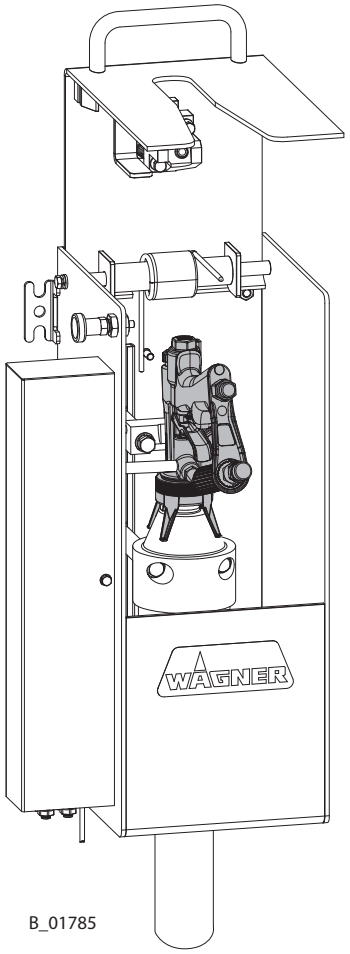


B_01785

Gun flush box

PSV

Translation of the Original Operating Manual

CE Ex II 2 G Ex h IIB T6 Gb X

For professional use.
Always observe the information in this manual, particularly the safety instructions and the warning instructions. Store the manual in a safe place.

Edition: 10/2025

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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.
⚠	**WARNING**	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.
ⓘ	**Info**	Provides information about particular characteristics and how to proceed.

Explanation of warning notice:

⚠ WARNING

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 GENERAL CHARACTERS AND SYMBOLS

The characters and symbols in this operating manual indicate the following:

✓ Requirement that must be fulfilled before an action can be performed.

1. Step 1 of an action to be performed with several action steps.
   - Second level action step
2. Step 2
   ⇨ Intermediate result of an action

⇨ Result of a complete action

- Action to be performed with an action step

1. Numbered list, first level
   – Numbered list, second level

– Non-numbered list, first level

– Non-numbered list, second level

[▸▸ 8] = cross-reference on page

♦ = wearing parts

⋆ = included in service set

● = not part of the standard equipment but available as a special accessory

1.4 LANGUAGES

The operating manual is available in the following languages:

Original operating manual

Language	Order no.
German	377970

Translation of the original operating manual

Language	Order no.	Language	Order no.
English	377971	Japanese	2359469
French	377972	Czech	2413373
Spanish	377975	Dutch	377973
Italian	377974	Portuguese	377978
Danish	377977	Polish	377979
Swedish	377976		

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

1.5 ABBREVIATIONS

Order no.	Order number
ET	Spare part
K	Marking in the spare parts lists
Pos	Position
Stk	Number of pieces
GFB	Gun flush box
2K	Two components
SW	Wrench size

1.6 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 USING IN ACCORDANCE WITH THE INSTRUCTIONS

2.1 DEVICE TYPES

Gun flush box for flushing manual spray guns

2.2 TYPE OF USE

The gun flush box is suitable for flushing manual spray guns with suitable working materials (see chapter Processible working materials [▸▸ 8]).

The gun flush box may only be operated with the intended spray gun types. The gun flush box can be operated as a component of an electric 2K system or as a single device.

WAGNER explicitly prohibits any other use!

The device may only be operated under the following conditions:

- Use the device only to work with the materials recommended by WAGNER.
- 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.
- Follow the instructions in the 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 Identification [▸▸ 9]).



2.4 PROCESSIBLE WORKING MATERIALS

Flushing agent for coating or surface technology process products as well as similar products.

Info

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

Device type	**PSV**
Manufacturer	J. Wagner GmbH 88677 Markdorf Germany

II 2 G Ex h IIB T6 Gb X

CE	European Communities
Ex	Symbol for explosion protection
II	Device class II
2	Category 2 (Zone 1)
G	Ex-atmosphere gas
Ex	Ignition protection class
h	Ignition protection class for non-electrical devices
IIB	Explosion group
T6	Maximum surface temperature < 85 °C; 185 °F
Gb	Zone 1 high safety level
X	Special notices (see chapter Identification "X")

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 Data [▸▸ 19].

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.

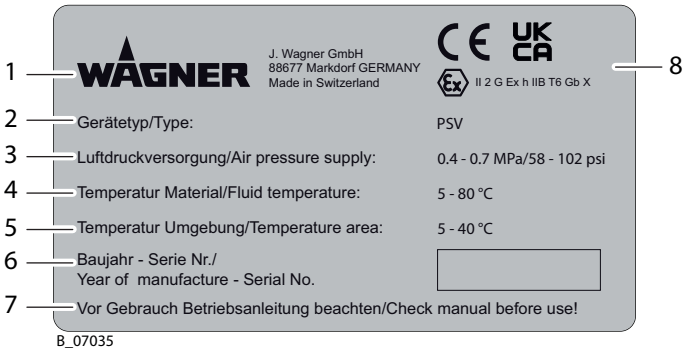
Cleaning



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



B_07035

1	Manufacturer	5	Ambient temperature
2	Device type	6	Model year - serial number
3	Air pressure supply	7	Read operating manual before use!
4	Product temperature	8	Identification

3.4 PERMISSIBLE DEVICE COMBINATIONS

The different versions for the individual spray gun types and the corresponding order numbers are listed on the overview sheet (order no. 2342346). Only the intended spray gun types can be used in the gun flush box.

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 existing regulations concerning occupational safety and accident prevention regulations.

4.1.1 Electrical devices and equipment



Danger of electric shock!

Danger to life from electric shock:

- Place and operate device in accordance with the existing 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.
- Do not disconnect any plug connections during operation.
- Label plug connections with the warning "Do not disconnect when energized".
- Must be repaired immediately in the event of problems.
- Decommission if device poses a danger or is damaged.
- Disconnect the power supply before starting maintenance or repair work on the device.
  - Secure the device against being switched back on without authorization.
  - 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



Danger due to dangerous fluids or vapors!

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

- Ensure that the floor in the working area is static dissipative in accordance with EN 1081:2018+A1:2020 or EN 61340-4-1:2004+A1:2015 (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 is available and is used.

- Make sure that all people within the work area wear static dissipative shoes. Footwear must comply with EN 20344. The measured insulation resistance must not exceed 100 MΩ.
- Ensure that during spraying, persons wear static dissipative gloves. The grounding takes place via the spray gun's handle or its trigger.
- 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. Do not smoke.
- Ensure that the pipe joints, hoses, equipment parts and connections are permanently, technically leak-proof:
  - Periodic preventative maintenance and service (replacing hoses, checking tightness strength 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.

4.1.3 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 observe the information in this manual, particularly the safety instructions and the warning instructions.
- Always follow existing regulations concerning occupational safety and accident prevention regulations.

Danger due to high-voltage field!



Danger to life from malfunction of active implants.

- 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

Danger 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.
- Implement the prescribed safety measures, in particular the wearing of safety glasses, safety clothing and protective gloves as well as the use of protective hand cream.
- 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

Danger 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.
- Perform the following measures 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
  - Securing 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 chapter on troubleshooting and rectification.
- If needed, the liquid ejection devices must be checked by experts (e.g., WAGNER 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 lacquer or flushing agents:

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

Danger due to recoil forces!



Actuating the trigger can causes strong recoil forces. Thereby, the user can lose his balance and injure himself when falling.

Avoid risk of injury from recoil forces:

- Ensure that you have firm footing when operating the spray gun.

4.2.3 Grounding the device

Danger due to electrostatic charge!



Risk of injury, 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.
- Make sure that the ground and potential equalization of all system parts are performed reliably and continuously and can withstand the expected stress (e.g., mechanical stress, corrosion).
- Earth the workpieces being painted.
- 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's handle or its trigger.

4.2.4 Product hoses



Danger 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 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
  - 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 MΩ.
- 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.

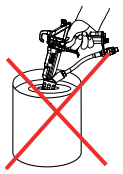
- Non-ignitable cleaning agents and flushing agents should preferably be used.
- When carrying out cleaning work with flammable cleaning agents, make sure that all equipment and resources (e.g., collection tank, funnel, transport cart) are conductive or static dissipative and grounded.
- Observe the 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.

- It should be noted that when the device is put into operation or emptied: depending on the coating product used, depending on the rinsing agent (solvent) used, there may briefly be a mixture inside the pipes and equipment which can ignite.
- Only use electrically conductive tanks 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 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

Danger 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, apply a warning label to the device that says "Warning - Hot Surface."

Instruction label: Order no. 9998910

Protection label: Order no. 9998911

Info



Order the two labels together.

4.2.7 Maintenance and repair

Danger 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.
- Repair or replacement of devices or parts of devices are only allowed to be performed outside the hazard area by qualified personnel.
- 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 Chapters Accessories [▸▸ 33] and Spare parts [▸▸ 34] and 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, product 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

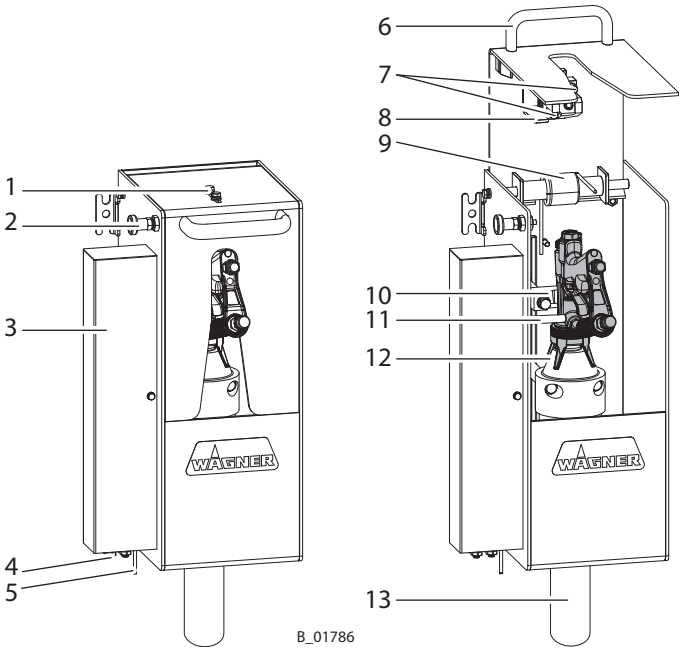
Danger due to removal of protective and monitoring equipment!

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	Function
1	Fixing positioning	Optimal positioning of the fixing.
2	Locking bolt	The cover is opened by pulling out the locking bolt's button.
3	Trigger mechanism	There is a pneumatic cylinder in the trigger mechanism, which, when selected, moves the actuation shaft for the spray gun's trigger.
4	Pneumatic connections	Connection of the connection hoses to the gun flush box. A = Switch off spray gun. B = Switch on spray gun. C = Limit switch's output signal. D = Limit switch's air supply.
5	Grounding cable	Grounding cable connection.
6	Handle	Use for guided opening of the cover.
7	Limit switch stop	2/2-way valve switches, when the cover is closed and a spray gun is in the gun flush box. The pneumatic signal (see chapter Pneumatic Diagram [▸▸ 39]) can be used to ensure that the gun flush box is ready for flushing; e.g., information to a 2K system.
8	Interlocking	When the trigger is actuated by the trigger mechanism, the lock prevents the cover from being opened.
9	Leg spring	The leg spring holds the cover in the opened position.
10	Stop	Positioning of the spray gun in the gun flush box.

Pos	Designation	Function
11	Actuation shaft	The actuation shaft moves under the trigger and then lifts it, so that the spray gun is activated.
12	Holder	The holder positions the spray gun, so that the spray is forced into the discharge opening via the nozzle.
13	Hose	The flushing liquid in the hose is discharged downwards and must be collected in a suitable tank which is grounded.

5.2 FUNCTIONING

The gun flush box serves for both manual and automatic flushing and filling of a manual spray gun. In the case of the automatically operated gun flush box, the controller is provided, e.g., from a 2K system, so that after expiry of the pot life and the post-alarm, the manual spray gun is automatically flushed in the gun flush box. For a paint change, the manual spray gun is placed in the gun flush box, the spray gun is flushed automatically and filled with new paint.

Advantages:

- Reduction of the flushing agent consumption (given flushing quantity via the controller)
- Reduction of the volatile organic compounds (VOC), because atomizing air is switched off automatically and the flushing agent is collected again
- High level of user safety during the flushing procedure
- Highest production and working safety
- Simple handling, easy operation
- Modular structure
- Low contamination of the spray gun during the flushing procedure

5.3 EXTENT OF DELIVERY

The standard equipment includes:

Stk	Order no.	Designation
1	--	Gun flush box
The standard equipment includes:		
1	See chapter Declaration of conformity [▸▸ 41]	Declaration of conformity
1	377970	Operating manual, in German
1	See chapter Languages [▸▸ 6]	Operating manual in the local language
1	2342346	Gun flush box overview sheet, German/English
1	See 2342346	Supplementary sheets regarding the corresponding gun flush box (spare parts list/basic settings), German/English

For special versions the delivery note applies.

Info

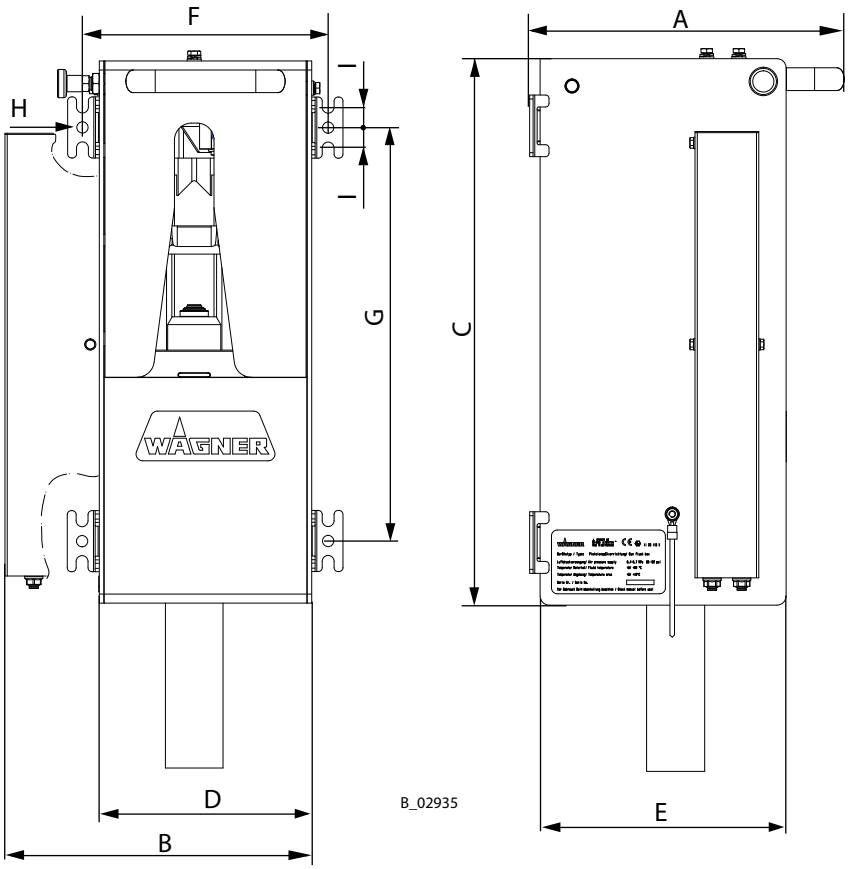
There are different basic system variants.
The different versions for the various spray gun types and the corresponding order numbers are listed on the overview sheet (order no. 2342346).
The connection hoses are not included in the standard equipment. Various supplementary components for the gun flush box are listed in the accessories chapter (see chapter Accessories - GunFlushBox [▸▸ 33]).

5.4 DATA

5.4.1 Technical Data

Description	Units	Value
Inlet pressure (air pressure)	MPa; psi; bar	0.4 – 0.7; 58 – 102; 4 – 7
Outlet pressure (air pressure)	MPa; psi; bar	0.4 – 0.7; 58 – 102; 4 – 7
Compressed air quality: free from oil and water	Quality standard 7.5.4 according to ISO 8573.1, 2010	
	7: Particle concentration 5–10 mg/m³ 5: Humidity: pressure dew point ≤ 7 °C 4: Oil content ≤ 5 mg/m³	
Weight	kg; lb	approx. 7.5; 15.63
Operating temperature range	°C; °F	5 – 80; 41 – 176

Dimensions:



Measurement	mm	inch
A	277	10.9
B	271.5	10.7
C	480	18.9
D	188	7.4
E	216	8.5
F	217.1	8.6
G	366	14.4
H	10.5	0.41
I	18	0.71

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 °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 be in a range between 10 °C and 60 °C; 50 °F and 140 °F.

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

6.4 INSTALLATION AND CONNECTION

The gun flush box is suitable for Ex zone 1. The device must be protected from contamination. All pneumatic hoses, grounding cables and product hoses must be laid properly and secured.

6.4.1 Wall mounting

Mount the gun flush box on a suitable wall with 4 M8 screws. Vertical angle of inclination, max. 10°. Ground the gun flush box with the grounding cable provided.

Attach the connection hoses of the gun flush box control:

A = Switch off spray gun.

B = Switch on spray gun.

C = Tappet valve's output signal

D = Tappet valve's air supply

6.5 ADJUSTMENT OF THE GUN FLUSH BOX

The gun flush box is adjusted with a spray gun in the factory. Adjust the height of the fixing, in such a way that the spray gun is solidly fixed and the tappet valve is triggered (see also chapter Table of dimensions for basic settings [▸▸ 27] and Readjustment of the universal fixing [▸▸ 28]).

Further information regarding the readjustment of the universal fixing can be found in the gun flush box's corresponding supplementary sheet (see overview sheet 2342346).

6.6 GROUNDING

⚠ DANGER

Discharge of electrostatically charged components in atmospheres containing solvents!



Explosion hazard from electrostatic sparks or flames.

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

⚠ WARNING

Heavy paint mist if grounding is insufficient!



Risk of poisoning.

Insufficient paint application quality

- Earth all unit components.
- Earth the workpieces being painted.

6.7 SAFETY CHECKS

- Carry out safety checks in accordance with chapter Safety Checks and Maintenance Intervals [▸▸ 26].

6.8 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 Safety Checks and Maintenance Intervals [▸▸ 26].

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:

1. the regular safety checks are carried out in accordance with Chapter Safety Checks and Maintenance Intervals [▸▸ 26],
2. commissioning is carried out in accordance with Chapter Assembly and commissioning [▸▸ 21].

7.2.1 Procedure

⚠ WARNING

Discharge of the electrostatics in atmospheres containing solvents!

Fire and explosion hazard.

- Turn off the electrostatics before flushing the gun or before placing the gun in the gun flush box.



⚠ WARNING

Heavy paint mist if grounding is insufficient!

Risk of poisoning.

Danger due to escaping product mist, contamination of the device and device components. Danger of poisoning.

- Switch off the atomizing air before the gun is flushed or placed in the gun flush box.



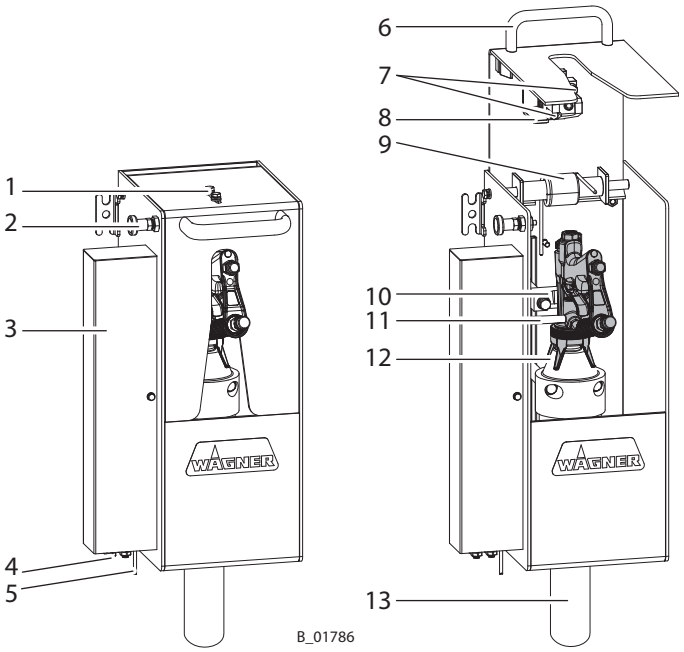
⚠ WARNING

Inserting and removing the gun!

Risk of crushing by moving device components.

- When opening and closing the device: one hand on the bow-type handle and the other hand on the detent element.
- Never operate the device without covers.





1. Right hand on the bow-type handle (6) and pull the locking bolt (2) out of the detent body with the left hand. Due to the spring force (9) the unlatched cover automatically swings upwards until the stop. The swing movement should be guided by hand.
2. Place the corresponding spray gun in the gun flush box in such a way, that the gun hook engages in the stop (10) and aligns the spray gun nozzle with the hole in the spray gun holder (12).
3. In order to avoid the uncontrolled escaping of liquid, check again whether the spray gun is correctly inserted.
4. With the right hand, close the cover again until the locking bolt (2) locks back in place.
5. The spray gun can now be flushed manually (for individual applications) or automatically in connection with an electric 2K system (e.g. Twincontrol, 2K Smart or 2K Comfort).
   NOTICE! With an electrical 2K system, the possibility also exists that after the expiration of the pot life and after the pre-alarm, the spray gun and the mixed 2K product in the hose are flushed automatically (see the corresponding operating manual).
6. If the paint must be filled after flushing, care should be taken during programming to ensure that the spray gun only remains open in the gun flush box until the hose is filled with paint. Thus, 2K lacquer does not harden and contamination of the holder (12) can be avoided.

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

8.2 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 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 device.
- Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, product hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the power and compressed air supply.
  - Disconnect the control unit from the mains.
- Observe the operating and service manual for all work.



Prior to maintenance

It should be ensured that the unit is in the following state before carrying out any work on it:

- Flush and clean the system according to chapter Cleaning and flushing [▸▸ 14].
- Take the spray gun out of the gun flush box and relieve the gun flush box of pressure.

After maintenance

- Carry out safety checks in accordance with chapter Safety Checks and Maintenance Intervals [▸▸ 26].
- Put the system into operation and check for leaks.

– Have the system checked for safe condition by a skilled person.

In accordance with DGUV regulation 100-500:

– 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 Safety Checks and Maintenance Intervals

Every day

1. Check grounding: see chapter Grounding [▸▸ 22].
2. Check hoses, tubes and couplings: see chapter Product Hoses, Pipes and Couplings [▸▸ 26].

Weekly

- Check that the safety fixtures function properly (see chapter Protective and monitoring equipment [▸▸ 16]).

Yearly or as required

1. In accordance with DGUV regulation 100-500, chapters 2.29 and 2.36:
   - Have the liquid ejection devices checked by an expert (e.g., WAGNER service technician) as required, but no later than every 12 months to ensure that they are in safe working order.
   - For shut down devices, the examination can be suspended until the next start-up.

8.2.4 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.

1. Check hoses, pipes, and couplings every day and replace if necessary.
2. Before every commissioning, check all connections for leaks.
3. 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.
4. Replace the complete hose if one of the following two periods is exceeded:
   - 6 years from the date of the hose crimping (see fitting embossing).
   - 10 years from the date of the hose imprinting.

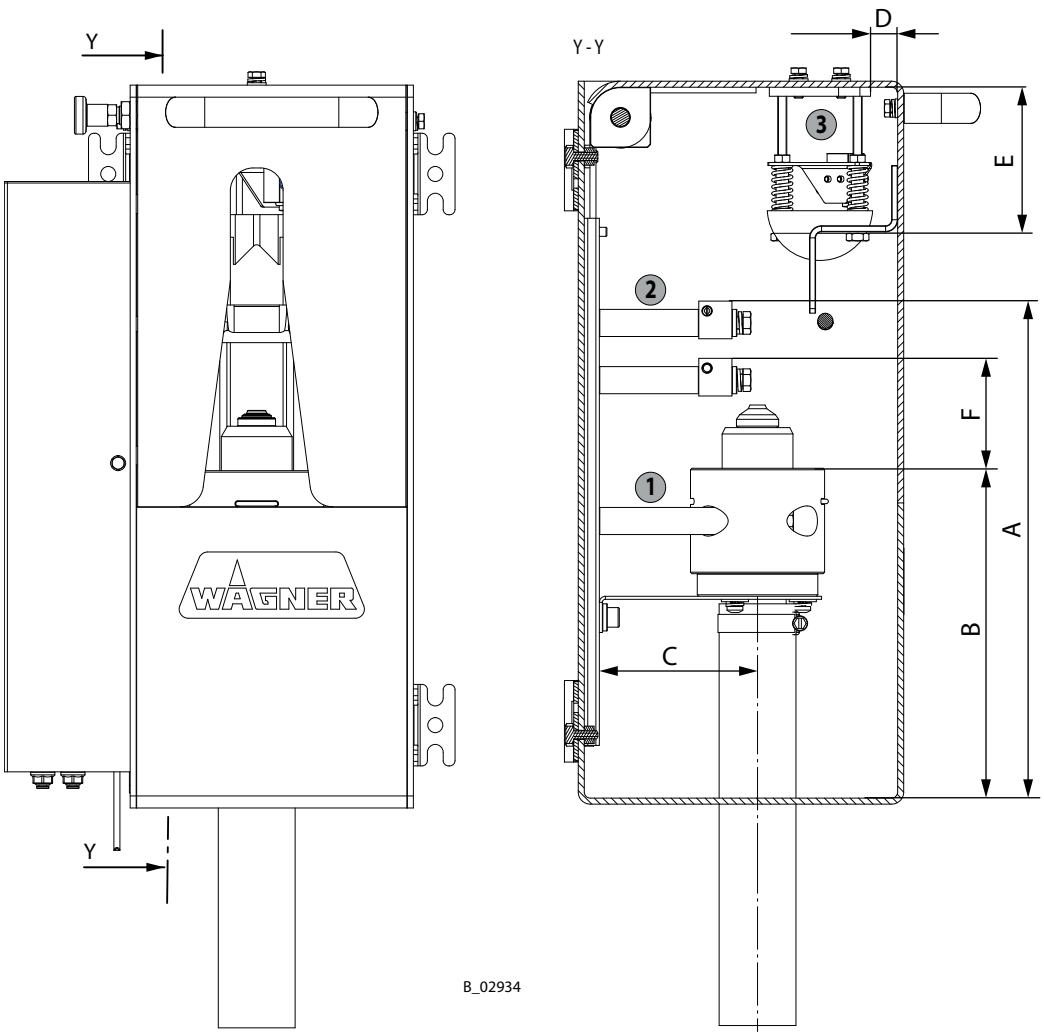
Fitting embossing (if present)	**Meaning**
xxx bar	Pressure
yymm	Crimping date (year/month)
XX	Internal code

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

* = If available, possibly without imprint for low pressure!

8.3 TABLE OF DIMENSIONS FOR BASIC SETTINGS

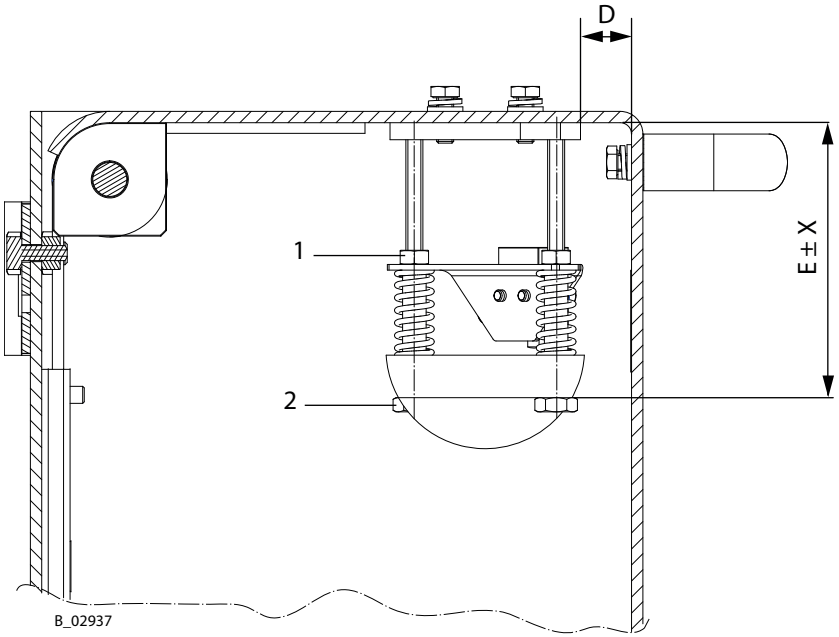
Figure of a gun flush box for a GM4x00AC spray gun.



The three components holder (1), stop (2) and fixing (3) differ depending on spray gun type (see spare parts lists) and must be dimensionally coordinated depending on the spray gun used, to ensure perfect functioning of the gun flush box. The table specifications are theoretical basic dimensions. In the event of major tolerance deviations in the spray guns, the fixing must be readjusted.

The setting dimensions of the different spray gun types are listed in the corresponding supplementary sheets.

8.4 READJUSTMENT OF THE UNIVERSAL FIXING



The universal fixing is completely adjusted to the spray gun used in the gun flush box and tested in the factory. Larger tolerance differences on different spray guns can be equalized by making a readjustment to the fixing.

1. Loosen lock nut (1) and turn clockwise.
2. Define stop dimension E +X or -X over threaded sleeve (2).
3. Fix threaded sleeve (2) with an open-end size 13 wrench and tighten nut (1) so that it is flush.

9 TROUBLESHOOTING AND RECTIFICATION

Malfunction	Cause	Rectification
The spray gun is in the gun flush box, but it is not possible to flush it or fill it with paint.	No air pressure	Switch on the compressed air
	No compressed air signal for the cylinder	Check the compressed air supply line connection to the cylinder
	No signal from tappet valve	Check that tappet valve is actuated by the inserted spray gun when the cover is closed
	Cylinder defective or jammed	Replace cylinder

10 REPAIRS

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. A function test should be performed.

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 device.
- Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, product hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the power and compressed air supply.
  - Disconnect the control unit from the mains.
- Observe the operating and service manual for all work.



Before repair work

It should be ensured that the unit is in the following state before carrying out any work on it:

1. Flush and clean the system according to chapter Cleaning and flushing [▸▸ 14].
2. Take the spray gun out of the gun flush box and relieve the gun flush box of pressure.

After repair work

1. Carry out safety checks in accordance with chapter Safety Checks and Maintenance Intervals [▸▸ 26].
2. Put the system into operation and check for leaks.
3. Function test in accordance with chapter Function test after repair work [▸▸ 31].

In accordance with DGUV regulation 100-500:

- 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.

11 FUNCTION TEST AFTER REPAIR WORK

After all repair work, the gun flush box 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.

Activity	Aid tools
1. Testing for leaks in air supply	
▸ Connect the gun flush box to the air supply.	Test medium: compressed air leak spray
2. General checks	
▸ Check tightening torque of various screws.	Torque wrench
3. Basic device versions for different spray gun types	
▸ Settings as per supplement (order no. 2342346).	Supplement (order no. 2342346)
4. Testing for leaks in flushing circuit	
1. Insert spray gun in gun flush box (Adjust settings as necessary - see chapter Table of dimensions for basic settings [▸▸ 27] and Readjustment of the universal fixing [▸▸ 28]). 2. Check the function of the limit switch. 3. Check the function of the trigger mechanism. 4. Observe flushing procedure.	Test medium: suitable flushing agent

12 DISPOSAL

12.1 DEVICE

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

The following materials have been used:

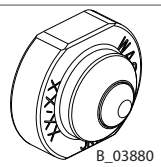
- Stainless steel (inox)
- Zinc-plated steel
- Copper
- Elastomers
- Plastics

12.2 CONSUMABLE PRODUCTS

Consumable products (lacquers, adhesives, flushing and cleaning agents) must be disposed of in accordance with all applicable legal requirements.

13 ACCESSORIES

13.1 ACCESSORIES - GUNFLUSHBOX

Order no.	Stk	Description	
2411715	? m	Hose Outer Ø 51 mm; 2.00 inches Inner Ø 38 mm; 1.5 inch Per meter suitable for draining solvent	
		Connection hose set consists of:	
9982072	4	– Hose (length stated in m; inches)	
9955709	2	– Label no. 1	
9955710	2	– Label no. 2	
9955711	2	– Label no. 3	
9955712	2	– Label no. 4	
2312792	1	Complete flushing nozzle with internal diameter of 2 mm instead of nozzle type ACF3000-AirCoat – 379xxx ACF3000 – 321xxx ACF3000 plus for spray gun types such as GM4x00AC	 B_03880

The gun flush box controls of electrical 2K systems are listed in the accessories chapter of the corresponding operating manual of the 2K system. The same is also valid for the atomizing air and electrostatic switch-offs.

14 SPARE PARTS

14.1 HOW TO ORDER SPARE PARTS

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" (marking) in the following spare parts lists:

♦ Wearing parts. Wearing parts are not included in the warranty.

⋆ Included in service set

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

Explanation of order no. column:

-- Item not available as spare part.

/ Position does not exist.

14.2 NOTES ON USING SPARE PARTS

⚠ DANGER

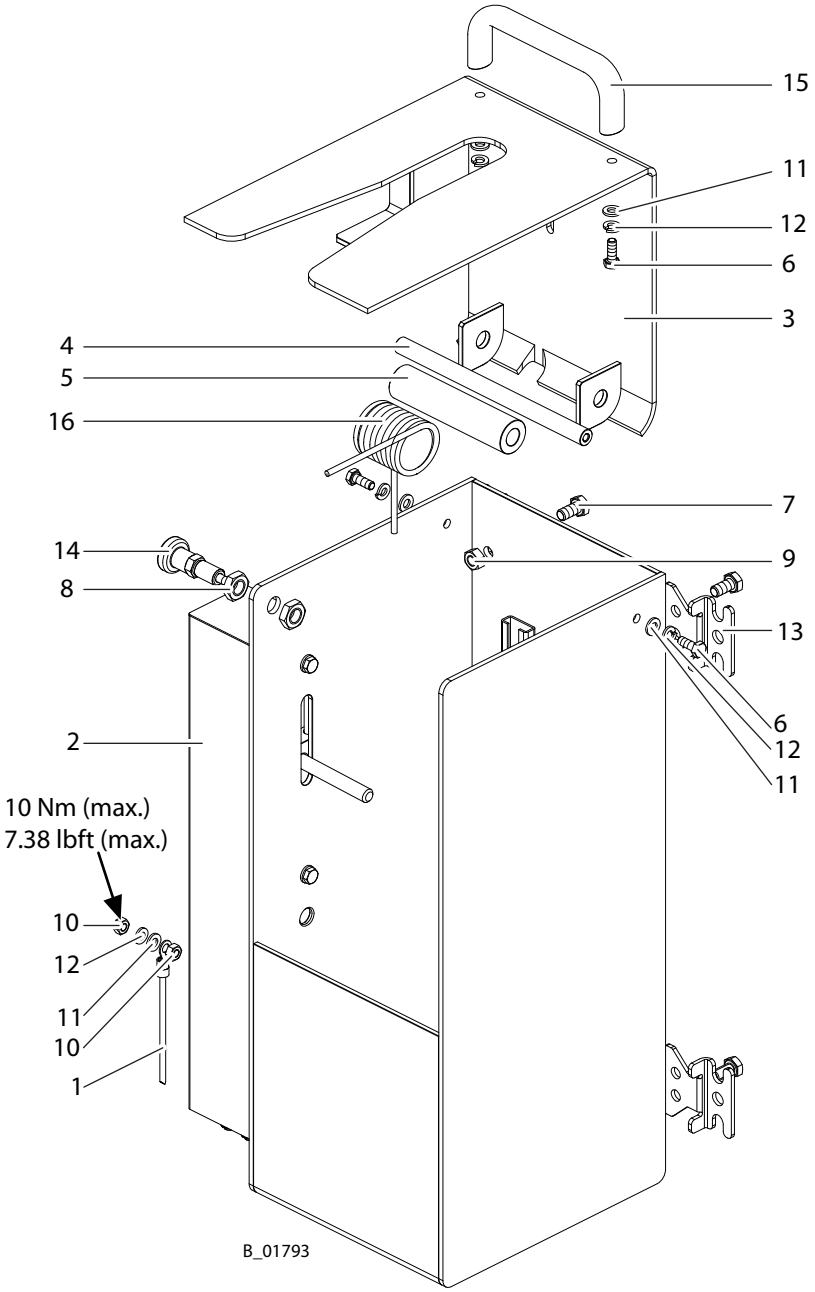
Incorrect maintenance/repair!

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 device.
- Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, product hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the power and compressed air supply.
  - Disconnect the control unit from the mains.
- Observe the operating and service manual for all work.



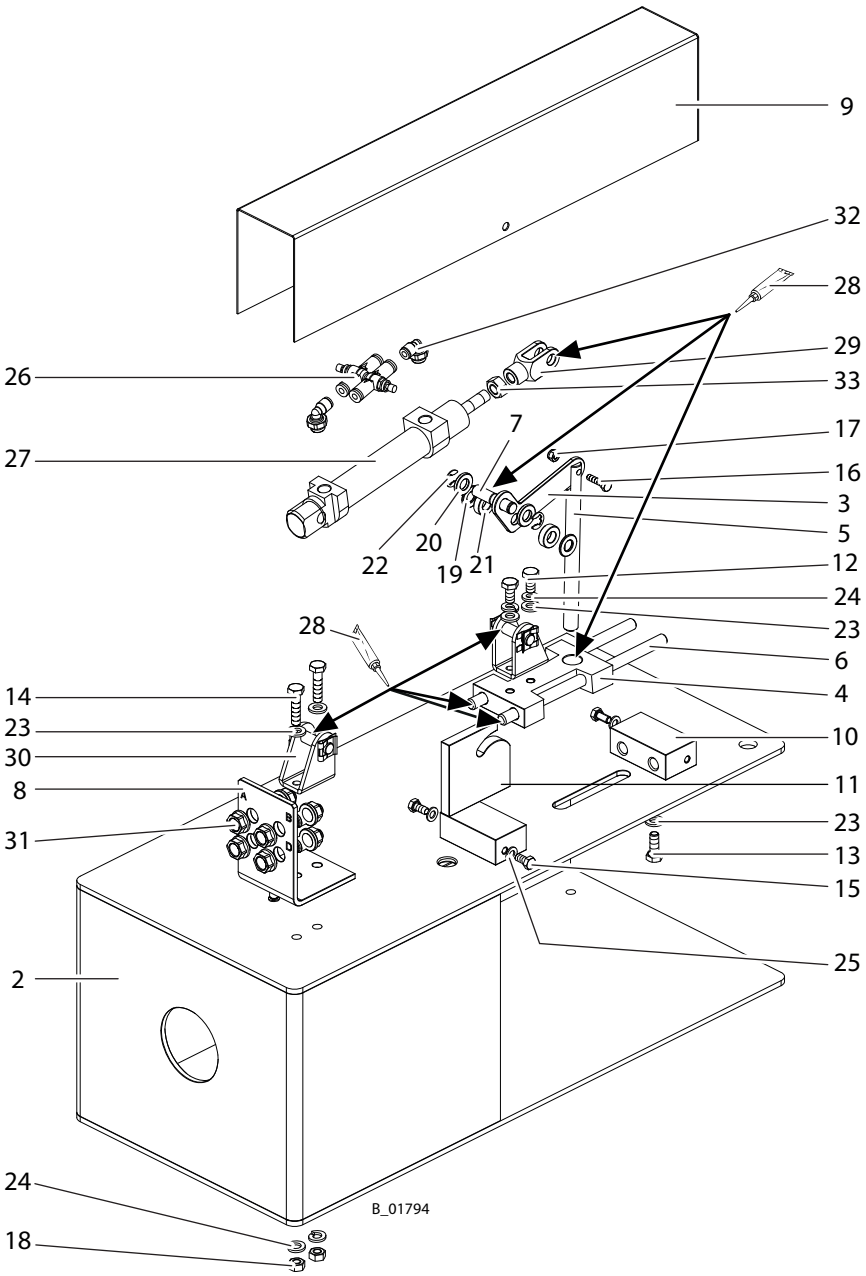
14.3 COMPLETE GUN FLUSH BOX (EMPTY)



Pos	K	Stk	Order no.	Designation
1		1	236219	Grounding cable, complete
2		1	--	Trigger mechanism, complete (see chapter Complete discharge device [▸▸ 36])
3		1	377601	Cover, welded
4		1	377619	Shaft
5		1	377621	Sleeve
6		4	9907198	Hexagon screw, M6x16
7		4	9907200	Hexagon screw, M8x16
8		2	9913047	Locknut, M12x1.5

Pos	K	Stk	Order no.	Designation
9		4	9913050	Hexagon nut, M8
10		2	9913052	Hexagon nut, M6
11		5	9920109	Washer, A6.4
12		5	9925048	Spring washer, B6
13		4	9998868	Wall mounting bracket
14		1	9999065	Locking bolt
15		1	9999068	Handle
16		1	9999069	Leg spring, right

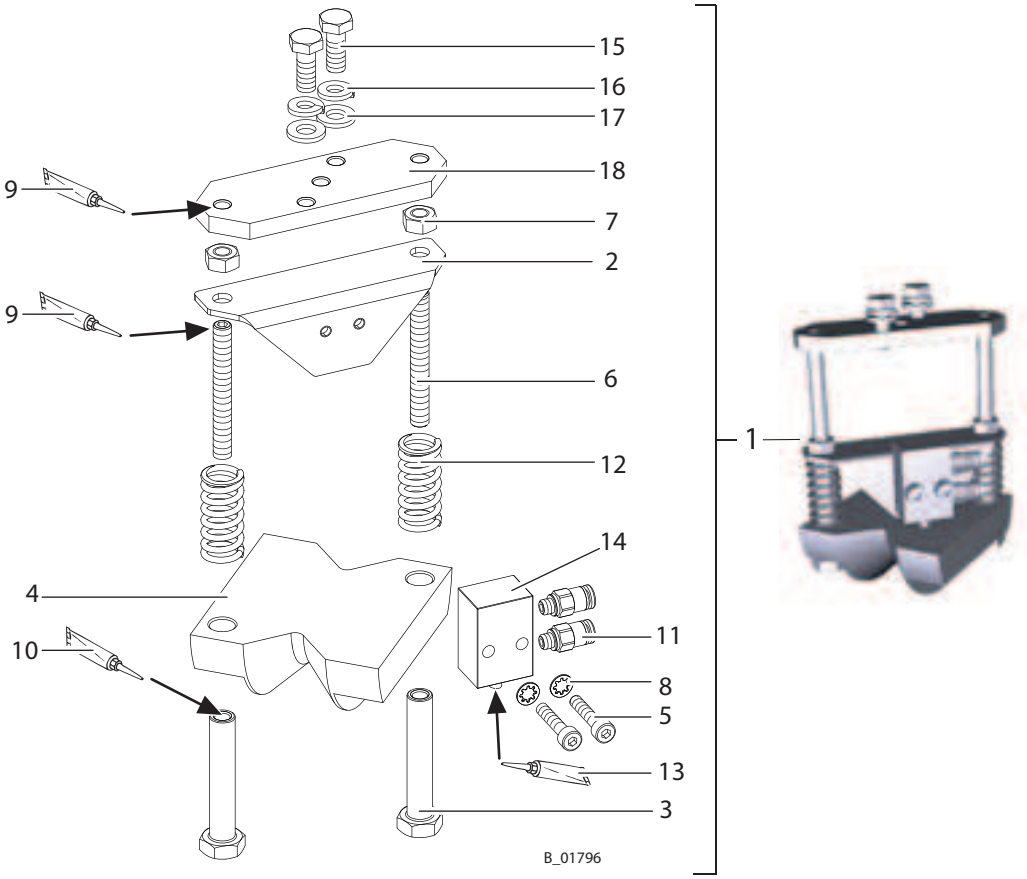
14.4 COMPLETE DISCHARGE DEVICE



Pos	K	Stk	Order no.	Designation
2		1	377600	Housing welded
3		1	377608	Transmission lever 110°
4	♦	1	377609	Slide part
5		1	377610	Actuation shaft
6	♦	2	377612	Shaft
7		1	377613	Position pin
8		1	377615	Plug connection angle
9		1	377616	Cover, complete
10		1	377617	Shaft holder
11		1	377618	Shaft holder template
12		2	9900106	Hexagon screw, M6x12
13		2	9907198	Hexagon screw, M6x16
14		2	9907199	Hexagon screw, M6x25
15		3	9907206	Hexagon screw, M5x10
16		1	9907216	Hexagon screw, M4x16
17		1	9910202	Hexagon nut with M4 clamp
18		2	9913052	Hexagon nut, M6
19		2	9925040	Distance washer, Ø 16x1.5
20		2	9925041	Distance washer, Ø 16x2.4
21		2	9925042	Distance washer, Ø 16x5
22		2	9921902	Lock washer
23		6	9920109	Washer, A6.4
24		4	9925048	Spring washer, B6
25		3	9920101	Washer, A5.3
26		2	9943023	Adjustable check-valve
27	♦	1	9943123	Cylinder
28		-	9992616	Molykote DX grease
29		1	9998084	Fork end
30		2	9999063	Bearing pedestal
31		4	9999064	Hermetic plug connection
32		2	9999066	Male stud elbow
33		1	9913050	Hexagon nut, M8

♦ = wear parts

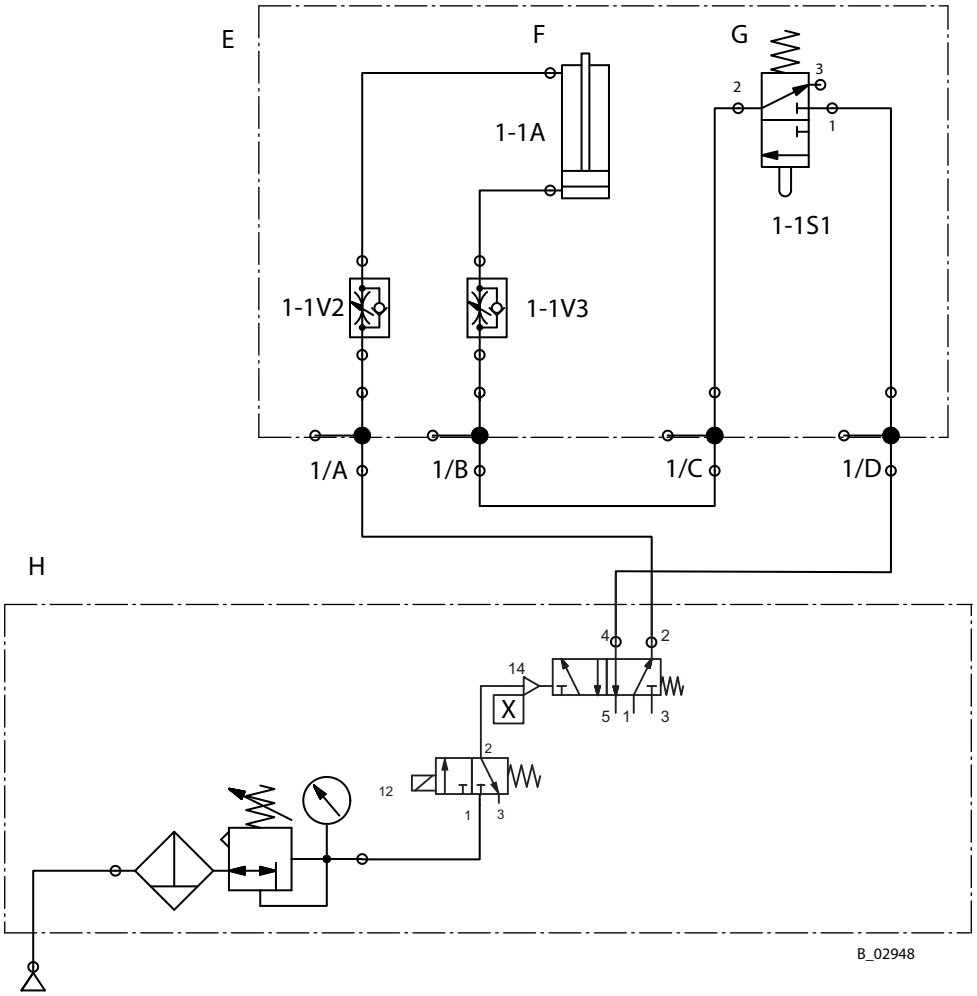
14.5 UNIVERSAL FIXING, COMPLETE



Pos	K	Stk	Order no.	Designation
1		1	377179	Universal fixing, complete
2		1	377672	Supporting bracket
3		2	377673	Threaded sleeve
4		1	377674	Thrust piece
5		2	9906004	Socket cap screw
6		2	9907262	Threaded pin
7		2	9913052	Hexagon nut
8		2	9922107	Lock washer with internal teeth
9		1	9992528	Loctite® 270
10		1	9992616	Molykote® DX grease paste
11		2	9992723	Straight plug-in connection
12		2	9998581	Pressure spring
13		1	9998808	Mobilux® EP 2 grease
14		1	9999453	Tappet valve
15		2	9907198	Hexagon screw
16		2	9925048	Spring washer
17		2	9920109	Washer
18		1	377671	Threaded anchor plate

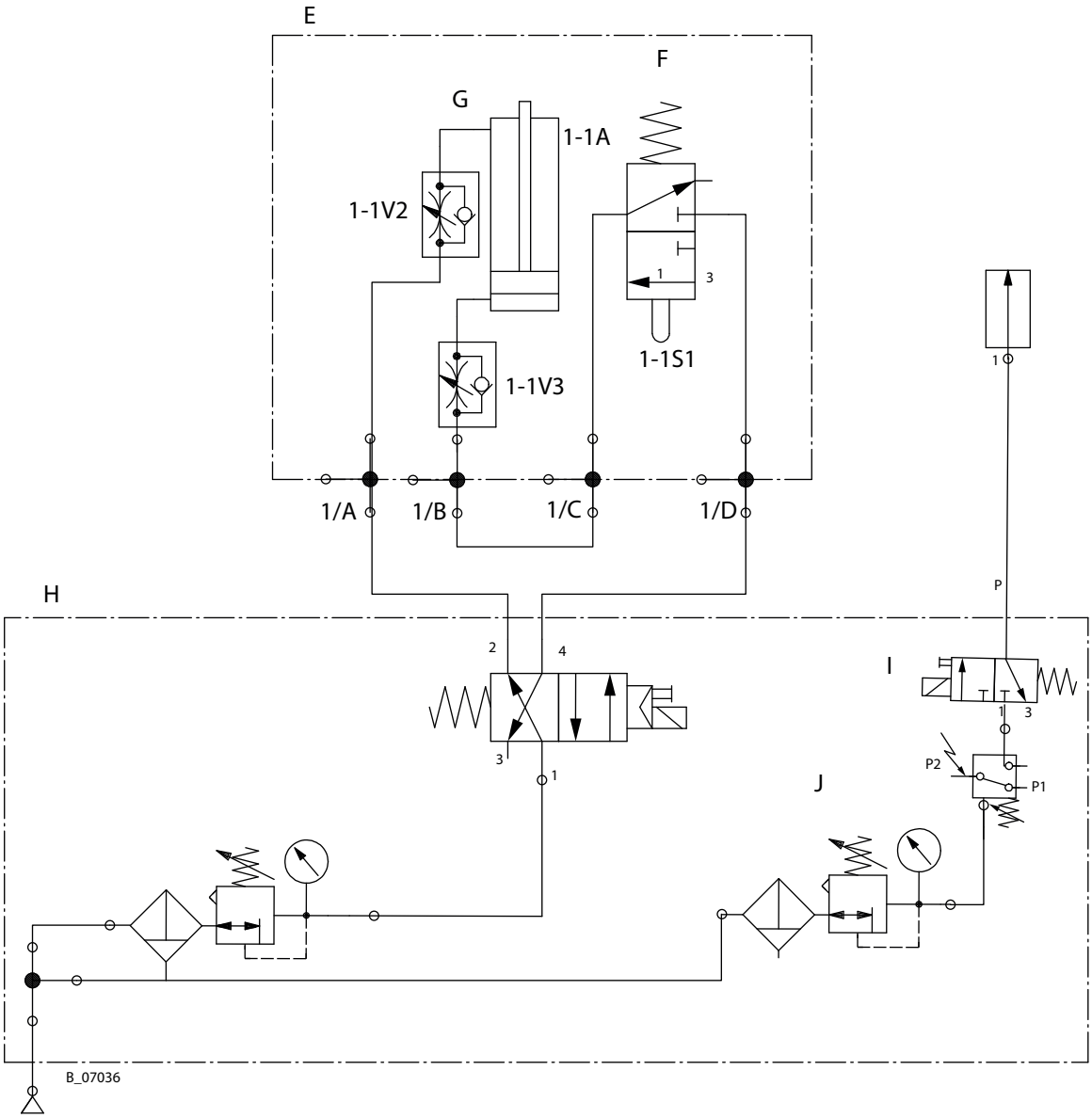
15 PNEUMATIC DIAGRAM

15.1 GUN FLUSH BOX PNEUMATICS DIAGRAM AND TWINCONTROL TYPES 1 AND 2



A	Switching off of spray gun's pneumatic connection	F	Actuation of the spray gun trigger
B	Switching on of spray gun's pneumatic connection	G	Gun in position and cover closed
C	Pneumatic connection Tappet valve's output signal	H	TwinControl
D	Pneumatic connection Tappet valve's air supply	X	Up to Software Version 3.xx = 20 From Software Version 4.03 = 3
E	Gun flush box		

15.2 GUN FLUSH BOX PNEUMATICS DIAGRAM AND 2K SMART / 2K COMFORT



A	Switching off of spray gun's pneumatic connection	F	Actuation of the spray gun trigger
B	Switching on of spray gun's pneumatic connection	G	Gun in position and cover closed
C	Pneumatic connection Tappet valve's output signal	H	2K Smart / 2K Comfort
D	Pneumatic connection Tappet valve's air supply	I	Atomizing air shut-off valve
E	Gun flush box	J	Gun monitoring

16 DECLARATION OF CONFORMITY

16.1 EU DECLARATION OF CONFORMITY

Herewith we declare that the supplied version of:

PSV

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 ISO 13732-1:2008	EN ISO 80079-37:2016
EN 1127-1:2019	

Identification:

 II 2 G Ex h IIB T6 Gb 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: 377910

Order number 377971
Edition 10/2025

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