



**Translation of the original
Operating manual**

Hardware

PrimaTech CCM

Version 02 / 2008



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1 ABOUT THESE INSTRUCTIONS

This operating manual contains information on the operation, repair and maintenance of the unit.

→ Always observe these instructions when operating the unit.

This equipment can be dangerous if it is not operated in accordance with this manual.

Compliance with these instructions constitutes an integral component of the warranty agreement.

1.1 LANGUAGES

The operating manual is available in the following languages:



Language:	Order No.	Language:	Order No.
German	0263971	English	0263972
French	0263973	Dutch	---
Italian	0263974	Spanish	0263975

1.2 WARNINGS, NOTES AND SYMBOLS IN THESE INSTRUCTIONS



Warning instructions in this manual point out particular dangers to users and equipment and state measures for avoiding the hazard.

These warning instructions fall into the following categories:



Danger - imminent danger. Non-observance will result in death, serious injury and serious material damage.

 SIHI_0100_GB	 DANGER
	<p>This line warns of the hazard! Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

Warning - possible danger. Non-observance can result in death, serious injury and serious material damage.

 SIHI_0103_GB	 WARNING
	<p>This line warns of the hazard! Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

Caution - a possibly hazardous situation. Non-observance can result in minor injury.

 SIHI_0101_GB	 CAUTION
	<p>This line warns of the hazard! Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

Caution - a possibly hazardous situation. Non-observance can cause material damage.

SIHI_0102_GB	CAUTION
<p>This line warns of the hazard! Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>	

Note - provide information on particular characteristics and how to proceed.

2 GENERAL SAFETY INSTRUCTIONS

2.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

- Keep these operating instructions to hand near the unit at all times.
- Always follow local regulations concerning occupational safety and accident prevention.



2.1.1 ELECTRICAL PLANT AND UNITS

- To be provided in accordance with the local safety requirements with regard to the operating mode and ambient influences.
- May only be maintained by skilled electricians.
- Must be operated in accordance with the safety regulations and electrotechnical regulations.
- Must be repaired immediately in the event of problems.
- Must be put out of operation if they pose a hazard.
- Must be de-energized before work is commenced on active parts.
- Secure the control unit against being switched back on without authorisation. Inform staff about planned work.
- Observe electrical safety regulations.

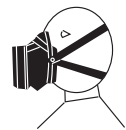


2.1.2 PERSONNEL QUALIFICATIONS

- Ensure that the unit is operated and repaired only by trained persons.

2.1.3 A SAFE WORK ENVIRONMENT

- Ensure that the floor of the working area is anti-static (measurement in accordance with EN 1081).
- Ensure that all persons within the working area wear anti-static shoes.
- Ensure that gloves that are being worn, are made of conductive material.
- The powder release must be electronically interlocked with the powder spray system exhaust equipment.
- Excess coating material (overspray) must be collected up safely.
- Ensure that there are no ignition sources such as naked flame, glowing wires or hot surfaces in the vicinity. Do not smoke.
- Maintain sufficient quantities of suitable fire extinguishers and ensure that they are serviceable.
- The operating company must ensure that an average concentration of powder paint in the air does not exceed 50% of the lower explosion limit (LEL = max. permitted concentration of powder to air). If no reliable LEL value is available, the average concentration may not exceed 10g/m³.



2.2 SAFETY INSTRUCTIONS FOR STAFF

- Always follow the information in these instructions, particularly the general safety instructions and the warning instructions.
- Always follow local regulations concerning occupational safety and accident prevention.
- Under no circumstances should persons with pacemakers be in the area where the high-voltage field between the spray gun and the workpiece to be coated builds up!



2.2.1 SAFE HANDLING OF WAGNER POWDER SPRAY UNITS

- Never point the powder spray gun at people.
- Before all work on the unit, in the event of work interruptions and functional faults:
 - Switch off the energy/compressed air supply.
 - Secure the powder spray gun against actuation.
 - Relieve the pressure from the powder spray gun and unit.
 - By functional faults: Identify and correct the problem, proceed as described in chap. "Trouble shooting".



2.2.2 EARTH THE UNIT

The electrostatic charge may, in certain cases, give rise to electrostatic charges on the device. These can involve with unloading transmitting or flame formation.

- Ensure that the device is grounded before each coating process.
- Earth the workpieces being painted.
- Ensure that all persons inside the working area are earthed, e.g. that they are wearing antistatic shoes.
- Grounding cables must be checked regularly to ensure that they are serviceable (see EN 60204).



2.2.3 PAINT HOSES

- Only use original Wagner powder hose.



2.2.4 CLEANING

- De-energize the unit electrically.
- Disconnect the pneumatic supply line.
- Relieve the pressure from the unit.
- Secure the control unit against being switched back on without authorisation.
- Only mobile industrial vacuum cleaners of design 1 (see EN 60335-2) may be used for getting rid of dust build-ups.

2.2.5 HANDLING OF POWDER LACQUER

- Take note of the processing regulations laid down by the manufacturer of the powder paint being used, when preparing or processing the powder.
- Take note of the manufacturer's advice and the relevant environmental protection regulations when disposing of powder paints.
- Implement the prescribed safety measures, in particular the wearing of safety glasses and safety clothing as well as the use of protective hand cream.
- Use dust masks or breathing apparatus.
- To ensure sufficient protection of health and the environment, only operate the device in a powder booth or at a spray wall with activated ventilation (exhaust air).



2.3 CORRECT USE

WAGNER accepts no liability for any damage arising from incorrect use.

- Use the unit only to work with the materials recommended by WAGNER.
- Operate the unit only as an entire unit.
- Do not deactivate safety equipment.
- Use only WAGNER original spare parts and accessories.



2.4 SAFETY FEATURES

Plates bearing information for the user have been attached to the work openings of the powder coating booth.
 The plate size corresponds to the standard category Ø 100 mm.
 The label plates, which must be attached, are shown below.



High voltage!
 In the control cabinet:
 (25 mm; 0.98 inches)
 voltage before main
 switch



Danger of crushing!



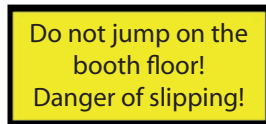
Explosive atmosphere!



Risk of tripping!



Forbidden for persons
 with a cardiac pacemaker!



Fire, open light and
 smoking prohibited!



Forbidden for unauthorized
 persons!



Wear electrostatically
 conductive footwear!



Follow the instructions in
 the operating manual!

3 PRODUCT LIABILITY AND WARRANTY

3.1 NOTES ON PRODUCT LIABILITY

As a result of an EC regulation, effective as from January 1, 1990, the manufacturer shall only be liable for his product if all parts come from him or are approved by him, and if the devices are properly fitted, operated and maintained.

If other makes of accessory and spare parts are used, the manufacturer's liability could be fully or partially null and void.

The usage of original WAGNER accessories and spare parts guarantees that all safety regulations are observed.

3.2 WARRANTY

This equipment is covered by the following manufacturing warranty.

We will at our discretion repair or replace free of charge all parts which within 24 months in single-shift, 12 months in 2-shift or 6 months in 3-shift operation from date of receipt by the Purchaser are found to be wholly or substantially unusable due to causes prior to the sale, in particular faulty design, defective materials or poor workmanship.

The terms of the warranty are met at our discretion by the repair or replacement of the unit or parts thereof. The resulting costs, in particular shipping charges, road tolls, labour and material costs will be borne by us except where these costs are increased due to the subsequent shipment of the unit to a location other than the address of the purchaser.

This warranty does not cover damage caused by:

Unsuitable or improper use, faulty installation or commissioning by the purchaser or a third party, normal wear, negligent handling, defective maintenance, unsuitable coating products, substitute materials and the action of chemical, electrochemical or electrical agents, except when the damage is attributable to us.

This warranty does not cover damage caused by:

Unsuitable or improper use, faulty installation or commissioning by the purchaser or a third party, normal wear, negligent handling, defective maintenance, unsuitable coating products, substitute materials and the action of chemical, electrochemical or electrical agents, except when the damage is attributable to us.

Components not manufactured by Wagner are subject to the warranty terms of the original maker.

The replacement of a part does not extend the warranty period of the unit.

The unit should be inspected immediately upon receipt.

To avoid loss warranty, any apparent defect should be notified to us or the dealer in writing within 14 days from date of sale of the unit.

The right to commission warranty services to a third party is reserved.

Warranty claims are subject to proof of purchase by submitting an invoice or delivery note. If an inspection finds damage not covered by the present warranty, the repair will be carried out at the expense of the purchaser.

Note that this warranty does not in any way restrict legally entitled claims or those contractually agreed to in our general terms and conditions.

J. Wagner AG

3.3 CE-CONFORMITY

Herewith we declare that the supplied version of

- CCM Prima, Order No. 0263070

complies with the following provisions applying to it:

- 2004/108/EC (Electro-magnetic compatibility (EMC) guideline)
- 94/9/EC (Atex-directive)
- 2002/95/EC (RoHs-directive)
- 2002/96/EC (WEEE-directive)

Applied standards, in particular:

- DIN EN 50177
- DIN EN 61241-0
- DIN EN 61241-1
- DIN EN 61000-6-1
- DIN EN 61000-6-2
- DIN EN 61000-6-3
- DIN EN 61000-6-4
- DIN EN 60529
- BGI 764

Identification:



CE Certificate of Conformity

The certificate is enclosed with this product. The certificate of conformity can be reordered from your WAGNER representative, quoting the product and serial number.

Part number:

PrimaTech CCM 0263850

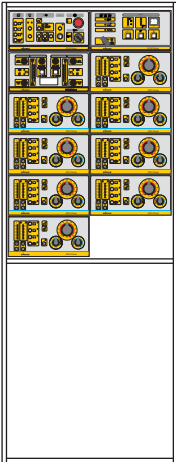
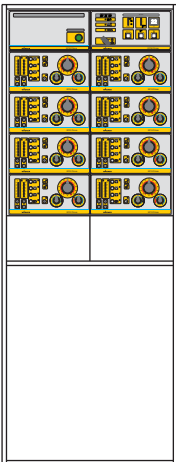
4 DESCRIPTION

4.1 FIELDS OF APPLICATION, USING IN ACCORDANCE WITH THE INSTRUCTIONS

The PrimaTech CCM Control Unit is used in automatic coating systems. The Control unit controls according to the model:

- Powder output quantity
- Powder atomization
- High voltage
- Current limit
- Reciprocator settings
- Gap controller

4.1.1 VERSIONS (EXAMPLES)

	<p>Basic model PrimaTech CCM with: CCM Prima Central controller GCM Prima Gap controller RCM Prima Reciprocator controller EPG Prima Gun controller</p>
	<p>Extension modul with: SCM Extension module GCM Prima Gap controller EPG Prima Gun controller</p>

4.2 SCOPE OF DELIVERY

Quantity	Part-No.	Description
1	0263070	PrimaTech CCM
The standard equipment includes:		
1	0263850	CE-Declaration of Conformity
1	0263971	Operating manual German
1	see Chapter 1.1	Operating manual in the local language



4.3 SPECIFICATIONS

4.3.1 TOTAL SYSTEM

Dimensions:	
High	1700 mm; 66.93 inches
Width	630 mm; 24.80 inches
Depth	660 mm; 25.98 inches
Weight	approx. 78 kg; 172 lb

Electrical:	
a) Used without ICC ...	
Mains power input voltage	85 VAC-250 VAC / 47-440 Hz
Input power	40 watt
b) Used with ICC ...	
Mains power input voltage	230 V \pm 10 % / 50-60 Hz
Protection class	IP 54
Temperature range	5-45°C; 41-113°F
Danger zone	EX II 3 D (Zone 22 in the rack with cover)

Pneumatics:	
Compressed air input pressure	0.6-0.8 MPa; 6-8 bar; 87-116 psi
Compressed air quality according to ISO 8573.1	3.5.2

	 WARNING
	<p>Outgoing air containing oil! Risk of poisoning if inhaled.</p> <p>→ Provide water-free and oil-free compressed air (quality standard 3.5.2 as per ISO 8573.1) 3.5.2 = 5 μm / +7°C; 44.6°F / 0.1 mg/m³.</p>

4.3.2 CCM PRIMA

Dimensions:	
High	136 mm; 5.35 inches
Width	270 mm; 10.63 inches
Depth	340 mm; 13.39 inches
Weight	approx. 8 kg; 17.6 lb

Electrical:	
Mains power input voltage	85 VAC-250 VAC / 47-440 Hz
Input power	40 watt
Protection class	IP 54
Temperature range	5-45°C; 41-113°F




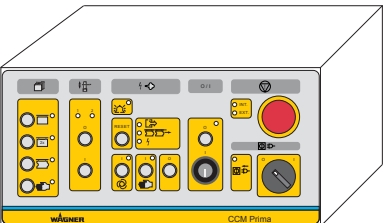
5 CONSTRUCTION AND INSTALLATION

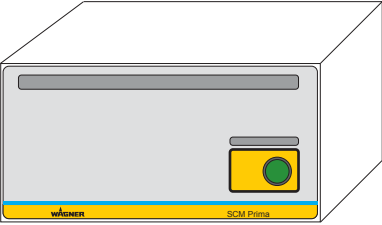
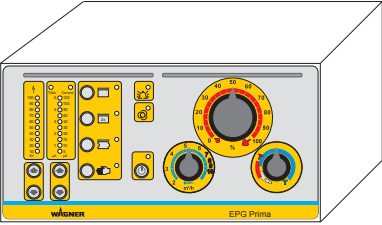
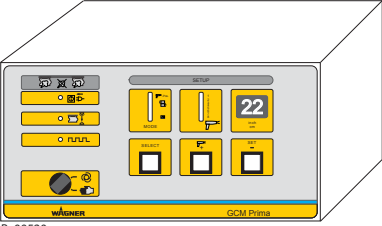
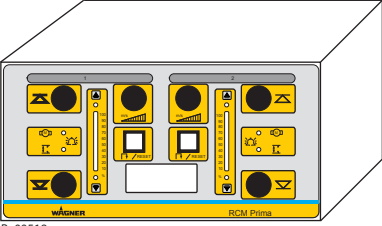

5.1 CONFIGURING THE PRIMATECH CCM SYSTEM

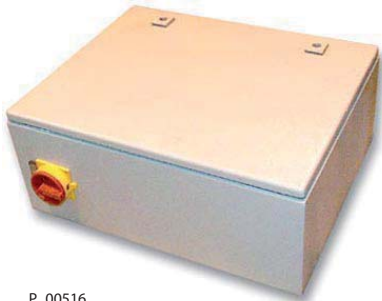
Based on the following table, you can configure the necessary components, dependent on the number of guns.

Item	Components	Quantity							
		2	4	6	8	10	12	14	16
	Corona Spray gun								
A	Rack	1	1	1	1	1	2	2	2
B	Metal sheet	9	7	5	3	-	10	8	6
C	CCM Prima Control unit	1	1	1	1	1	1	1	1
D	SCM Prima Control unit	0	0	0	0	1	1	1	1
E	EPG Prima Control unit	2	4	6	8	10	12	14	16
1	Connection set	2	4	6	8	10	12	14	16
8	Mains cable	1	1	1	1	1	1	1	1
G	Loop cable	0	0	0	0	1	1	1	1

5.2 OVERVIEW OF THE PRIMATECH CCM COMPONENTS

 <p>P_00103</p>	<p>Rack: Order No.0360090</p> <p>The Rack contains: Distributor block, complete Order No.0263325 consisting of: Straight, pluggable fitting Order No.9992743 Stopper Order No.9998201 Grounding cable, complete Order No.0264332</p> <p>Basic frame with six storage positions for:</p> <ul style="list-style-type: none"> ● one CCM Prima and a maximum of 11 control units ● a maximum of 12 control units (without CCM Prima)
 <p>P_00105</p>	<p>Metal sheet: Order No.0360238</p> <p>To close off free places if the holder is not fully loaded.</p> <p>The metal sheet contains: Star washer Order No.9922101 Fillister head screw Order No.9903328 Hex nut Order No.9910108</p>
 <p>P_00168</p>	<p>Cable clamp: Order No.0360239</p> <p>For securing the pneumatic hoses and electric cables.</p>
 <p>P_00176</p>	<p>CCM Prima Order No.00263070</p> <p>Central control and operating unit for all PrimaTech modules. Connections for:</p> <ul style="list-style-type: none"> ● 8 EPG Prima ● 1 GCM Prima Gap controller ● Interlocking for conveying equipment and booths ● 1 equipment plug „extension“ or 1 SCM Prima for a further 8 guns <p>A maximum of 8 spray guns can be operated without an SCM Prima extension module.</p>

 <p>P_00517</p>	<p>SCM Prima Order No. 0263071</p> <p>Extension module for 8 EPG Prima Universal control units. Using this, a further 8 guns can be operated in addition to the first 8 guns with the basic version.</p> <ul style="list-style-type: none"> ● 8 EPG Prima ● 1 GCM Prima Gap controller ● 1 equipment plug "extension" or 1 SCM Prima for a further 8 guns
 <p>P_00518</p>	<p>EPG Prima Order No. 0360010</p> <p>Universal control unit for Corona or Tribo powder spray guns</p> <p>One EPG Prima is needed for each gun.</p>
 <p>P_00520</p>	<p>GCM Prima Order No. 0263114</p> <p>Control unit to interrupt the coating process in the gaps between the individual workpieces.</p> <p>A GCM Prima can control a maximum of eight guns (EPG Prima).</p>
 <p>P_00519</p>	<p>RCM Prima Order No. 0263115</p> <p>Control unit for one or two EBA 1 or EBA 6 reciprocators.</p> <p>A frequency converter box ICC ... is needed in addition for the electric power supply.</p>
 <p>P_00515</p>	<p>GHCM 2007</p> <p>GHCM-S210-TD200 Order No. 3151269 Gap controller for up to 16 horizontally aligned guns.</p> <p>GHCM-S121-TD200 Order No. 3151341 Height controller for up to 16 vertically aligned guns.</p>



P_00516

- | | |
|--|-------------------|
| ICC 2075 | Order No. 0263121 |
| Frequency converter (0.75 kW) for 2 EBA 1 reciprocators. | |
| ICC 1075 | Order No. 0263122 |
| Frequency converter (0.75 kW) for 1 EBA 1 reciprocator. | |
| ICC2150 | Order No. 0263123 |
| Frequency converter (1.5 kW) for 2 EBA 6 reciprocators. | |
| ICC 1150 | Order No. 0263124 |
| Frequency converter (1.5 kW) for 1 EBA 6 reciprocator. | |



P_00106

- | | |
|-------------------|-------------------|
| Loop cable | |
| Length | |
| 0.55 m; 1.81 ft | Order No. 0241269 |
| 1.4 m; 4.59 ft | Order No. 0263249 |
| 10 m; 32.81 ft | Order No. 0263233 |

5.3 ASSEMBLING THE COMPONENTS



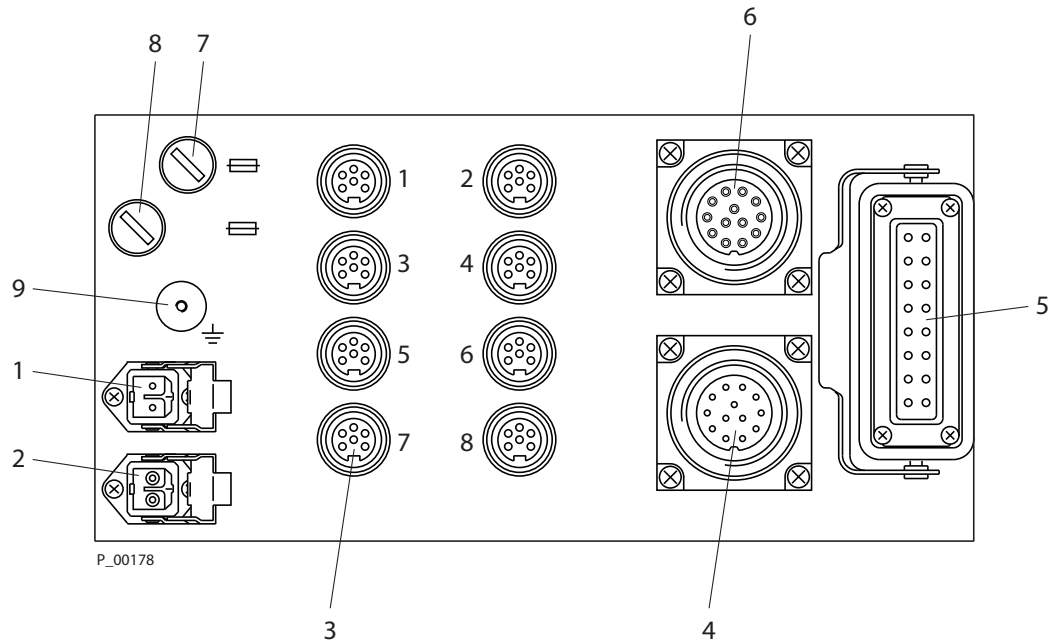
P_00177

Procedure:

1. Install rack (1) at the location.
2. Lift cover plate 2 on the rear of the rack 1 upwards and out and unhinge it.
3. Install CCMPrima(3) in the top compartment of rack 1 (Recommendation).
4. Install EPG Prima control units (4) from top to bottom.
5. Close of any empty rack compartments with metal sheets (5).
5. Hang cover plate 2 back in position on the back of the rack 1.

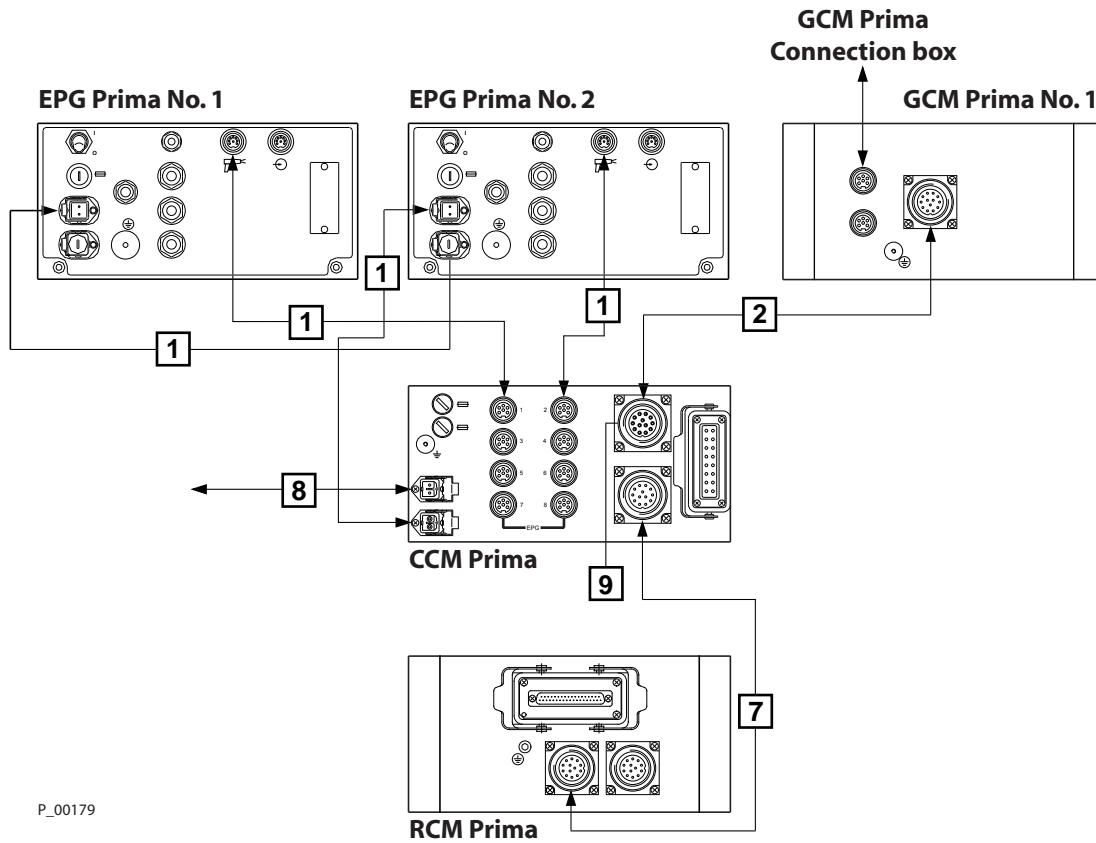
5.4 ELECTRICAL CONNECTIONS

5.4.1 CCM PRIMA CONNECTION SIDE



- 1 "Input power supply" equipment plug
- 2 "Output power supply" equipment socket
- 3 EPG Prima equipment sockets
- 4 "Extension" equipment plug
- 5 "External interlock" equipment socket
- 6 "Gap controller" equipment socket
- 7 Secondary fuse
- 8 Primary fuse
- 9 "Operating ground" grounding connection

5.4.2 ELECTRICAL CONNECTIONS AND CONNECTION CABLES (OVERVIEW)

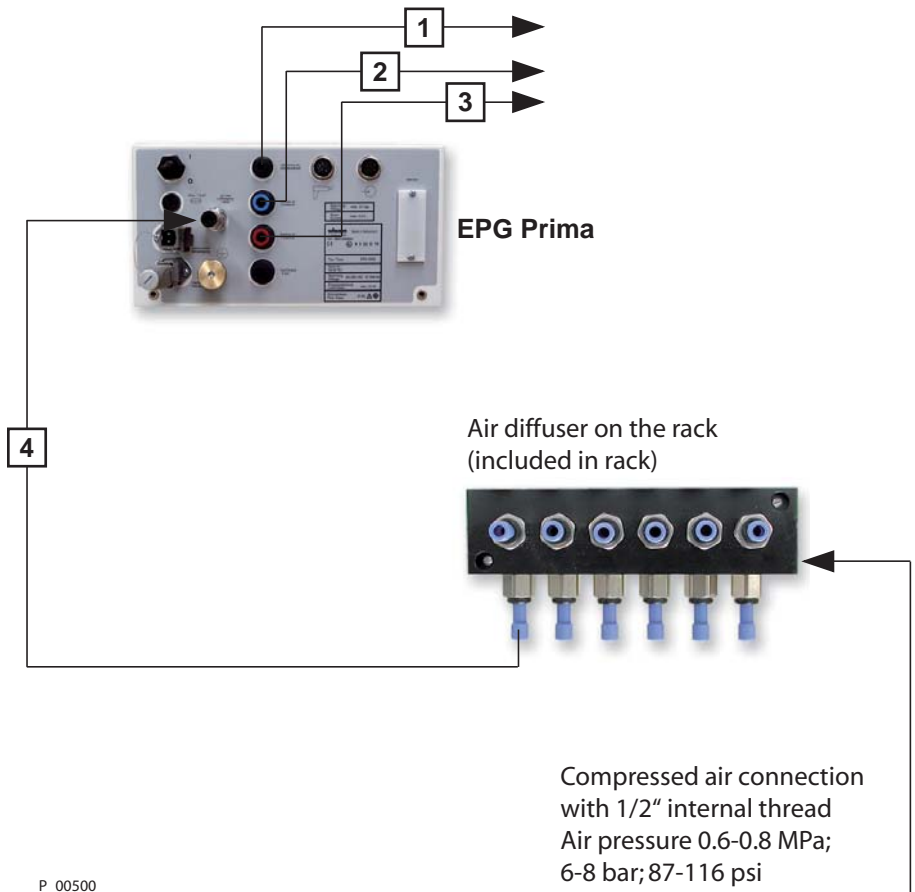


P_00179

The figure above is just to provide an overview. There is almost no limit to the number of possible configurations, because of the modular construction of the PrimaTech CCM system.

	<p>CCM / EPG (1) Connector CCM Prima-EPG Prima connection set consisting of: 1.2 m; 3.94 ft connection cable 0.55; 1.81 ft m mains cable</p>	<p>Order No. 0263092 Order No. 0263214 Order No. 0241269</p>
	<p>CCM / GCM (2) Connector 1.4 m; 4.59 ft CCM Prima-GCM Prima connection cable</p>	<p>Order No. 0263241</p>
	<p>GCM / GCM (3) Connector 1.2 m; 3.94 ft GCM Prima-GCM Prima connection cables</p>	<p>Order No. 0263253</p>
	<p>Extension (4) to light barrier, light curtain, conveyor clock generator, connection box and to 10 m; 32.81 ft GCM Prima-GCM Prima connecting cable</p>	<p>Order No. 0263252</p>
	<p>1.53 yd / 1.4 m (7) Extension set consisting of: 1.4 m; 4.59 ft cable extension 1.4 m; 4.59 ft mains extension</p>	<p>Order No. 0263094 Order No. 0263248 Order No. 0263249</p>
	<p>10.94 yd / 10 m (7) Extension set consisting of: 10 m; 32.81 ft cable extension 10 m; 32.81 ft mains extension</p>	<p>Order No. 0263093 Order No. 0263232 Order No. 0263233</p>
	<p>Mains cable (8) Europe Switzerland USA Japan Grounding cable for Japan</p>	<p>Order No. 0241270 Order No. 0241271 Order No. 0264626 Order No. 0264625 Order No. 0236219</p>
	<p>Short circuit insert (9) Short circuit insert (contained in the CCM Prima) must be used on the CCM Prima equipment socket if no gap controller is connected</p>	<p>Order No. 0263217</p>

5.4.3 PNEUMATIC CONNECTIONS AND HOSES



P_00500

Hose 4/6, black (1) Order No. 9982079	Connection hose between control units and spray guns. Available by the yard/meter.
Hose 6/8, blue (2) Order No. 9982062	Dosing air hose from the EPG Prima to the powder injector.
Hose 6/8, red (3) Order No. 9982063	Feed air hose from the EPG Prima to the powder injector.
Hose 6/8, green (4) Order No. 9982077	Fluid air hose from the air diffuser to the EPG Prima.

5.5 GROUNDING

For safety reasons, the CCM Prima and/or the PrimaTech CCM System must be correctly grounded.

Wagner recommends the use of copper cable of at least 0.16 in² / 4 mm² with sufficient mechanical stability.

It is important for system security and to achieve an optimum coating, that all system components such as workpieces, conveyors, control unit, color supply, control unit and booth or spray wall are perfectly grounded.

A poorly grounded workpiece causes:

- dangerous electric charging of the workpiece
- very bad wrap around
- uneven coating
- back-spray on the guns, i.e. contamination.

Requirements for a good grounding and coating are:

- conducting suspension for the workpiece that is to be coated
- grounding of the powder coating booth, transport and suspension equipment to be provided on site, in accordance with the corresponding Operating manuals or the definitions laid down by the manufacturer.
- regular cleaning of powder deposits from the hangers
- a grounding resistance for the workpiece of a maximum of 1 MW (mega ohm)
- grounding cable connected to the controller module or control cabinet.

If hooks or other hanger parts do not have all the paint removed, ignitable sparks can occur between workpiece and hangers. These sparks can cause strong radio frequency interferences.

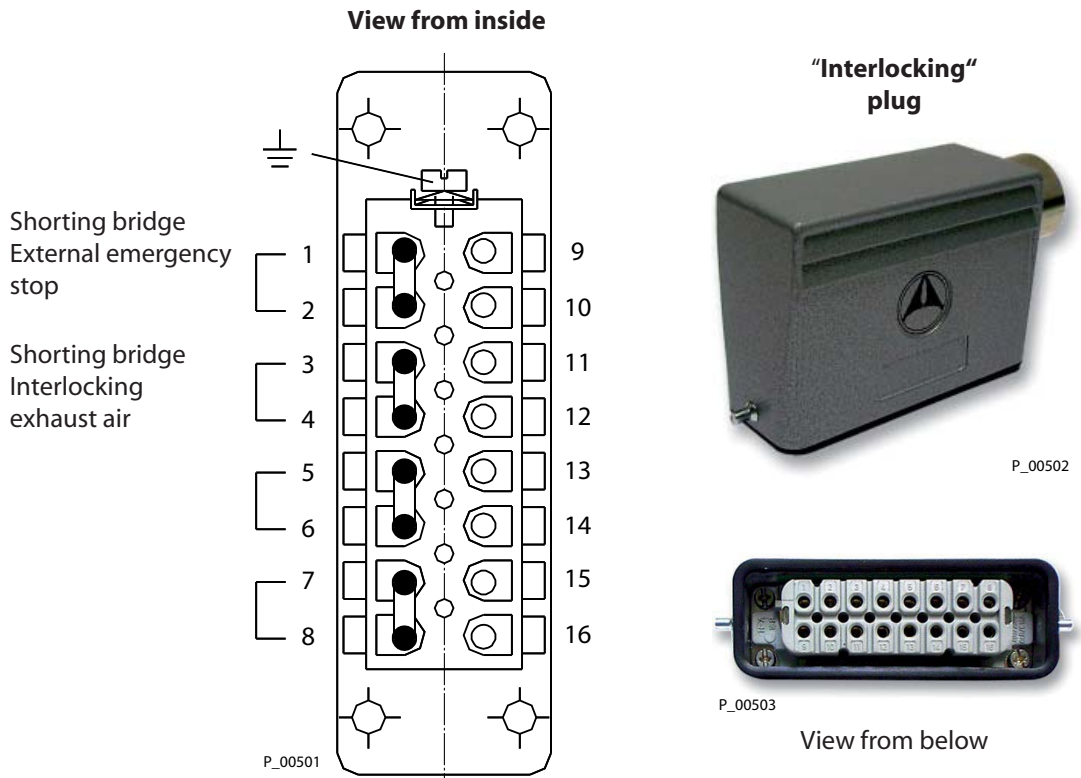
5.6 INTERLOCKING

5.6.1 PRIMATECH CCM SYSTEM WITHOUT EXTERNAL INTERLOCKING

CAUTION
<p>Exhaust air interlock!</p> <ul style="list-style-type: none"> → The exhaust air interlock must be achieved using the shorting bridges 3 and 4. → If that is not possible, the mains socket on the CCM Prima must be electrically interlocked with the exhaust air equipment.

The CCM Prima control unit is delivered with the “Interlocking” plug installed.

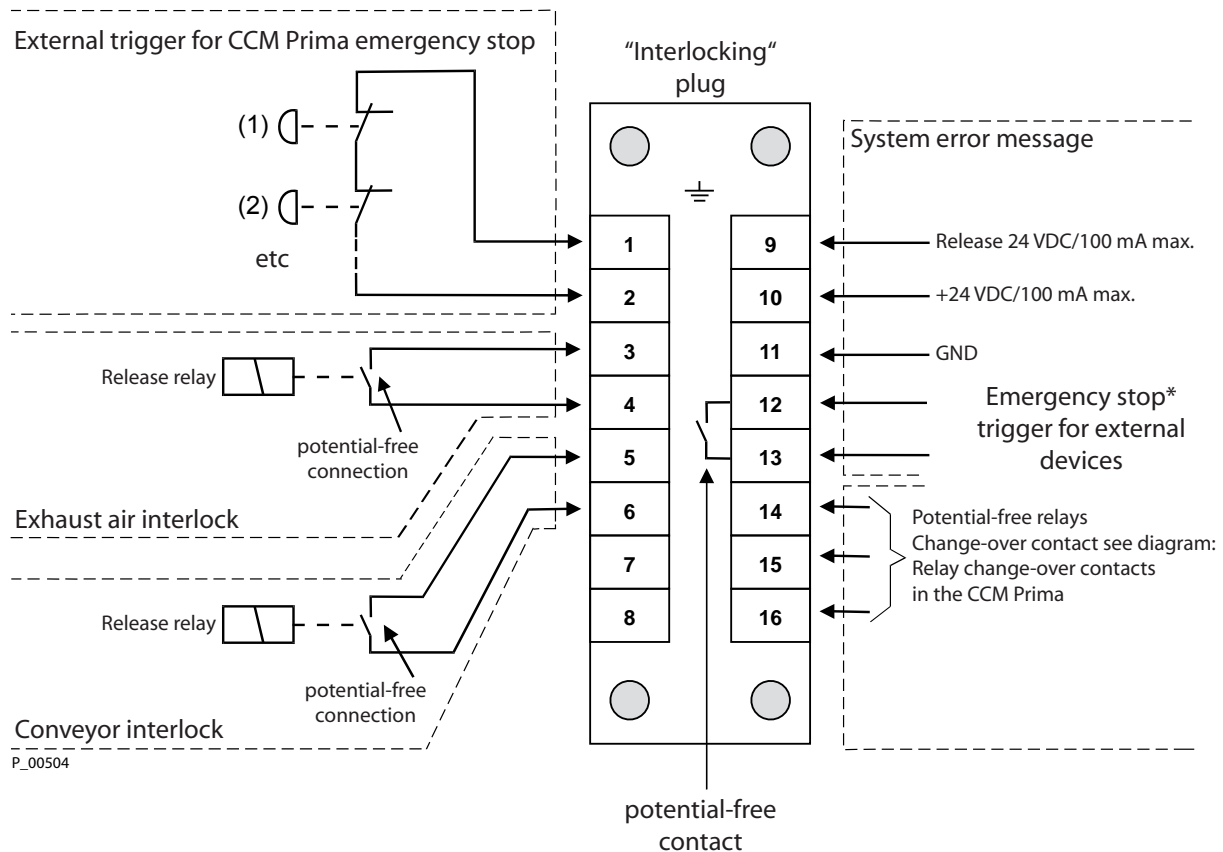
All interlocks are bridged, as shown below.



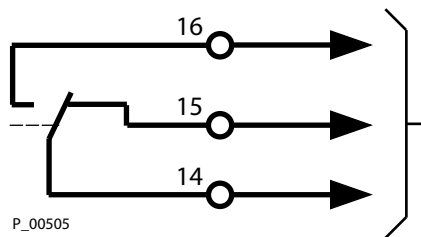
5.6.2 PRIMATECH CCM SYSTEM WITH EXTERNAL INTERLOCKING

<h2 style="margin: 0;">CAUTION</h2>
<p>Equipment damage!</p> <ul style="list-style-type: none"> → “Interlocking” connector plug: Pins 1 to 11 only feed 24 VDC control voltage and are supplied from the CCM Prima. Applying an external voltage to these pins destroys the CCM Prima. → Pins 12 and 13 are used to trigger the external emergency stop function. Maximum permitted contact load is 220 V / 1 A.

Plug pin assignment:



* The switch is closed between pin 12 and pin 13 during normal operation. The switch is opened if the emergency stop button is operated.

Diagram: Relay - change-over contact in the CCM Prima:**Maximum contact load:**

- Switching power max. 20 W / 40 VA
- Switching voltage max. 48 VDC
- Switching current max. 1 A

As shown:

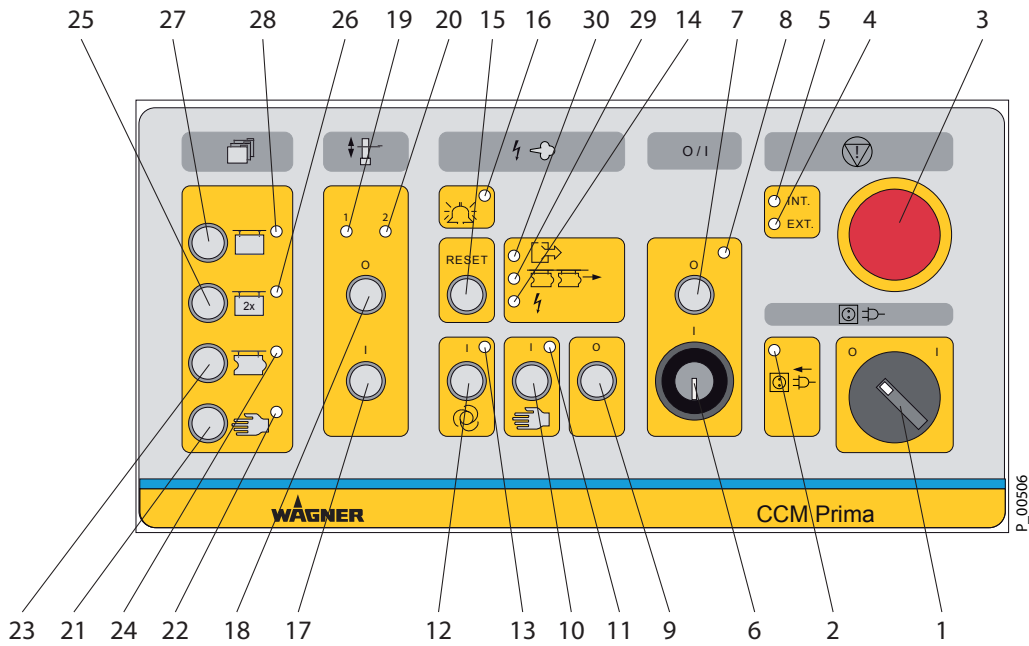
No error message, system OK

6 START UP

	<h3>! WARNING</h3>
	<p>Incorrect installation/operation! Risk of injury and damage to equipment</p> <p>→ When putting into operation and for all work, read and follow the operating instructions and safety regulations for the additionally required system components.</p>

6.1 PREPARING FOR COMMISSIONING

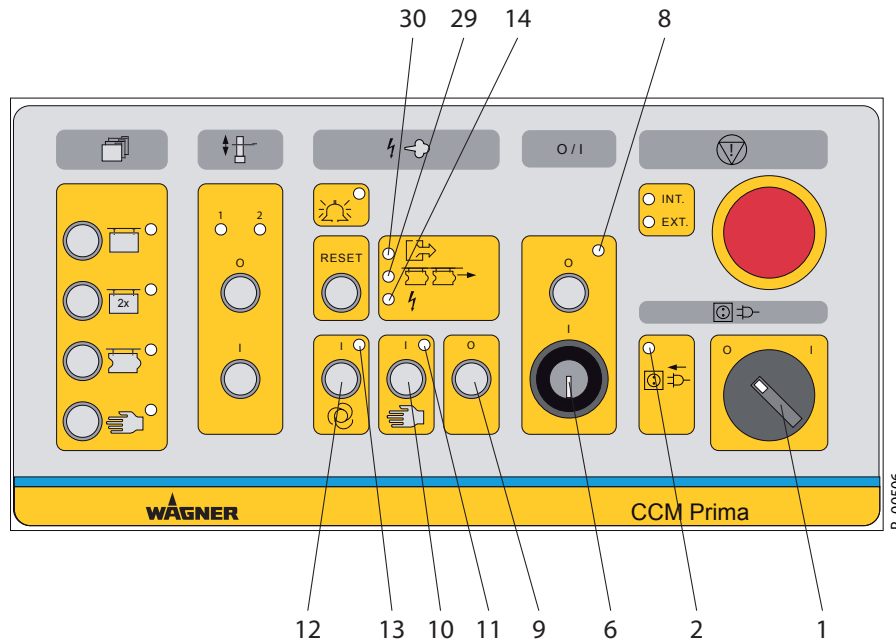
6.1.1 CONTROL PANEL FROM THE CCM PRIMA CENTRAL CONTROL UNIT



P_00506

- | | | | |
|----|-------------------------------------|----|---|
| 1 | Main switch | 16 | "Fault" indicator |
| 2 | "Mains supply" indicator | 17 | "Start reciprocators" button |
| 3 | "Emergency stop" button | 18 | "Stop reciprocators" button |
| 4 | "External Emergency stop" indicator | 19 | "Reciprocator 1 in operation" indicator |
| 5 | "Internal Emergency stop" indicator | 20 | "Reciprocator 2 in operation" indicator |
| 6 | "System ON" key switch | 21 | "Manual setting recipe" button |
| 7 | "System OFF" button | 22 | "Manual setting recipe" indicator |
| 8 | "System in operation" indicator | 23 | "Profile parts recipe" button |
| 9 | High voltage/powder "OFF" | 24 | "Profile parts recipe" indicator |
| 10 | "Start manual" button | 25 | "Post-coating recipe" button |
| 11 | "Ready manual" indicator | 26 | "Post-coating recipe" indicator |
| 12 | "Start automatic" button | 27 | "Surface parts recipe" button |
| 13 | "Ready automatic" indicator | 28 | "Surface parts recipe" indicator |
| 14 | High voltage/powder "ON" indicator | 29 | "Conveyor running" indicator |
| 15 | "Fault reset" button | 30 | "Booth exhaust air" indicator |

6.2 START UP THE SYSTEM



Procedure:

1. Switch on the power supply with main switch (1) on the CCM Prima control unit: Display (2) lights up.
2. Switch on the system by turning key switch (6) in a clockwise direction: Display (8) "System in operation" lights up. The key can be removed.
3. Ensure fluidization of the powder container.

The further procedure is dependent on the selected operating mode (manual or automatic).

How to proceed with "Manual" operating mode:

4. Switch on the boot exhaust air and wait until full suction capacity has been reached and the "Booth exhaust air" indicator 30 lights up.
5. Press button 10 "Manual start". The indicators 11 "Manual ready" and 14 "High voltage/ Powder ON" light up.
6. Please refer to Chapter 7.1 "Setting the powder quantity" for the further procedure.

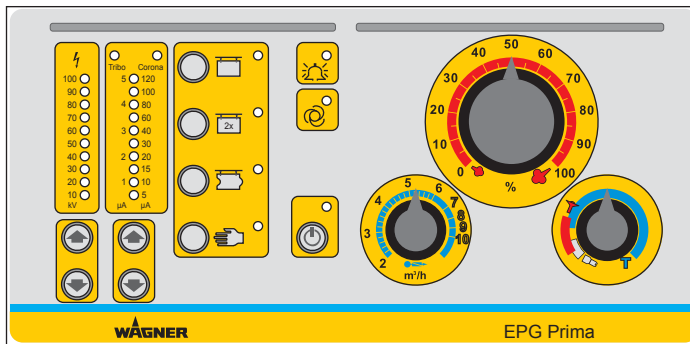
How to proceed with "Automatic" operating mode:

5. Switch on the boot exhaust air and wait until full suction capacity has been reached and the "Booth exhaust air" indicator 30 lights up.
6. Press button 12 "Automatic start". "Ready automatic" indicator (13) lights up.
7. The guns can now be switched on and off with the conveyor interlock. The displays 14 "High voltage/Powder ON" and 29 "Conveyor running" light up.

7. OPERATION

7.1 SETTING THE ELECTROSTATIC AND THE POWDER QUANTITY

The electrostatic and the powder quantity are set at the individual EPG Prima control units.



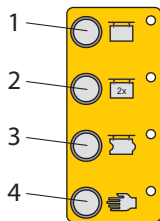
P_00507
Setting the electrostatic

Setting the powder quantity

7.2 RECIPES

7.2.1 SETTING AT THE CCM PRIMA

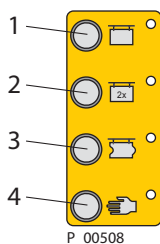
The recipes from all the connected EPG Prima units can be adjusted together from the CCM Prima.



- Surface parts (1)
- Post-coating (2)
- Profile parts (3)
- Manual setting (4)

7.2.2 SETTING AT THE EPG PRIMA

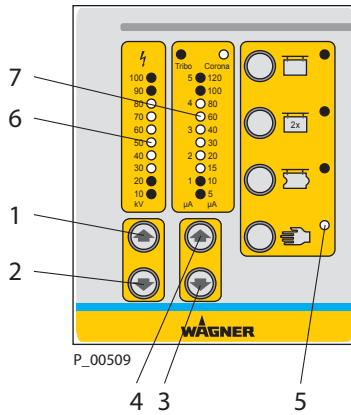
The EPG Prima control unit has 4 pre-defined recipes for the Corona gun. The factory settings for these recipes are as follows.



- | | | |
|----------------------|-------|--------|
| ● Surface parts (1) | 80 kV | 120 µA |
| ● Post-coating (2) | 50 kV | 80 µA |
| ● Profile parts (3) | 60 kV | 60 µA |
| ● Manual setting (4) | 80 kV | 100 µA |

7.3 MODIFYING AND SAVING CORONA RECIPES

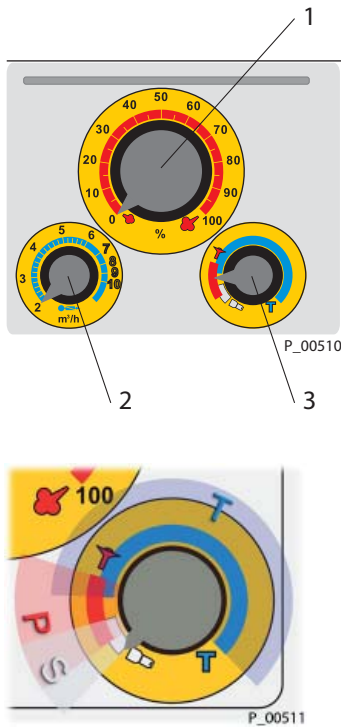
Procedure:



1. Increase or decrease the high voltage with button 1 or 2.
2. Increase or decrease the current limiting with button 3 or 4.
3. The unit has switched to manual setting recipe 5.
4. Press and hold the recipe button until the middle 6 diodes light up on both LED displays 6 and 7.
5. The new values are now added to this recipe and are retained, even if the control unit is switched off.

7.4 SETTING THE POWDER QUANTITY

Procedure:



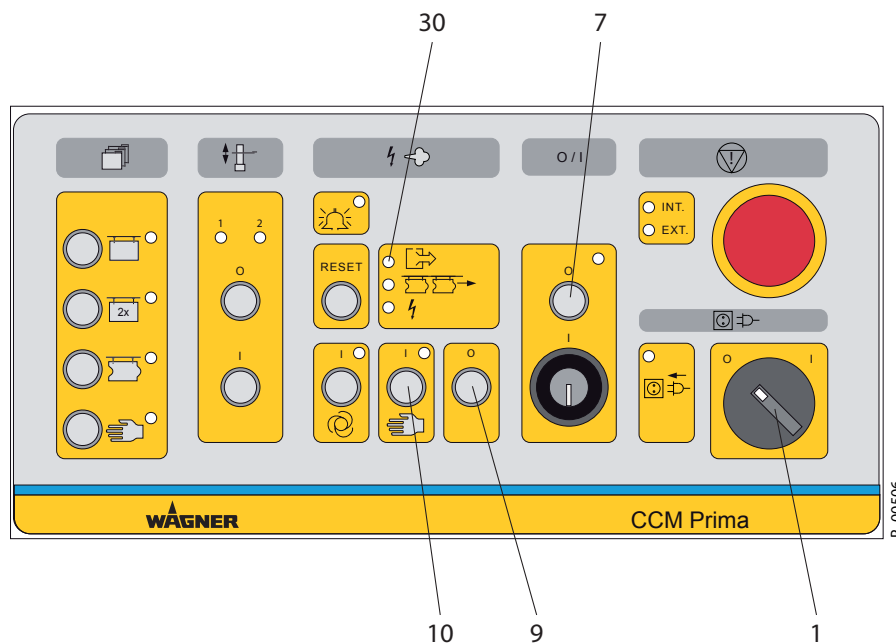
1. Setting is done in automatic mode.
The guns are in the booth and the exhaust air must be switched on.
2. Adjust the overall air quantity with the rotary regulator 2. The overall air quantity influences the powder feed speed.
The optimum powder feed speed is dependent on the system configuration, the type of powder and above all, in the cross section of the powder feed hose.
If the feed speed is too slow, the charged powder starts to pulse.
If the speed is too high, the powder doesn't stay adhered to the object to be coated any more.
With standard powder types, we recommend that the overall air quantity is set between 2 and 6 m³/h. You will find more information in the powder injector Operating manual.
3. The powder quantity can be adjusted using the rotary controller 1 between 0 and 100%.
4. The gun air can be adjusted using the rotary controller 3.
Please refer to the spray gun Operating manual.

S Adjusting range for a column nozzle
 P Adjusting range for a deflector cone
 T Adjusting range for the Tribo air

7.5 SWITCH COATING OFF

HINT:

The spray guns and the powder-conveying parts must be blown through each time there is a break in work.



Procedure:

1. Switch off powder feed with button 9 "High voltage/Powder OFF":
The booth exhaust air remains switched on and display 30 stays on.
2. Switch off fluidization.
3. Pull the powder injectors out of the feed system so that no more powder can be conveyed.
4. Press button 10 "Manual start": The spray guns are blown out empty.
5. Switch the system off with button 7 "System OFF".

The PrimaTech CCM System can now be switched off with main switch 1.

7.6 COLOR CHANGE AND CLEANING THE SYSTEM (WITH CLEANING RECIPE)

In the case of a color change, powder residues must be thoroughly removed from all the powder-conveying parts throughout the complete coating system.

When a thorough cleaning of the booth is carried out, an empty container should be made available for the powder that is reclaimed from the booth.

7.6.1 GENERATING THE CLEANING RECIPE AT THE EPG PRIMA

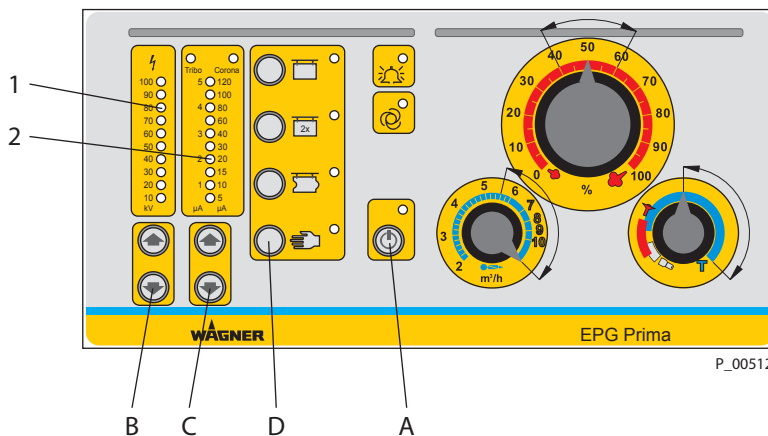
The cleaning recipe is intended to provide optimum cleaning of the powder injector as well as the gun's high-voltage electrode, in combination with the cleaning (impulse-flushing) of the powder center.

The cleaning recipe only has to be generated once at each EPG Prima and can then always be used again.

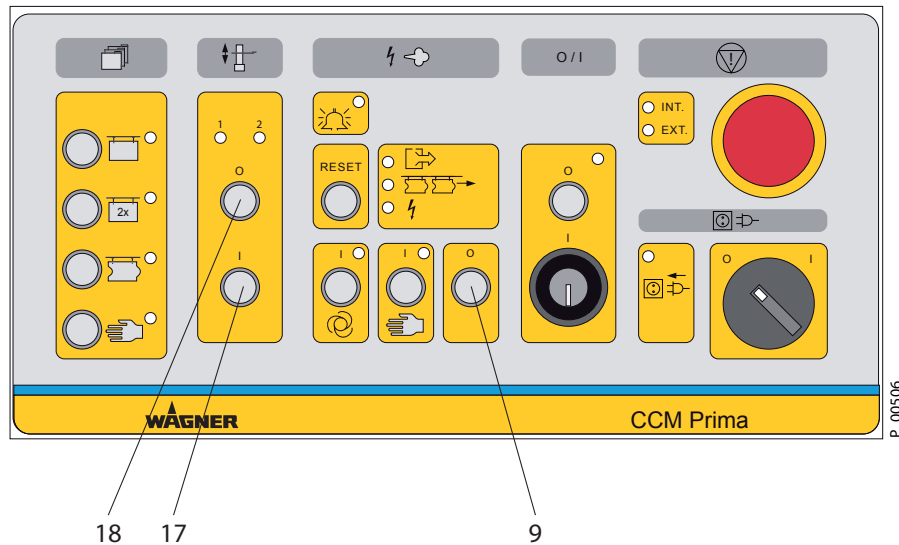
The steps necessary for the generation of a cleaning recipe are described in the following.

Procedure:

1. Switch the EPG Prima control unit on with button A.
2. Select any recipe at the EPG Prima (Recommendation: hand icon D).
3. Set the electrostatic (kV, μA) to the lowest level with buttons B and C (10 kV, 5 μA).
4. Save the settings on the selected recipe button. Press and hold the recipe button until the middle 6 diodes light up on both bar graph LED displays 1 and 2. Saving recipes is described in detail on the EPG Prima Operating manual.

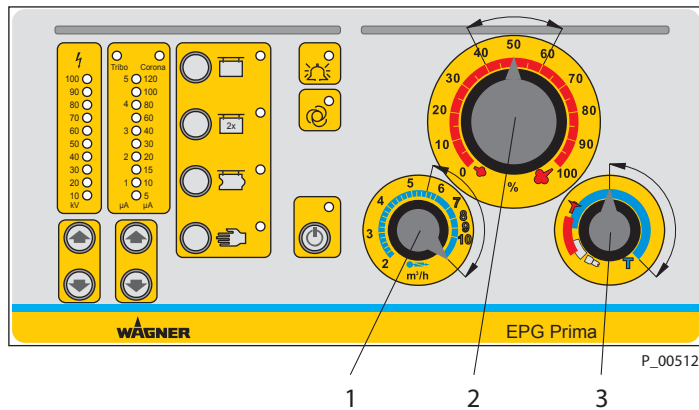


7.6.2 CLEANING THE POWDER FEED TO THE GUN

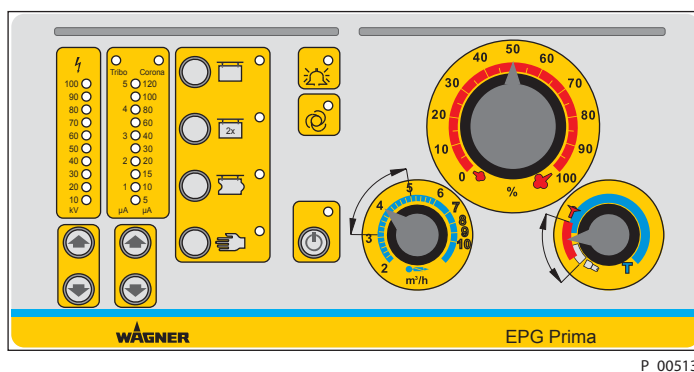


Procedure:

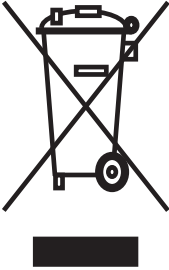
1. Switch off the powder feed to the gun with button 9 "High voltage/Powder OFF" at the CCM Prima.
2. Switch off the stroke movement with button 18 "Stop reciprocators".
3. Move the guns to the cleaning position.
4. Move the suction system in the powder center up out of the powder container.
5. Remove the powder container from the vibrator table.
6. Clean external suction tube with compressed air.
7. Set the air quantity controller at all EPG Prima as per the figure shown here.
 - Set the total air at rotary knob 1 in the indicated range.
 - Hose lengths up to 6 m: 6m³/h
 - Hose lengths greater than 6 m: 10m³/h - maximum
 - Set the powder quantity setting at rotary knob 2 in the scale value range 40 - 60 (indicated range)
 - Set the atomizing air at rotary knob 3 in the indicated range.





8. Call the cleaning recipe at all EPG Prima (see Chapter 7.6.1).
9. Switch on guns at CCM Prima..
10. Activate the impulse flushing (if available) in the powder center.
11. Once the cleaning process is complete (impulse flushing), switch guns off with button 9 "High voltage/Powder OFF".
12. Switch stroke movement back on again with Button 17 "Start reciprocators" and move the guns back to the work position.
13. Call the partial-coating recipe again and set the air quantity controller back to the original value (see example below).



7.7 DISPOSAL

Note	
	<p>Do not dispose of waste electrical equipment with the household refuse!</p> <p>In accordance with European Directive 2002/96/EC on the disposal of waste electrical equipment and its implementation in national law, this product may not be disposed of with the household refuse, but must rather be recycled in an environmentally correct manner. Your waste Wagner electrical device will be taken back by us or our representatives and disposed of environmentally correctly. Please contact one of our service points or one of our representatives or us directly to this purpose.</p>

8 RECTIFICATION OF MALFUNCTIONS

	 DANGER
	<p>Incorrect maintenance/repair! Danger to life and equipment damage.</p> <p>→ Maintenance, repairs or the exchange of units or parts there of must be carried out by trained personnel, outside the danger areas.</p>

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8.1 ERROR DISPLAYS AT THE CCM PRIMA

Hint:

A fault can also be triggered by one of the modules integrated in the controller (EPG Prima, RCM Prima, etc.).

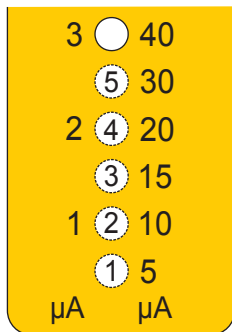
Procedure:

- Check which unit has triggered the fault.
- Eliminate the fault at the corresponding unit by reference to the unit's Operating manual.
- Press the Reset button on the CCM Prima.

Malfunction	Cause	Rectification
Operating display does not light up	<ul style="list-style-type: none"> ● Mains supply is not switched on ● No power supply ● Fuse 2/1 AT is defective 	<ul style="list-style-type: none"> ● Switch mains supply on. If necessary, release the emergency stop button ● Check the power supply ● Replace the fuse
Error display lights up	<ul style="list-style-type: none"> ● One of more devices has a fault ● The mains power switch has been operated at an EPG, during normal operation 	<ul style="list-style-type: none"> ● Locate and eliminate the malfunction at the corresponding device (see the Operating manuals for the devices) ● Press the Reset button
High voltage and powder switch do not switch even when released through the CCM	<ul style="list-style-type: none"> ● Gap controller short circuit plug has not been set 	<ul style="list-style-type: none"> ● See Chapter: 5.4.1 "CCM Prima Connection side", Item 6

Malfunction	Cause	Rectification
System cannot be started with the key switch (LED 4 or 5 lights up)	<ul style="list-style-type: none"> Internal or external emergency stop has been operated Emergency stop bridges in the interlocking plug are not in place Plug has not been inserted in the "External controller" equipment socket 	<ul style="list-style-type: none"> Release emergency stop button See Chapter: 5.6.2 "PrimaTech CCM system with external interlocking" See Chapter: 5.4.1 "CCM Prima Connection side", Item 4

8.2 FAULT DISPLAYS AT THE EPG PRIMA



P_00514

Error message overview:

If LED 1 lights up:	Contact the Wagner Service Team
If LED 2 lights up:	Contact the Wagner Service Team
If LED 3 lights up:	Tribo current was lower than the set limit value for more that 10 seconds
If LED 4 lights up:	Tribo current higher than 12 μA (ATEX: Switch the unit off)
If LED 5 lights up:	Grounding monitoring fault

8 SPARE PARTS

8.1 HOW TO ORDER SPARE PARTS

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

Part Number, description and quantity

The quantity need not be the same as the number given in the „Quantity“ column. This number merely indicates how many of the respective parts are used in each subassembly.



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

- Address for the invoice
- Address for delivery
- Name of the person to be contacted in the event of any queries
- Type of delivery required (air freight or mail, sea route or overland route, etc.)

Marks in spare parts lists

Note to column „K“ in the following spare parts lists.

- ◆ = Wearing parts
Note: No liability is assumed for wearing parts
- = Not part of standard equipment, available, however, as additional extra.

	 WARNING
	<p>Incorrect maintenance/repair! Risk of injury and damage to equipment.</p> <ul style="list-style-type: none"> → Only a WAGNER service center or special trained personnel may carry out repairs and replace parts. → Before all work on the unit and in the event of work interruptions: <ul style="list-style-type: none"> - Switch off the energy/compressed air supply. - Ensure that all system components are grounded. - Secure the control unit against being switched back on without authorisation. → Observe the operating and service instructions when carrying out all work.

8.2 CCM PRIMA CONTROL UNIT

Item	K	Quantity	Order No.	Description
			0263070	CCM Prima Control unit
			0264900	Spare parts set (fuses, contained in the CCM Prima)
			9951116	2A Fuses
			9951117	1A Fuses

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