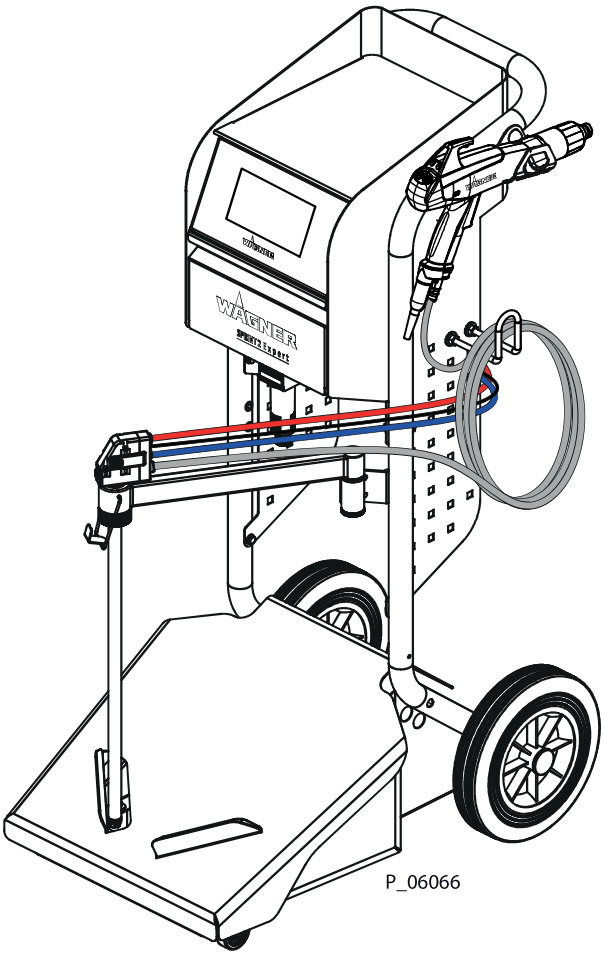


P_06066

Manual system

SPRINT 2 Expert

Translation of the Original Operating Manual

CE Ex II 3 D Ex h IIIB T100°C Dc

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: 12/2024

TABLE OF CONTENTS

1 ABOUT THESE INSTRUCTIONS

1.1 PREFACE

The operating manual contains information about safely operating, maintaining, cleaning and repairing the device. The operating manual is part of the device and must be available to the operating and service personnel.

The device may only be operated by trained personnel and in compliance with this operating manual. Operating and service personnel should be instructed according to the safety instructions.

This equipment can be dangerous if it is not operated according to the instructions in this operating manual.

1.2 WARNINGS, NOTICES AND SYMBOLS IN THESE INSTRUCTIONS

Warning instructions in this manual highlight particular dangers to users and to the device and state measures for avoiding the hazard.

These warning instructions fall into the following categories:

⚠	**DANGER**	Immediate risk of danger. Non-observance will result in death or serious injury.
⚠	**WARNING**	Potential 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.
i	**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	2468293

Translation of the original operating manual

Language	Order no.	Language	Order no.
English	2468294	Czech	2475947
French	2468297	Slovenian	2475948
Italian	2468298	Turkish	2475949
Spanish	2468299	Portuguese	2475950
Chinese	2468300	Norwegian	2475951
Polish	2468888	Swedish	2475952
Japanese	2475944	Finnish	2475953
Dutch	2475945		
Hungarian	2475946		

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

1.5 SUPPLEMENTARY DOCUMENTATION

Operating manual for WACON Sprint 2 Expert control unit

Language	Order no.	Language	Order no.
German	2468263	Italian	2468266
English	2468264	Spanish	2468267
French	2468265	Chinese	2468268

Operating manual for PEM-X1 manual gun

Language	Order no.	Language	Order no.
German	2326019	Italian	2326022
English	2326020	Spanish	2326023
French	2326021	Chinese	2333345

Operating manual for Quick-Link powder injector

Language	Order no.	Language	Order no.
German	2467463	Italian	2467480
English	2467465	Spanish	2467483
French	2467479	Chinese	

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

1.6 ABBREVIATIONS

Order no.	Order number
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

Manual system for manual coating of grounded work pieces.

2.2 TYPE OF USE

The Sprint 2 Expert manual system is designed for single and serial coatings for industry and commerce.

The Sprint 2 Expert manual system is comprised of a mobile base, WACON Sprint 2 Expert control unit and PEM-X1 manual gun.

WAGNER explicitly prohibits any other use!

Electrostatic manual coating systems may only be used in spray areas equipped in accordance with EN 16985:2018 or under equivalent ventilation conditions.

The components of the different versions of the Sprint 2 Expert manual system (Box version), hopper version (60 L tank) are mutually compatible.

The device may only be operated under the following conditions:

- Use the device only to work with the materials recommended by WAGNER.
- Only operate the device as a whole.
- Do not deactivate safety fixtures.
- Use only WAGNER original spare parts and accessories.
- The operating personnel must be trained on the basis of this operating manual.
- Follow the instructions in the operating manual.

2.3 FOR USE IN POTENTIALLY EXPLOSIVE AREAS

As defined in Directive 2014/34/EU (ATEX), the device is suitable for use in potentially explosive areas (see Explosion protection identification [▸▸ 10]). In explosion hazard areas, only use approved explosion-proof electrical devices.

2.4 PROCESSIBLE WORKING MATERIALS

– 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 IDENTIFICATION

3.1 EXPLOSION PROTECTION IDENTIFICATION

3.1.1 Mobile base identification

Device type	Sprint 2 Expert mobile base
Manufacturer	Wagner International AG 9450 Altstätten Switzerland

II 3 D Ex h IIIB T100°C Dc

CE	European Communities
Ex	Symbol for explosion protection
II	Device class II
3	Category 3
D	Ex-atmosphere dust
Ex	Ignition protection class
h	Ignition protection class for non-electrical devices
IIIB	Explosion group (dust group)
T100°C	Temperature class, maximum surface temperature < 100 °C; 212 °F
Dc	Device protection level, suitable for use in Zone 22

3.2 PERMISSIBLE DEVICE COMBINATIONS

⚠ WARNING

Incorrect use!

Risk of injury and damage to the device.

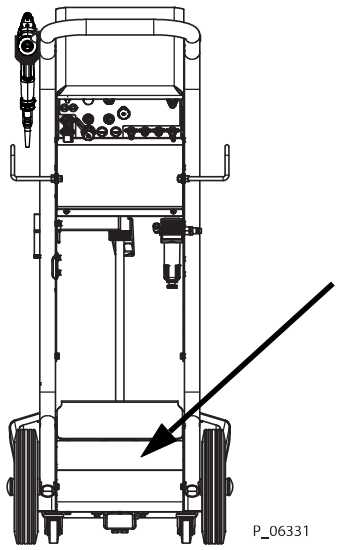
- Only use the manual system with the original WAGNER control units and powder spray guns.

Only use the Sprint 2 Expert manual system with the following guns and control units:

Control units	Guns
WACON Sprint 2 Expert	PEM-X1 Corona spray gun, PEM-X1 CG
	PEM-T3 Tribo spray gun

3.3 TYPE PLATES

3.3.1 Manual system type plate



WAGNER Made in Switzerland
Wagner International AG
CH - 9450 Altstätten
II 3 D
Ex h IIIB T100°C Dc

Typ: Handanlage Sprint 2 Expert
Type: Manual unit Sprint 2 Expert

☐ Sprint 2 Expert H	90-250 VAC 47-63 Hz
☐ Sprint 2 Expert B	230 VAC 50 Hz
☐ Sprint 2 Expert B JP	100 VAC 50/60 Hz
☐ Sprint 2 Expert B US	115 VAC 60Hz
☐ Sprint 2 Expert H US	90-250 VAC 47-63 Hz

Serial no.
Serie Nr.:
Year of manufacture:
Baujahr:

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 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 [▸▸ 13]) 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/m^3 is to be used. Thus, the average concentration of 10 g/m^3 must not be exceeded.

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 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.

4.2.2 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.

4.2.3 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).

4.2.4 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.

4.2.5 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.

4.2.6 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").

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 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.

4.2.8 Protective and monitoring equipment

Danger due to removal of protective and monitoring equipment!

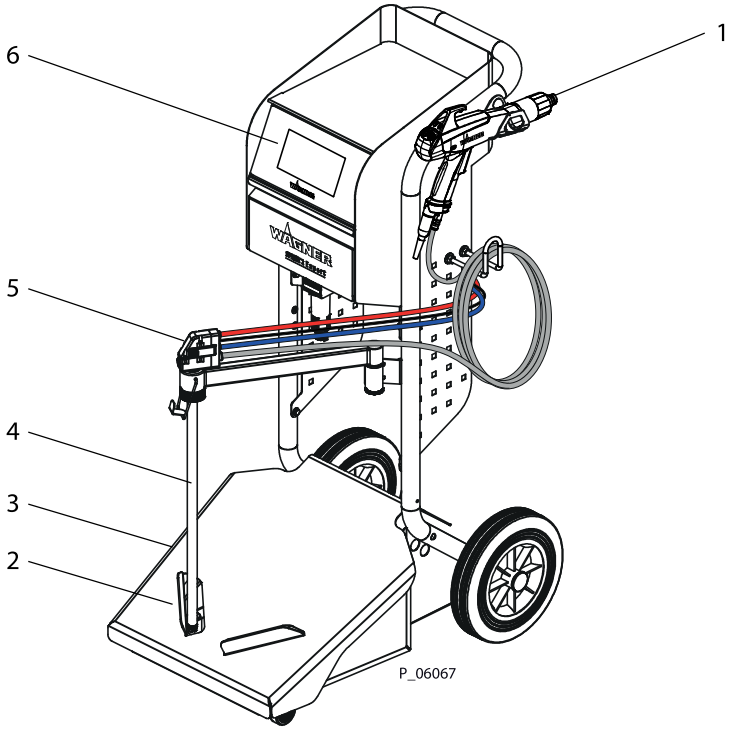
Danger to life and equipment damage.

- 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 CONSTRUCTION AND MODE OF OPERATION

5.1.1 Sprint 2 Expert B

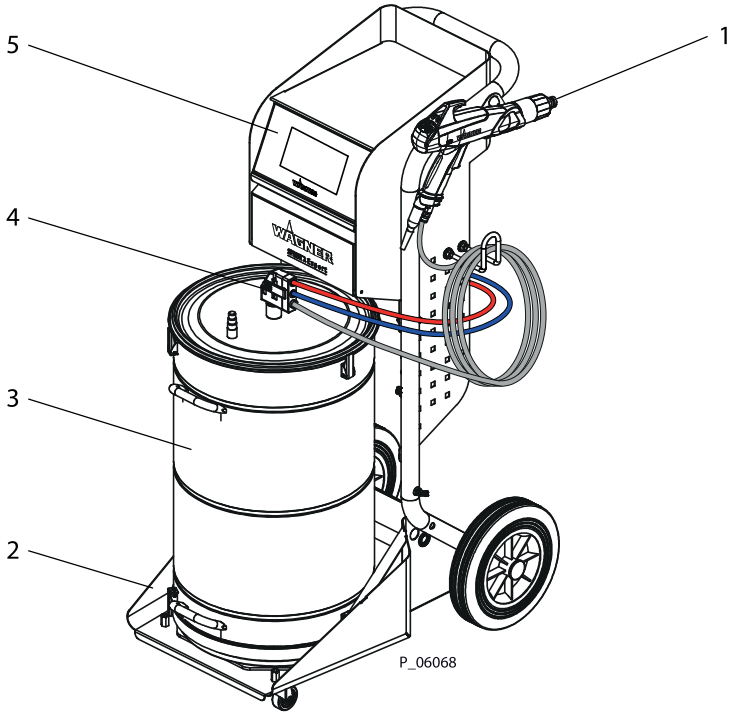


1	PEM-X1 manual gun	5	Quick-Link powder injector, AF
2	Vibration table	6	WACON Sprint 2 Expert control unit
3	Mobile base		
4	Suction lance		

Mode of operation:

The suction lance 4 is inserted directly into the original tank. The powder is fed through the powder injector (5) to the powder spray gun (1). Due to the special arrangement of the suction crown and the vibration of the tank, a homogeneous powder/air mixture is generated and maintained during the entire duration of the powder removal. The powder quantity and the electrostatic charge of the paint powder are regulated by the control unit (6). The setting of the fluid air takes place on the WACON Sprint 2 Expert control unit (see the operating manual of the control unit).

5.1.2 Sprint 2 Expert H (without vibrator table)



1	PEM-X1 manual gun	4	Quick-Link powder injector, 60 L
2	Mobile base	5	WACON Sprint 2 Expert control unit
3	60 L tank		

Mode of operation:

Through the powder injector 4, the powder is transported from the tank 3 to the spray gun 1. By feeding fluid air into the fluid base of the powder tank (3), a homogeneous powder/air mixture is generated and maintained during the entire process of the powder removal from the tank. The powder quantity and the electrostatic charge of the paint powder are regulated by the control unit (5). The setting of the fluid air takes place on the WACON Sprint 2 Expert control unit (see the operating manual of the control unit).

5.1.3 Operating modes

5.1.3.1 Operation with Tribo gun

When operating the manual system with a Tribo gun, the set values (total air volume, feed air volume, Tribo air volume) in recipes 1–5 must be adjusted. The setting of the values is described in the operating manual of the WACON Sprint 2 Expert control unit.

The set values for operating with the Tribo gun should be saved to individually selected recipe locations.

When operating with a Tribo gun, the [Gun type] parameter on the WACON Sprint 2 Expert control unit must be changed to Tribo (Please refer to the control unit operating manual for the procedure).

The gun type can also be changed automatically. For this, the [Gun type] parameter must be set to [Auto] in the settings on the control unit (for instructions, see operating manual of the control unit).

5.2 EXTENT OF DELIVERY

5.2.1 Variants

Order no.	Designation
2469388	Sprint 2 Expert B manual system, standard
2474779	Sprint 2 Expert B W EC manual system, standard (with load cell and EtherCAT)
2473752	Sprint 2 Expert B W manual system, standard (with load cell)
2473766	Sprint 2 Expert H W manual system, standard (with load cell, without tank)
2472292	Sprint 2 Expert H manual system without tank
2472293	Sprint 2 Expert B manual system, USA
2474780	Sprint 2 Expert B W EC manual system, USA (with load cell and EtherCAT)
2473753	Sprint 2 Expert B W manual system, USA (with load cell)
2473767	Sprint 2 Expert H W manual system, USA (with load cell, without tank)
2472294	Sprint 2 Expert H manual system, USA (without tank)
2473790	Sprint 2 Expert B manual system, Japan
2473754	Sprint 2 Expert B W manual system, Japan (with load cell)

5.2.2 Standard equipment

Stk	Order no.	Designation
1	See chapter Spare parts list for Sprint 2 Expert B manual system [▸▸ 57]	Sprint 2 Expert B manual system
1	See chapter Spare parts list for Sprint 2 Expert H manual system [▸▸ 58]	Sprint 2 Expert H manual system without tank
The standard equipment includes:		
	See chapter Declaration of conformity [▸▸ 67]	Declaration of conformity
	2468293	Operating manual, in German
	See chapter Languages [▸▸ 7]	Operating manual in local language

5.3 TECHNICAL DATA

Dimensions:	
Height	1250 mm; 49.21 inch
Width	495 mm; 19.49 inch
Depth (without operating elements)	740 mm; 29.13 inch
Weight	approx. 50 kg; 110.23 lbs
Maximum box size	420 x 420 x 400 mm; 16.54 x 16.54 x 15.75 inches
Maximum filling weight of box	30 kg; 66.14 lbs

Electrical:

For electrical data, see operating manual for WACON Sprint 2 Expert control unit.

Pneumatic:	
Compressed air connection	G1/4"
Connection hose diameter	18.5 x 12.5 mm
Input air pressure	0.6–0.8 MPa; 6–8 bar; 87–116 psi
Air flow	maximum 15 m^3/h; 529.63 cf/h
Sum of dosing and feed air	1–6 m^3/h; 35.3–211.9 cf/h
Gun air	0.05–4.0 m^3/h; 1.7–141.3 cf/h
WAGNER injector type	Quick-Link injector
Required compressed air quality as per ISO 8573.1, 2010	6.5.2

⚠ WARNING

Exhaust air containing oil!

Risk of poisoning if inhaled.

- Provide compressed air free from oil and water.

Ambient conditions:

When using low-melting powder varieties, an ambient temperature below 30 °C (86 °F) may be necessary.

Volume measures:

for volumes specified in Nm^3 (standard cubic meters). One cubic meter of gas at 0 °C and 1.013 bar is referred to as a normal cubic meter.
The volume flow (air volume) is specified in m^3/h. The calibration of the WAGNER volume flow sensor was performed at room temperature with a reference measuring instrument, that displays the volume flow in Nm^3/h.

Advertisements:	
High voltage	0–100 kV resolution 10 kV
Corona current	0–120 µA resolution 5–20 µA
Tribo current	0–5 µA resolution 0.5 µA
Recipes	50 preset
Switch over from Tribo to Corona	Automatic
Connectable spray gun types	WAGNER guns: PEM-X1, PEM-T3

Ambient conditions:	
Operating temperature range	5–40 °C; 41–104 °F
Noise development	< 63 dB (mains pressure 0.6 MPa ; 6 bar; 87 psi)

5.4 OPERATING ELEMENTS

5.4.1 Operating elements on front side

The operating elements on the front side of the control unit are described in the operating manual of the WACON Sprint 2 Expert control unit.

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 0 and 40 °C; 32 and 104 °F.

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

6.4 ASSEMBLY OF THE MANUAL SYSTEM

6.4.1 Assembly of the mobile base

The manual system's mobile base is supplied partially assembled for transport reasons. It must be assembled as described below.

1. Place transport packaging on a clean, level surface.
2. Carefully open the transport packaging as indicated by the pictograms on the packaging (fold down the side walls of the box completely).
3. Erect manual system.

6.4.2 Connecting the manual system

The assembly of the manual system is the same for the Corona spray gun and for the Tribo spray gun.

The manual system is equipped with a filter separator as a standard feature. Nevertheless, a high compressed air quality is still required for safe operation of the system. The plant operator is responsible for ensuring the required compressed air quality.

6.4.2.1 Connection requirements

⚠ DANGER

Danger from electric current!

Danger to life and equipment damage.

- Switch off the main switch before connecting the system.

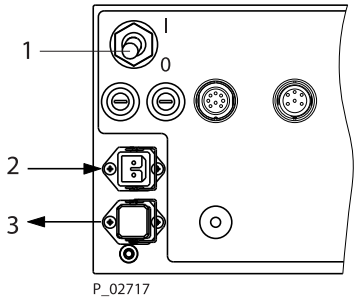
ⓘ NOTICE

Missing cover

IP Code of device not guaranteed.

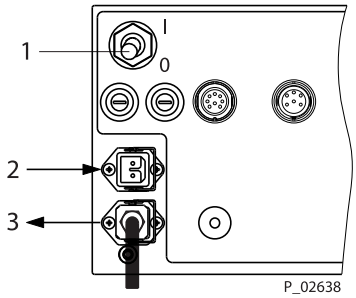
- The mains output socket must remain closed in manual systems without vibrator motor with the cover closed.

Without vibrator motor:



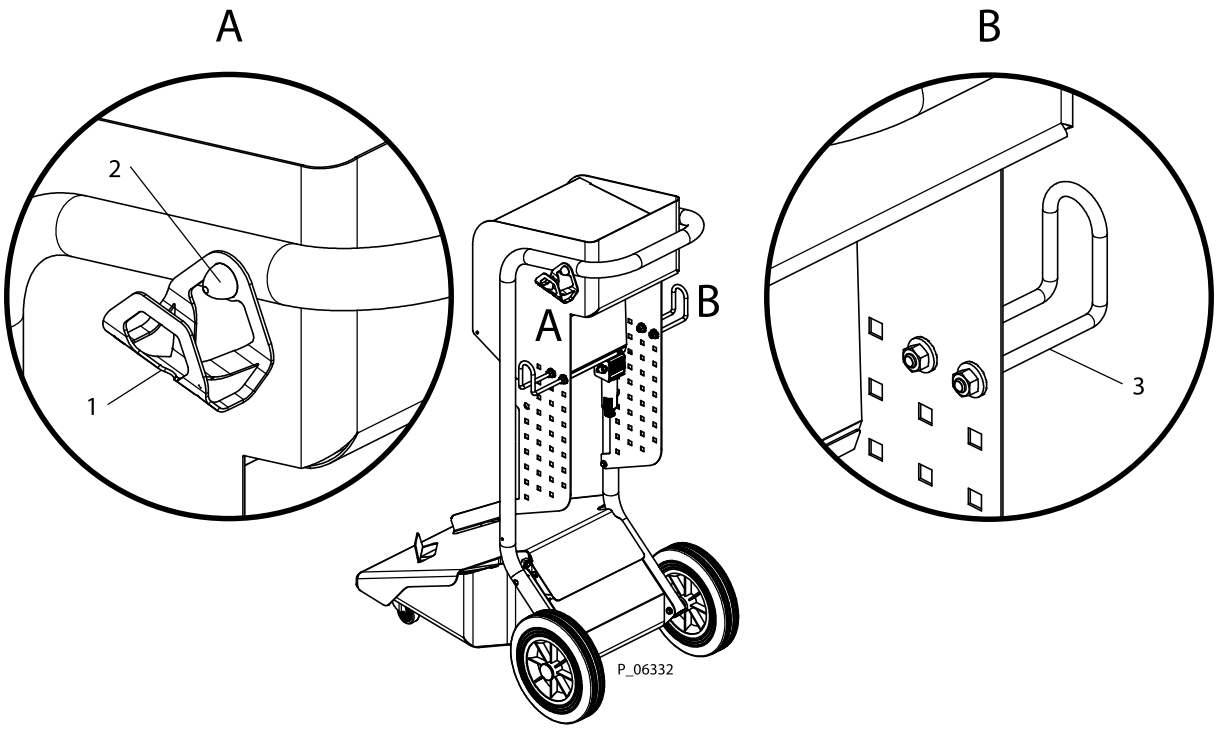
1	Main switch	3	Mains output terminal, attach cover
2	Mains input terminal		

With vibrator motor:

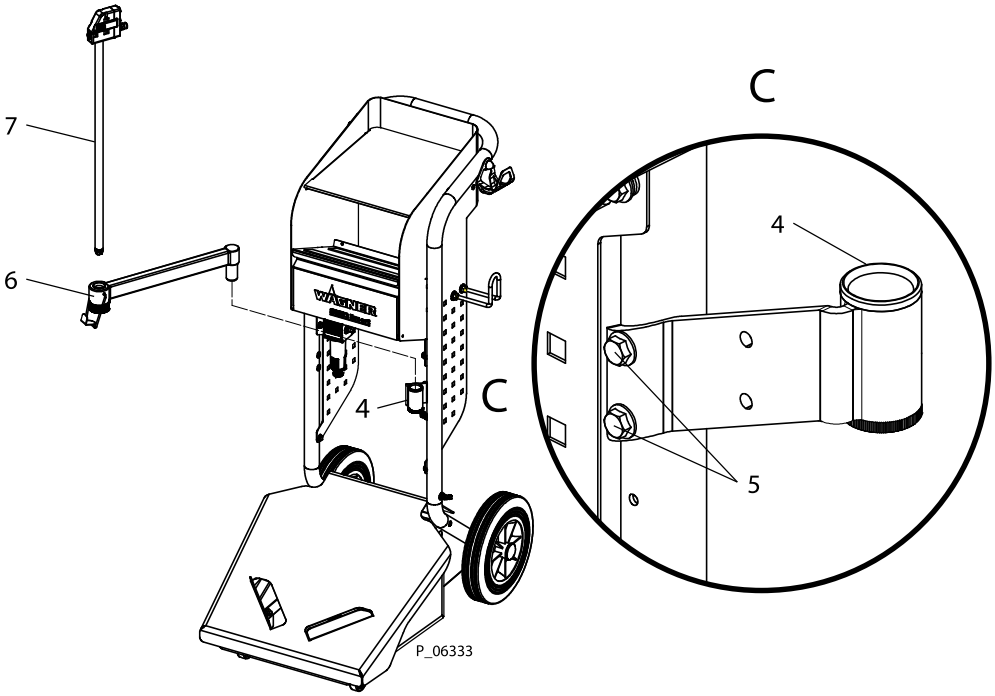


1	Main switch	3	Output to vibrator motor
2	Mains input terminal		

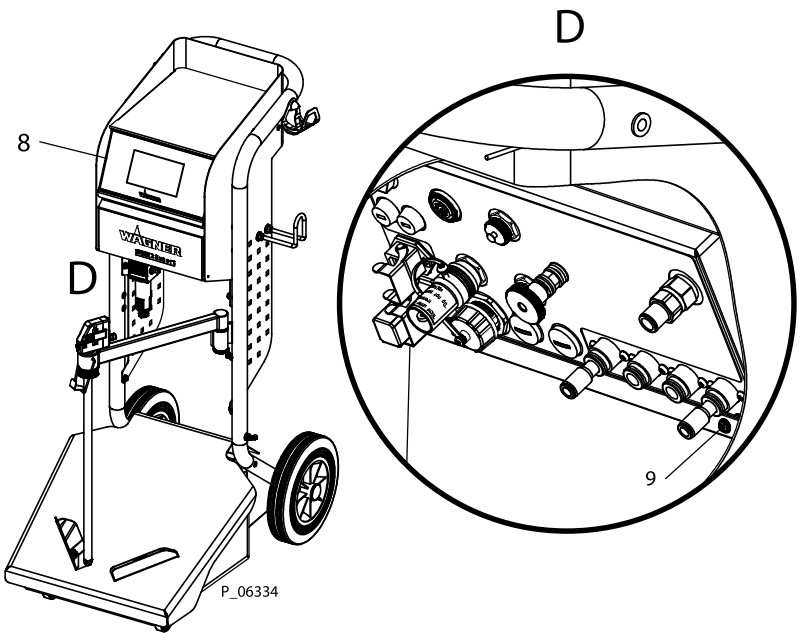
6.4.2.2 Connecting the Sprint 2 Expert B manual system



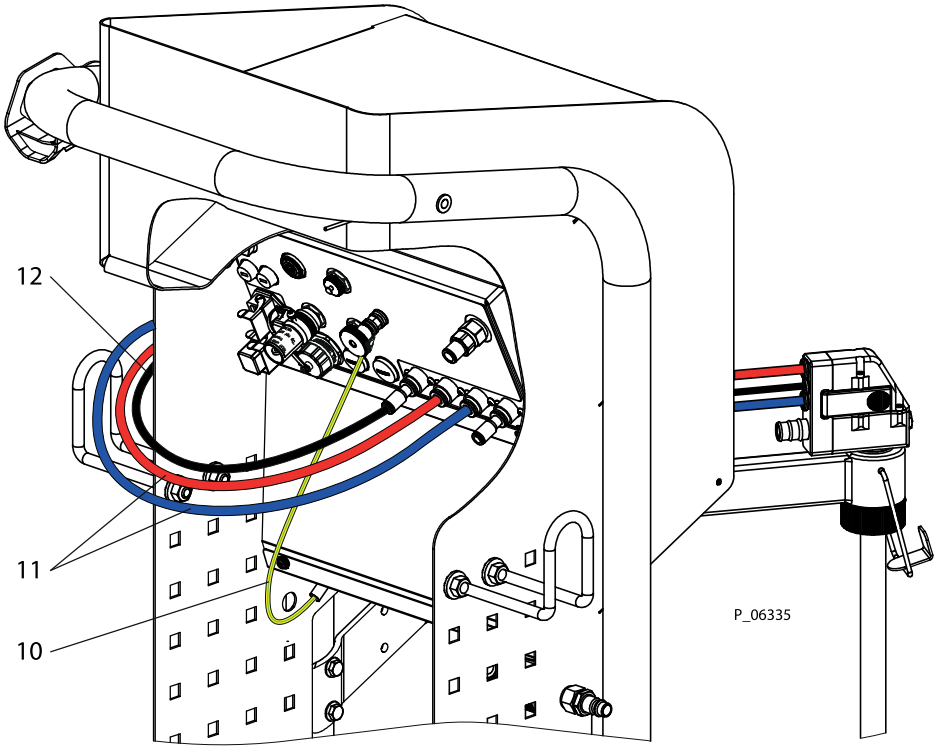
1. Screw on gun holder (1) with threaded rubber buffer (2) and contact washer (Detail A).
2. Fasten the hose holder (3) to the left and right of the mobile base with four M8 nuts each (Detail B).



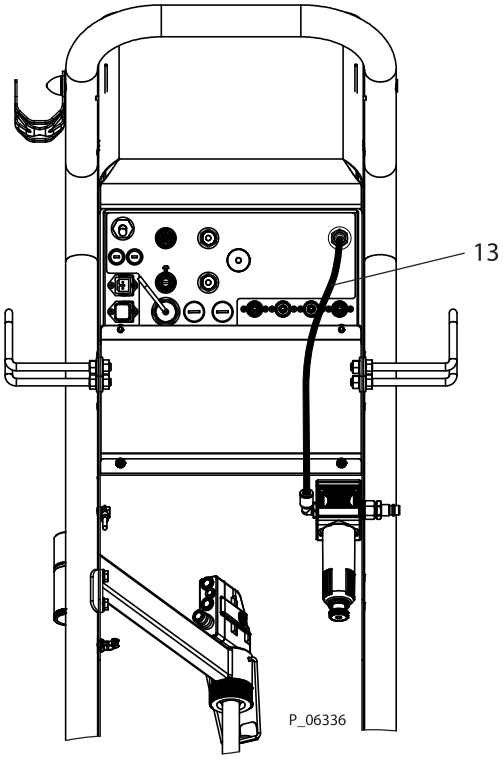
3. Fit the bracket (4) for the swivel arm to the mobile base using two hexagon screws (5) (Detail C).
4. Insert swivel arm (6) into the holder (4).
5. Insert suction lance (7) into the guide bush on the swivel arm (6).



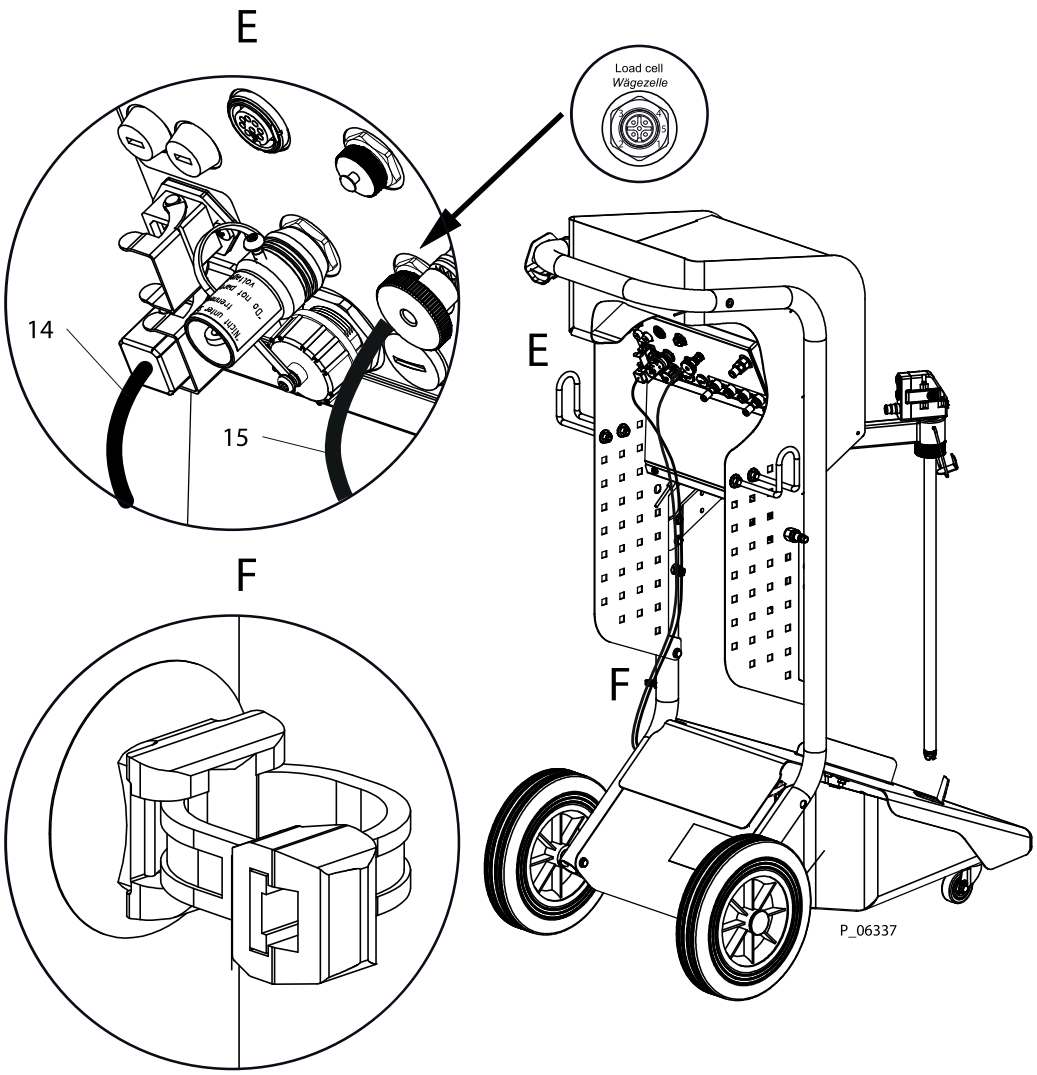
6. Slide the control unit (8) into the mobile base from the front and screw it onto the holder using the fastening screws (9) (Detail D).



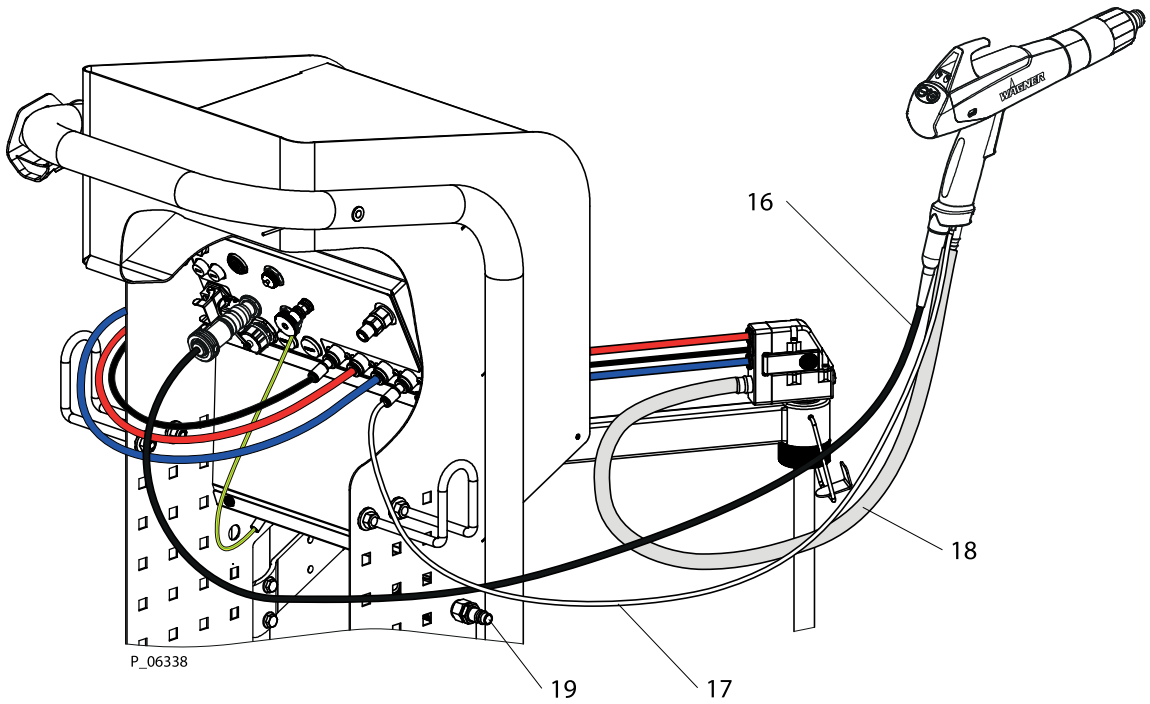
7. Connect the mobile base's grounding cable (10) to the grounding connection of the control unit.
   Connect the control unit's grounding cable with the signal ground.
8. Connect the feed air hose and dosing air hose (11) from the injector to the control unit according to the color coding.
9. Connect the fluid air hose (12) from the injector to the control unit according to the color coding.



10. Guide the compressed air line (13) from the filter separator to the control unit and connect it.



11. Guide the cable (14) from the vibrator motor along the tubular frame of the mobile base, fasten with cable ties and plug into the control unit (Detail E and F).
12. Guide the optional cable (15) from the load cell along the tubular frame of the mobile base, fasten with cable ties and plug into the control unit (Detail E and F).

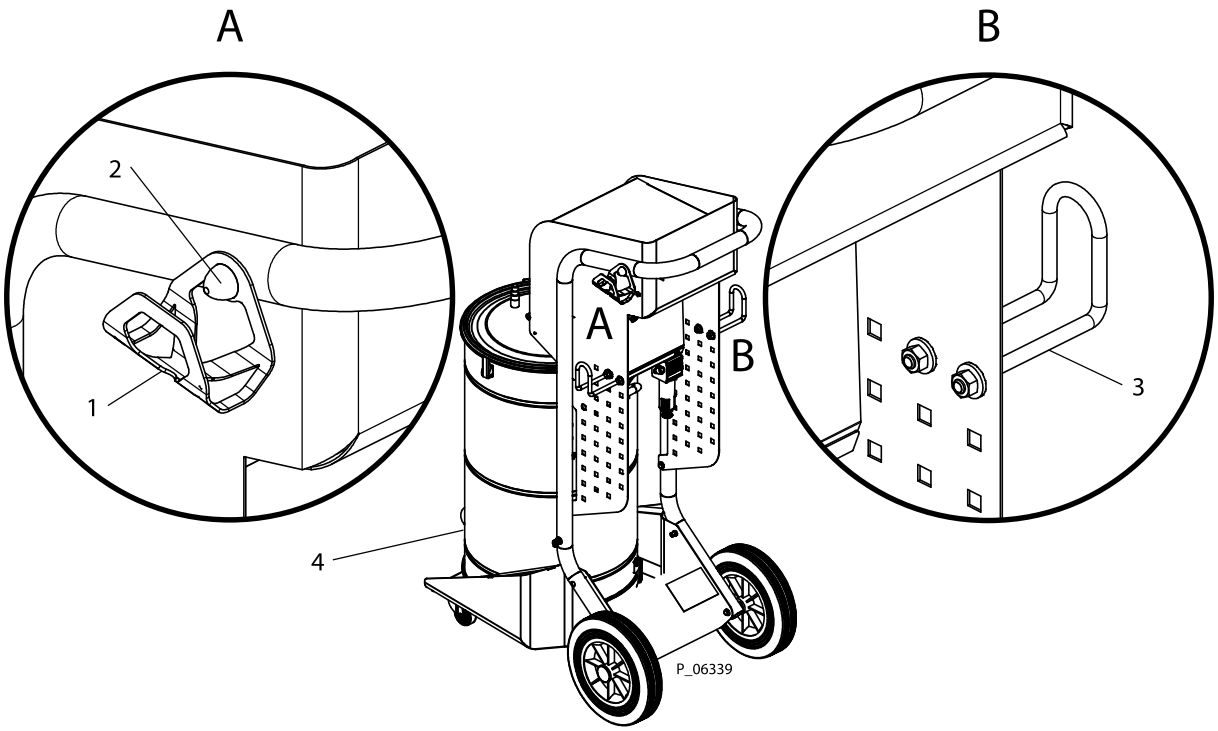


13. Connect manual gun cable (16) to control unit.
14. Connect the atomizing air hose (17) to the control unit.
15. Connect powder hose (18) to the injector.
    Bundle the two hoses and the gun cable with Velcro cable binders.
16. Connect compressed air from the compressed air network of the company to the connection of the manual system (19).
17. Connect the mains cable to the control unit and plug it into the socket.

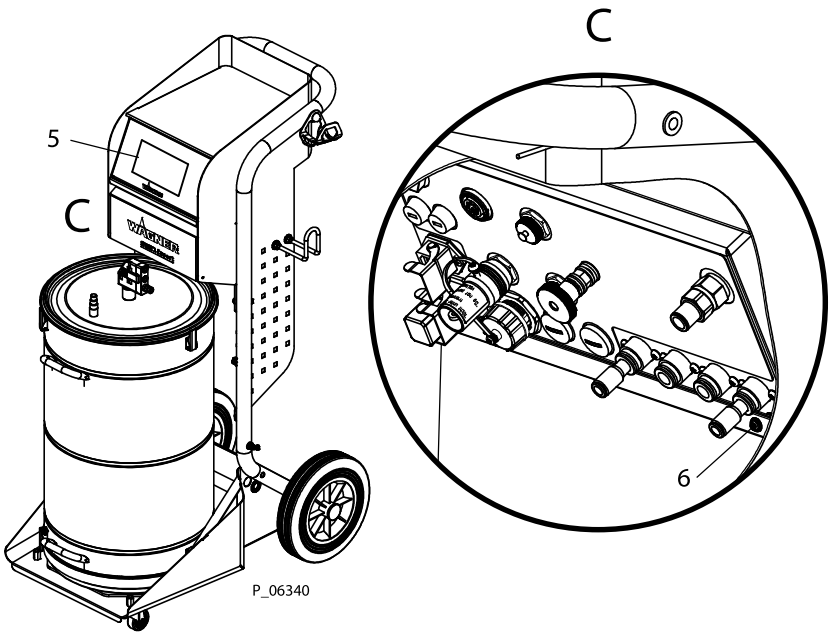
6.4.2.3 Connecting the Sprint 2 H manual system

Note:

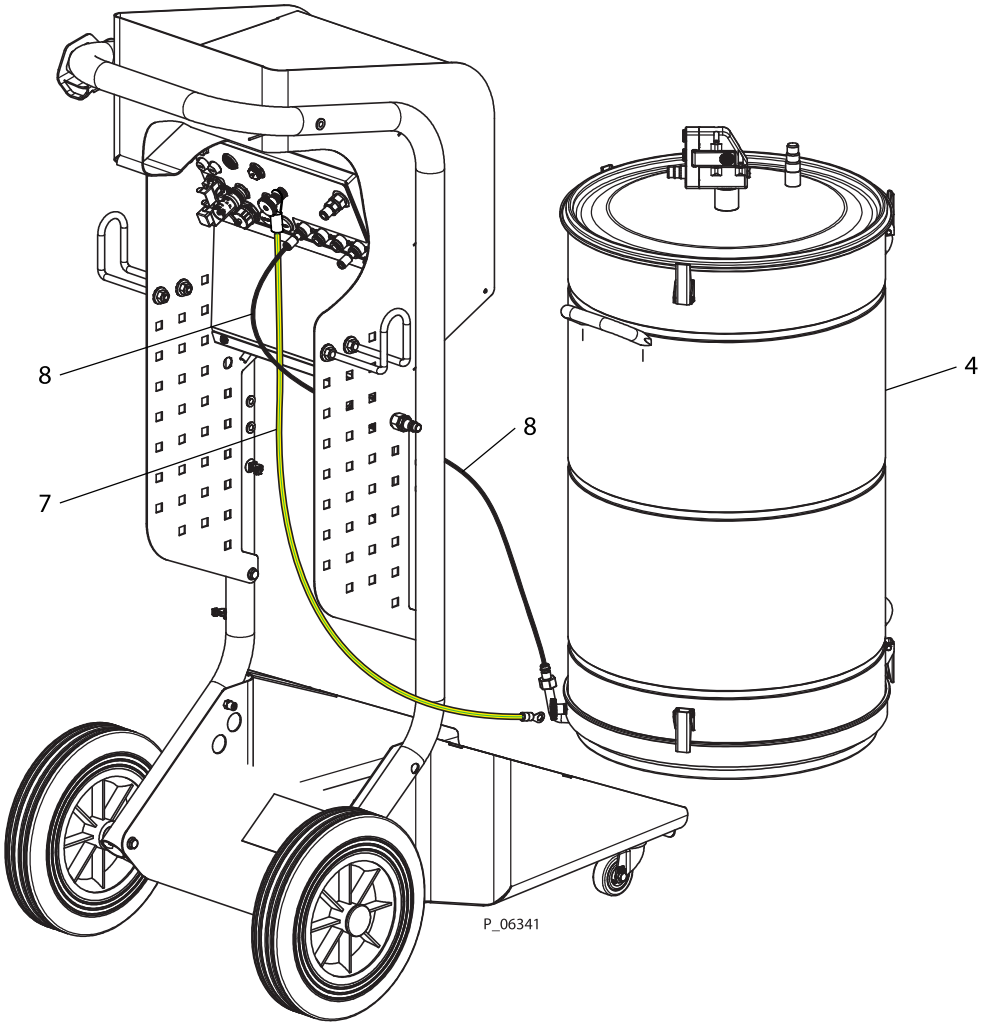
For better understanding, the tank is shown removed from the mobile base during various assembly steps.



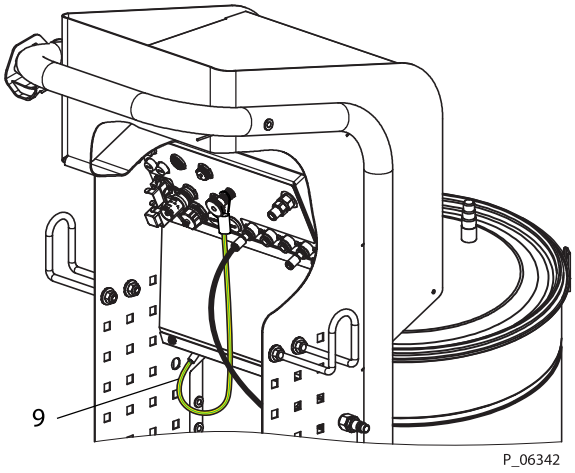
1. Screw on gun holder (1) with threaded rubber buffer (2) and contact washer (Detail A).
2. Fasten the hose holder (3) to the left and right of the mobile base with four M8 nuts each (Detail B).
3. Place the tank (4) on the mobile base.



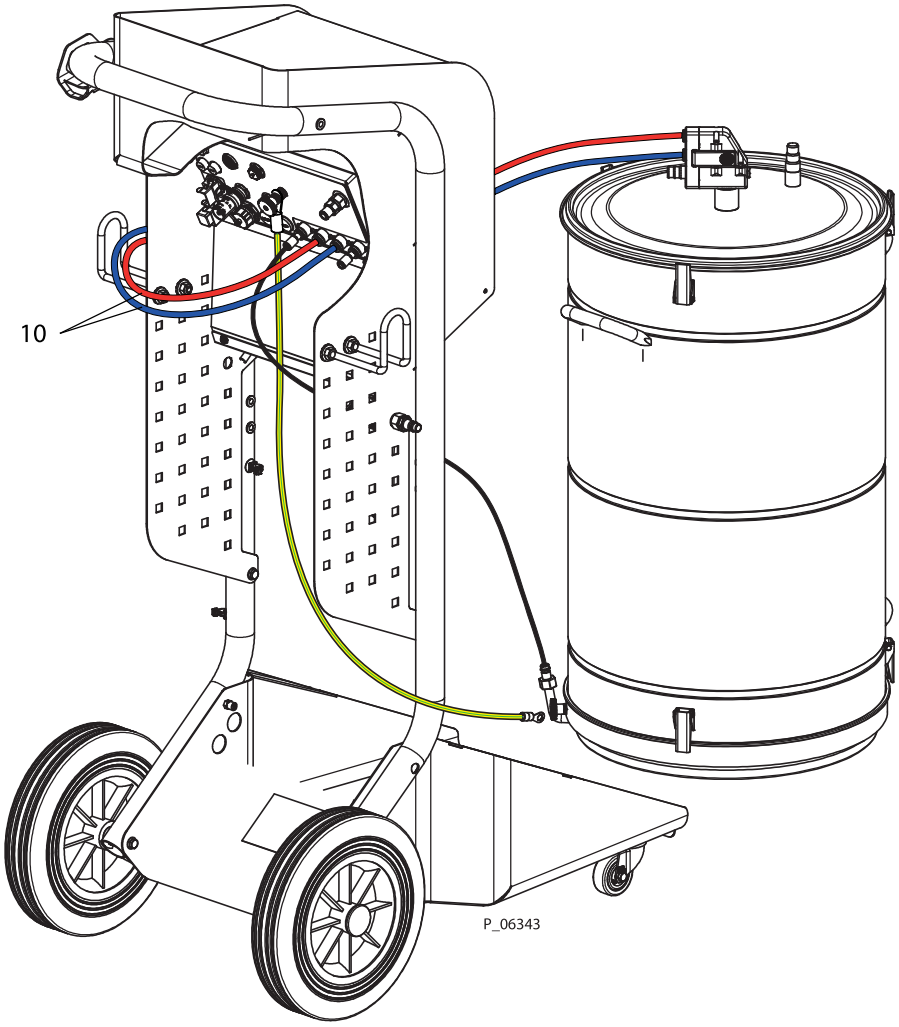
4. Slide the control unit (5) into the mobile base from the front and screw it onto the head module using the fastening screws (6) (Detail C).



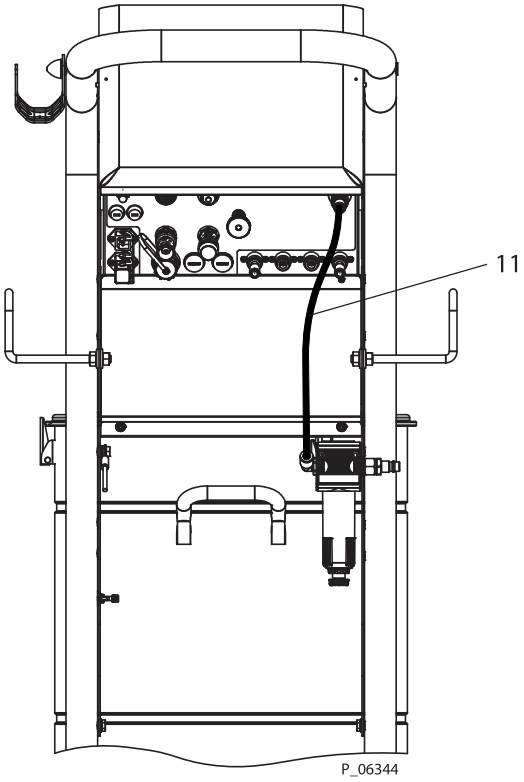
5. Connect the grounding cable (7) to the tank (4) and to the grounding connection of the control unit.
6. Connect the fluid air hose (8) to the control unit and to the tank (4).



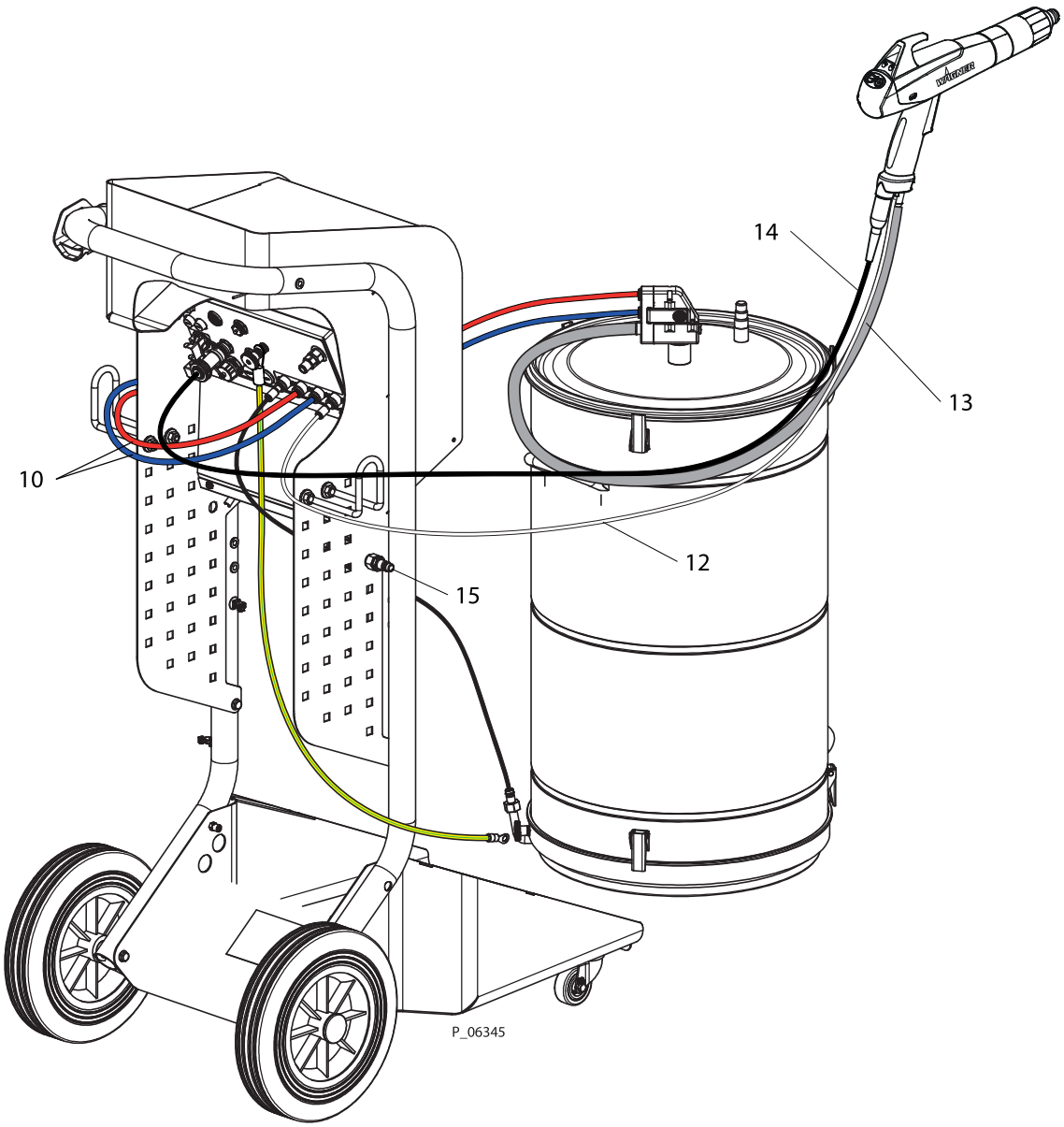
7. Connect the mobile base's grounding cable (9) to the grounding connection of the control unit.



8. Connect the feed air hose and dosing air hose (10) from the injector to the control unit according to the color coding.



9. Guide the compressed air line (11) from the filter separator to the control unit and connect it.



10. Connect the atomizing air hose (12) to the control unit.
11. Connect the powder hose (13) to the injector.
12. Connect manual gun cable (14) to the control unit.
    Bundle the two hoses and the gun cable with Velcro cable binders.
13. Guide the optional cable from the load cell along the tubular frame of the mobile base, fasten with cable ties and plug into the control unit.
14. Connect exhaust air hose to the connection on the powder tank. The other end of the exhaust air hose must be routed to the extraction unit of the powder spray booth!
15. Attach the cover to the mains output terminal from the control unit.
16. Connect the control unit's grounding cable with the signal ground!
17. Connect compressed air from the compressed air network of the company to the manual system.
18. Connect the mains cable to the control unit and plug it into the socket.

6.5 GROUNDING

For security reasons the manual system must be properly grounded. Normally this is done via the mains cable.
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:

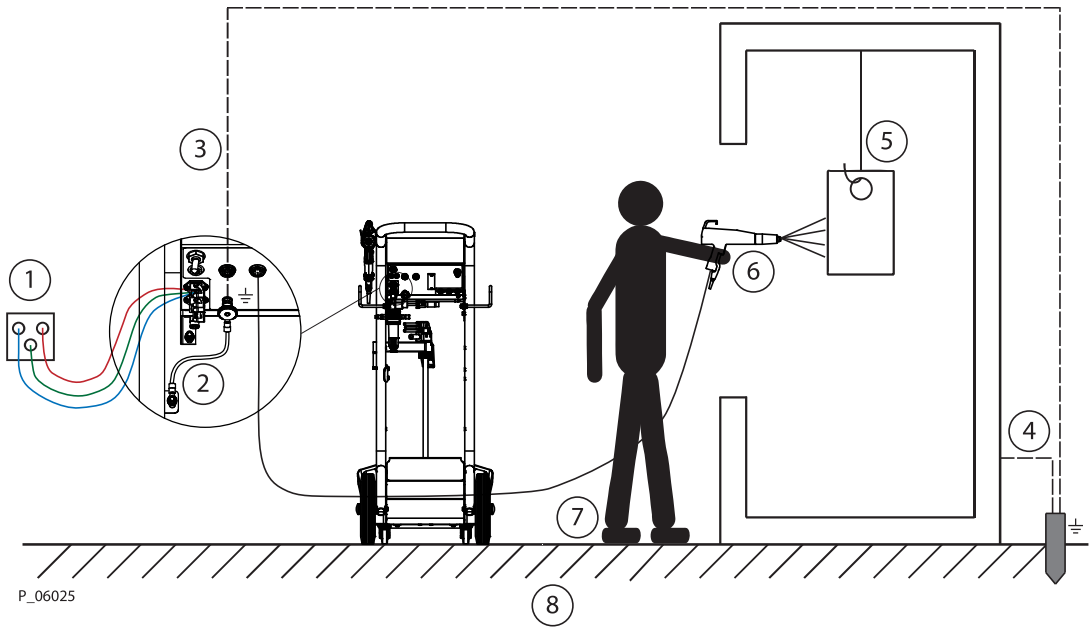
- Dangerous electric charging of the work piece
- Very bad wrap-around
- Uneven coating
- Back spraying to the spray gun, i.e., contamination

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).

6.5.1 Grounding the powder coating system



1	Only use mains cables with grounding strand!
2	Connect the mobile base's grounding cable to the grounding connection of the control unit!
3	Connect the control unit's grounding cable with the signal ground!
4	Connect booth or spray wall to the signal ground with the grounding cable!
5	Remove all paint from hooks and other hanger parts!
6	Wear electrostatically conductive gloves!
7	Wear electrostatically conductive footwear!
8	The floor must be electrostatically conductive!

6.6 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 [▸▸ 44].

7 OPERATION

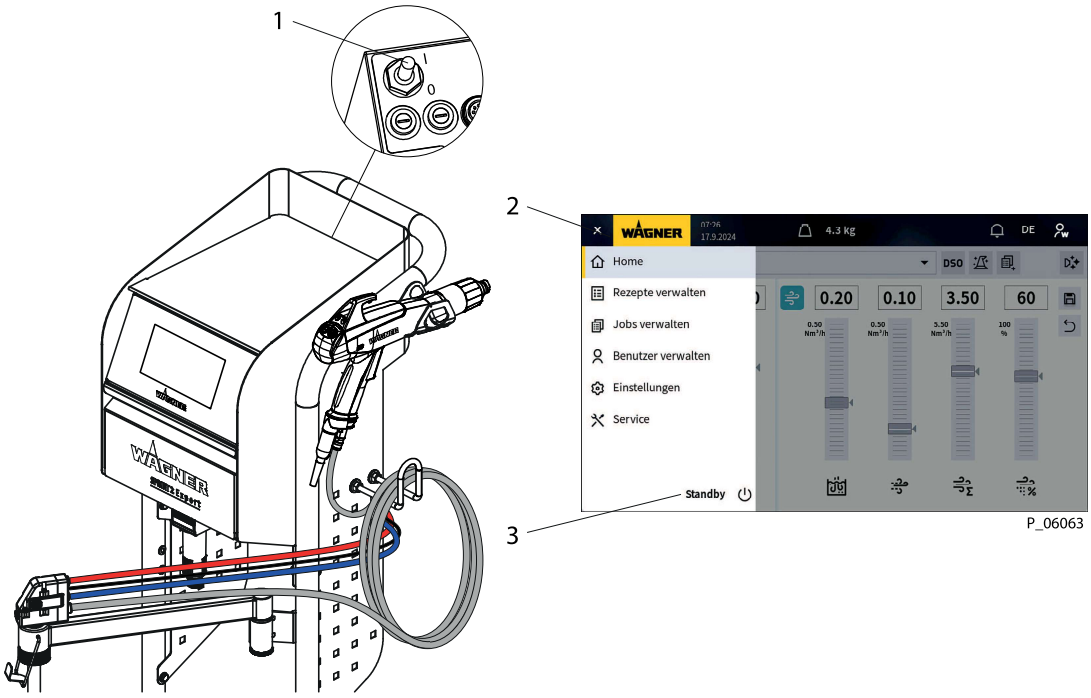
7.1 TRAINING THE OPERATING PERSONNEL

- 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

1. Ensure that:
   - the regular safety checks are carried out in accordance with chapter Safety checks [▸▸ 44];
   - commissioning is carried out in accordance with chapters Assembly of the manual system [▸▸ 21] and Connecting the manual system [▸▸ 21].

7.2.1 Switching on the manual system



To turn the power supply of the manual system on, set the main switch 1 on the back side of the control unit to position [I].

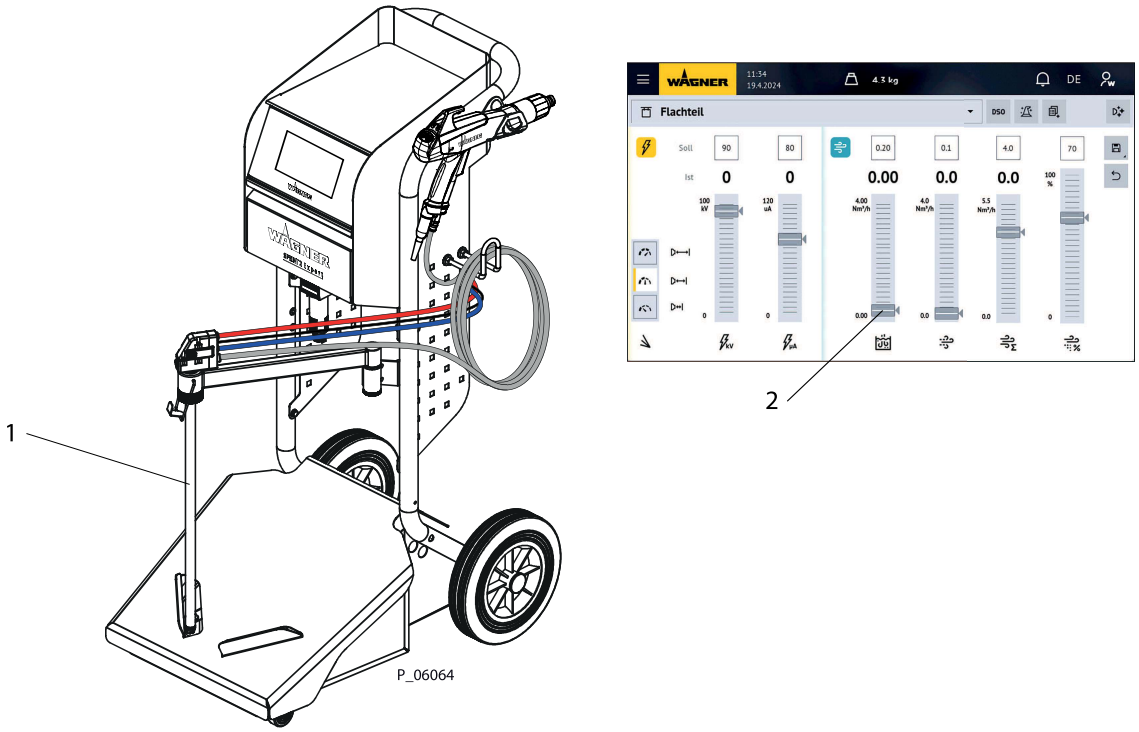
- After a few seconds the control unit is operational.
- The device switches to [Flat part] recipe after every restart.
- To switch the manual system on or off, press push button 2 [Menu] and then push button 3 [Standby] after tapping on the black screen.

Note:

- When commissioning the manual system for the first time, the fluid air must be set on the control unit (see operating manual of the WACON Sprint 2 Expert control unit).
- The control unit automatically recognizes the connected gun type.
  For this, the [Gun type] parameter must be set to [Automatic] in the settings on the control unit (see operating manual of the WACON Sprint 2 Expert control unit).

– All airs are only switched on once the manual gun's trigger has been actuated.

7.2.2 Setting the fluidization of Sprint 2 Expert B (box)



1. Swivel the feed unit 1 to the right-hand side and pull upwards until the retaining bracket swivels downwards.
2. Place an opened powder container (25–30 kg; 55.11–66.14 lbs) on the vibrator table.
3. Switch on the control unit.
4. Swivel the feed unit (1) into the powder tank and lower it down to the powder surface. Actuate the trigger lever of the gun for a short time and release it. The vibrator motor and the fluid air continue to run for 10 s (factory setting). This setting can be changed by the user if required (see WACON Sprint 2 Expert control unit operating manual).
5. Adjust the fluid air, at slider 2 on the control unit, until fluidization is recognizable (basic setting 0.5 Nm^3/h).

Info

The amount of fluid air depends on the characteristics of the powder.
The powder should be moving in the suction area of the feed unit (gently simmering).
Avoid a dust build up in the powder tank.

7.2.3 Setting the fluidization of Sprint 2 Expert H (60 L tank)

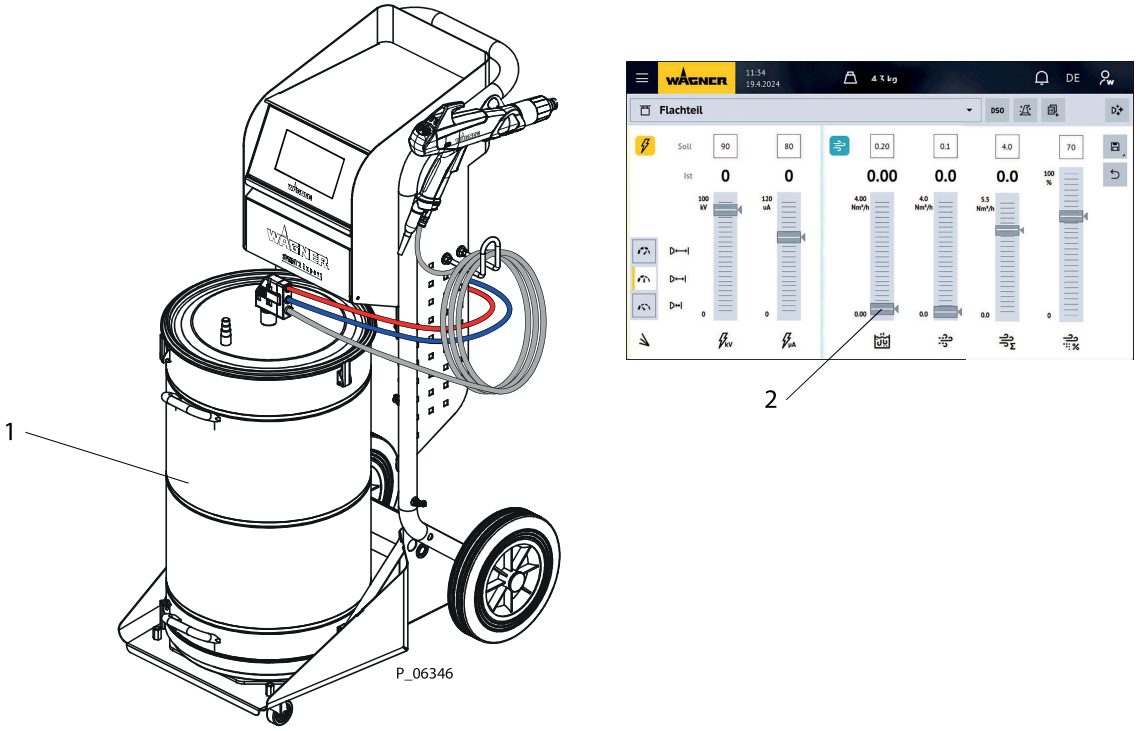
⚠ WARNING

Dust formation!

Risk of poisoning if inhaled.

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

- The powder tank may only be filled to the halfway mark, because fluidizing increases the volume of powder.



1. Open the powder tank and fill it only halfway with powder.
2. Switch on the control unit.
3. Set the [Vibrator motor controller] parameter, on the control unit, to [ON] to permanently activate the fluid air (see the WACON Sprint 2 Expert control unit operating manual).
4. Actuate the trigger lever of the gun for a short time and release it.
5. Adjust the fluid air, at slider 2 on the control unit, until fluidization is recognizable. **NOTICE!** The amount of fluid air depends on the characteristics of the powder. Avoid a build up of powder dust (too much fluid air) in the powder tank!
6. Close the powder tank 1 and check whether the exhaust air hose is leading in the direction of the exhaust system of the powder coating booth.

7.3 FACTORY SETTING RECIPE NOS. 1–5

The following set values are stored in recipe nos. 1–5 in the factory.

Recipe no.	Designation	Characteristic	High voltage [kV]	Current limitation [µA]	Characteristic curve	Total air [m³/h]	Feed air [%]	Atomizing air [m³/h]	Fluid air [m³/h]
P01	Flat part	High surface coverage	90	80	Standard	3.5	60	0.1	0.2
P02	Profile part	Penetration and reduced build-up of edges	60	20	Medium	2.9	40	0.1	0.2
P03	Second coating	Avoidance of spraying back	50	10	Soft	2.9	45	0.1	0.2
P04	Blowing off	Blow-off function	0	0.5	Medium	0.0	0	2.0	0.0
P05	Double click	individual	60	20	Standard	2.9	40	0.1	0.2

Info

Under normal conditions, metallic powder can be processed well using recipes Nos. 1–3 and 5.
When operating the system with a Tribo gun, the values for total air, powder feed and Tribo air must be adjusted accordingly and saved.
With the 3 L tank variant, the values must also be adjusted individually and saved.

7.4 INTERRUPTING THE COATING PROCESS OF SPRINT 2 EXPERT B (BOX)

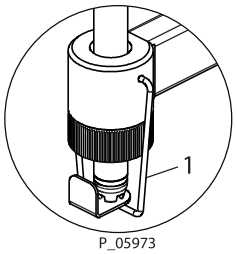
NOTICE

Powder residues and sticking fluid disk!

Equipment damage and danger of blockage.

- Before the control unit is deactivated, the feed unit must be pulled out of the powder tank.
- At every work interruption, blow through the powder spray gun and the powder feeding parts and clean any powder residues.

1. Release the trigger lever on the spray gun.
   ⇨ The high voltage and the powder feed are deactivated.



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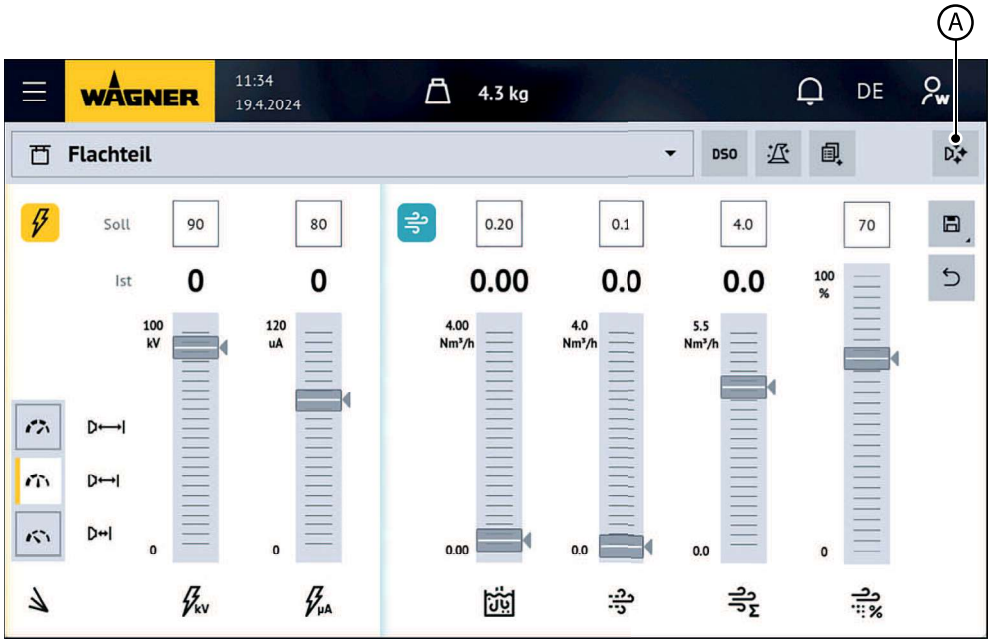
2. Lift the feed unit up and out of the tank until retaining clamp 1 swivels downwards.
3. Lower the feed unit into the parking position so that no more powder is fed.



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4. Hold the gun in the spray booth and start the flush function by pressing the [Flush] button (A).
   ⇨ The injector and hoses are flushed.
5. Swivel the feed unit to the right side.
6. Switch off control unit.

7.5 INTERRUPTING THE COATING PROCESS OF SPRINT 2 EXPERT H (60 L TANK)

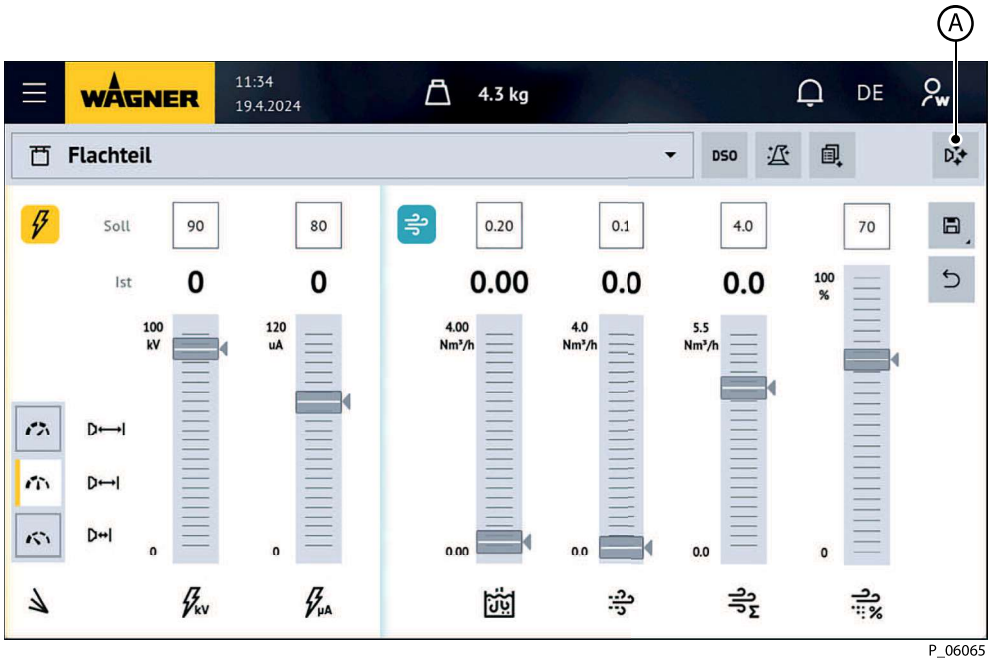
NOTICE

Powder residues!

Damage to the device.

- At every work interruption, blow through the powder spray gun and the powder feeding parts and clean any powder residues.

1. Release the trigger lever on the spray gun.
   ⇨ The high voltage and the powder feed are deactivated.
2. Remove the injector from the holder to stop powder feed.



3. Hold the gun in the spray booth and start the flush function by pressing the [Flush] button (A).
   ⇨ The injector and hoses are flushed.
4. Switch off control unit.

7.6 PERFORMING A PAINT CHANGE

7.6.1 Box version

Info

For a paint change, all components of the powder feed system must be thoroughly cleaned.

1. Perform cleaning in accordance with chapter Interrupting the coating process of Sprint 2 Expert B (box) [▸▸ 39].
2. Clean all powder feeding parts of the unit, such as the spray gun, the injector and the powder feed hose.

3. Place an opened tank (25–30 kg; 55.11–66.14 lbs) with the new powder on the vibrator table.
4. Swivel retaining clamp 1 away, lower the feed unit to the powder surface, actuate the trigger lever of the spray gun for a short time and then release it.
5. Adjust the fluid air at the control unit to the point that the feed unit sinks into the powder due to its own weight.

If programs are to be adapted to the new application, proceed as described in the operating manual of the WACON Sprint 2 Expert control unit.

7.6.2 60 L tank version

7.6.2.1 Cleaning process when using a single powder tank

Info

For a paint change, all components of the powder feed system must be thoroughly cleaned.

1. Perform cleaning in accordance with chapter Interrupting the coating process of Sprint 2 Expert H (60 L tank) [▸▸ 40].
2. Open the powder tank and clean all powder feeding parts such as: the spray gun, the powder injector, the powder feed hose and the suction system.
3. Clean the powder tank and pay special attention to the fluid base.

Info

Proper fluidization is not possible with a damaged and/or clogged fluid base.

If programs are to be adapted to the new application, proceed as described in the operating manual of the WACON Sprint 2 Expert control unit.

7.6.2.2 Cleaning process when using multiple powder tanks

Info

For a paint change, all components of the powder feed system must be thoroughly cleaned.

1. Perform cleaning in accordance with chapter Interrupting the coating process of Sprint 2 Expert H (60 L tank) [▸▸ 40]
2. Pull the powder injector off of the powder tank.
3. Press the catches together at the corrugated surfaces and pull the hose connection part off the injector housing.
4. Thoroughly blow out the hoses and the injector.
5. Loosen the grounding cable from the powder tank.
6. Replace the powder tank.
7. Reassemble the injector and attach it to the new powder tank.
8. Ground the powder tank by connecting it to the grounding cable.

Info

Proper fluidization is not possible with a damaged and/or clogged fluid base.

7.6.2.3 Restarting the manual system

1. Check whether the control unit is switched off.
2. Open the powder tank.

⚠ WARNING

Dust formation!

Risk of poisoning if inhaled.

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

- The powder tank may only be filled to the halfway mark, because fluidizing increases the volume of powder.

3. Switch on the control unit and activate the [Powder feed quantity] function by pressing the [Powder quantity] button.
4. Adjust the powder quantity to 0% on the control unit with the slider.
5. Actuate the trigger lever and keep it actuated.
6. Adjust the fluid air with the slider on the control unit, until fluidization is recognizable. **NOTICE!** The amount of fluid air depends on the characteristics of the powder. Avoid a build up of powder dust (too much fluid air) in the powder tank!
7. Close the powder tank and check whether the exhaust air hose is leading in the direction of the exhaust system of the powder coating booth.

To adapt the programs to the new applications, proceed as described in the WACON Sprint 2 Expert control unit's operating manual.

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:

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

8.1.2 Flushing and cleaning the system

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.

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:

- 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.

8.2.2 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 [▸▸ 43].

After maintenance

- Carry out safety checks in accordance with chapter Safety checks [▸▸ 44].

8.2.3 Safety checks

8.2.3.1 Grounding check

Every day

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

8.2.4 Maintenance Procedures

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

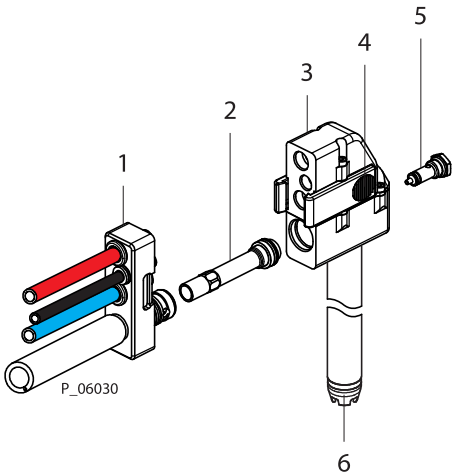
If in doubt, we recommend contacting WAGNER's specialist personnel.

Maintenance work	Time stamp	
	Per shift	Weekly
Blow out gun and check for sintering	x	
Check gun settings	x	
Check gun discharge pressure	x	
Blow out powder hoses	x	
Check grounding		x
Check compressed air quality		x
Check gun voltage		x
Check powder hoses for bends and sintering		x

8.3 PERIODIC CHECKING OF THE MANUAL SYSTEM

8.3.1 Version Sprint 2 Expert B (box)

1. Perform cleaning in accordance with chapter Interrupting the coating process of Sprint 2 Expert B (box) [▸▸ 39].

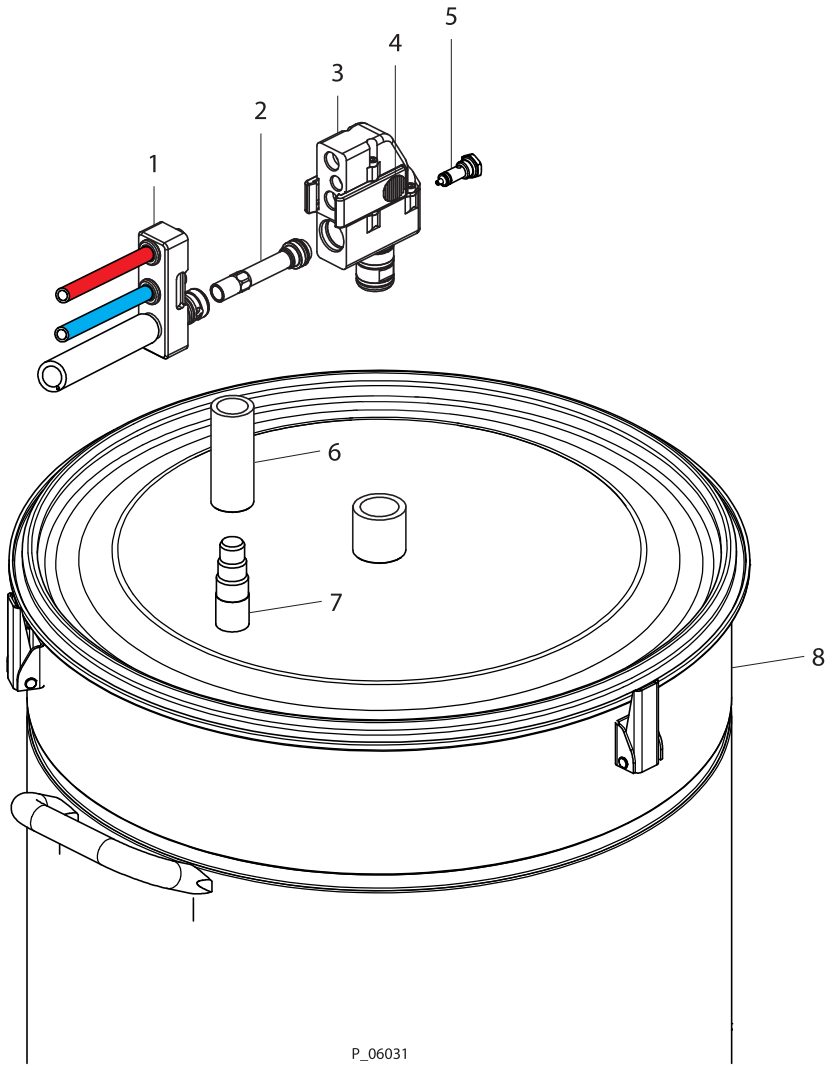


2. Press the catches (4) together at the corrugated surfaces and pull the hose connection part (1) off the injector housing (3) towards the front.
3. Thoroughly blow out all parts with compressed air.

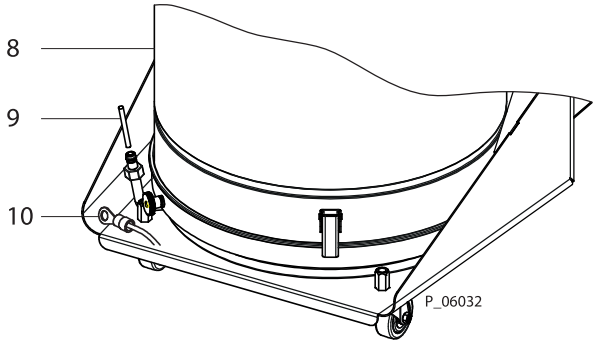
4. If necessary, remove and replace the collector nozzle (2) and the air nozzle (5). The wearing and spare parts are listed in the corresponding chapter of the powder injector's operating manual.
5. Pull feed unit out of the holder arm.
6. Blow out the suction tube of the feed unit thoroughly and rub it clean with a dry cloth.
7. Check whether the fluid disk (6) on the bottom of the feed unit is blocked and replace if necessary.

8.3.2 Version Sprint 2 Expert H (60 L tank)

1. Perform cleaning in accordance with chapter Interrupting the coating process of Sprint 2 Expert H (60 L tank) [▸▸ 40].



2. Press the catches (4) together at the corrugated surfaces and pull the hose connection part (3) off the injector housing (6) towards the front.
3. Thoroughly blow out all parts with compressed air.
4. Check powder injector for wear and replace worn parts if necessary. The wearing and spare parts are listed in the corresponding chapter of the powder injector's operating manual.
5. Loosen the exhaust air hose 6 from the connection 7 of the powder tank 8.



6. Pull the black fluid air hose (9) off the powder tank (8).
7. Loosen the grounding cable 10 from the powder tank 8.
8. Lift the powder tank off of the equipment mobile base for cleaning.
9. Remove the lid of the powder tank to empty the powder tank and thoroughly blow out the powder tank.
10. Completely remove all residual powder from the suction system.
11. Thoroughly clean the fluid base, check it for clogging or damage and replace it if necessary. The wearing and spare parts are listed in chapter Spare parts [▸▸ 56] of the operating manual.

9 TROUBLESHOOTING AND RECTIFICATION

Malfunction	Cause	Rectification
Power indicator does not light up No Corona power supply	Mains supply not switched on	Turn on mains
	2 AT fuses defective	Replace fuses
	The connection cable to the powder spray gun is interrupted	To replace the connection cable, notify the WAGNER service department or qualified personnel
	The powder spray gun is too close to the work piece	Switch off the high voltage, increase the distance between the spray gun and the work piece and then switch the high voltage on again Should an error message be displayed again, inform the WAGNER service department
	The grounding between control unit and powder spray gun is interrupted	Contact WAGNER service department
Intermittent powder discharge	The speed in the powder feed hose is too low	Increase the total feed and dosing air and readjust the ratio of the airs to each other
	The cross section of the powder feed hose is reduced by movements	Use a powder hose that prevents the cross section from narrowing (select a hose with a thicker wall)
	Fluctuations in the compressed air caused by short-term increase of the compressed air consumption in the supply system	Install compressed air storage directly in front of high consumption system components
Dust buildup above the tank/powder tank	Too much fluid air	Reduce the fluid air at the throttle
	The throttle is not connected to the fluid air connection of the control unit	Connect the throttle to the fluid air connection of the control unit and readjust the fluid air volume
Bad wrap around, backspray	Insufficient grounding	Make sure that all components are properly grounded, see chapter Grounding [▸▸ 33]
No powder discharge	Tank/powder tank empty	Refill the powder
	The spray gun is clogged	Blow through the spray gun
	The powder feed hose is clogged	Blow through the powder feed hose
	The powder suction system in the powder tank is clogged	Blow through the powder suction system
	The feed air hose is kinked	Straighten or replace the feed air hose
	The powder feed hose is kinked	Straighten or replace the powder feed hose
The feed unit does not sink into the powder	The guide of the feed unit holder is jammed	Enable the guide to move smoothly

10 INSPECTIONS IN ACCORDANCE WITH DIN EN 50050-2:2013

If the system is used for electrostatic coating with ignitable coating powders, the test must be performed in accordance with DIN EN 50050-2: 2013 according to the following Overview Table [▶▶ 49].

10.1 ABBREVIATIONS

ER	Employer	FT	Function test
SP	Skilled person	ME	Measurement
FPE	Fire protection engineer	SI	Standard inspection
QEW	Electrician	VI	Visual inspection
MFR	Manufacturer	CM	Continuous monitoring
TP	Trained person	TI	Technical inspection

10.2 OVERVIEW TABLE

Section	Type of inspection	Requirements	Inspection by	Type of inspection	Inspection interval
1	Ground leaking resistance from the work piece attachment point	The resistance to ground of the hold point of every work piece may be 1 MΩ at the most (measuring voltage must be 1000 V). The design of the work piece holder must ensure that the work pieces remain grounded during coating.	SP	ME/CM Measure resistance to ground (work piece receiver - ground potential) max. 1 MΩ @ 1000 V	Weekly
2	Link between technical ventilation equipment and high voltage, compressed air and powder feed	The technical ventilation should be interlocked such that the powder feed and high voltage cannot be switched on, while the technical ventilation is not working effectively.	SP	FT Testing whether the system is stopped by the safety technology and the powder feed, supply air and high voltage are switched off in case of ventilation deactivation.	Annually
3	Checking the electrostatic manual coating system for damage	Electrostatic manual coating systems may only be operated in an undamaged condition. Damaged devices must be decommissioned immediately and repaired immediately.	SP	FT Inspect and test (e.g., by measurement) whether all parts carrying high voltage do not result in discharge which puts people at risk.	Weekly

11 DISASSEMBLY AND DISPOSAL

11.1 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 system.
2. Pull the connection cable out of the socket.
3. Lock the compressed air supply and decompress system.
4. Separate the connection cable from the compressed air connection.
5. Separate the grounding cable from the signal ground.

11.2 DISPOSAL

ⓘ NOTICE

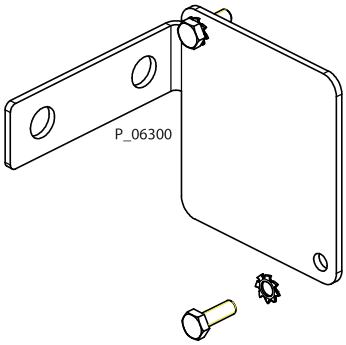
Do not dispose of used electrical equipment with household refuse!

In accordance with European Directive 2012/19/EU on the disposal of used electrical equipment and its implementation in national law, this product may not be disposed of with the household refuse, but must be recycled in an environmentally correct manner.

- WAGNER or one of our dealers will take back your used WAGNER electric or electronic equipment and will dispose of it for you in an environmentally-friendly way.
- Please contact one of our service points, one of our representatives or us directly.

12 ACCESSORIES

12.1 ADAPTER PLATE SWITCHBOX



Order no.	Designation
2472202	Adapter plate switchbox

12.2 SPRAY GUN SWITCHBOX

P_00670

Order no.	Designation
265911	Spray gun switchbox When alternately a Corona or a Tribo gun is operated
2313993	Hose (black, Ø 4x6 mm)

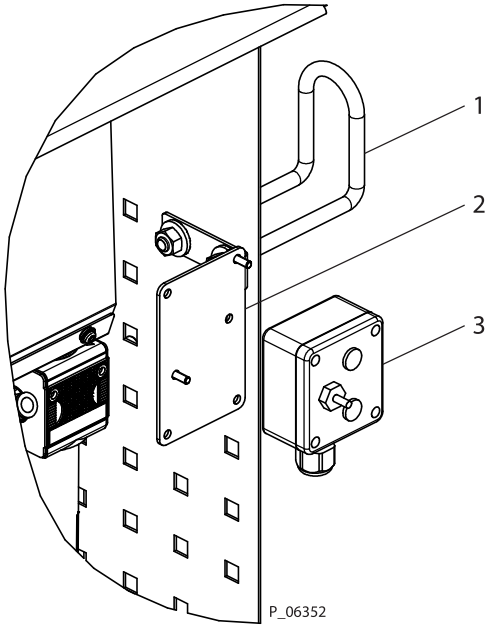
12.2.1 Installation of the switchbox

⚠ WARNING

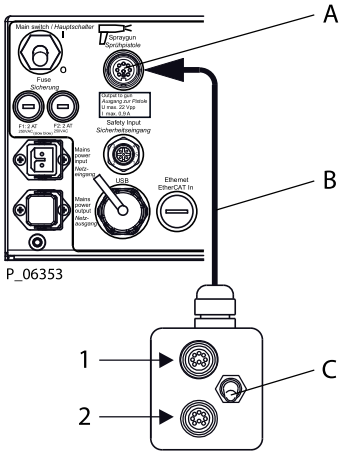
Danger from electric current!

Risk of injury and damage to the device.

- Before starting with the installation of the switchbox, the manual system must be switched off and the mains plug disconnected.



1. Screw adapter plate 2 onto the right hose holder 1.
2. Screw switchbox 3 onto adapter plate 2.



1	Connection for Corona guns	2	Connection for Tribo guns

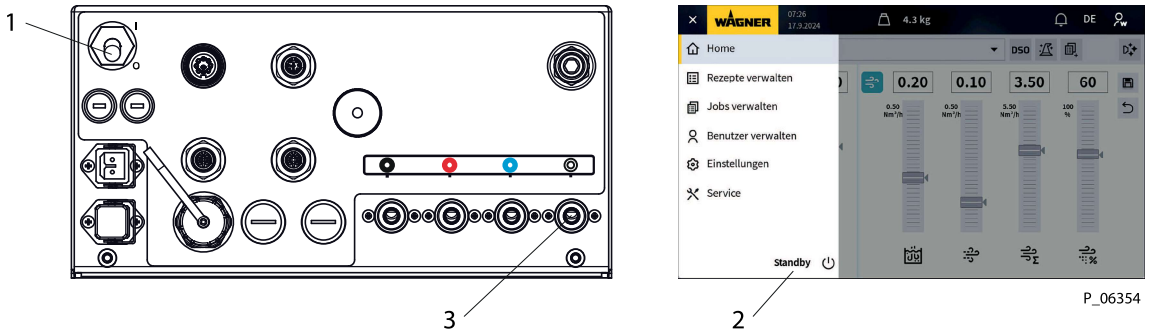
3. Pull the gun cable out of the socket (A) on the control unit.
4. Plug the switchbox's electrical cable (B) into the socket (A) on the control unit and secure it with the protective sleeve.
5. Connect the spray gun to the appropriate connection on the switchbox and secure it with the protective sleeve of the spray gun cable.

6. Set the switch (C) on the switchbox to the desired gun type.

12.2.2 Switching the gun type

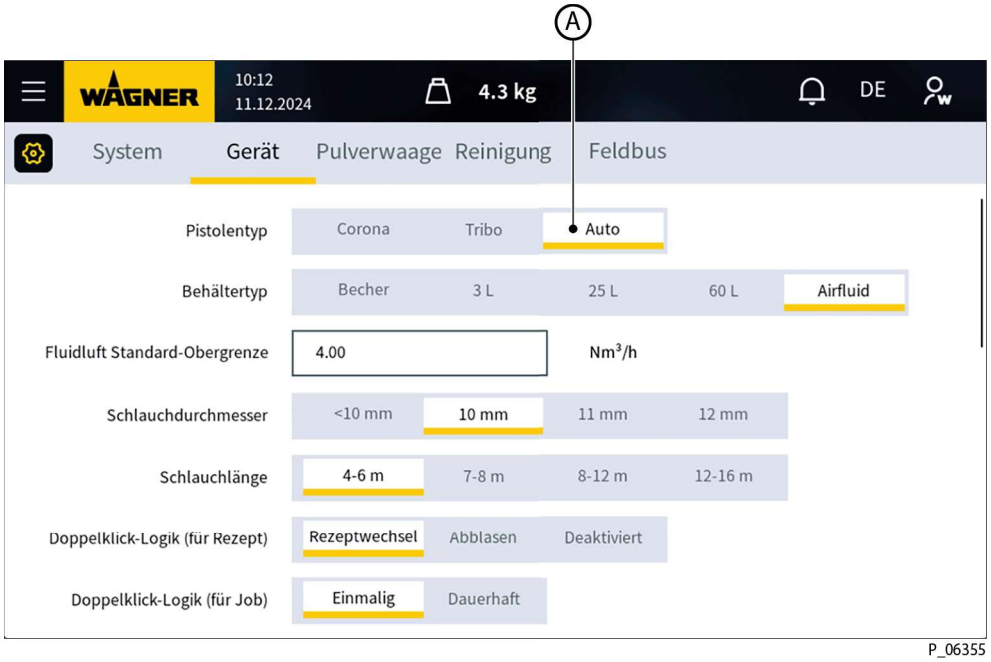
Info

Clean the powder residues from all powder-conveying parts thoroughly, before changing to another gun type.



For example: switching from Corona to Tribo

1. Switch off control unit with switch 1 on the rear or with [Standby] button 2 on the front of the control unit.
2. Change the coating powder from Corona to Tribo.
3. Disconnect the hose (3) (transparent, atomizing air) from the Corona gun and connect it to the Tribo gun (Tribo air).
4. Disconnect the powder feed hose of the Corona gun from the powder injector and connect the Tribo gun powder feed hose to the powder injector.
5. Set the switch (C) on the switchbox to Tribo.
6. Switch on control unit with switch 1 on the rear or with [Standby] button 2 on the front of the control unit.

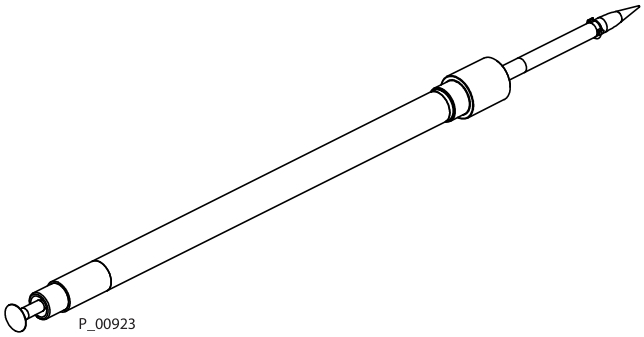


The gun type parameter must be set to [Auto] (A) in the device configuration of the WACON Sprint 2 Expert control unit. No gun is selected at first after the control unit is switched on. This will however be automatically selected and displayed after 1 second.

12.3 PEM-T3 MANUAL GUN

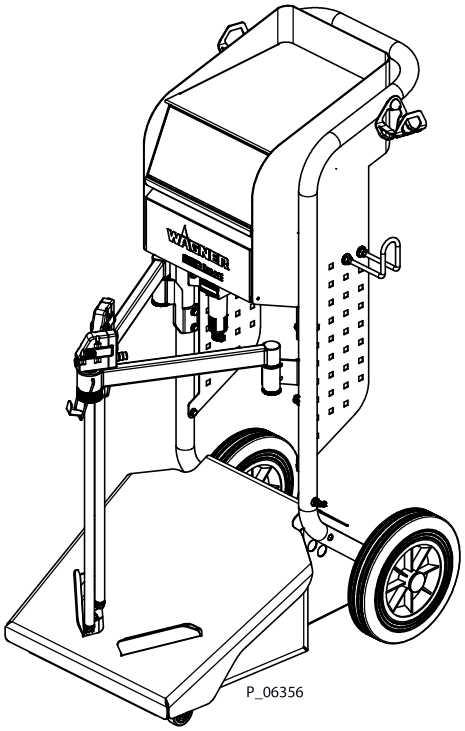
Order no.	Designation
351019	PEM-T3 Tribo manual gun

12.4 PEM-T3 EXTENSION



Order no.	Designation
260934	Nozzle extension, PEM-T3

12.5 2 GUN EXTENSION



Order no.	Designation
2474941	2 gun extension, Sprint 2 Expert

The Sprint 2 Expert 2-gun extension accessory set is used to equip the Sprint 2 Expert manual system with a second swivel arm, injector, powder spray gun and WACON Sprint 2 Expert. This allows two coaters to coat simultaneously from one powder tank.

12.6 POWDER HOSE

Order no.	K	Designation
351794	♦	Powder hose, Ø 9 mm
2310699	♦	Powder hose, Ø 10 mm
2307502	♦	Powder hose, Ø 11 mm
2310700	♦	Powder hose, Ø 12 mm

♦ = wearing parts

13 SPARE PARTS

13.1 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.

13.2 NOTES ON THE USE OF SPARE PARTS

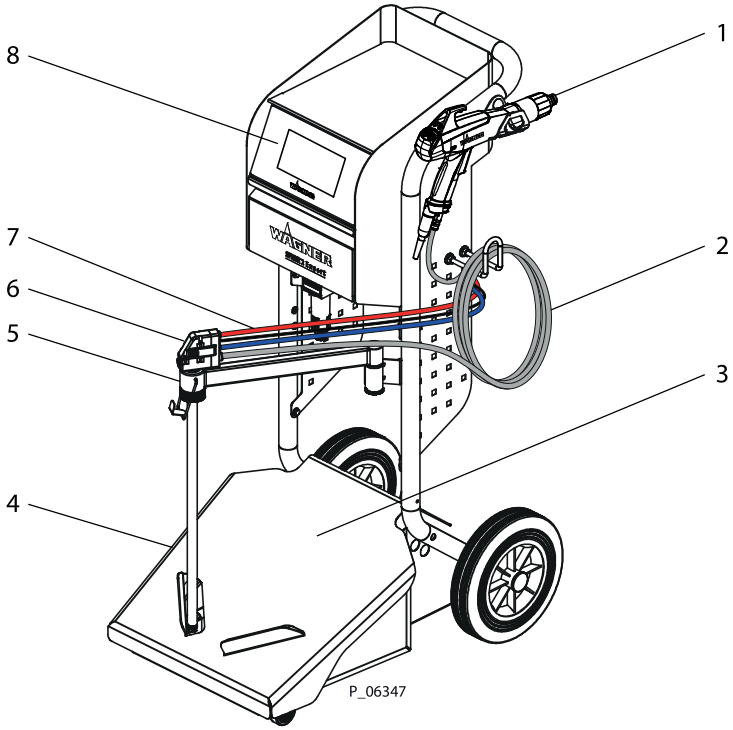
⚠ DANGER

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.

13.3 SPARE PARTS LIST FOR SPRINT 2 EXPERT B MANUAL SYSTEM

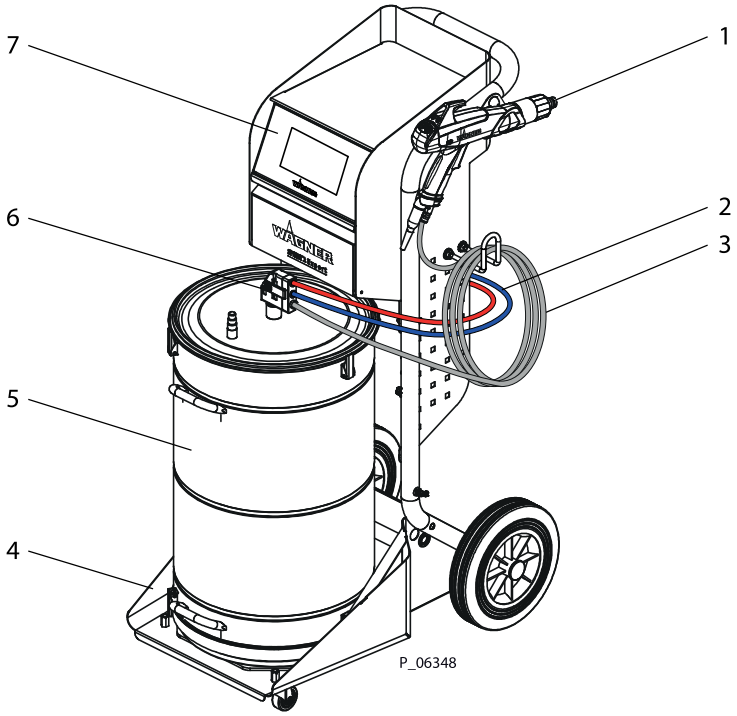


Pos	K	Stk	Order no.	Designation
			2469388	Sprint 2 Expert B manual system (standard version)
			2472293	Sprint 2 Expert B manual system (USA version)
			2473790	Sprint 2 Expert B manual system (Japan version)
			2474779	Sprint 2 Expert B manual system with load cell and EtherCAT (standard version)
			2474780	Sprint 2 Expert B manual system with load cell and EtherCAT (USA version)
			2473752	Sprint 2 Expert B manual system with load cell (standard version)
			2473753	Sprint 2 Expert B manual system with load cell (USA version)
			2473754	Sprint 2 Expert B manual system with load cell (Japan version)
1		1	2322587	PEM-X1 manual gun
2			2466676	Powder hose set, d10-5.5 m POE
3		1	2355337	Vibrator motor, 230V/50 Hz (standard version)
3		1	2355338	Vibrator motor, 115V/60 Hz (US/Japanese version)
4		1		Sprint 2 mobile base
5		1	2466049	Swivel arm set
6		1	2466079	Quick-Link B injector
7			2466207	Sprint 2 B hose set
8		1	2469304	WACON Sprint 2 Expert control unit
			9951116	Slow-acting fuse, 2A (included in WACON Sprint 2 Expert)
9		1	130215	Grounding cable, 10 m; 32.81 ft
10		1	241270	Mains cable (Europe)
10		1	241271	Mains cable (Switzerland)

Pos	K	Stk	Order no.	Designation
10		1	264626	Mains cable (USA)
10		1	264625	Mains cable (Japan)
11		1	2460889	Filter, G1/4 5 µm with PC tank
Not included in the scope of delivery, please order separately:				
12		1	2466872	Spare parts case, Sprint 2 manual system
13		1	2331976	Spare parts starter set, X1 R round jet
14		1	2349959	Spare parts starter set, X1 F flat jet

♦ = wearing parts

13.4 SPARE PARTS LIST FOR SPRINT 2 EXPERT H MANUAL SYSTEM



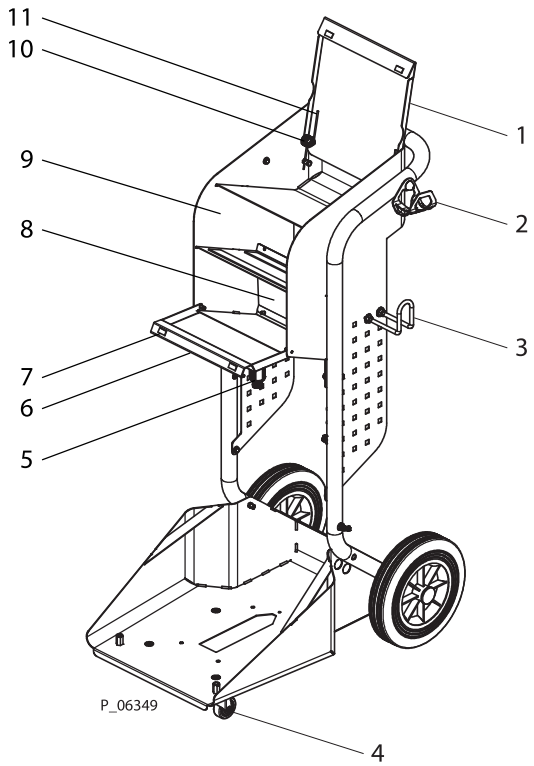
(without vibrator table)

Pos	K	Stk	Order no.	Designation
			2472292	Sprint 2 Expert H manual system (standard version)
			2472294	Sprint 2 Expert H manual system (USA version)
			2473766	Sprint 2 Expert H manual system with load cell (standard version)
			2473767	Sprint 2 Expert H manual system with load cell (standard version)
			2474781	Sprint 2 Expert H manual system with load cell and EtherCAT (standard version)
			2474782	Sprint 2 Expert H manual system with load cell and EtherCAT (USA version)
1		1	2322587	PEM-X1 manual gun
2			2466363	Sprint 2 hose set, 60 L
3			2466676	Powder hose set, d10-5.5 m POE
4		1		Mobile base
6		1	2466080	Quick-Link H injector

Pos	K	Stk	Order no.	Designation
7		1	2469304	WACON Sprint 2 Expert control unit
			9951116	Slow-acting fuse, 2A (included in WACON Sprint 2 Expert)
8		1	130215	Grounding cable, 10 m; 32.81 ft
9		1	241270	Mains cable (Europe)
9		1	241271	Mains cable (Switzerland)
9		1	264626	Mains cable (USA)
10		1	2460889	Filter, G1/4 5 µm with PC tank
Not included in the scope of delivery, please order separately:				
5		1	264268	Powder tank, 60 L
5		1	264224	Powder tank, 25 L
11		1	2466872	Spare parts case, Sprint 2 manual system
12		1	2331976	Spare parts starter set, X1 R round jet
13		1	2349959	Spare parts starter set, X1 F flat jet

♦ = wearing parts

13.5 MOBILE BASE

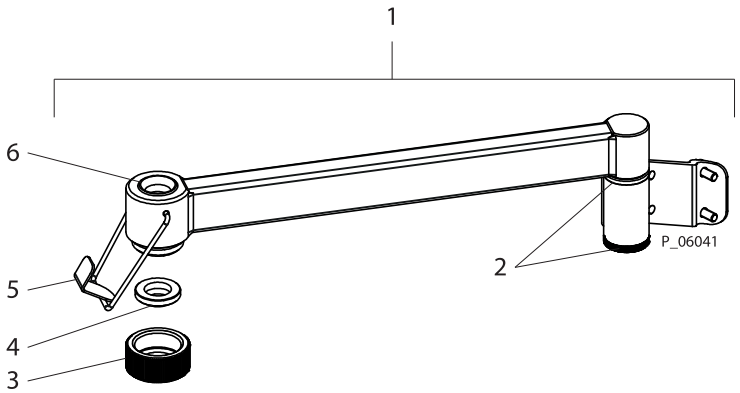


Pos	K	Stk	Order no.	Designation
1		1	2475465	Cover, storage compartment ET
2		1	2467408	Gun holder, ET
3		2	2467410	Hose holder
4		2	2467279	Swivel castor set
5		1	2460889	Filter, G1/4 5 µm with PC tank
6		1	2475466	Valve, storage compartment, ET set

Pos	K	Stk	Order no.	Designation
7		4	2475468	Block magnet, self adhesive, ET
8		1	2475467	Rear wall, storage compartment, ET set
9		1	2475458	Head module, Sprint 2 Expert ET
10		1	2475464	Hinge, cover, ET set
11		1	2475463	Springs, ET set
12		1	2467345	Quick connection coupling
12		1	2467346	Quick connection coupling (Switzerland)
13		1	2474824	Filter cup, PC
14		1	2474823	Filter element, 5 µm

♦ = wearing parts

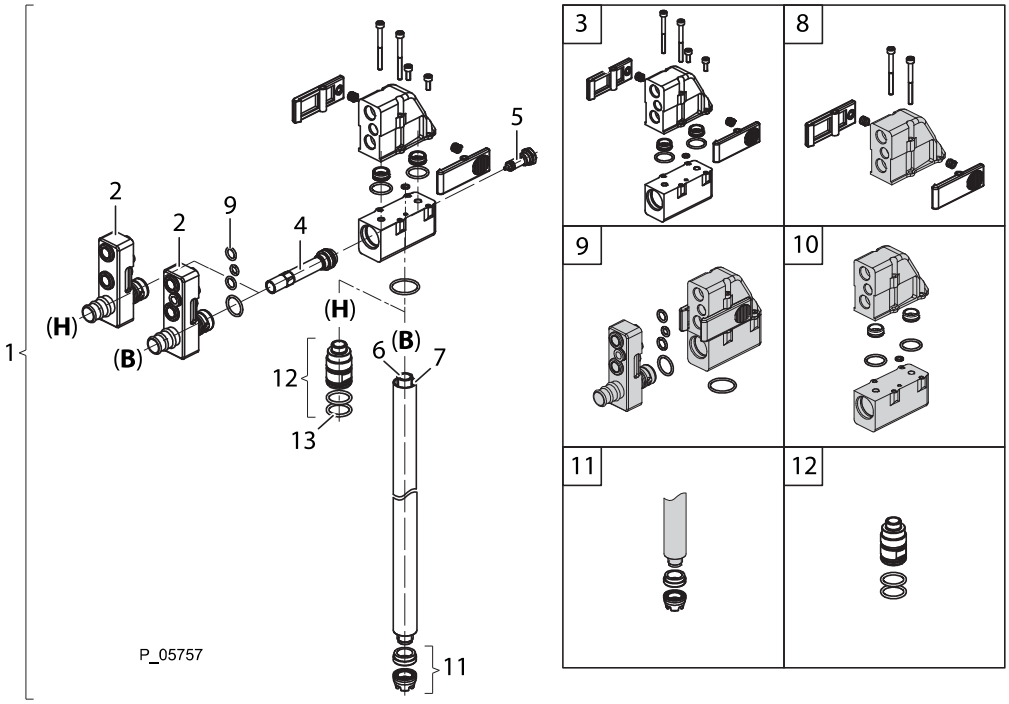
13.6 SWIVEL ARM SET



Pos	K	Stk	Order no.	Designation
1		1	2466049	Swivel arm set
2		1	2467414	Guide bush with nut
3		1	2467417	Wiper ring nut
4	♦	1	2467416	Scraper ring
5		1	2467418	Retaining clamp
6		1	2467415	Guide bush

♦ = wearing parts

13.7 QUICK-LINK POWDER INJECTOR

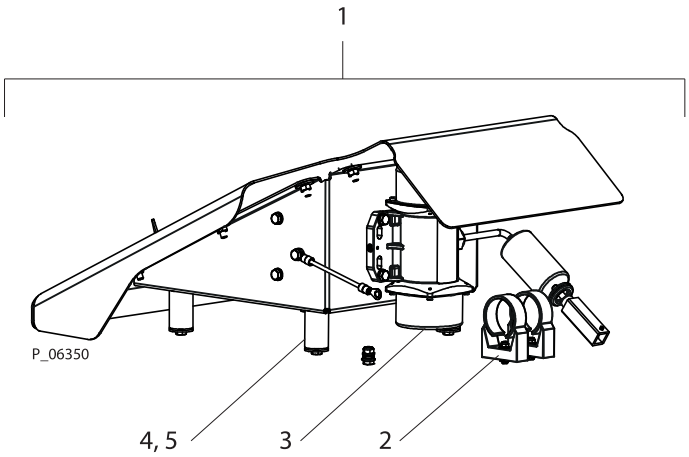


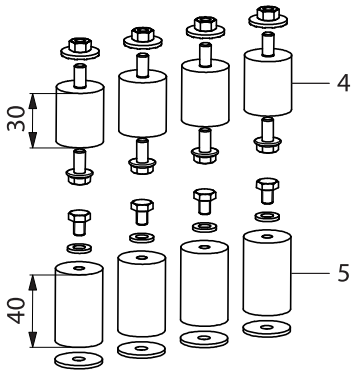
Pos	K	Stk	Quick-Link B order no.	Quick-Link H order no.	Quick-Link Hi-Coat B order no.	Quick-Link Hi-Coat H order no.	Designation
1		1	2466079	2466080	2467892	2467893	Powder injector
2		1	2468008	2468010	2468011	2468012	Coupling piece
3		1	2467983				Injector head set, comprising: – Basic injector body – 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	2466796				Locking latch set, comprising: – 2 pressure springs – 2 latches – 2 hexagon socket head cap screws, M3 x 035
9	♦	1	2466809				Quick Link injector O-ring set, comprising: – 2 O-ring, 7x1.5 – 1 O-ring, 5x1.5 – 1 O-ring, 13x1.5 – 1 O-ring, 18x1.5
10	♦	1	2466811				Non-return valve set, comprising: – 2 non-return valves, Inline – 2 O-rings, electrically conductive, 13x1.5 – 1 O-ring, 4x1
11	♦	1	2466792	--	2466792	--	Fluid ring crown set, comprising: – 1 fluid ring, D18 – 1 crown, D18
12		1	--	2468013	--	2468013	Suction connector set, comprising: – 1 suction connector – 2 O-rings, electrically conductive
13	♦	2	--	9974023	--	9974023	O-ring, electrically conductive

♦ = wearing parts

13.8 VIBRATION TABLE

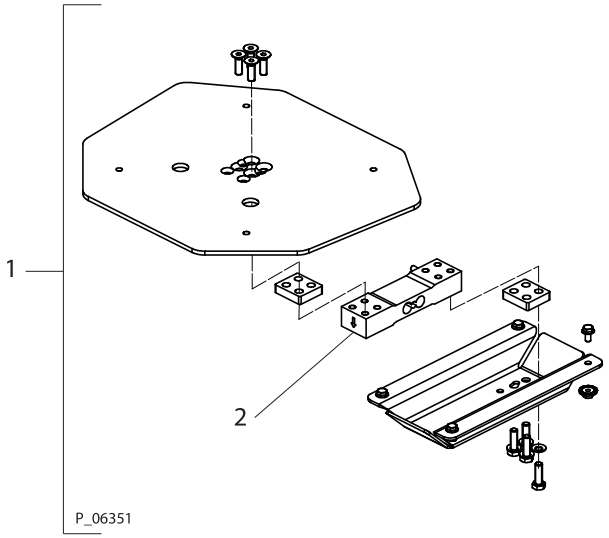




Pos	K	Stk	Order no.	Designation
1		1	2467275	Vibrator table, Sprint 2 230 V/50 Hz ET
1		1	2475513	Vibrator table, Sprint 2 115 V/60 Hz ET
1		1	2475516	Vibrator table, Sprint 2, 230 V/50 Hz, ET (for manual system with load cell)
1		1	2475517	Vibrator table, Sprint 2, 115 V/60 Hz, ET (for manual system with load cell)
2		2	2362487	Pipe clamp
3		1	2355337	Vibrator motor, 230 V/50 Hz ET
3		1	2355338	Vibrator motor, 115 V/60 Hz ET
4		1	2467272	Swivel element, ET set
5		1	2475518	Swivel element, scale, ET set

♦ = wearing parts

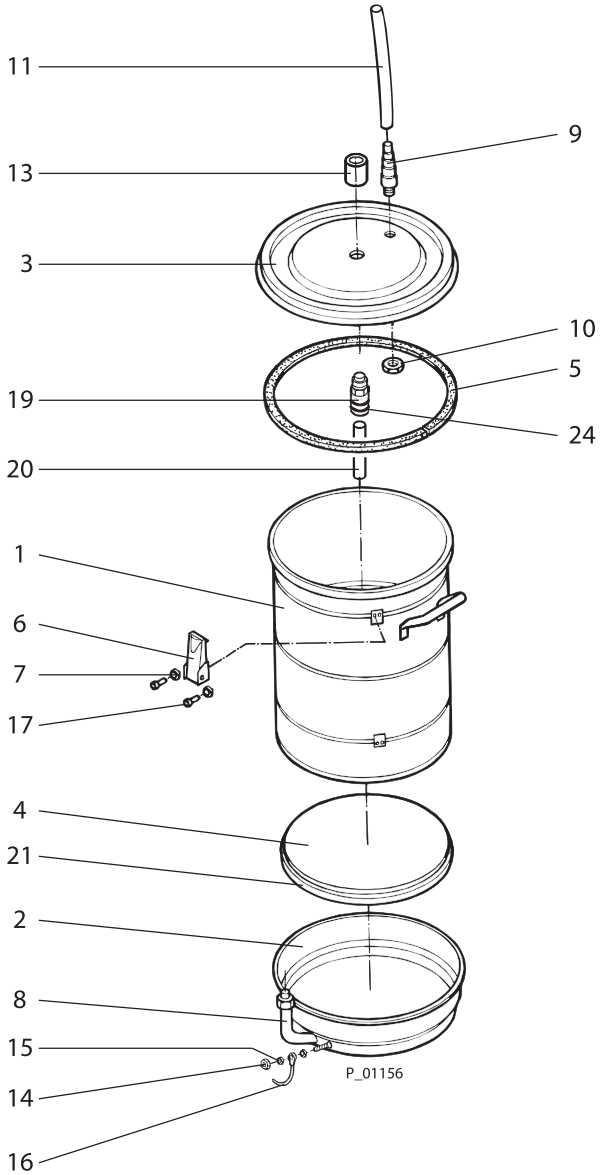
13.9 LOAD CELL



Pos	K	Stk	Order no.	Designation
1		1	2475514	Load cells, set
2		1	247515	Load cell, Sprint 2, ET

♦ = wearing parts

13.10 60 L/25 L TANK



Pos	K	Stk	Order no.	Designation
1		1	264268	Powder tank, 60 L
1		1	264224	Powder tank, 25 L
2		1	264215	Base housing
3		1	264381	Cover
4	♦	1	264382	Fluid bed
5	♦	1.10 m	9971527	Foam rubber seal
6		6	9994703	Spring clip
7		12	9900717	Socket cap screw
8		1	9992270	Quick coupling for screw-on connector
9		1	184336	Hose fitting
10		1	9910109	Hexagon nut

Pos	K	Stk	Order no.	Designation
11			9982058	Exhaust air hose, 17x3 mm
13		1	241372	Injector connection, complete
14		1	170533	Knurled nut
15		2	9920118	Washer
16		1	241276	Grounding cable, complete
17		12	9922102	Toothed lock washer
19		1	241376	Cable connection
20	♦	1	263357	Suction tube, 60 L
20	♦	1	264420	Suction tube, 25 L
21	♦	1.10 m	8324008	Base seal
24	♦	2	9971178	O-ring

♦ = wearing parts

14 DECLARATION OF CONFORMITY

14.1 EU DECLARATION OF CONFORMITY

Herewith we declare that the supplied version of:

Sprint 2 Expert manual unit

complies with the following guidelines:

2006/42/EC
2014/34/EU

Applied standards, in particular:

EN ISO 12100:2010
EN 1127-1:2019
EN ISO 80079-36:2016
EN ISO 80079-37:2016

Identification:

 II 3 D Ex h IIIB T100°C Dc

Declaration of conformity

The 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: 2471706

Order number 2468294
Edition 12/2024

Germany
J. Wagner GmbH
Otto-Lilienthal-Strasse 18
Postfach 1120
D-88677 Markdorf
Telephone: +49 (0)7544 5050
Fax: +49 (0)7544 505200
E-mail: ts-powder@wagner-group.com

Switzerland
Wagner International AG
Industriestrasse 22
CH-9450 Altstätten
Telephone: +41 (0)71 757 2211
Fax: +41 (0)71 757 2222

Document number 11525674
Version B

More contact addresses on the internet at:
www.wagner-group.com