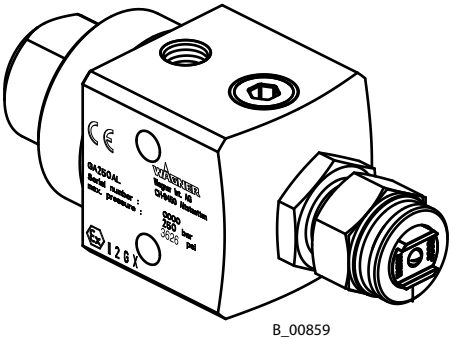
Translation of the Original Operating Manual

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.

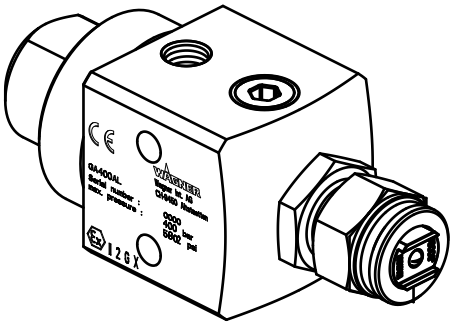
Version 12/2018

GA 250AL
GA 400AL

Airless automatic spray gun



B_00859



B_00861

CE Ex II 2G X

Table of Contents

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.
⚠ **WARNING**	Potential risk. Non-observance may result in death or serious injury.
⚠ **CAUTION**	Potentially hazardous situation. Non-observance may result in minor injury.
ⓘ **NOTICE**	Potentially hazardous 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 hazard!
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	350939

Translation of the Original Operating Manual

Language	Order no.
English	350941
French	350946
Italian	350948
Spanish	350949

Language	Order no.
Swedish	350950
Dutch	350947
Danish	350951
Portuguese	2404528

Additional languages on request or at: www.wagner-group.com

1.4 ABBREVIATIONS

Order no.	Order number
ET	Spare part
K	Marking in the spare parts lists
Pos	Position
Stk	Number of pieces
SW	Wrench size (tool)
UWMW-PE	Ultra-high molecular polyethylene
POM	Polyoxymethylene (Acetal)

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 generator	Pump or pressure tank
Personnel qualifications	
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 person	Is instructed by an electrician about the tasks assigned to him/her, 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 accordance with TRBS 1203 (2010/Revision 2012)	A person who, based on his/her technical training, experience and recent vocational experience, has sufficient technical knowledge in the areas of explosion protection, protection 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

Automatic gun for automatic coating of work pieces.

GA 250AL
GA 400AL

2.2 TYPE OF USE

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

→ Non-ignitable products.
→ Ignitable products.

WAGNER 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 WAGNER.
→ Only operate the device as a whole.
→ Do not deactivate safety fixtures.
→ Use only WAGNER 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

Top-coat lacquers, primer paints, corrosion protection, textured lacquers, lyes, staining solvents, clear lacquers, separating agents, etc. with a solvent or water base. If you want to spray working materials other than the aforementioned, contact a WAGNER representative.

Note:
Contact your local WAGNER dealer and the lacquer 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;
→ no food, medicine or cosmetics are processed.
It is important to note that the device's materials are not food-safe.

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:	GA 250AL / GA 400AL Airless automatic gun
Manufacturer:	Wagner International AG CH-9450 Altstätten, Switzerland


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 5.4.2.

Safe Handling of WAGNER 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.

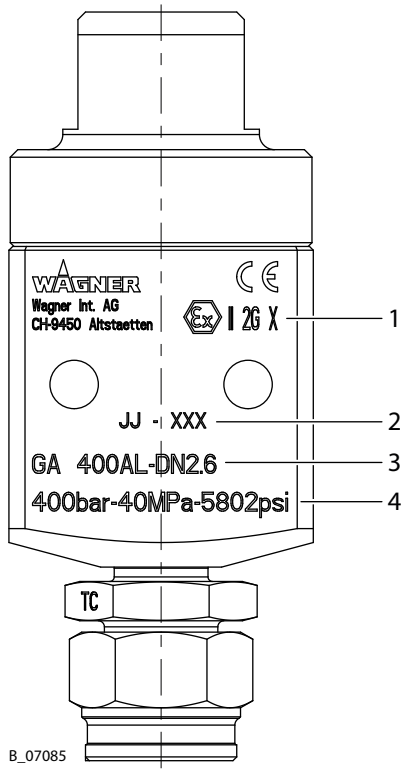
Ignition temperature of the coating product

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

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.

3.3 TYPE PLATE



Pos	Designation
1	CE and explosion protection identification
2	Year of construction / serial number
3	Model designation (GA 250AL-DN2.6; GA 400AL-DN2.6)
4	Maximum product pressure

4 BASIC SAFETY INSTRUCTIONS

4.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

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

4.1.1 ELECTRICAL DEVICES AND EQUIPMENT

Electric shock hazard!
Danger to life from electric shock.
→ Prepare device in accordance with the local safety requirements with regard to the operating mode and ambient influences.
→ May only be maintained by skilled electricians or under their supervision. With open housings, the mains voltage poses a danger.
→ Operate device in accordance with the safety regulations and electrotechnical regulations.
→ Must be repaired immediately in the event of problems.
→ Decommission if it poses a hazard or is damaged.
→ Must be de-energized before work is commenced. Inform personnel about planned work. Observe electrical safety regulations.
→ Ground all devices to a common grounding point.
→ Only operate the device with a properly installed socket with a protective ground wire connection.
→ Keep liquids away from electrical devices.

4.1.2 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 the floor in the working are is static dissipative in accordance with EN 61340-4-1 (resistance must not exceed 100 MΩ).
- → Paint mist extraction systems/ventilation systems must be fitted on site according to local regulations.
- → Make sure that the ground connection and potential equalization of all system parts are reliable and continuous and can withstand the expected stress (e.g., mechanical stress, corrosion).
- → Ensure that product hoses/air hoses adapted to the working pressure are used.

- → Ensure that personal protective equipment (see Chapter 4.2.1) is available and is used.
- → 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 MΩ.
- → 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.
- → In the event of defects, immediately bring the device or system to a stop and arrange to have repairs carried out immediately.

4.1.3 PERSONNEL QUALIFICATIONS

Hazard 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 occupational safety and accident prevention.

→ In electrostatics applications: Persons belonging to a risk group according to EMF guideline 2013/35/EU (e.g., carriers of active implants), must not enter the high-voltage area.

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 lacquer and when cleaning the device, follow the working instructions of the manufacturer of the lacquers, solvents, and cleaning agents being used.
→ Take the specified protective measures. In particular, wear safety goggles, protective clothing and gloves, as well as hand protection cream if necessary.
→ 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 WAGNER SPRAY DEVICES

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

The spray jet is under pressure and can cause dangerous injuries. Avoid injection of lacquer 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.
  - – Secure the spray gun against actuation.
  - – Disconnect the control unit from the mains.
  - – In the event of functional faults: remedy the fault as described in the "Troubleshooting" chapter.
- → If necessary or at least every 12 months, the liquid ejection devices must be checked for safe working conditions by an expert (e.g. WAGNER Service Technician) in accordance with the guidelines for liquid ejection devices (DGUV [German Statutory Accident Insurance] regulation 100-500 section 2.29 and 2.36).
  - – For shut down devices, the examination can be suspended until the next start-up.

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

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

4.2.3 GROUNDING THE UNIT

Hazard due to electrostatic charge!

Explosion hazard and damage to the device.

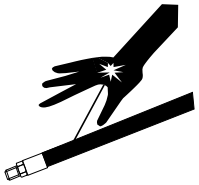
Friction, flowing liquids and air or electrostatic coating processes create charges.

Flames or sparks can form during discharge.

Correct grounding of the entire spraying system prevents electrostatic charges.

- → Ensure that the unit is grounded for every spraying operation.
- → 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.
- → The spray substance supply (spray substance tank, pump, etc.) must be grounded.

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 hose and the fittings are suitable for the pressure generated.
- → Ensure that the following information can be seen on the high-pressure hose:
  - – 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 lift trucks), 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 equipment.
- → The electrical resistance of the product hose, measured at both valves, must be less than 1 MΩ.
- → Suction hoses may not be subjected to pressure.

4.2.5 CLEANING AND FLUSHING

Hazard 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 lacquer 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.

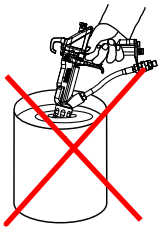
- → Never use chloride or halogenated solvents (such as trichloroethane and methylene chloride) with devices containing aluminium or galvanized/zinc-plated parts. They may react chemically thus producing an explosion danger.
- → Take measures for workplace safety (see Chapter 4.1.2).
- → When commissioning 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 components of equipment.
- → Only electrically conductive tanks may be used for cleaning and flushing agents.
- → 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 spray 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 TOUCHING HOT SURFACES

Hazard due to hot surfaces because of hot coating products!
Risk of burn injuries.
- → Only touch hot surfaces if you are wearing protective gloves.
- → When operating the device with a coating product with a temperature of > 43 °C; 109 °F:
  – Identify the device with a warning label "Warning – hot surface".
  Order no.
  9998910 instruction label
  9998911 protection label
  Note: Order the two stickers together.

4.2.7 MAINTENANCE AND REPAIR

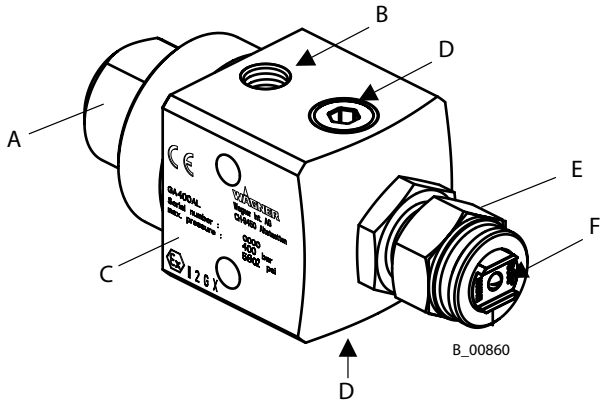
Hazard due to improper maintenance and repair!
Danger to life and equipment damage.
- → Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts.
- → Use only WAGNER original spare parts and accessories.
- → Do not change or modify the device; if change is necessary, contact WAGNER.
- → Only repair and replace parts that are listed in Chapter 13 and Chapter 14 that are assigned to the unit.
- → 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, high-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.

4.2.8 PROTECTIVE AND MONITORING EQUIPMENT

Hazard 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.

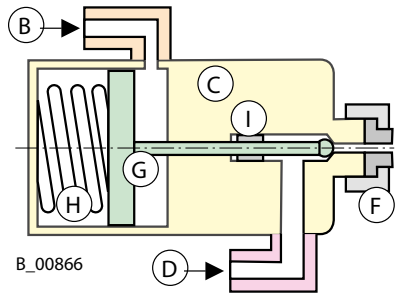
5 DESCRIPTION

5.1 COMPONENTS



Pos	Designation
A	Clamping nut
B	Control air connection
C	Spray gun housing
D	Fluid inlet
E	Union nut
F	Flat jet nozzle
G	Valve rod (see Chapter 10.3.1)
H	Pressure spring (see Chapter 10.3.1)

5.2 FUNCTIONAL DESCRIPTION



- The GA 250AL and/or GA 400AL automatic gun is switched on using control air (B).
- The control piston positioned on the valve rod (G) in the housing (C) of the spray gun GA 250AL and/or GA 400AL is pressurized and thus opens the passageway to the flat jet nozzle (F).
- Closing is effected by means of a pressure spring (H) after the control air pressure (B) has dropped.
- The set of seals (I) prevents product from flowing into the housing (C).
- Securing the spray gun: Remove the control air line from the control air connection (B) on the spray gun.

5.3 SCOPE OF DELIVERY

5.3.1 TYPE DESCRIPTION

GA	XXX	AL
①	②	③

① **GA =** Automatic gun
② **250 =** Gun type 25 MPa; 250 bar; 3626 psi
400 = Gun type 40 MPa; 400 bar; 5802 psi
③ **AL =** Airless spraying process

5.3.2 STANDARD VARIANT

Stk	Order no.	Designation
1	350033	GA 250AL Airless automatic gun
1	350032	GA 400AL Airless automatic gun

The standard equipment includes:

Stk	Order no.	Designation
1	350907	CE Declaration of Conformity
1	350939	Operating manual, German
1	see Chap. 1.3	Operating manual in local language

The supplementary components can be used to harmonize and supplement the standard equipment of the automatic gun perfectly to any application depending upon requirements and accessory requests.

The delivery note shows the exact scope of delivery.

5.4 DATA

5.4.1 MATERIALS OF PAINT-WETTED PARTS

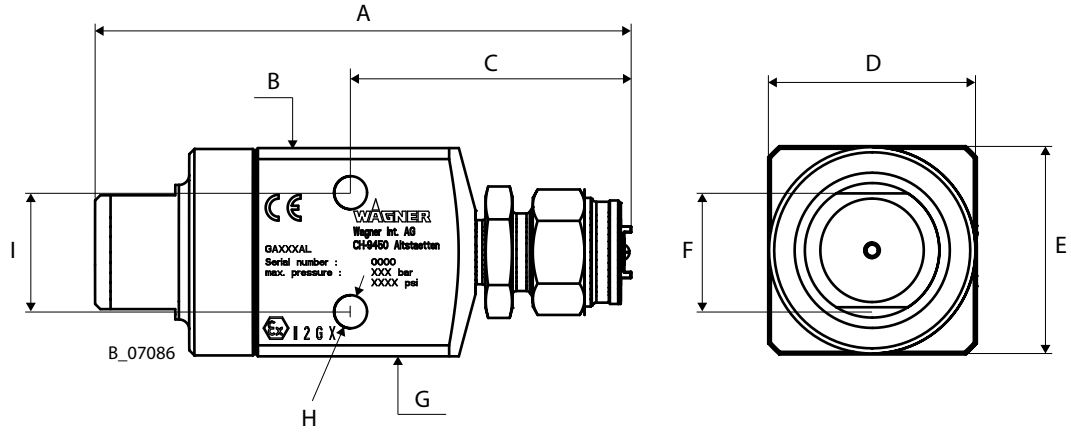
Metals		Plastics
Carbide	Stainless steel 1.4305	POM
Stainless steel 1.4310	Stainless steel 1.4104	UHMW-PE

5.4.2 TECHNICAL DATA

Description	Units	GA 250AL	GA 400AL
Maximum product pressure	MPa; bar; psi	25; 250; 3626	40; 400; 5802
Control air pressure	MPa; bar; psi	0.45–0.8; 4.5–8; 65–116	
Product connection, internal thread	inch	G1/4" (2x)	
Control air connection, internal thread	inch	G1/8"	
Weight	G; oz	545; 19.2	
Maximum product temperature	°C; °F	60; 140	
Maximum ambient temperature	°C; °F	5–40; 41–104	
Sound level at 0.4 MPa; 4 bar; 58 psi air pressure (depending on nozzle used)***	dB(A)	84	

*** A-rated sound pressure level measured at 0.5 m distance, Lpa 0.5 m, according to DIN EN 14462: 2005

5.4.3 DIMENSIONS



Pos	mm	inch
A	104	4.094
B	G1/8"	
C	55	2.165
D	40	1.574
E	40	1.574
F	22	0.866
G	G1/4"	
H	6.4	0.25
I	23	0.90

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 installed 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 °C and +60 °C (-4 °F and +140 °F).

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

6.3 INSTALLATION CONDITIONS

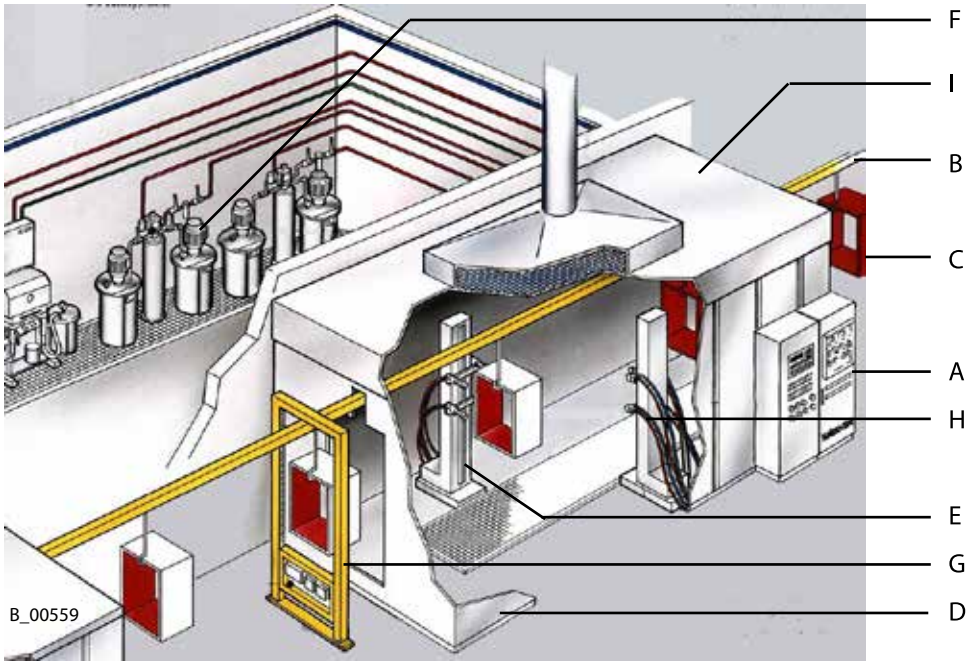
The air temperature at the installation site must lie between 0 °C and 40 °C; 32 °F and 132 °F.

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

6.4 INSTALLATION AND CONNECTION

The spray gun must be combined with various components to make up a spraying system. The spraying system shown in the figure is only one example of an AirCoat spraying system. Your WAGNER 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
A	Control cabinet
B	Conveyor
C	Work piece
D	Spray booth
E	Reciprocator

Pos	Designation
F	Paint supply
G	Part recognition
H	Spray guns
I	Supply air system and exhaust air system

6.4.2 VENTILATION OF THE SPRAY BOOTH

→ Operate the device in a spray booth approved for the working materials.
-or-
→ 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 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.

DANGER

Bursting hose, bursting threaded joints!
Danger to life from injection of product.
→ 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 high-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 LACQUER PREPARATIONS

The viscosity of the lacquer is of great importance. The best spraying results are obtained with values between 80 and 260 millipascals (mPas) × sec.
Please also read the technical data sheet of the lacquer for optimal processing, viscosity adjustment and intermixing of the product.

6.7.1 VISCOSITY CONVERSION TABLE

Millipascal × sec	Centipoise	Poise	DIN cup	ISO cup			Ford cup	Zahn cup
			4 mm	4 mm	5 mm	6 mm	Number 4	Number 2
mPa s	cP	P	sec	sec	sec	sec	sec	sec
10	10	0.1		14			5	16
15	15	0.15		17			8	17
20	20	0.2		20			10	18
25	25	0.25	14	23			12	19
30	30	0.3	15	26			14	20
40	40	0.4	17	33			18	22
50	50	0.5	19	40			22	24
60	60	0.6	21	47			26	27
70	70	0.7	23	54			28	30
80	80	0.8	25	62	28		31	34
90	90	0.9	28	70	31		32	37
100	100	1	30	78	34		34	41
120	120	1.2	33	90	40		41	49
140	140	1.4	37	105	46		45	58
160	160	1.6	43		52		50	66
180	180	1.8	46		58	28	54	74
200	200	2	49		63	31	58	82
220	220	2.2	52		69	34	62	
240	240	2.4	56		75	37	65	
260	260	2.6	62		82	40	68	
280	280	2.8	65		89	43	70	
300	300	3	70		95	46	74	
320	320	3.2				48		
340	340	3.4				51		
360	360	3.6	80			54		
380	380	3.8				57		
400	400	4	90			60		

6.8 COMMISSIONING

6.8.1 PREPARATION BEFORE COMMISSIONING

NOTICE

Impurities in the spraying system!

Spray gun blockage.

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

NOTICE

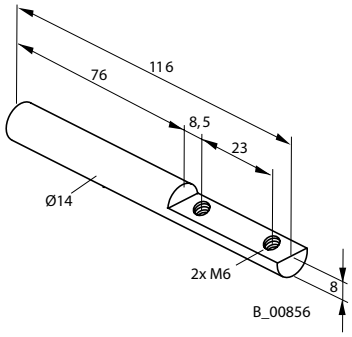
The valve does not open or it only opens with a reduced path!

Greater wear on the valve seat and needle.

→ Only use pressure spring for 250 bar; 25 MPa; 3626 psi (order no. 350498). The pressure spring is marked red.

→ Never use pressure spring for 400 bar; 40 MPa; 5800 psi (order no. 350482).

- Mount spray gun to reciprocator.
- Connect the product hose to the spray gun and product supply system.
- Use Airless nozzle.
- Connect control air hose ø 6 mm; 0.24 inch / ø 4 mm; 0.16 inch on spray gun and on air supply.
- Visually check the permissible pressures for all the system components.
- Make sure that the device and all other conductive parts within the work area are grounded.
- Set operating pressure at 250 bar; 25 MPa; 3626 psi or 400 bar; 40 MPa; 5800 psi and use a suitable medium to check that connections do not leak.



Accessory - locking bolts
Order no. 350480

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 installed and commissioned.
This includes:

- Carry out safety checks in accordance with Chapter 8.2.3.

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

⚠ CAUTION

Spurting out of liquids with high pressure!
Risk of injury and damage to the device.
→ No persons should be located in the hazard area during operation.
→ Make sure to keep a safe distance during setting up, installation and maintenance work.

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 AIRLESS SPRAYING

1. Start up product supply (set to an operating pressure of approx. 15 MPa; 150 bar; 2175 psi) and control unit.
2. Spray (release control air) and check the atomization.
3. Set the spray pressure on the product supply such that optimum product atomization is attained.

Note:
The flow rate can be changed by:
→ changing the product pressure
or
→ using a different flat jet nozzle. See accessories.

7.2.2 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 or the filter is removed from 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.

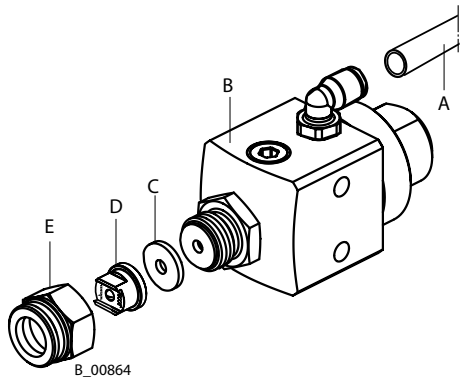
Pressure Relief Procedure:
1. Close the compressed air supply on the material side upon the product pressure generator.
2. Open product pressure relief valve (see system description) and relieve pressure from the system.
3. Leave product pressure relief valve open.

If the pressure is still not completely relieved after this:
- If the nozzle is obstructed: loosen the union nut and remove the nozzle to release remaining pressure.
- If product hose is obstructed: slowly loosen the hose connections to release the remaining pressure.

Note:
Always follow the procedure described above if pressure relief is specified in the instructions.

7.2.3 REPLACING THE AIRLESS FLAT JET NOZZLE

1. Thoroughly flush the spray gun with cleaning agent.
2. Relieve the pressure of the spray gun and device!
3. Secure the spray gun (pull out control air hose).
4. Unscrew union nut (E).
5. Remove flat jet nozzle (D).
   Note:
   Pay attention to seal (C).
   Assembly:
6. Insert cleaned or new flat jet nozzle (D) in union nut (E).
7. Insert seal (C) in union nut.
8. Place union nut with nozzle and seal on spray gun and slightly tighten.
9. Turn the flat jet nozzle (D) so that it corresponds to the desired spray pattern.
10. Tighten union nut (E).
11. Connect control air hose (A) again.



7.2.4 CLEANING THE AIRLESS FLAT JET NOZZLE

The Airless flat jet nozzle (D) can be placed in a cleaning solution recommended by the lacquer manufacturer.

Attention:
Sharp-edged objects cannot be used on the flat jet nozzle.

8 CLEANING AND MAINTENANCE

8.1 CLEANING

8.1.1 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:

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

8.1.2 FLUSHING AND CLEANING THE SPRAY GUN

ⓘ NOTICE

Impurities in the spraying system

Spray gun blockage, products harden in the system.

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

ⓘ NOTICE

Flushing agent in the air duct!

Functional faults caused by swollen seals.

→ Always point the spray gun down when cleaning.

→ Never immerse the spray gun in cleaning agent.

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. Relieve the pressure of the spray gun and device.
2. Secure spray gun (Remove control air hose).
3. Connect the cleaning agent supply.
4. Dismount the Airless nozzle and clean it separately (see Chapter 7.2.3).
5. Pressurize the cleaning agent supply to a maximum pressure of 4 MPa; 40 bar; 580 psi and thoroughly flush the spray gun.
6. Relieve the pressure of the spray gun and device.
7. Secure spray gun (Remove control air hose).
8. Clean outside of spray gun with a cleaning agent recommended by the lacquer manufacturer and dry with a cloth or blow gun.

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.

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

8.2.2 MAINTENANCE INSTRUCTIONS

⚠ DANGER

Incorrect maintenance/repair!

Danger to life and equipment damage.

→ Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts.
→ Use only WAGNER 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, high-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 8.1.2
- 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 an authorized person.
- Function test in accordance with Chapter 11.

8.2.3 SAFETY CHECKS AND MAINTENANCE INTERVALS

Every day

→ Check grounding: see Chapter 6.5.
→ Check hoses, tubes and couplings: see Chapter 8.2.3.1.
→ Flush and clean the spray gun in accordance with Chapter 8.1.2.

Weekly

→ Check spray guns for damage.
→ Check that the safety fixtures function properly (see Chapter 4.2.8).

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., WAGNER 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:
  – 6 years from the date of the hose crimping (see fitting embossing).
  – 10 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
Wagner	Name/Manufacturer
yymm	Date of manufacture (year/month)
xxx bar (xx MPa) e.g., 270 bar (27 MPa)	Pressure
XX	Internal code
DNxx (e.g., DN10)	Nominal diameter

9 TROUBLESHOOTING AND RECTIFICATION

Functional fault	Cause	Remedy	See Chapter
Insufficient product output	Nozzle too small	Select larger nozzle	13.1
	Product pressure too low	Increase product pressure	
	Nozzle is clogged	Nozzle cleaning	7.2.4
	High pressure filter at pump clogged	Clean or replace filter	
Poor spray pattern	Damaged nozzle	Replace the nozzle	7.2.3
	Nozzle too large	Select smaller nozzle	13.1
	Product pressure too low	Increase product pressure	
	Spray product viscosity too high	Thin spray product in accordance with the manufacturer's instructions	
	Partial nozzle blockage	Nozzle cleaning	7.2.4
Valve rod leaks	Seals at the valve rod are damaged	Re-tighten sealing screw	10.3.1 / 10.3.2
		Replace the sealing collar on the valve rod	10.3.1 / 10.3.2
	Valve rod damaged	Replace valve rod	10.3.1 / 10.3.2
Spray gun will not shut off correctly - "dripping"	Worn valve seat / valve ball	Check valve rod and flat jet nozzle and replace if necessary.	7.2.3 / 10.3.1
	Sealing screw too tight	Check torque	10.3.2

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 WAGNER service center or a suitably trained person may carry out repairs and replace parts.
→ Use only WAGNER 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, high-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 according to Chapter 8.1.2.
- 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 an authorized 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:

- Open-end wrench, SW 2
- Rod ø 4.5 mm; 1.78 inch
- Open-end wrench, SW 5
- Torque wrench 12±1 Nm; 8.85 lbft

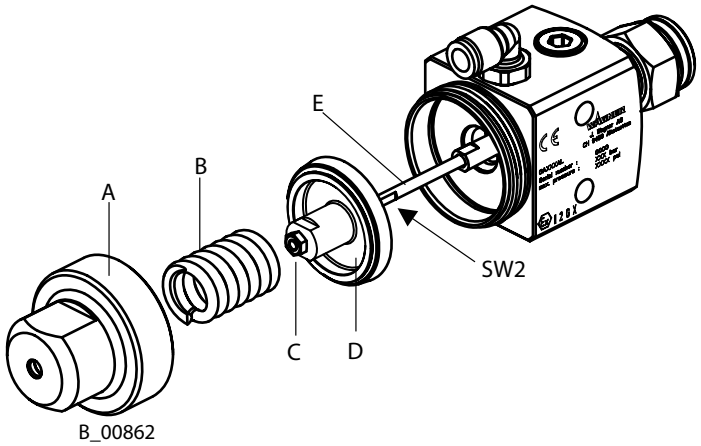
Assembly aids:

Order no.	Quantity	Designation	Smaller tanks
9992831	1 pc = 50 ml	Loctite ® 542	
9992833	1 pc = 250 ml	Loctite ® 638 green	
9992590	1 pc = 50 ml	Loctite ® 222	
9992698	1 pc = 200 g	Vaseline white, PHHV II	
9992616	1 pc = 1 kg can	Molykote ® DX grease	50 g tube = Order no. 2355419

Brand notice:
The brands specified in this document are property of the respective owners.
Loctite ®, for example, is a registered brand of Henkel.

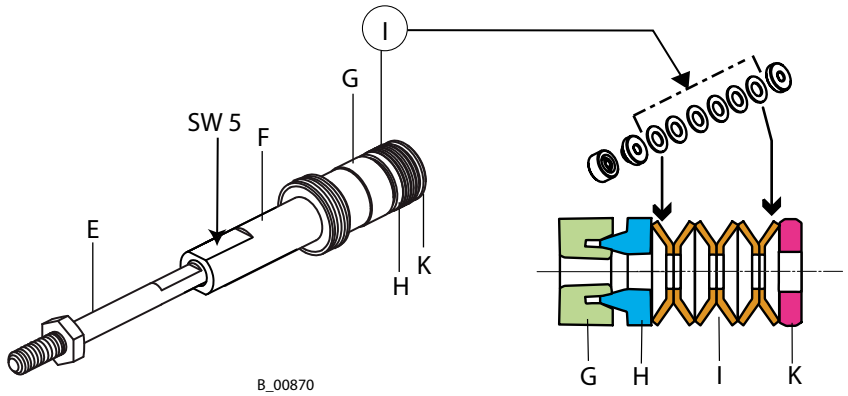
10.3.1 REPLACING OF PARTS ON THE VALVE ROD

1. Decommissioning work and cleaning.
2. Unscrew clamping nut (A), remove pressure spring (B).
3. Pull out the valve rod at piston (D) carefully until the flattened surfaces on the valve rod (E) are visible.
4. Hold the valve rod (E) using a size 2 wrench and unscrew the nut (C).
5. Pull the piston (D) from the valve rod (E).
6. Use a size 5 wrench to loosen the sealing screw (F) completely.
7. Pull out the valve rod (E) with sealing screw (F), sealing collar (G), thrust piece (H), the 6 spring washers (I) and pressure ring (K).
   Note:
   Should parts get stuck in the drilled hole, the nozzle (M) and the intermediate piece (L) are to be unscrewed. These parts can be pushed out with a rod with a max. ø 4.5 mm; 1.78 inch.
8. Replace relevant parts.



10.3.2 ASSEMBLING THE VALVE ROD AND SPRAY GUN

1. Slide the sealing screw (F), sealing collar (G), thrust piece (H), the 6 spring washers (I) and pressure ring (K) onto the valve rod (E).
   Note:
   The spring washers (I) have to be positioned reciprocally.
2. Insert the premounted valve rod into the gun housing.
3. When shifting the valve rod (E), screw in sealing screw (F) and carefully tighten until a light resistance is noticeable.
4. Assembling of piston (D), pressure spring (B) and clamping nut (A) in the reverse order in accordance with Chapter 10.3.1, steps 5 to 2.



11 FUNCTION TEST AFTER REPAIR WORK

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 – Connect 1 bar; 0.1 MPa; 14.50 psi and 8 bar; 0.8 MPa; 116 psi air pressure to the air connection and product connection. Place the spray gun completely into the water bath and check all sealing points with 1 bar; 0.1 MPa; 14.50 psi and 8 bar; 0.8 MPa; 116 psi for leaks. At 8 bar; 0.8 MPa; 116 psi bar, the gun must be completely sealed. At 1 bar; 0.1 MPa; 14.50 psi, a slight leak can be tolerated: 5 air bubbles per minute.	Air connection 1 bar / 8 bar Water bath
Injection and Final Inspection	
Activity	**Means**
2. Leak test – Connect the spray gun, slowly increase the product pressure in increments using a suitable medium until the maximum pressure specified is reached. – Trigger and flush the spray gun multiple times. With a control air of 5 bar; 0.5 MPa; 72.5 psi, the spray gun must open and close properly. (5 times) – Check the following: – Is the product connection sealed when the gun is closed? – Is the product valve sealed? – Is there no product discharge at the valve rod seal?	Visual inspection Max. product pressure: GA400 400 bar GA250 250 bar

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
- Elastomers
- Plastic
- Carbide

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

13 ACCESSORIES

13.1 AIRLESS FLAT JET NOZZLES


B_00857

Order no.	Nozzle label	Spray angle	Drilled hole inch; mm	Jet width mm; inch	Application
90407	407	40 °	0.007; 0.18	163; 6.42	Natural lacquer Clear lacquers Oils
90507	507	50 °	0.007; 0.18	190; 7.48	
90209	209	20 °	0.009; 0.23	148; 5.83	
90309	309	30 °	0.009; 0.23	158; 6.22	
90409	409	40 °	0.009; 0.23	198; 7.79	
90509	509	50 °	0.009; 0.23	215; 8.46	
90609	609	60 °	0.009; 0.23	225; 8.85	
90111	111	10 °	0.011; 0.28	87; 3.42	Synthetic resin lacquers PVC lacquers
90211	211	20 °	0.011; 0.28	93; 3.66	
90311	311	30 °	0.011; 0.28	127; 5.0	
90411	411	40 °	0.011; 0.28	210; 8.23	
90511	511	50 °	0.011; 0.28	225; 8.85	
90611	611	60 °	0.011; 0.28	270; 10.63	
90113	113	10 °	0.013; 0.33	103; 4.05	Lacquers, base coat Zinc chromate primer Primer, filler
90213	213	20 °	0.013; 0.33	107; 4.21	
90313	313	30 °	0.013; 0.33	142; 5.59	
90413	313	40 °	0.013; 0.33	207; 8.15	
90513	513	50 °	0.013; 0.33	255; 10.04	
90613	613	60 °	0.013; 0.33	282; 11.10	
90813	813	80 °	0.013; 0.33	375; 14.76	
90115	115	10 °	0.015; 0.38	98; 3.86	Filler Spraying plaster Rust proofing paints
90215	215	20 °	0.015; 0.38	100; 3.94	
90315	315	30 °	0.015; 0.38	162; 6.38	
90415	415	40 °	0.015; 0.38	202; 7.95	
90515	515	50 °	0.015; 0.38	252; 9.92	
90615	615	60 °	0.015; 0.38	268; 10.55	
90715	715	70 °	0.015; 0.38	295; 11.61	
90815	815	80 °	0.015; 0.38	395; 15.55	

Order no.	Nozzle label	Spray angle	Drilled hole inch; mm	Jet width mm; inch	Application
90217	217	20 °	0.017; 0.43	117; 4.60	Spraying plaster Rust proofing paints Red lead Latex paints
90317	317	30 °	0.017; 0.43	153; 6.02	
90417	417	40 °	0.017; 0.43	190; 7.48	
90517	517	50 °	0.017; 0.43	235; 9.25	
90617	617	60 °	0.017; 0.43	283; 11.14	
90717	717	70 °	0.017; 0.43	342; 13.46	
90219	219	20 °	0.019; 0.48	147; 5.79	
90319	319	30 °	0.019; 0.48	168; 6.61	
90419	419	40 °	0.019; 0.48	192; 7.56	
90519	519	50 °	0.019; 0.48	272; 10.71	
90619	619	60 °	0.019; 0.48	315; 12.40	
90719	719	70 °	0.019; 0.48	330; 12.99	
90819	819	80 °	0.019; 0.48	402; 15.83	
90221	221	20 °	0.021; 0.53	148; 5.83	Mica paints Zinc rich paints Emulsions
90421	421	40 °	0.021; 0.53	183; 7.20	
90521	521	50 °	0.021; 0.53	252; 9.92	
90621	621	60 °	0.021; 0.53	313; 12.32	
90821	821	80 °	0.021; 0.53	380; 14.96	
90223	223	20 °	0.023; 0.58	130; 5.12	Rust proofing paints
90423	423	40 °	0.023; 0.58	185; 7.28	
90523	523	50 °	0.023; 0.58	253; 9.96	
90623	623	60 °	0.023; 0.58	298; 11.73	
90723	723	70 °	0.023; 0.58	340; 13.38	
90823	823	80 °	0.023; 0.58	355; 13.98	
90225	225	20 °	0.025; 0.64	133; 5.24	Emulsion Emulsion paint Glue paints Fill color
90425	425	40 °	0.025; 0.64	198; 7.79	
90525	525	50 °	0.025; 0.64	250; 9.84	
90625	625	60 °	0.025; 0.64	265; 10.43	
90825	825	80 °	0.025; 0.64	360; 14.17	
90227	227	20 °	0.027; 0.69	143; 5.63	
90427	427	40 °	0.027; 0.69	222; 8.74	
90527	527	50 °	0.027; 0.69	233; 9.17	
90627	627	60 °	0.027; 0.69	270; 10.93	
90827	827	80 °	0.027; 0.69	353; 13.90	
90629	629	60 °	0.029; 0.75	288; 11.34	
90231	231	20 °	0.031; 0.79	130; 5.12	
90431	431	40 °	0.031; 0.79	220; 8.66	
90531	531	50 °	0.031; 0.79	223; 8.78	
90631	631	60 °	0.031; 0.79	273; 10.75	
90433	433	40 °	0.033; 0.84	220; 8.66	
90235	235	20 °	0.035; 0.90	120; 4.72	
90435	435	40 °	0.035; 0.90	220; 8.66	
90535	535	50 °	0.035; 0.90	270; 10.93	
90635	635	60 °	0.035; 0.90	310; 12.20	
90839	839	80 °	0.039/ 0.99	480; 18.90	

Order no.	Nozzle label	Spray angle	Drilled hole inch; mm	Jet width mm; inch	Application
90243	243	20 °	0.043; 1.10	165; 6.50	Large-surface coating
90543	543	50 °	0.043; 1.10	260; 10.24	
90552	552	50 °	0.052; 1.30	280; 11.02	

13.2 HOSES

Order no.	Designation
9981939	Red, polyamide air hose - 6/4 mm; 0.24/0.16 inch, length specification in meters
9987008	High-pressure hose DN10, 15 m; 49.21 ft; 530 bar; 53 MPa; 7687 psi, M16x1.5
9984431	High-pressure hose DN10, 10 m; 32.81 ft, 530 bar; 53 MPa; 7687 psi, M16x1.5
9984420	High-pressure hose DN6, 10 m; 32.81 ft, 530 bar; 53 MPa; 7687 psi, M16x1.5
9984421	High-pressure hose NPS 1/4“, DN6-ND 530 bar; 53 MPa; 7687 psi, 10 m; 32.81 ft
9987118	High-pressure hose NPS 3/8“, DN10-ND 530 bar; 53 MPa; 7687 psi, 15 m; 49.21 ft

13.3 MISCELLANEOUS

Order no.	Designation
0350480	Locking bolt for gun attachment
0350499	Double connector G1/4“ - M16x1.5 product connection
9998110	Threaded elbow fitting 1/8“-D6 control air connection
0350883	Service set for gun
0350550	Double connector G1/4“-NPS1/4“ product connection
0367560	Double connector NPS1/4“-NPS1/4“
0367561	Double connector NPS3/8“-NPS1/4“

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:

- address for the invoice,
- address for delivery,
- 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

Notice

These parts are not covered by warranty terms.

● Not part of standard equipment, available, however, as additional extra.

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 WAGNER service center or a suitably trained person may carry out repairs and replace parts.

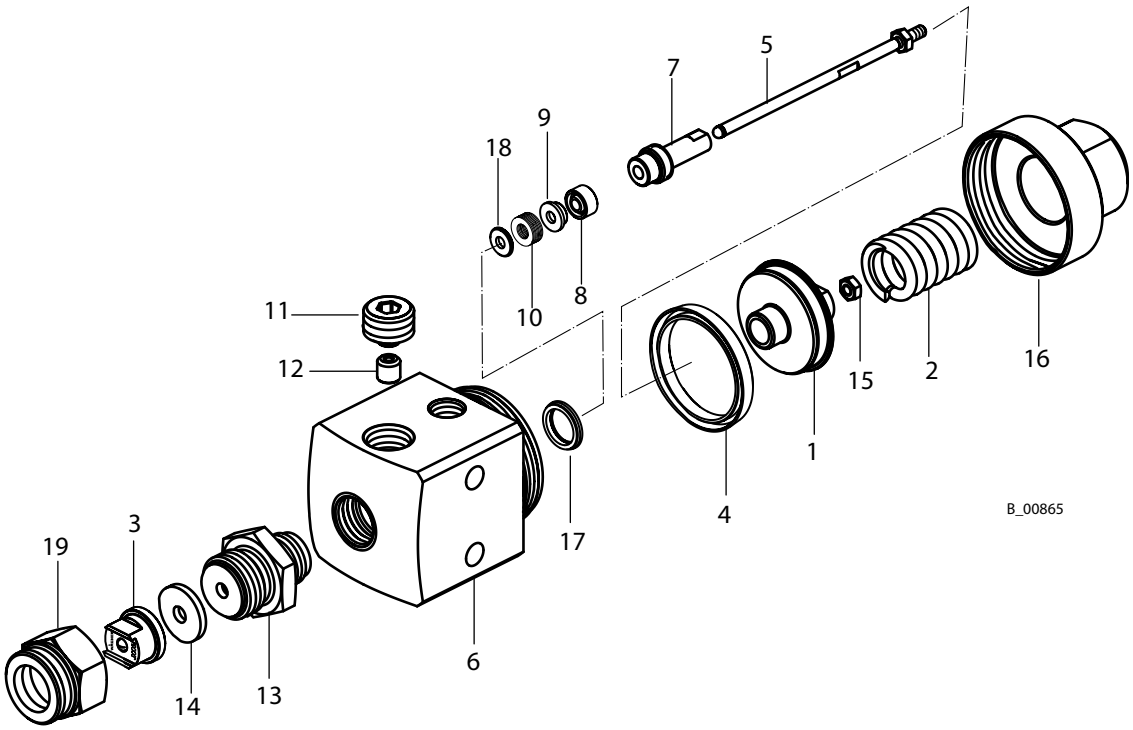
→ Use only WAGNER original spare parts and accessories.

→ 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, high-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 SPARE PARTS LIST GA 400AL

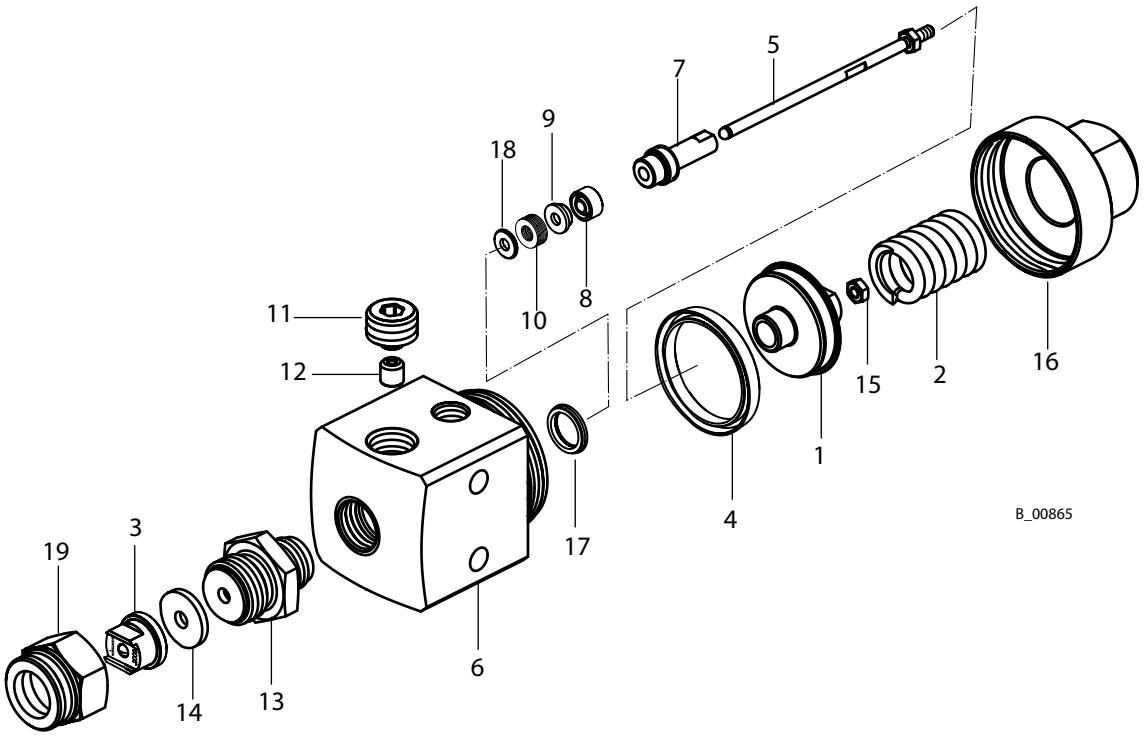


Pos	K	Quantity	Order no.	Designation
1		1	350481	Piston
2		1	350482	Pressure spring 40 MPa; 400 bar; 5800 psi
3	●	1	90xxx	Standard nozzle ... (see accessories)
4	◆ ★	1	350483	Piston seal
5	◆ ★	1	350884	Valve rod GA 250AL+GA 400AL (SP)
6		1	350484	Gun housing, GA 400AL
7		1	350485	Sealing screw
8	◆ ★	1	350486	Sealing collar
9		1	350487	Thrust piece
10		1	335707	Spring washer set (6 pieces)
11		1	350488	Screw plug
12		1	350418	Plug
13	◆ ★	1	350161	Intermediate piece
14	◆ ★	1	350489	Seal
15		1	9913014	Hexagon nut, M3
16		1	350882	AL clamping nut, complete
17	◆ ★	1	350422	Seal
18		1	350491	Pressure ring
19		1	97404	Union nut
	●		350883	Service set, GA 250AL/ GA 400AL

◆ Wearing parts; ★ = Included in service set

● Not part of the standard equipment, but available as a special accessory

14.3 GA 250AL SPARE PARTS LIST



Pos	K	Quantity	Order no.	Designation
1		1	350481	Piston
2		1	350498	Pressure spring 25 MPa; 250 bar; 3626 psi marked red
3	●	1	90xxx	Standard nozzle ... (see accessories)
4	◆ ★	1	350483	Piston seal
5	◆ ★	1	350884	Valve rod, GA 250AL+GA 400AL (SP)
6		1	350512	Gun housing, GA 250AL
7		1	350485	Sealing screw
8	◆ ★	1	350486	Sealing collar
9		1	350487	Thrust piece
10	★	1	335707	Spring washer set (6 pieces)
11		1	350488	Screw plug
12		1	350418	Plug
13	◆ ★	1	350161	Intermediate piece
14	◆ ★	1	350489	Seal
15		1	9913014	Hexagon nut, M3
16		1	350882	AL clamping nut, complete
17	◆ ★	1	350422	Seal
18		1	350491	Pressure ring
19		1	97404	Union nut
	●		350883	Service set, GA 250AL/ GA 400AL

◆ Wearing parts; ★ = Included in service set

● Not part of the standard equipment, but available as a special accessory

15 DECLARATION OF CONFORMITY

15.1 EU DECLARATION OF CONFORMITY

Herewith we declare that the supplied version of:

GA 250AL, GA 400AL

complies with the following guidelines:

2006/42/EC
2014/34/EU

Applied standards, in particular:

EN ISO 12100: 2010	EN ISO 80079-36: 2016
EN 1953:2013	EN ISO/IEC 80079-34: 2011
EN ISO 13732-1: 2008	
EN 14462:2015	
EN 1127-1:2011	

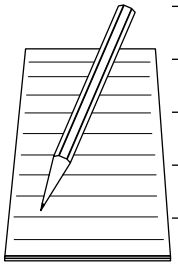
Applied national technical standards and specifications, in particular:

DGUV regulation 100-500 Chapter 2.29	
DGUV regulation 100-500 Chapter 2.36	
TRGS 727	

Identification: CE Ex II 2G X

EU Declaration of Conformity
The EU Declaration of Conformity is enclosed with this product. If needed, further copies can be ordered through your WAGNER dealer by specifying the product name and serial number.

Order number: 350907



Order no. 350941
Edition 12/2018

Germany
J. Wagner GmbH
Otto-Lilienthal-Str. 18
Postfach 1120
88677 **Markdorf**
Phone +49/ (0)7544 / 5050
Telefax +49/ (0)7544 / 505200
E-Mail ts-liquid@wagner-group.com

Switzerland
Wagner International AG
Industriestrasse 22
9450 **Altstätten**
Phone +41/ (0)71 / 757 2211
Telefax +41/ (0)71 / 757 2222

More contact addresses:
www.wagner-group.com

Document No. 11057601
Version B