (seal) on the	Replace needle packing (seal).	<u>10.4</u>
packing leaky	needle damaged		
Air valve leaks	Air valve damaged	Replace air valve.	<u>10.5</u>
Spray gun will not	Nozzle nut not tightened enough	Tighten nozzle nut.	<u>10.8</u>
shut off correctly	Nozzle or needle damaged	Replace nozzle or needle.	<u>10.9</u>



10 REPAIR WORK

10.1 REPAIR PERSONNEL

Repair work should be undertaken carefully by qualified and trained personnel. They should be informed of specific hazards during their training.

The following hazards may arise during repair work:

- risk to health from inhaling solvent vapors,
- use of unsuitable tools and aids.

A skilled person must check to ensure that the device is in a reliable state after it is repaired. Carry out function test in accordance with Chapter 11.

10.2 REPAIR NOTES

⚠ DANGER

Incorrect maintenance/repair!

Danger to life and equipment damage.



- → Only a WALTHER service center or a suitably trained person may carry out repairs and replace parts.
- → Use only WALTHER original spare parts and accessories.
- → Only repair and replace parts that are listed in the "Spare parts" chapter and that are assigned to the unit.
- → Before all work on the device and in the event of work interruptions:
 - Relieve the pressure from the spray gun, pressure hoses and all devices.
 - Secure the spray gun against actuation.
 - Switch off the energy and compressed air supply.
 - Disconnect the control unit from the mains.
- → Observe the operating and service manual for all work.

Before Repair Work

- Flush and clean the system in accordance with Chapter 8.1.3.
- Interrupt the air supply.

After Repair Work

- Carry out safety checks in accordance with Chapter 8.2.3.
- Put the system into operation and check for leaks as described in Chapter 6.8.
- Have the system checked for safe condition by a skilled person.
- Function test in accordance with Chapter 11.

10.3 TOOLS

The following tools are required for carrying out the repair work on the gun described below:

- Gun wrench sizes 17mm; 16mm; 14mm; 13mm; 12mm; 7mm. For the repairs described below only wrench sizes 16mm; 13mm; and 7mm are needed.
- Allen wrench, 10 mm



Assembly aids:

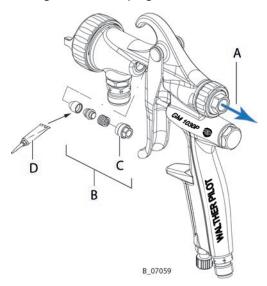
Order no.	Quantity	Designation
V000000001	1 X ≙ 10 g grease packet	Gun Grease

Note:

The WALTHER PILOT gun grease, supplied with the spray gun (order no. V0000000001), can be used.

10.4 CHANGING NEEDLE PACKINGS

- 1. Flush and clean the spray gun in accordance with Chapter 8.1.3.
- 2. Relieve the pressure of the product pressure generator and of the spray gun in accordance with Chapter 7.4.
- 3. Unscrew needle stroke regulator (A).
- 4. Carefully pull out needle from the rear. As necessary, slightly loosen the clamping sleeve (C) of the needle packing (B).
- 5. Loosen the clamping sleeve (C) of the needle packing (B) with a size 7 wrench.
- 6. Unscrew needle packing (B) and coat needle packing (B) with WALTHER PILOT gun grease (D) and insert it.
- 7. Place clamping sleeve (C) and tighten it by one rotation.
- 8. Insert the needle and fix it with the needle stroke regulator.
- 9. Tighten the clamping sleeve (C).



(!) NOTICE

Unsuitable tool!

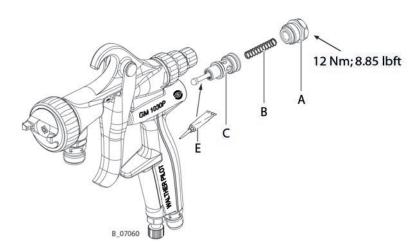
Damage to seals and sealing surfaces.

→ Hold the needle with pliers or a similar tool.



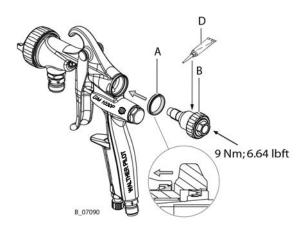
10.5 CHANGING THE AIR VALVE

- 1. Flush and clean the spray gun in accordance with Chapter 8.1.3.
- 2. Relieve the pressure of the product pressure generator and of the spray gun in accordance with Chapter 7.4.
- 3. Unscrew locking cap (A) with a size 16 wrench.
- 4. Carefully remove pressure spring (B) and unscrew air valve (C) with a size 10 Allen wrench.
- 5. Replace air valve (C) and put back in, together with the pressure spring (B), then tighten with 6 Nm; 4.43 lbft.
- 6. Retighten the locking cap (A) with a size 16 mm wrench and a torque of 12 Nm; 8.85 lbft



10.6 CHANGING SHAPING AIR REGULATOR

- 1. Flush and clean the spray gun in accordance with Chapter 8.1.3.
- 2. Relieve the pressure of the product pressure generator and of the spray gun in accordance with Chapter <u>7.4</u>.
- 3. Carefully insert rod seal (A) in the foreseen notch on the gun. Ensure that the installation position is correct (see sectional view). Ideally, place the rod seal (A) on a flat surface and press gun body onto the seal without tilting it.
- 4. Completely coat the threaded sleeve (B) with WALTHER PILOT gun grease (D) and then tighten it with a size 13 wrench and a torque of 9 Nm; 6.64 lbft.





10.7 CHANGING SHAPING AIR REGULATOR 110

- 1. Flush and clean the spray gun in accordance with Chapter 8.1.3.
- 2. Relieve the pressure of the product pressure generator and of the spray gun in accordance with Chapter 7.4.

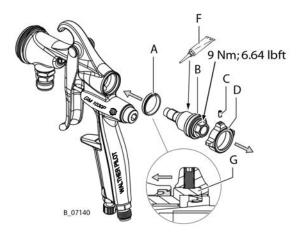
Disassembly:

- 1. First, unscrew grub screw (C) with a size 1.5 Allen wrench and pull air shape regulator top piece (D) out from the rear.
- 2. Unscrew threaded sleeve (B) with a size 13 wrench.

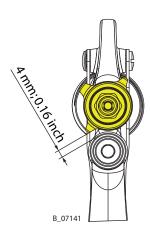
 If the air adjustment knob (G) gets stuck with the gun housing when unscrewing, screw it back in and completely unscrew the threaded sleeve (B).
- 3. If necessary, pull out the rod seal (A) with a small screwdriver and then replace it with a new one.

Assembly:

- 1. Carefully insert rod seal (A) in the foreseen notch on the gun. Ensure that the installation position is correct (see sectional view). Ideally, place the rod seal (A) on a flat surface and press gun body onto the seal without tilting it.
- 2. Coat the threaded sleeve (B) with WALTHER PILOT gun grease (F) and then tighten it with a size 13 wrench and a torque of 9 Nm.



3. Lock air shape regulator top piece (D) in the position shown on the right, with completely opened air shape regulator using grub screw.



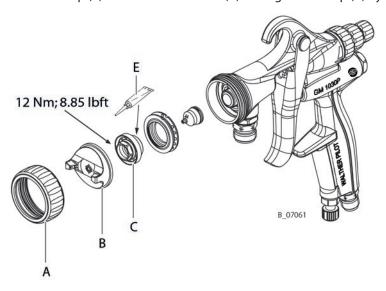


10.8 TIGHTENING NOZZLE NUT

- 1. Flush and clean the spray gun in accordance with Chapter $\underline{8.1.3}$.
- 2. Relieve the pressure of the product pressure generator and of the spray gun in accordance with Chapter 7.4.
- 3. Remove air cap nut (A) and air cap (B).
- 4. Check nozzle nut (C) for correct seating and, if necessary, tighten with a size 13 wrench. Coat inside with WALTHER PILOT gun grease (E).

Note: Tighten only with the trigger pulled!

5. Fit air cap (B) back onto nozzle nut (C) and tighten air cap (A) by hand.





10.9 REPLACING NOZZLE OR NEEDLE

Note: Only loosen and tighten nozzle with the trigger pulled.

Disassembly:

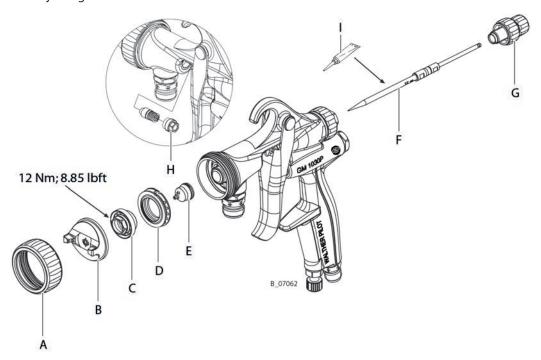
- 1. Flush and clean the spray gun in accordance with Chapter 8.1.3.
- 2. Relieve the pressure of the product pressure generator and of the spray gun in accordance with Chapter 7.4.
- 3. Unscrew needle stroke regulator (G) by hand.
- 4. Carefully pull needle (F) out from the rear (if necessary, loosen the clamping sleeve (H) of the needle packing).
- 5. Remove air cap nut (A) and air cap (B).
- 6. Unscrew nozzle nut (C) with a size 13 wrench, remove air control ring (D) and nozzle (E).
- 7. Treat parts with cleaning agent until all remaining paint has been dissolved.

Assembly:

- 1. Place nozzle (E) in nozzle nut (C) and insert air control ring (D) in the spray gun. Tighten nozzle nut (C) with a size 13 wrench and with a torque of 12 Nm; 8.85 lbft.
- 2. Insert air cap (B) and tighten by hand with air cap nut (A).
- 3. Cover needle (F) with WALTHER PILOT gun grease (I). Loosen clamping sleeve (H) of the needle packing and carefully insert needle (F).
- 4. Unscrew needle stroke regulator (G) by hand and retighten clamping sleeve (H).



The **Needle setting dimension** PILOT GM 1030P is x = 73 mm and Pilot GM 1030P **adhesive** (ADH) x = 80.7 mm measured from the needle tip to the adjusting nut.





11 FUNCTION TEST

After all repair work, the spray gun must be checked for safe condition before recommissioning. The necessary scope of inspection and testing depends on the repair carried out and must be documented by the repair personnel.

Assembly inspection	
Activity	Means
1. Leak test	Wearis
- Connect 1 bar; 0.1 MPa; 14.50 psi air pressure to the air connection and	Air connection, 1 bar
product connection.	, an estimated only i bar
Place the spray gun completely into the water bath and check all sealing	Water bath
points with 4 bar; 0.4 MPa; 58 psi for leaks.	
At 4 bar; 0.4 MPa; 58 psi, a slight leak can be tolerated.	
Injection and Final Inspection	
Activity	Means
2. Trigger lever function test	
– The trigger lever must be pulled as far as it will go.	Manual inspection
Make sure that the trigger lever can move slightly in its rest position.	
3. Leaktest	
 Connect the spray gun, slowly increase the product pressure in increments 	Visual inspection
using a suitable medium until the maximum pressure (8 bar, 0.8 MPa; 116 psi)	
specified on the spray gun is reached.	
 Trigger and flush the spray gun multiple times. 	
- Check the following:	Product connection, 8 bar
- Is the product connection sealed when the gun is closed?	Air connection, 3 bar
- Is the product valve sealed?	Size 7 mm wrench for the
- Is there no product discharge at the valve rod seal?	clamping sleeve
If product leaks, tighten clamping sleeve:	
Clamping sleeve of the needle packing on the valve rod must be tightened.	
If necessary, tighten the clamping sleeve with the wrench.	
(In doing so, it is important to make sure that the valve rod still runs smoothly	
and the gun closes reliably).	
Activity	Means
4. Checking the switching sequence	\r
– Mount nozzle and air cap nut.	Visual inspection
- Set the injection pressure to 8 bar; 0.8 MPa; 116 psi, pull the trigger slowly,	
note the switching sequence "Switch on" and "Switch off".	
Switch on: shaping air on, product on	
Switch off: product off, shaping air off	
5. Flush the spray gun	
 Switch off the air and product supply, pull trigger lever and flush spray gun or blow out with air. 	
Flush the gun without the valve and air cap.	
In doing so, you can remove the air connection hose.	
 When almost no more product comes out, remove the product connection 	
hose and blow the rest of the test medium out of the spray gun using ar	
air gun.	



12 DISPOSAL

When the devices must be scrapped, please differentiate the disposal of the waste materials.

The following materials have been used:

- Stainless steel
- Aluminum
- Brass
- Plastics

The consumable products (lacquers, adhesives, solvents) must be disposed of in accordance with the applicable specific standards.



13 ACCESSORIES

13.1 AIR CAPS

Order no.	Description	Processible Working Materials Adhesive	
V1071130105	Air cap 1,0 mm		
V1071130125	Air cap 1,2 mm		
V1071130155	Air cap 1,5 mm	Air cap with wide jet spray pattern	
V1071130185	Air cap 1,8 mm	for low and medium viscosity adhesives	
V1071130205	Air cap 2,0 mm	uanesives	
V1071130255	Air cap 2.5 mm		
V1071136105	Air cap 1,0 mm HVLP		
V1071136125	Air cap 1,2 mm HVLP		
V1071136155	Air cap 1,5 mm HVLP	Overspray reduced wide jet air cap	
V1071136185	Air cap 1,8 mm HVLP	for dispersion adhesive for bonding foams	
V1071136205	Air cap 2,0 mm HVLP		
V1071136255	Air cap 2,5 mm HVLP		
V1070030080	Air cap 0,8 - 1.0 mm Rotating wide beam		*
V1070030120	Air cap 1,2 - 1.5 mm Rotating wide beam	Rotary jet air cap with wide jet spray pattern for high viscosity adhesives	
V1070030180	Air cap 1,8 - 2.0 mm Rotating wide beam		
V1070051050	Air cap 0,5 - 1,8 mm RndStr		
V1070051200	Air cap 2,0 - 2,5 mm RndStr	Round jet air cap for low and medium viscosity adhesives	
V1070051053	Air cap 0,5 - 1,8 mm RndStr stainless steel	adiresives	
V1071145103	Dispadheair cap 1,0 mm		
V1071145123	Dispadheair cap 1,2 mm		
V1071145153	Dispadheair cap 1,5 mm	Dispersion adhesive air cap	
V1071145183	Dispadheair cap 1,8 mm	with round jet spray pattern	
V1071145253	Dispadheair cap 2,5 mm		0.5-72 N
V1070071120	Air cap 1,2 - 1,5 mm Rotating round jet	Rotary jet air cap with round jet	
V1070071180	Air cap 1,8 - 2.0 mm Rotating round jet	spray pattern for high viscosity adhesives	



Order no.	Description	Processible Working Materials		
V1070035038	Air cap 0.3-1.8 mm CONV 8	Base lacquer, colored lacquer, clear		
V1070035208	Air cap 2.0-2.5 mm CONV 8	lacquer, separating agent, anti-dust		
V1070035308	Air cap 3.0 mm CONV 8			
V1070035358	Air cap 3.5 mm CONV 8		B_07078	
V1070035031	Air cap 0.3-1.8 mm CONV 10	Stain, primer, filler, base lacquer,		
V1070035201	Air cap 2.0-2.5 mm CONV 10	colored lacquer, clear lacquer,		
V1070035301	Air cap 3.0 mm CONV 10	spraying plaster, separating agent		
V1070035351	Air cap 3.5 mm CONV 10		B_07078	
V1070038050	Air cap 2.0-2.5 mm CONV 12	Base lacquer, colored lacquer, clear		
V1070038200	Air cap 0.3-1.8 mm CONV 14	lacquer, separating agent	B_07078	
V1070039050	Air cap 2.0-2.5 mm CONV 14	Base lacquer, colored lacquer, clear		
V1070039200	Air cap 0.3-1.8 mm HVLP Plus	lacquer, separating agent, anti-dust	B_07078	
V1070036060	Air cap 2.0-2.5 mm HVLP Plus	Stain, primer, filler, base lacquer,		
V1070036160	Air cap 3.0 mm HVLP Plus	colored lacquer, clear lacquer, glaze		
V1070036260	Air cap 3.5 mm HVLP Plus			
V1070036360	Air cap 0.3-1.8 mm HVLP		B_07079	
V1070037061	Air cap 2.0-2.5 mm HVLP	Stain, primer, filler, base lacquer,		
V1070037161	Air cap 3.0 mm HVLP	colored lacquer, glazes, spraying		
V1070037261	Air cap 3.5 mm HVLP	plaster		
V1070037361	Air cap 3.5 mm HVLP		B_07080	



13.2 NOZZLES AND NEEDLES

PILOT GM 1030P ADH nozzle needle sets are available in the following sizes:

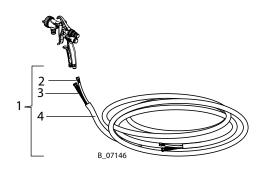
Order no.		Description	
V18103P1083		GM 1030P ADH nozzle needle sets 0,8 mm	
V18103P1103		GM 1030P ADH nozzle needle sets 1,0 mm	ND ND
V18103P1123		GM 1030P ADH nozzle needle sets 1,2mm	walked a second
V18103P1153		GM 1030P ADH nozzle needle sets 1,5 mm	
V18103P1183		GM 1030P ADH nozzle needle sets 1,8 mm	B_07081
V18103P1203		GM 1030P ADH nozzle needle sets 2,0 mm	
V18103P1253		GM 1030P ADH nozzle needle sets 2,5 mm	
V18103P2103		GM 1030P ADH nozzle needle sets 1.0 mm	
V18103P2123	am	GM 1030P ADH nozzle needle sets 1.2 mm	
V18103P2153	þe	GM 1030P ADH nozzle needle sets 1,5 mm	
V18103P2183	Rotary	GM 1030P ADH nozzle needle sets 1,8 mm	
V18103P2203	Ro	GM 1030P ADH nozzle needle sets 2,0 mm	
V18103P2253		GM 1030P ADH nozzle needle sets 2,5 mm	

PILOT GM 1030P nozzle needle sets are available in the following sizes:

Order no.	Description	
V18103P0033	GM 1030P nozzle needle set 0.3 mm	
V18103P0053	GM 1030P nozzle needle set 0.5 mm	TO TO
V18103P0083	GM 1030P nozzle needle set 0.8 mm	wa Dilla
V18103P0103	GM 1030P nozzle needle set 1.0 mm	
V18103P0123	GM 1030P nozzle needle set 1.2 mm	B 07081
V18103P0153	GM 1030P nozzle needle set 1.5 mm	
V18103P0183	GM 1030P nozzle needle set 1.8 mm	
V18103P0203	GM 1030P nozzle needle set 2.0 mm	
V18103P0223	GM 1030P nozzle needle set 2.2 mm	
V18103P0253	GM 1030P nozzle needle set 2.5 mm	
V18103P0303	GM 1030P nozzle needle set 3.0 mm	
V18103P0353	GM 1030P nozzle needle set 3.5 mm	



13.3 HOSE SETS



Pos	Designation
1	Hose set, complete*
2	Air hose
3	Product hose
4	Protective hose

^{*} For configurations, see following table

Stk	Order no.	Designation
1	2405455	LP hose set Flex DN6 7.5 m
1	2405456	LP hose set Flex DN6 10 m
1	2405457	LP hose set PA DN6 7.5 m
1	2405458	LP hose set PA DN6 10 m



13.4 ADDITIONAL ACCESSORIES

Order no.	Description	
V2000830144	Compressed air hose ø 8 mm, outer - ø 14 mm, electr. conductive, per meter	
V0010102000	Hose connector, 8 mm brass	
V0010103000	Union nut G 1/4" nickel-plated brass	
V7013150000	Hose clamp 13/15	0
2403453	Shaping air regulation 110 set	B_07084
2401072	Product tube with filter, complete	B_07082
3204604	Edge filter 60 mesh	
3204605	Edge filter 100 mesh	
9999002	Edge filter 200 mesh	
V0000104000	Double ball joint, air 1/4"	
2324766	Swivel joint air	
V0000102100	Swivel joint, 3/8" I/A	



14 SPARE PARTS

14.1 HOW CAN SPARE PARTS BE ORDERED?

Always supply the following information to ensure delivery of the right spare part:

Order number, designation and quantity

The quantity need not be the same as the number given in the quantity column "**Stk**" on the list. This number merely indicates how many of the respective parts are used in each component.

The following information is also required to ensure smooth processing of your order:

- billing address
- delivery address
- name of the person to be contacted in the event of any queries
- type of delivery (normal mail, express delivery, air freight, courier, etc.).

Identification in spare parts lists

Explanation of column "K" (labeling) in the following spare parts lists:

- ♦ Wearing parts. Wearing parts are not included in the warranty terms.
- ★ Included in service set

Note:

These parts are not covered by warranty terms.

• Not part of standard equipment, however, available as special accessory.

Explanation of order no. column

- -- Item not available as spare part.
- / Position does not exist.

⚠ DANGER

Incorrect maintenance/repair!

Danger to life and equipment damage.



- → Only a WALTHER service center or a suitably trained person may carry out repairs and replace parts.
- → Use only WALTHER original spare parts and accessories.
- → Only repair and replace parts that are listed in the "Spare parts" chapter and that are assigned to the unit.
- → Before all work on the device and in the event of work interruptions:
 - Relieve the pressure from the spray gun, pressure hoses and all devices.
 - Secure the spray gun against actuation.
 - Switch off the energy and compressed air supply.
 - Disconnect the control unit from the mains.
- → Observe the operating and service manual for all work.

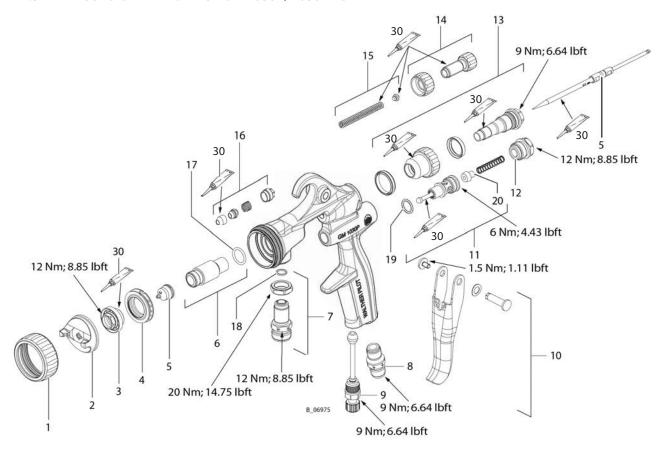


14.2 GUN VERSIONS

Adhesive (dispersion- & solvent-based) GM 1030P ADH		Separating ag GM 1030P	ent
Order no.	Description	Order no.	Description
V1030P02103	GM 1030P ADH 1,0 mm	GM103P12033	GM103P 0,3 mm conventional 12-hole air
V1030P02123	GM 1030P ADH 1,2 mm	GM103P12053	GM103P 0,5 mm conventional 12-hole air
V1030P02153	GM 1030P ADH 1,5 mm	GM103P12083	GM103P 0,8 mm conventional 12-hole air
V1030P02183	GM 1030P ADH 1,8 mm		
V1030P02203	GM 1030P ADH 2,0mm	GM103P14033	GM103P 0,3 mm conventional 14-hole air
V1030P02253	GM 1030P ADH 2,5 mm	GM103P14053	GM103P 0,5 mm conventional 14-hole air
		GM103P14083	GM103P 0,8 mm conventional 14-hole air
V1030P03103	GM 1030P ADH HVLP 1,0 mm		
V1030P03123	GM 1030P ADH HVLP 1,2 mm	GM103P04033	GM103P 0,3 mm HVLP
V1030P03153	GM 1030P ADH HVLP 1,5 mm	GM103P04053	GM103P 0,5 mm HVLP
V1030P03183	GM 1030P ADH HVLP 1,8 mm	GM103P04083	GM103P 0,8 mm HVLP
V1030P03203	GM 1030P ADH HVLP 2,0mm	GM103P04103	GM103P 1,0 mm HVLP
V1030P03253	GM 1030P ADH HVLP 2,5 mm	GM103P04123	GM103P 1,2 mm HVLP
V1030P21123	GM 1030P ADH DRSTR. 1,2 mm	GM103P05033	GM103P 0,3 mm HVLP PLUS
V1030P21153	GM 1030P ADH DRSTR. 1,5 mm	GM103P05053	GM103P 0,5 mm HVLP PLUS
V1030P21183	GM 1030P ADH DRSTR. 1,8 mm	GM103P05083	GM103P 0,8 mm HVLP PLUS
V1030P21203	GM 1030P ADH DRSTR. 2,0 mm	GM103P05103	GM103P 1,0 mm HVLP PLUS
		GM103P05123	GM103P 1,2 mm HVLP PLUS
V1030P33123	GM 1030P ADH DRBRSTR. 1,2 mm		
V1030P33153	GM 1030P ADH DRBRSTR. 1,5 mm		
V1030P33183	GM 1030P ADH DRBRSTR. 1,8 mm		
V1030P33203	GM 1030P ADH DRBRSTR. 2,0 mm		



14.3 EXPLODED DRAWING PILOT GM 1030P/ 1030P ADH





14.4 SPARE PARTS LIST

			PILOT GM 1030P ADH V1030Pxxxx3 PILOT GM 1030P GM103Pxxxx3		
Pos	K	Description	Stk	Order no.	
1		Air cap nut, complete	1	2400769	
2			1	2400709	
3		Air cap (see Chapter 13.1)	1	2400702	
4	•	Nozzle nut		2400782	
5	•	Air control ring	1	2400779	
6	_	Nozzle/needle set (see Chapter 13.2)	1	2400776	
7		Nozzle holder set	1	2400776	
8		Product connection set	1	2400775	
		Air connection	1	2400781	
9		Air volume regulation, complete	1	2400773	
10		Trigger set	1	2400774	
11		Air valve, complete	1	2400772	
12		Lock cap	1	2400780	
13		Shaping air regulation set	1	2400783	
14		Needle stroke regulator set	1	2400778	
15		Needle spring set	1	2400777	
16	* •	Needle packing set	1	2419835	
17		O-ring	1		
18		Sealing ring	1		
19	*	O-ring	1		
20	* •	Air valve cone	1		
30		Gun grease (10g grease paket)	1	V000000001	
	•		1	2400784	
	•	Air inlet screw fitting, NPS	1	60-104	
	•	Product connection set, NPS	1	2403450	

- ◆ = Wearing parts★ = Included in service set
- \bullet = Not part of the standard equipment but available as a special accessory.



15 EC/EU-DECLARATION OF CONFORMITY

EC/EU-Declaration of Conformity according to 2006/42/EC, Annex II, No. 1A



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.dd		
			V1030Pxxxx3 GM103xxxx3	
Intended purpo	ose	Proces	sing of sprayable media	a
Applied Stand	ards and Directives			
2006/42/EC	EU-Mechanical Engineering Directives 2006/42/EC			
2014/34/EU (AT	,			
DIN EN ISO 121	00:2011-3	DIN	NEN 1127-1:2019	
DIN EN 1953:20	13	DII	NEN ISO 80079-36:2016	
Specification a	according 2014/34/EU			
Category 2 Part marking Ex II 2G Ex h IIC T6 Gb Tech. File, Ref				
Nico Kowalski, W	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			oning is prohibited	

Wuppertal the 11th August 2020

Name: Ralf Mosbacher

2006/42/EC.

Managing Director 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.

Name: Torsten Bröker

until such time as the end product has been proved to conform to the provision of the Directives

OPFR	ATING	MAN	IUAI



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The WALTHER PILOT Programme

- Manual Spray Guns
- Automatic Spray Guns
- Low Pressure Spray Guns (System HVLP)
- Gun Nozzle Extension for Internal Coating
- Two Component Spray Guns
- Material Pressure Tanks
- Nonpressurized Tanks
- Agitator Systems
- Airless Equipment and Fluid Pumps
- Material Circulation Systems
- Paint Mist Extraction Systems
- Supply Air Systems
- Occupational Safety and Accessory Items

Document-No: 11408620 Version I

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