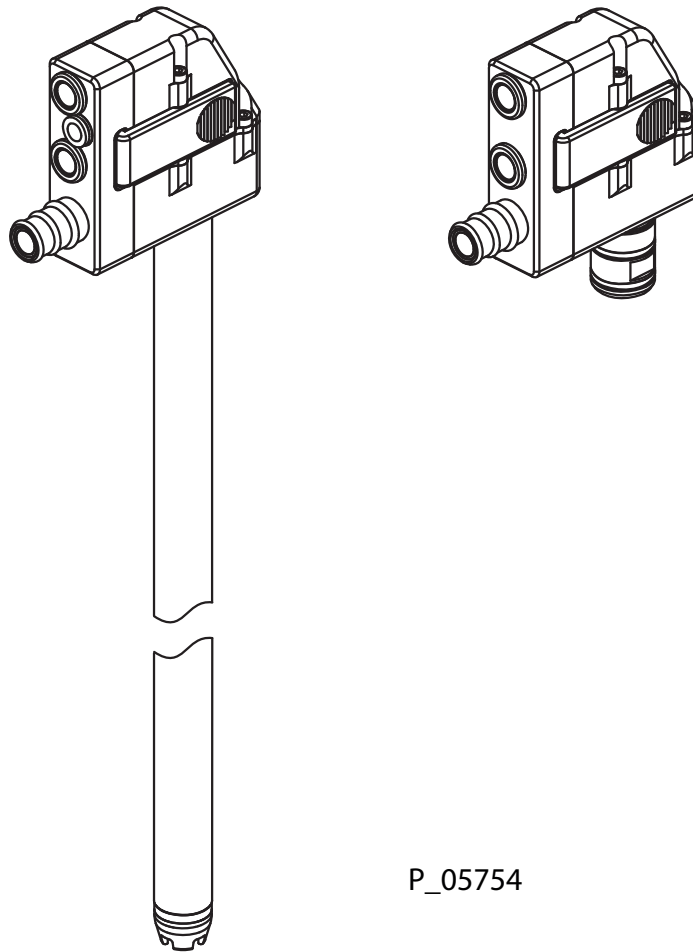




P_05754

Powder Injector

Quick-Link

Translation of the Original Operating and Assembly Manual

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: 05/2024

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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	2467463

Translation of the original operating manual

Language	Order no.	Language	Order no.
English	2467465	French	2467479
Italian	2467480	Spanish	2467483
Polish	2470768		

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

1.5 SUPPLEMENTARY DOCUMENTATION

Operating manual for Sprint 2 manual system

Language	Order no.	Language	Order no.
German	2467030	Italian	2467034
English	2467031	Spanish	2467035
French	2467032	Chinese	2467036

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

1.6 ABBREVIATIONS

Order no.	Bestellnummer
ET	Spare part
K	Marking in the spare parts lists
Pos	Position
Stk	Number of pieces
--	Item not available as spare part
/	Item does not exist

1.7 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 compressed air.

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 the context of DGUV 209-052	A person who, based on his/her technical training, experience and recent vocational experience, has sufficient technical knowledge in the area of electrostatic coating 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. Additional requirements for skilled persons can also be found in TRBS 1203 (2010/amendment 2012): Expert knowledge in the areas of protection against excessive pressure, electrical hazards and explosion protection (where applicable).

2 USING IN ACCORDANCE WITH THE INSTRUCTIONS

2.1 DEVICE TYPE

The powder injector Quick-Link is a conveying system for powder lacquers according to the Venturi principle.

2.2 TYPE OF USE

Application areas:

The Quick-Link powder injector is used in the Sprint 2 manual system for powder feed.

With the powder injector, all types of powder can be conveyed. (See chapter Processible Working Materials [►► 8])

Powder injector types

The following powder injector types are available:

Quick-Link B:	Powder injector with suction lance, for powder boxes
Quick-Link H:	Powder injector with adapter fitting, for powder tank
Quick-Link Hi-Coat B:	Powder injector with suction lance, for powder boxes and for small air discharge quantities
Quick-Link Hi-Coat H:	Powder injector with adapter fitting, for powder tank and for small air discharge quantities

The powder injector types are also specified in this operating manual as variant B (Quick-Link B and Quick-Link Hi-Coat B) for powder boxes and variant H (Quick-Link H and Quick-Link Hi-Coat H) for 60 liter powder tanks, for example.

Powder injector - control units

The powder injectors may only be operated with the following control units:

Variant B:	WACON Sprint 2 XE control unit, with AFC technology (flow rate regulation), flushing air operation to powder feed and vibrator motor control.
Variant H:	WACON Sprint 2 X control unit and WACON Sprint 2 XE, with AFC technology (flow rate regulation) and flushing air operation to powder feed.

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 Quick-Link powder injector can be employed in explosion hazard zones (Zone 22). The powder injector must be grounded properly for this, see chapter Grounding [►► 19].

2.4 PROCESSIBLE WORKING MATERIALS

The Quick-Link powder injector is suitable for processing industrial powder lacquers.

- Types of powder which can be charged electrostatically

- Metallic powder

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 liquid coating products, e.g., solvents or water-based lacquers, are processed.
- ▶ No food, medicine or cosmetics are processed.

3 BASIC SAFETY INSTRUCTIONS

3.1 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.



3.1.1 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.



3.1.2 A safe work environment

Danger due to dust formation!

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

- ▶ The floor of the work area must be electrostatically conductive (measurement in accordance with EN 1081:2018+A1:2020 or EN 61340-4-1:2004+A1:2015).
- ▶ In the spray booth, coating may only be performed with correctly designed and locked technical ventilation.
- ▶ Make sure that grounding and potential equalization of all system parts is reliably and permanently in effect and that they withstand the loads to be expected (e.g., mechanical, corrosion).
- ▶ Make sure that the personal protective equipment (see chapter Personal protective equipment [▶▶ 11]) is present and being used.
- ▶ Make sure that all people within the work area wear static dissipative shoes. The footwear must correspond to EN 20344. The measured insulation resistance must not exceed 100 MΩ.



- ▶ Protective clothing including gloves, must correspond to 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 spray booth. Do not smoke.
- ▶ A suitable system for suppressing fire and explosion must be installed.
- ▶ The powder release must be electrically interlocked with the connected technical ventilation of the spray system.
- ▶ Excess coating product (overspray) must be collected up safely. Accumulations of powder in the spray booth is to be avoided. Set the parameters of the floor cleaning and manually clean the spray booth as needed.
- ▶ Ensure that maintenance and safety checks are performed regularly.
- ▶ In case of defects, immediately shut down the device or system and repair before switching back on. Accumulations of powder are to be removed before switching the system back on.
- ▶ The operator/responsible person must ensure that an average concentration of powder lacquer in the air of 50% of the lower explosion limit (max. permitted powder/air concentration) is not exceeded. If no reliable LEL value is available, the value 20 g/m³ is to be used. Thus, the average concentration of 10 g/m³ must not be exceeded.

3.1.3 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.

3.2 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.



3.2.1 Personal safety equipment

Danger due to dust formation!

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

- ▶ Observe the processing regulations laid down by the manufacturer of the powder lacquer being used, when preparing or processing the powder.
- ▶ Take note of the manufacturer's notification and the relevant environmental protection regulations when disposing of powder lacquers.
- ▶ Take the specified protective measures, in particular wear safety goggles, protective clothing and gloves, as well as skin protection cream if necessary.
- ▶ Use a mask or breathing apparatus if necessary.



- ▶ For sufficient health and environmental protection, only operate the device with technical ventilation (extraction) switched on.

3.2.2 Safe handling of WAGNER powder spray devices

Danger due to dust formation!

- ▶ Do not point spray guns at people.
- ▶ Do not spray device parts using electrostatic equipment.
- ▶ Before any work on the device, in the event of work interruptions and malfunctions:
 - ▶ Switch off the energy/compressed air supply.
 - ▶ Relieve pressure on 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 chapter on troubleshooting.
- ▶ Carry out the work steps in accordance with the chapter on pressure relief in the operating manual of the corresponding device:
 - ▶ If a prompt for pressure relief is given.
 - ▶ If coating work is interrupted or stopped.
 - ▶ Before the device is externally cleaned, checked or serviced.
 - ▶ Before the spray nozzle is installed or cleaned.



3.2.3 Grounding the Device

Danger due to electrostatic charge!

Explosion hazard and damage to the device.

The electrostatic charge may, in certain cases, give rise to electrostatic charges on the device. Flames or sparks can form during discharge.

Correct grounding of the entire coating system prevents electrostatic charges:

- ▶ Ensure that all devices and tanks are grounded before each coating process.
- ▶ All conductive components of the system, such as floors, walls, ceilings, barriers, transport equipment, work pieces, powder tanks, moving devices or structural parts in the spray area, with the exception of parts under high voltage during operation, must be connected to the grounding system.
Parts of the spray booth must be grounded. All these components of the complete spray system must be on the same grounding potential.
- ▶ Ensure that all persons inside the working area are grounded, e.g., that they are wearing static dissipative shoes.
- ▶ Grounding cables must be checked regularly to ensure that they are serviceable (see EN 60204).



3.2.4 Product hoses

Danger due to damaged product hoses!

The product hose may cause dangerous injuries.

- ▶ Use only an original WAGNER powder hose.
- ▶ 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.

3.2.5 Electrical connection cables

Risk caused by improperly laid cables!

Risk of injury and damage to the device.

- ▶ Properly lay connection cables and check them regularly.
- ▶ Immediately replace damaged connection cables.
- ▶ Ensure that no work is ever performed with a damaged connection cable.
- ▶ Do not lay connection lines on travel paths of forklifts or through doors/gates.
- ▶ Do not lay connection lines in the area of walkable hallways or paths to avoid the risk of tripping.

3.2.6 Cleaning and flushing

Danger due to cleaning and flushing!

Explosion hazard and damage to the device.

- ▶ Before starting cleaning or any other manual work, the high voltage in the spray area must be shut down and locked to prevent it from being switched back on.
- ▶ Lock the compressed air supply and decompress the device.
- ▶ Secure the device against being switched back on without authorization.
- ▶ Use only electrically conducting and grounded tanks for cleaning fluids.
- ▶ Preference should be given to non-ignitable cleaning fluids.
- ▶ Ignitable cleaning liquids may only be used if all high-voltage parts are discharged to a discharge energy of less than 0.24 mJ after shutting off the high voltage before these parts can be reached. Most ignitable solvents have an ignition power in the range of 0.24 mJ, corresponding to 60 nC.
- ▶ The flash point of the cleaning agents must be at least 15 K over the ambient temperature.
- ▶ Note the details provided by the powder lacquer manufacturer.
- ▶ To remove dust deposits, only suitable mobile industrial vacuums may be used.
- ▶ Take measures for workplace safety (see chapter "A safe work environment").



3.2.7 Maintenance and repair

Danger due to improper maintenance and repair!

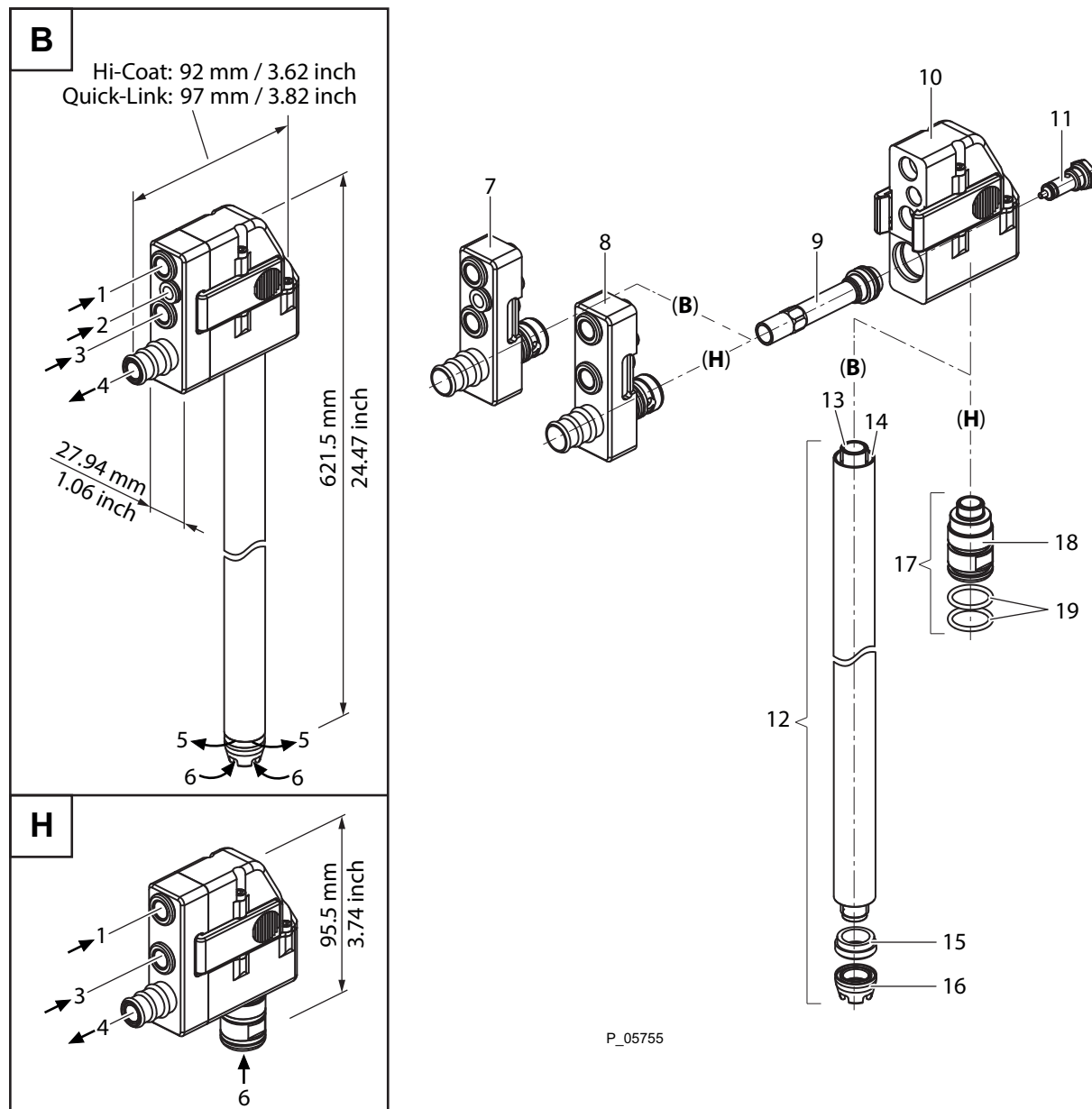
Danger to life and equipment damage.

- ▶ Only a WAGNER service center or a specially 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.
- ▶ WAGNER assumes no liability for changes to the product made by the operating company without the knowledge of WAGNER. Any adjustments to the documentation and the market release are the responsibility of the operating company.
- ▶ Only repair and replace parts that are listed in the chapters "Accessories" and "Spare parts" 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:
 - ▶ Switch off the energy and compressed air supply.
 - ▶ Relieve pressure on spray gun and device.
 - ▶ Secure the spray gun against actuation.
- ▶ Observe the operating and service manual for all work.

4 DESCRIPTION

4.1 DESIGN OF THE POWDER INJECTOR



B	Variant B With suction lance and fluidizing air connection.	10	Injector base
H	Variant H With adapter fitting and without fluidizing air connection.	11	Air nozzle
1	Feed air input	12	Suction lance, complete (for variant B)
2	Fluidizing air inlet (only for variant B)	13	Inner pipe
3	Dosing air input	14	Outer pipe
4	Powder air mix output to gun	15	Fluid ring

5	Fluidizing air output in the powder tank	16	Crown
6	Powder input from powder tank	17	Adapter fitting, complete (for variant H)
7	Hose connection, complete (for variant B)	18	Adapter fitting
8	Hose connection, complete (for variant H)	19	O-rings (electrically conductive)
9	Collector nozzle		

4.2 MODE OF OPERATION OF THE POWDER INJECTOR

The powder injector works according to the Venturi principle. Feed air flows into the injector and is deflected by 90° at the air nozzle. A negative pressure is created at the tip of the air nozzle due to the difference in speed to the suction lance (Venturi effect). The powder is sucked up out of the powder tank due to the negative pressure and mixed with the feed air in the injector. Then, the powder-air mixture flows through the collector nozzle into the powder hose.

Dosing air also flows into the powder hose through an annular gap on the collector nozzle. The dosing air is not charged with powder. It only serves as a transportation aid for the powder-air mixture in the powder hose.

The sum of feed air and dosing air is referred to as total air.

Fluidization of the paint powder

Option B:

Variant B of the powder injector is only used for the Sprint 2 B manual system (with vibrator table). Variant B has a connection for fluidizing air.

Air flows through a hose from the WACON Sprint 2 XE control unit to the powder injector. Inside the injector, the air flows into the air gap of the double-walled suction tube. At the end of the suction tube, the air flows into the powder box via the fluid ring made of porous, air-permeable material. The incoming air and the vibration of the powder tank on the vibrator table loosen the powder and a homogeneous powder-air mixture is created.

Variant H:

Variant H of the powder injector is only used for the Sprint 2 H manual powder system (with vibrator table). The variant H has no connection for fluidizing air!

- When using the WACON Sprint 2 XE control unit, the fluidizing air flows directly from the control unit through a hose to the fluidizing air connection on the powder tank. The incoming air loosens the powder and a homogeneous powder-air mixture is created. The control for the vibrator table is switched off.
- When using the WACON Sprint 2 X control unit, the fluidizing air flows directly from the control unit through a hose to the fluidizing air connection on the powder tank. The incoming air loosens the powder and a homogeneous powder-air mixture is created.

4.3 EXTENT OF DELIVERY

Quick-Link

Stk	Order no.	Designation
1	2466079	Powder injector Quick-Link B
1	2466080	Powder injector Quick-Link H
The standard equipment includes:		
1	2357262	Collector nozzle for Quick-Link B and H
1	2467463	Operating manual, in German
1	See chapter Languages [►► 6]	Operating manual in local language

Quick-Link Hi-Coat

Stk	Order no.	Designation
1	2467892	Powder injector Quick-Link Hi-Coat B
1	2467893	Powder injector Quick-Link Hi-Coat H
The standard equipment includes:		
1	2368035	Collector nozzle for Quick-Link Hi-Coat B and H
1	2467463	Operating manual, in German
1	See chapter Languages [►► 6]	Operating manual in local language

4.4 DATA

4.4.1 Technical Data

Dimensions (injector assembled)

	Quick-Link B	Quick-Link H	Quick-Link Hi-Coat B	Quick-Link Hi-Coat H
Width:	97 mm; 3.82 inch	97 mm; 3.82 inch	92 mm; 3.62 inch	92 mm; 3.62 inch
Height:	621.5 mm; 24.47 inch	95.5 mm; 3.76 inch	621.5 mm; 24.47 inch	95.5 mm; 3.76 inch
Depth:	27.94 mm; 1.1 inch	27.94 mm; 1.1 inch	27.94 mm; 1.1 inch	27.94 mm; 1.1 inch
Weight:	approx. 0.72 kg; 1.59 lb	approx. 0.33 kg; 0.73 lb	approx. 0.72 kg; 1.59 lb	approx. 0.33 kg; 0.73 lb

Conveyor key figures

	Quick-Link	Quick-Link Hi-Coat
Max. flow rate:	500 g/min	300 g/min
Max. conveyance path:	15 m; 49.2 ft	15 m; 49.2 ft
Max. delivery head:	5 m; 16.4 ft	5 m; 16.4 ft

WARNING

Exhaust air containing oil!

Risk of poisoning if inhaled.

- Provide compressed air free from oil and water.



Ambient conditions

Operating temperature range	5–40 °C; 41–104 °F
Maximum air humidity	75 %

5 ASSEMBLY AND COMMISSIONING

5.1 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.

5.2 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 5 and 40 °C (41 and 104 °F).

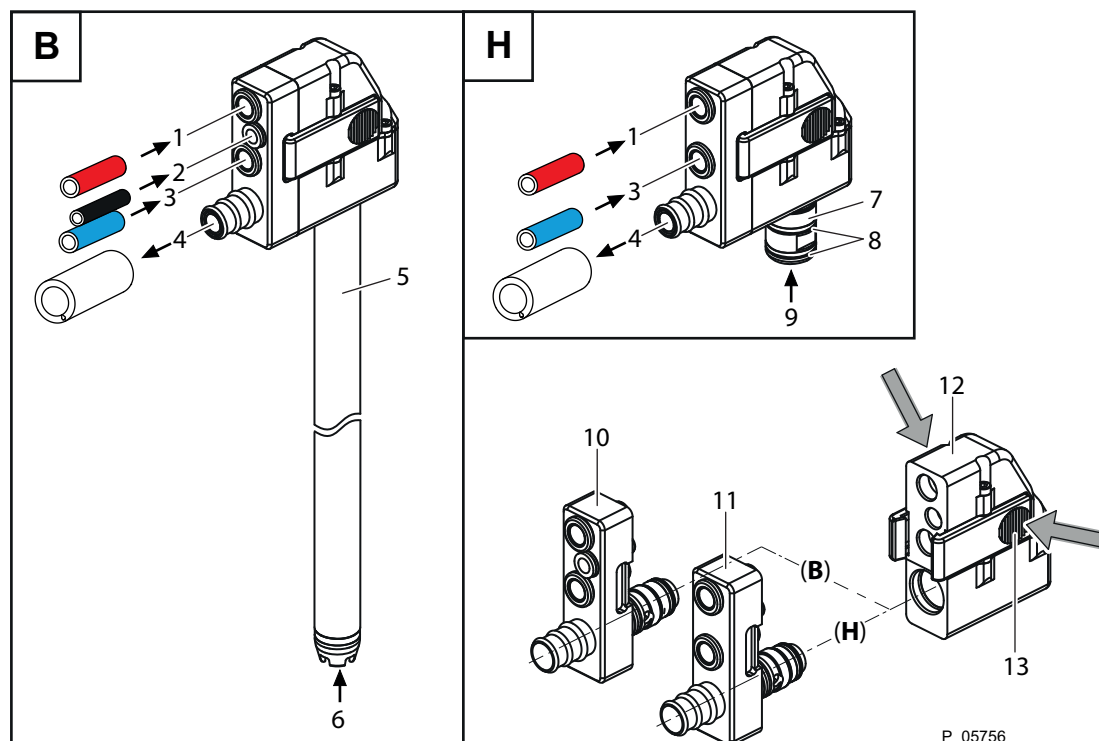
The relative air humidity at the storage location must be between 10 and 95% (without condensation).

5.3 INSTALLATION CONDITIONS

The air temperature at the installation site must be in a range between 5 and 40 °C; 41 and 104 °F.

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

5.4 CONNECTING THE POWDER INJECTOR



Mounting the air hoses on the injector hose connection

1. Push the hose connection (10/11) into the injector base (12) until the two locking latches (13) engage.
2. Push the feed air hose (red) into the connection (1) up to stop.
3. Push the dosing air hose (blue) into the connection (3) up to stop.
4. Push the powder hose up to stop on the connection (4).
5. Push the fluidizing air hose (black, only for injector variant B) into the connection (2) up to stop.

Mounting the powder injector variant B (with suction lance and fluidizing air):

- ▶ Push the suction tube (5) of the powder connection (6) into the holder of the powder box.

Mounting the powder injector variant H (with adapter fitting and without fluidizing air):

- ▶ Push the adapter fitting (7) of the powder connection (9) into the receptacle of the powder tank.
Make sure that the two electrically conductive O-rings (8) are grounded.

Connecting/disconnecting all air hoses using a quick connector:

The powder injector Quick-Link has a quick connector for quick and easy disconnection of all air connections in just one step and without having to detach the individual hose connections.

1. Hold the hose connection (10/11) with one hand.
2. Using the thumb and the index finger of the other hand, press the two locking latches (13) against the injector base (12) until the hose connection (10/11) can be pulled off the base
3. Pull the hose connection (10/11) off of the injector base (12).

To reconnect, push the hose connection (10/11) together with the collector nozzle into the injector base (12) until the two locking latches (13) engage.

5.5 GROUNDING

DANGER

Danger due to static charges!

Risk of danger and damage to the device due to electric charges.

- ▶ It is imperative that the powder injector be grounded to prevent the buildup of static charges!
- ▶ The Wagner hose must be used!



- ▶ Use only WAGNER original spare parts and accessories.

Safe operation of the powder injector is only guaranteed with proper grounding.

The grounding takes place via the powder injector:

- Variant B, from the Sprint 2 B manual powder system via the holder arm with an electrically conductive guide bush to the suction lance of the powder injector.
- Variant H, from the Sprint 2 H manual powder system to the powder tank and from the powder tank via the electrically conductive O-rings on the adapter fitting of the powder injector.

Good grounding of the work piece is also necessary for optimum powder coating. It is important to keep the ground cables as short as possible. Ground cables of an excessive length must be shortened. Ground cables of an excessive length must never be wound up on a roller.

A poorly grounded work piece causes:

- Dangerous electric charging of the work piece
- Very bad wrap-around
- Uneven coating
- Back spraying to the spray gun, i.e., contamination

Prerequisites for perfect grounding and coating of a work piece are:

- Electroconductive suspension for the work piece that is to be coated
- Regular cleaning of powder residue from hanger
- Grounding of the spray booth, conveyor system and suspension equipment on site, in accordance with the operating manual or the manufacturer's information
- Grounding cable connected to the control module or control cabinet
- That a grounding resistance of the work piece of 1 MΩ is not exceeded (resistance to ground measured at 500 V or 1000 V)

Sparks between conveyor, conveyor hooks (hangers) and work piece can occur if electric contact points between conveyor, conveyor hooks (hangers) and work piece are not sufficiently cleaned and therefore the work pieces are not sufficiently grounded! These sparks can cause heavy radio frequency interference (EMC).

5.6 SAFETY CHECKS

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 [▶▶ 24].

6 OPERATION

6.1 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.

6.2 TASKS

WARNING

Dust formation!

Risk of poisoning if inhaled.

Danger due to escaping dust, contamination of the device and device components.

- ▶ Only operate the device in conjunction with exhaust air equipment, for example a suction device.



1. Ensure that:

- ▶ regular safety checks are performed in accordance with Chapter Safety Checks [▶ 24]
- ▶ commissioning is carried out in accordance with Chapter Assembly and commissioning [▶ 18].

The powder injector Quick-Link is part of the Sprint 2 manual system.

Working with the system is described in the following operating manual:

- Sprint 2 manual system

6.3 SETTING THE POWDER DISCHARGE QUANTITY

Setting the powder injector to the desired discharge quantity

Rule of thumb for setting the powder injector:

- Feed air:
Specifies the amount of fed powder. The greater the feed air, the greater the speed difference; the greater the negative pressure (strong Venturi effect) and thus a larger powder quantity is drawn in.
- Dosing air:
The dosing air is still added in addition to achieve the correct speed in the powder hose. It should be between 12-15 m/sec, to ensure constant conveying.
- Total air:
The effective total air is dependent on the hose diameter used. In general, the larger the hose diameter is, the more air is needed.

This means: The ratio of the feed air volume to the total air volume determines the powder discharge quantity.

⚠ **NOTICE**

Powder discharge quantity

The achievable powder discharge quantity is dependent on various influences:

- ▶ from the length and diameter of the hose
- ▶ from the suction system
- ▶ from the hose laying
- ▶ from the powder type
- ▶ from the wear of the powder injector

⚠ **NOTICE**

Avoid pulsating powder feed

With pulsating powder feeding, a faulty spray pattern can occur.

- ▶ Reduce the feed air volume while keeping the total air volume constant.

6.4 PERFORMING A PAINT CHANGE

⚠ **CAUTION**

High voltage!

Danger due to electric shock.

- ▶ Switch of the high voltage before working on device/system.



⚠ **NOTICE**

Cleaning before paint change!

In the case of a paint change, powder residues must be thoroughly removed from all powder feeding parts.

The Quick-Link powder injector is part of the Sprint 2 manual system.
The paint change procedure is described in the following operating manual:

- Sprint 2 manual system

7 CLEANING AND MAINTENANCE

7.1 CLEANING

7.1.1 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:

- health hazard from inhaling powder lacquer,
- use of unsuitable cleaning tools and aids.

7.1.2 Cleaning Procedures

The cleaning intervals should be adapted by the operator depending on the level of use and if necessary the level of soiling.

If in doubt, we recommend contacting WAGNER's specialist personnel.

7.1.2.1 Cleaning Process

CAUTION

High voltage!

Danger due to electric shock.

- ▶ Switch off the high voltage before working on device/system.



The Quick-Link powder injector is part of the Sprint 2 manual system.

The cleaning procedure is described in the following operating manual:

- Sprint 2 manual system

7.2 MAINTENANCE

7.2.1 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:

- health hazard from inhaling powder lacquer,
- 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.

7.2.2 Maintenance Instructions

DANGER

Incorrect maintenance/repair!

Danger to life and equipment damage.

- ▶ Only a WAGNER service center or a specially 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:
 - ▶ Switch off the energy and compressed air supply.
 - ▶ Relieve spray gun and device pressure.
 - ▶ Secure the spray gun against actuation.
- ▶ Observe the operating and service manuals of the individual components for all work.



Prior to maintenance

- Flush and clean the system according to Chapter Cleaning Procedures [▶▶ 23].

After maintenance

- Carry out safety checks in accordance with chapter Safety Checks [▶▶ 24].
- Put the system into operation and check for leaks.
- Have the system checked for safe condition by a skilled person.

7.2.3 Safety Checks

7.2.3.1 Grounding Check

Every day

- ▶ Before starting work, carry out a visual check to ensure that the system is grounded.

7.2.3.2 Maintenance Procedures

The maintenance intervals should be adapted by the operator depending on the level of use and if necessary the level of soiling.

If in doubt, we recommend contacting WAGNER's specialist personnel.

The Quick-Link powder injector is part of the Sprint 2 manual system.

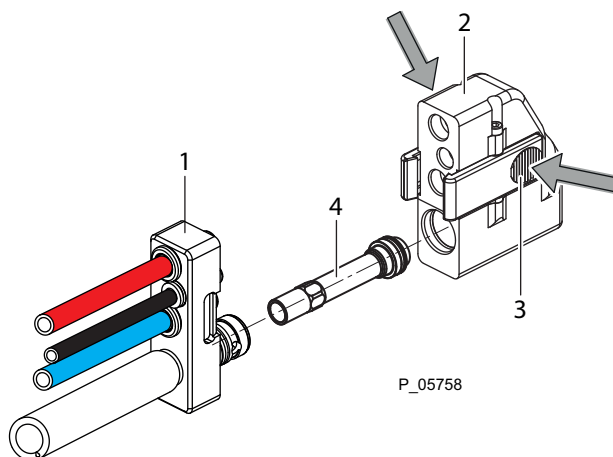
The maintenance work is described in the following operating manual:

- Sprint 2 manual system

7.2.4 Changing the collector nozzle

! NOTICE

The powder discharge can decrease by 30 % or more compared to the set value, if the collector nozzle is heavily worn.



Dismounting the nozzle

1. Perform cleaning in accordance with chapter Cleaning [►► 23].
2. Hold the hose connection (1) with one hand.
3. Using the thumb and the index finger of the other hand, press the two locking latches (3) against the injector base (2) until the hose connection (1) can be pulled off the base.
4. Pull the hose connection (1) off of the injector base (2).
5. Pull the collector nozzle (4) out of the hose connection (1) and the injector base (2).
6. Check the collector nozzle (4) as described in chapter Checking the collector nozzle for wear [►► 25] and replace as necessary.

The wearing and spare parts are listed in chapter Spare parts [►► 29].

Mount nozzle

1. Push the collector nozzle (4) into the hose connection (1).
2. Push the hose connection (1) together with the collector nozzle (4) into the injector base (2) until the two locking latches (3) engage.

7.2.5 Checking the collector nozzle for wear

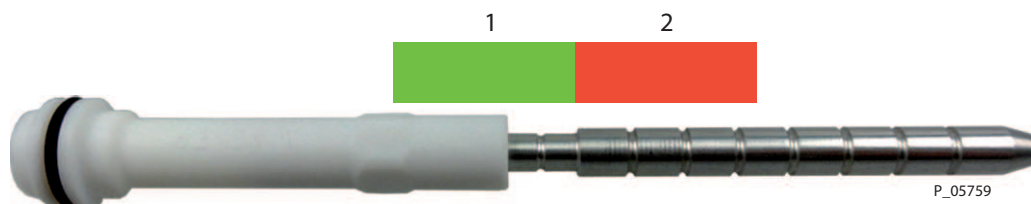
The check takes place using a test mandrel, which is inserted in the collector nozzle.

The wear of the collector nozzle is determined with the test mandrel. The deeper the test mandrel can be pushed into the collector nozzle, the greater the wear on the collector nozzle.

Description	Material number
Test mandrel	See chapter Powder injector accessories [►► 28]
Collector nozzle	See chapter Spare parts [►► 29]

Determining wear

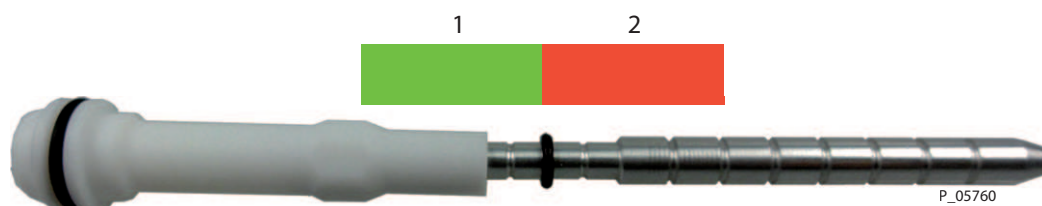
Collector nozzle for Quick-Link B and Quick-Link H:



1	Green area: good	2	Red area: worn
---	------------------	---	----------------

1. Pull the O-ring off of the test mandrel.
2. Push the thin side of the test mandrel as far as possible into the collector nozzle without applying pressure.
3. Determine the wear using the penetration depth of the test mandrel in the collector nozzle.

Collector nozzle for Quick-Link Hi-Coat B and Quick-Link Hi-Coat H:



1	Green area: good	2	Red area: worn
---	------------------	---	----------------

1. Place the O-ring on the test mandrel as shown in the image.
2. Push the thin side of the test mandrel as far as possible into the collector nozzle without applying pressure.
3. Determine the wear using the penetration depth of the test mandrel in the collector nozzle.

Penetration depth

⚠ NOTICE

Test mandrel penetration depth

The wear of the collector nozzle is determined using the penetration depth of the test mandrel in the collector nozzle.

- ▶ Green zone: The collector nozzle does not need to be replaced.
- ▶ Red zone: The collector nozzle needs to be replaced.

8 DISASSEMBLY AND DISPOSAL

8.1 DISASSEMBLY

WARNING

Incorrect disassembly!

Risk of injury and damage to the device.

- ▶ Before starting disassembly:
 - ▶ Switch off the energy and compressed air supply.
 - ▶ Ensure the grounding of all system components.
 - ▶ Secure system against being switched back on without authorization.
- ▶ Observe the operating manuals when carrying out all work.



1. Switch off the manual system.
2. Lock the compressed air supply and decompress system.
3. Detach the hose for the powder feed from the hose connection of the powder injector and pull it off.
4. Press the coding ring on the feed air connection and pull the feed air hose off the hose connection.
5. Press the coding ring of the dosing air connection and pull the dosing air hose off the hose connection.
6. Only for powder injector variant B: Press the coding ring of the fluidizing air connection and pull the fluidizing air hose off the hose connection.
7. Only for powder injector variant B: Pull the powder injector, including the suction lance, out of the powder tank and out of the swivel arm of the manual powder system.
Only for powder injector variant H: Pull the powder injector, including the adapter fitting, out of the holder on the powder tank.

8.2 DISPOSAL

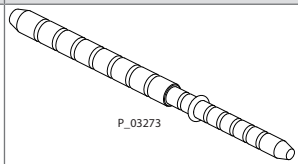
When the devices must be scrapped, please differentiate the disposal of the waste materials.

The following materials have been used:

- Steel
- Aluminium
- Brass
- Elastomers
- Plastics

9 ACCESSORIES

9.1 POWDER INJECTOR ACCESSORIES

Order no.	Designation	Illustration
<u>2383797</u>	PXS collector nozzle test mandrel, for checking the collector nozzle for wear	 P_03273
<u>351798</u>	Powder hose, inside diameter 8 mm, by the meter (only for Quick-Link Hi-Coat)	
<u>351794</u>	Powder hose, inside diameter 9 mm, by the meter (only for Quick-Link Hi-Coat)	
<u>2310699</u>	Powder hose, inside diameter 10 mm, by the meter	
<u>2307502</u>	Powder hose, inside diameter 11 mm, by the meter	
<u>2310700</u>	Powder hose, inside diameter 12 mm, by the meter	

10 SPARE PARTS

10.1 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.

10.2 NOTES ON THE USE OF SPARE PARTS

DANGER

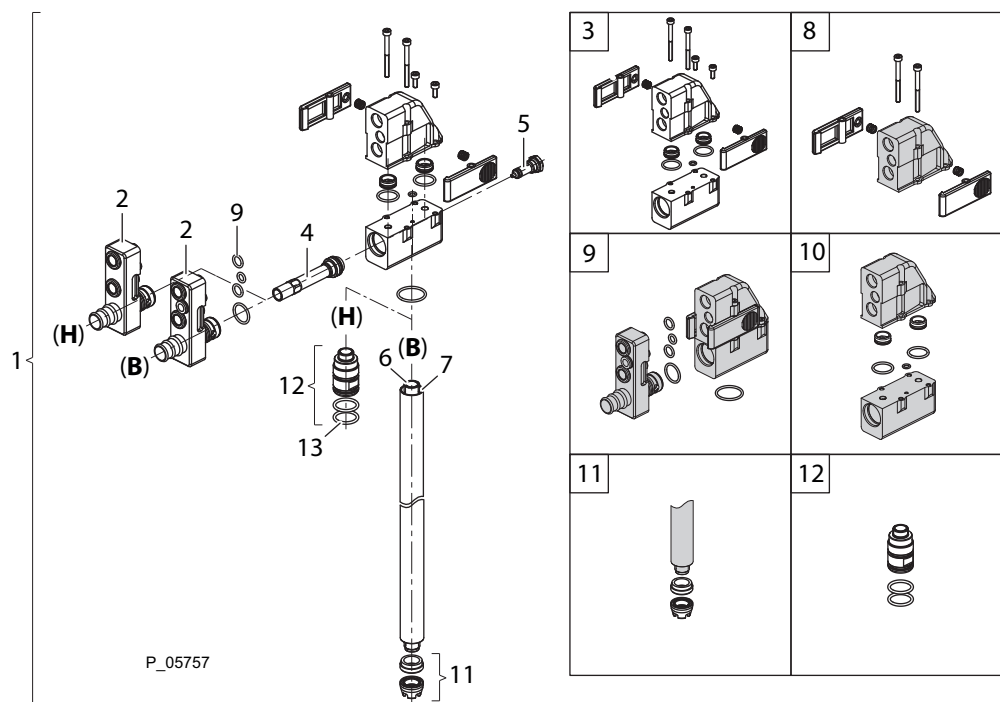
Incorrect maintenance/repair!

Danger to life and equipment damage.

- ▶ Only a WAGNER service center or a specially 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:
 - ▶ Switch off the energy and compressed air supply.
 - ▶ Relieve spray gun and device pressure.
 - ▶ Secure the spray gun against actuation.
- ▶ Observe the operating and service manuals of the individual components for all work.



10.3 QUICK-LINK POWDER INJECTOR



Pos	K	Stk	Quick-Link B order no.	Quick-Link H order no.	Quick-Link Hi-Coat B order no.	Quick-Link Hi-Coat H order no.	Designation
1		1	2466079	2466080	2467892	2467893	Powder injector
2		1	2468008	2468010	2468011	2468012	Hose connector
3		1	2467983				Injector head set, comprising: – Basic injector body – Housing connecting part – 2 non-return valves, Inline – 2 O-rings, electrically conductive, 13x1.5 – 1 O-ring, 4x1 – 2 pressure springs – 2 latches – 2 hexagon socket head cap screws, M3 x 035 – 2 hexagon socket head cap screws, M3 x 8
4	◆	1	2357262		2368035		Collector nozzle
5	◆	1	2366797		2368888		Air nozzle
6		1	2468004	--	2468004	--	Suction lance, outer pipe
7		1	2468006	--	2468006	--	Suction lance, inner pipe

Pos	K	Stk	Quick-Link B order no.	Quick-Link H order no.	Quick-Link Hi-Coat B order no.	Quick-Link Hi-Coat H order no.	Designation
8		1	<u>2466796</u>				Locking latch set, comprising: – 2 pressure springs – 2 latches – 2 hexagon socket head cap screws, M3 x 035
9	◆	1	<u>2466809</u>				O-ring set comprising: – 2 O-rings, 7x1.5 – 1 O-ring, 5x1.5 – 1 O-ring, 13x1.5 – 1 O-ring, 18x1.5
10	◆	1	<u>2466811</u>				Non-return valve set, comprising: – 2 non-return valves, Inline – 2 O-rings, electrically conductive, 13x1.5 – 1 O-ring, 4x1
11	◆	1	<u>2466792</u>	--	<u>2466792</u>	--	Fluid ring crown set, comprising: – 1 fluid ring, D18 – 1 crown, D18
12		1	--	<u>2468013</u>	--	<u>2468013</u>	Suction connector set, comprising: – 1 suction connector – 2 O-rings, electrically conductive
13	◆	2	--	<u>9974023</u>	--	<u>9974023</u>	O-ring, electrically conductive

◆ = wearing parts



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