TOPFINISH DD10

Pneumatic Double Diaphragm Pump

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

Translation of the Original Operating Manual

Version 12/2017
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1 ABOUT THESE INSTRUCTIONS

1.1 PREFACE

The operating manual contains information about safely operating, maintaining, cleaning and repairing the device.

The operating manual is part of the device and must be available to the operating and service personnel.

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

This equipment can be dangerous if it is not operated according to the instructions in this operating manual.
1.2 WARNINGS, NOTICES AND SYMBOLS IN THESE INSTRUCTIONS

Warning instructions in this operating manual highlight particular dangers to users and to the device and state measures for avoiding the hazard. These warning instructions fall into the following categories:

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

⚠️ **WARNING**
Potential risk.
Non-observance can result in death or serious injury.

⚠️ **CAUTION**
Potentially hazardous situation.
Non-observance may result in minor injury.

⚠️ **NOTICE**
Potentially hazardous situation.
Non-observance may result in damage to property.

Notice
Provides information about particular characteristics and how to proceed.

Explanation of warning:

⚠️ **LEVEL OF DANGER**

This notice warns you of a hazard!
Possible consequences of not observing the warning instructions.

→ The measures for preventing the hazard and its consequences.

1.3 LANGUAGES

The operating manual is available in the following languages:

<table>
<thead>
<tr>
<th>Language</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>2366669</td>
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</table>

Translation of the Original Operating Manual

<table>
<thead>
<tr>
<th>Language</th>
<th>Order No.</th>
</tr>
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<tbody>
<tr>
<td>English</td>
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<tr>
<td>French</td>
<td>2369230</td>
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<tr>
<td>Italian</td>
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<td>Spanish</td>
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<td>Chinese</td>
<td>2369234</td>
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<tr>
<td>Swedish</td>
<td>2391414</td>
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<tr>
<td>Russian</td>
<td>2369233</td>
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<tr>
<td>Dutch</td>
<td>2382562</td>
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<tr>
<td>Finnish</td>
<td>2391437</td>
</tr>
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</table>

Additional languages on request or at: [www.wagner-group.com](http://www.wagner-group.com)

1.4 ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
<th>Qty</th>
<th>Number of pieces</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET</td>
<td>Spare part</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Marking in the spare parts lists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pos</td>
<td>Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH</td>
<td>Double stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSSt</td>
<td>Stainless steel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2K</td>
<td>Two components</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1.5 TERMINOLOGY FOR THE PURPOSE OF THIS MANUAL

<table>
<thead>
<tr>
<th>Cleaning</th>
<th>Manual cleaning of devices and device parts with cleaning agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flushing</td>
<td>Internal flushing of paint-wetted parts with flushing agent</td>
</tr>
<tr>
<td>Product pressure generator</td>
<td>Pump or pressure tank</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trained person</td>
</tr>
<tr>
<td>Electrically trained person</td>
</tr>
<tr>
<td>Electrician</td>
</tr>
<tr>
<td>Skilled person in accordance with TRBS 1203 (2010/Revision 2012)</td>
</tr>
</tbody>
</table>

2 CORRECT USE

2.1 DEVICE TYPES

Pneumatic double diaphragm pump and spray pack:

TOPFINISH DD10

2.2 TYPE OF USE

The device is suitable for processing liquid materials like paints and lacquers in accordance with the classification into explosion classes IIA or IIB (see Chapter 2.4). WAGNER explicitly prohibits any other use!

The device may only be operated under the following conditions:

→ Use the device only to work with the products recommended by WAGNER.
→ Do not deactivate safety fixtures.
→ Use only WAGNER original spare parts and accessories.
→ The operating personnel must be trained on the basis of this operating manual.

2.3 FOR USE IN POTENTIALLY EXPLOSIVE AREAS

The device can be employed in explosion hazard zones (Zone 1) (see Chapter 3).
2.4 PROCESSIBLE WORKING MATERIALS

→ Fluid materials like paints and varnishes.

<table>
<thead>
<tr>
<th>Application</th>
<th>TOPFINISH DD10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water-dilutable products</td>
<td>✳</td>
</tr>
<tr>
<td>Solvent-based lacquers and paints</td>
<td>✳</td>
</tr>
<tr>
<td>Two-component coating products</td>
<td>✳</td>
</tr>
<tr>
<td>Emulsions</td>
<td>✳</td>
</tr>
<tr>
<td>UV lacquers</td>
<td>✳</td>
</tr>
<tr>
<td>Primers</td>
<td>✳</td>
</tr>
<tr>
<td>Epoxy and polyurethane lacquers, phenolic lacquers</td>
<td>✳</td>
</tr>
<tr>
<td>Liquid plastics</td>
<td>✳</td>
</tr>
<tr>
<td>Wax-based underside protection</td>
<td>✳</td>
</tr>
<tr>
<td>Shear-sensitive lacquers</td>
<td>✳</td>
</tr>
</tbody>
</table>

- recommended    → limited suitability    

 NOTICE

Abrasive working materials and pigments!

Greater wear of parts carrying the product.

→ Use the application-oriented model (flow rate/cycle, product, valves, etc.) as indicated in Chapter 5.5.

→ Check if the fluids and solvents used are compatible with the pump construction materials as indicated in Chapter 5.5.1.

Wear caused by abrasive working materials is not covered by the warranty.

Typical applications

<table>
<thead>
<tr>
<th>Application</th>
<th>TOPFINISH DD10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture industry</td>
<td>✳</td>
</tr>
<tr>
<td>Kitchen manufacturers</td>
<td>✳</td>
</tr>
<tr>
<td>Joinery</td>
<td>✳</td>
</tr>
<tr>
<td>Window factories</td>
<td>✳</td>
</tr>
<tr>
<td>Steel-processing industry</td>
<td>✳</td>
</tr>
<tr>
<td>Construction of vehicles</td>
<td>✳</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>✳</td>
</tr>
</tbody>
</table>

- recommended    → limited suitability    

2.5 MISUSE

Misuse can lead to physical injury and/or property damage!

Special attention must be paid that:

→ no dry coating products, e.g. powder are processed.

→ no food, medicine or cosmetics are processed.

   It is important to note that the device's materials are not food-safe.
3 IDENTIFICATION

3.1 EXPLOSION PROTECTION IDENTIFICATION

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

Device types: Pneumatic double diaphragm pump **TOPFINISH DD10**
Manufacturer: Wagner International AG
            CH-9450 Altstätten, Switzerland

CE Ex h IIB T4 Gb X
CE European Communities
Ex Symbol for explosion protection
II Device class II
2 Category 2 (Zone 1)
G Ex-atmosphere gas
Ex Ignition protection
h Ignition protection for non-electrical devices
IIB Explosion group
T4 Maximum surface temperature < 135 °C; 275 °F (with drying protection active)
Gb Zone 1 high safety level
X Special notes (see Chapter 3.2)

3.2 IDENTIFICATION "X"

The maximum surface temperature corresponds to the permissible product temperature. This and the permissible ambient temperature can be found in Chapter 5.5.2 (Technical Data).

Safe handling of WAGNER spray devices

Mechanical sparks can form if the device comes into contact with metal. In an explosive atmosphere:
→ Knocking or pushing metal against metal is to be avoided.
→ Do not drop the device.

Maximum surface temperature
→ The maximum surface temperature of the pump depends on the operating conditions (heated product) and not on the device (frictional heat).

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

Ambient temperature
→ Permissible ambient temperature: 10 °C to 60 °C; 50 °F to 140 °F.

Surface spraying, electrostatics
→ Do not spray device parts using electrostatic equipment.
Cleaning
If there are deposits on the surfaces, the device may form electrostatic charges. Flames or sparks can form during discharge.
- Remove deposits from the surfaces to maintain conductivity.
- Use only a damp cloth to clean the device.

Air in the pump fluid
Flammable gas mixtures can form if air reaches the pump fluid.
- Prevent the pump from taking in air and running dry.
- If air has been taken in, fix the leak. Then, fill slowly and in a controlled manner until the air has escaped.
Air in the pumped fluid can be caused by damaged diaphragms.
- Avoid operating the pump with damaged diaphragms.
- Periodically check that the pump is working smoothly, paying special attention to the presence of air in the pumped fluid.

Filling and emptying
Flammable gas mixtures can form in the fluid section or product hoses if the pump must be emptied for maintenance.
- Empty and fill the device slowly and in a controlled manner.
- Avoid potentially explosive atmosphere in the surroundings.

3.3 TYPE PLATE

<table>
<thead>
<tr>
<th>Pos</th>
<th>Designation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturer and CE Identification</td>
<td>Wagner International AG, CH-9450 Altstätten</td>
</tr>
<tr>
<td>2</td>
<td>max. Air Pressure</td>
<td>0.8 MPa; 116 psi</td>
</tr>
<tr>
<td>3</td>
<td>max. Fluid Pressure</td>
<td>0.8 MPa; 116 psi</td>
</tr>
<tr>
<td>4</td>
<td>Tamb °C/°F</td>
<td>4-40/39-104</td>
</tr>
<tr>
<td>5</td>
<td>Article No.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Year of manufacture - Serial No.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Check user manual before use!</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Indication of origin</td>
<td></td>
</tr>
</tbody>
</table>

Designation

B_06916

Check user manual before use!

Indication of origin

Wagner International AG, CH-9450 Altstätten

II 2G Ex h IIB T4 Gb X

0.8 MPa; 116 psi

4-40/39-104

Check the operating manual before use!

Indication of origin

Designed and assembled by WAGNER in Switzerland.

B_06916

Check the operating manual before use!

Indication of origin

Designed and assembled by WAGNER in Switzerland.

B_06916
4 BASIC SAFETY INSTRUCTIONS

4.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

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

4.1.1 ELECTRICAL DEVICES AND EQUIPMENT

Electric shock hazard!

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

4.1.2 A SAFE WORK ENVIRONMENT

Hazard due to dangerous fluids or steam!

- Ensure that the floor in the working are is static dissipative in accordance with EN 61340-4-1 (resistance must not exceed 100 MΩ).
- Paint mist extraction systems/ventilation systems must be fitted on site according to local regulations.
- Make sure that the ground connection and potential equalization of all system parts are reliable and continuous and can withstand the expected stress (e.g. mechanical stress, corrosion).
- Ensure that product/air hoses adapted to the working pressure are used.
- Ensure that personal protective equipment (see Chapter 4.2.1) is available and is used.
- Ensure that all persons within the working area wear static dissipative shoes. Footwear must comply with EN 20344. The measured insulation resistance must not exceed 100 MΩ.
- Ensure that during spraying, persons wear electrically conductive gloves. The grounding takes place via the spray gun handle or the trigger.
- Protective clothing, including gloves, must comply with EN 1149-5. The measured insulation resistance must not exceed 100 MΩ.
→ Ensure that there are no ignition sources such as naked flames, sparks, glowing wires, or hot surfaces in the vicinity. No smoking.
→ Ensure that the pipe joints, hoses, equipment parts and connections are permanently, technically leak-proof:
   - Periodic preventative maintenance and service (replacing hoses, checking tightness strength of the connections etc.).
   - Regular monitoring of leaks and defects via visual inspection and odor testing, e.g., daily before commissioning, at the end of work or weekly.
→ Ensure that maintenance and safety checks are performed regularly.
→ In the event of defects, immediately bring the device or system to a stop and arrange to have repairs carried out immediately.

4.1.3 PERSONNEL QUALIFICATIONS

Hazard due to incorrect use of device!
Risk of death due to untrained personnel.
→ Ensure that the operating personnel has been instructed by the operator in accordance with the operating manual and the operating instructions. The device must only be operated, maintained and repaired by trained personnel. Refer to the operating instructions for information about the required personnel qualifications.

4.2 SAFETY INSTRUCTIONS FOR STAFF

→ Always follow the information in this manual, particularly the safety instructions and the warning instructions.
→ Always follow local regulations concerning occupational safety and accident prevention.
→ In electrostatics application: anyone fitted with active implants (e.g., a pacemaker) must not enter the high-voltage area!

4.2.1 PERSONAL SAFETY EQUIPMENT

Hazard due to dangerous fluids or steam!
Serious or fatal injuries due to inhalation, swallowing or contact with the skin or eyes.
→ When preparing or working with paint and when cleaning the device, follow the working instructions of the manufacturer of the lacquers, solvents, and cleaning agents being used.
→ Take the specified protective measures. In particular wear safety goggles, protective clothing and gloves, as well as hand protection cream if necessary.
→ Use a mask or breathing apparatus if necessary.
→ For sufficient health and environmental safety: Operate the device in a spray booth or on a spraying wall with the ventilation (extraction) switched on.
→ Wear suitable protective clothing when working with hot products.
4.2.2 SAFE HANDLING OF WAGNER SPRAY DEVICES

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

The spray jet is under pressure and can cause dangerous injuries. Avoid injection of paint or flushing agents:

→ Never point the spray gun at people.
→ Never reach into the spray jet.
→ Before any work on the device, in the event of work interruptions and malfunctions:
  - Switch off the energy/compressed air supply.
  - Relieve the pressure from the spray gun and device.
  - Secure the spray gun against actuation.
  - Disconnect the control unit from the mains.
  - In the event of functional faults, remedy the fault as described in the "Troubleshooting" chapter.
→ If necessary or at least every 12 months, the liquid ejection devices must be checked for safe working conditions by an expert (e.g. WAGNER Service Technician) in accordance with the guidelines for liquid ejection devices (ZH 1/406 and DGUV 100-500 Chapters 2.29 and 2.36).
  - For shut-down devices, the check can be postponed until the next start-up.

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

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

4.2.3 GROUND THE UNIT

**Hazard due to electrostatic charge!**

Explosion hazard and damage to the device.

Friction, flowing liquids and air or electrostatic coating processes create charges. Flames or sparks can form during discharge.

Correct grounding of the entire spraying system prevents electrostatic charges.

→ Ensure that all devices and tanks are grounded before each spraying process.
→ Ground the work pieces to be coated.
→ Ensure that all persons inside the working area are grounded, e.g., that they are wearing static dissipative shoes.
→ Wear static dissipative gloves when spraying. The grounding takes place via the spray gun handle or the trigger.
4.2.4 PRODUCT HOSE

Hazard due to bursting of product hose!
The product hose is under pressure and may cause dangerous injuries.

→ Ensure that the hose material is chemically resistant to the sprayed products and the flushing agents used.

→ Ensure that the product hose and the fittings are suitable for the pressure generated.

→ Ensure that the following information can be seen on the hose used:
  – manufacturer
  – permissible operating pressure
  – date of manufacture

→ Make sure that the hoses are laid only in suitable places. Hoses should not be laid in the following places under any circumstances:
  – in high traffic areas
  – on sharp edges
  – on moving parts or
  – on hot surfaces

→ Ensure that the hoses are never run over by vehicles (e.g., fork lift trucks), or that the hoses are never put under pressure from the outside in any other way.

→ Ensure that the hoses are never kinked. Observe maximum bending radii.

→ Ensure that no work is ever performed with a damaged hose.

→ Make sure that the hoses are never used to pull or move the equipment.

→ The electrical resistance of the product hose, measured at both valves, must be less than 1 MΩ.

→ Suction hoses may not be subjected to pressure.

Several liquids have a high expansion coefficient. In some cases their volume can rise with consequent damage to pipes, fittings, etc. and cause fluid leakage.

When the pump sucks liquid from a closed tank, ensure that air or a suitable gas can enter the tank. Thus a negative pressure is avoided. The vacuum could implode the tank (squeeze) and can cause it to break. The tank would leak and the liquid would flow out.

The pressure created by the pump is a multiplication of the inlet air pressure.
4.2.5 CLEANING AND FLUSHING

Hazard due to cleaning and flushing!

Explosion hazard and damage to the device.

- Preference should be given to non-flammable cleaning and flushing agents.
- When carrying out cleaning work with flammable cleaning agents, make sure that all equipment and resources (e.g., collection tank, funnel, transport cart) are conductive or static dissipative and grounded.
- Observe the specifications of the lacquer manufacturer.
- Ensure that the flash point of the cleaning agent is at least 15 K above the ambient temperature or that cleaning is undertaken at a cleaning station with technical ventilation.
- Never use chloride or halogenated solvents (such as trichloroethane and methylene chloride) with units containing aluminium or galvanized and zinc-plated parts. They may react chemically thus producing an explosion danger.
- Take measures for workplace safety (see Chapter 4.1.2).
- When commissioning or emptying the device, please note that an explosive mixture may temporarily exist inside the lines and components of equipment:
  - depending upon the used coating product,
  - depending on the flushing agent (solvent) used.
- Take measures for workplace safety (see Chapter 4.1.2).
- Only electrically conductive tanks may be used for cleaning and flushing agents.
- The tanks must be grounded.

An explosive gas/air mixture forms in closed tanks.

→ Never spray into a closed tank when using solvents for flushing.

External cleaning

When cleaning the exterior of the device or its parts, also observe the following:

- Relie the pressure from the device.
- De-energize the device electrically.
- Disconnect the pneumatic supply line.
- Use only moistened cloths and brushes. Never use abrasive agents or hard objects, and never spray cleaning agents with a spray gun. Cleaning the device must not damage it in any way.
- Ensure that no electric component is cleaned with or immersed into solvent.

4.2.6 TOUCHING HOT SURFACES

Hazard due to hot surfaces because of hot coating products!

Risk of burn injuries

→ Only touch hot surfaces if you are wearing protective gloves.
→ When operating the device with a coating product with a temperature of > 43 °C; 109 °F:
  - Identify the device with a warning label "Warning – hot surface".

Order No.
9998910 Instruction label
9998911 Protection label

Note: Order the two stickers together.
4.2.7 MAINTENANCE AND REPAIR

Hazard due to improper maintenance and repair!
Danger to life and equipment damage.
→ Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts.
→ Use only WAGNER original spare parts and accessories.
→ Do not change or modify the device; if change is necessary, contact WAGNER.
→ Only repair and replace parts that are listed in the 13 “Spare parts” chapter and 14 that are assigned to the unit.
→ Do not use any defective components.
→ Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the energy and compressed air supply.
  - Disconnect the control unit from the mains. Secure the spray gun against actuation.
→ Observe the operating and service manual for all work.

4.2.8 PROTECTIVE AND MONITORING EQUIPMENT

Hazard due to removal of protective and monitoring equipment!
Danger to life and equipment damage.
→ Protective and monitoring equipment must not be removed, modified or rendered unusable.
→ Regularly check for perfect functioning.
→ If defects are detected on protective and monitoring equipment, the system must not be operated until these defects are remedied.
5 DESCRIPTION

5.1 COMPONENTS

<table>
<thead>
<tr>
<th>Pos</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Air outlet for gun air</td>
</tr>
<tr>
<td>2</td>
<td>Product outlet</td>
</tr>
<tr>
<td>3</td>
<td>Product inlet</td>
</tr>
<tr>
<td>4</td>
<td>Air inlet</td>
</tr>
<tr>
<td>5</td>
<td>Pump housing</td>
</tr>
<tr>
<td>6</td>
<td>Pressure regulator unit</td>
</tr>
</tbody>
</table>

5.2 MODE OF OPERATION

The double diaphragm pump is driven with compressed air. A pneumatic manifold alternates in supplying two diaphragms with compressed air. Diaphragm motion is created in this manner. The product is thus sucked in and displaced again. A series of four non-return valves prevents the liquid from flowing back, thus producing the suction and delivery phases in each pumping chamber, and generating the pumping effect.

5.2.1 POSITIONING

The pump can be mounted horizontally (± 10°) as well as vertically (± 10°) in any position. Ensure that all fastening screws are correctly tightened.

Tighten the fixing screws regularly depending on pump use. In the case of continuous or prolonged operation, it is advisable to check at least once a week that there are no air and/or liquid leaks. The entire pressure regulator unit (1) can be rotated in increments of 90 degrees to align the control elements. For this purpose, the four screws (2) must be removed.

5.3 PROTECTIVE AND MONITORING EQUIPMENT

⚠️ WARNING

Overpressure!
Danger to life from bursting components.

→ Never change the safety valve setting.

The air motor is fitted with a safety valve. The safety valve has been set and sealed at the factory. In case of pressures over and above the permissible operating pressure, the valve, which is held with a spring, automatically opens and releases the excess pressure.
5.4 INCLUDED ITEMS

<table>
<thead>
<tr>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>--</td>
<td>TOPFINISH DD10 diaphragm pump</td>
</tr>
</tbody>
</table>

The standard equipment includes:

| 1   | see Chapter 15.3 | Declaration of Conformity |
| 1   | 2366669          | Operating manual, German   |
| 1   | see Chapter 1.3   | Operating manual in the local language |

The delivery note shows the exact scope of delivery. Accessories: see Chapter.

5.5 DATA

5.5.1 MATERIALS OF PAINT WETTED PARTS

<table>
<thead>
<tr>
<th>Paint-wetted parts</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diaphragms</td>
<td>PA (Polyamide)</td>
</tr>
<tr>
<td>Remaining material-wetted parts</td>
<td>Stainless steel</td>
</tr>
</tbody>
</table>

5.5.2 TECHNICAL DATA

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
<th>TOPFINISH DD10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump ratio</td>
<td></td>
<td>1 : 1</td>
</tr>
<tr>
<td>Volume flow per double stroke (DH)</td>
<td>cm³</td>
<td>42.2</td>
</tr>
<tr>
<td></td>
<td>cu inch</td>
<td>25.75</td>
</tr>
<tr>
<td>Maximum operating pressure</td>
<td>MPa</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>bar</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>psi</td>
<td>116</td>
</tr>
<tr>
<td>Compressed air quality: free from oil and water</td>
<td></td>
<td>Quality standard 7.5.4 according to ISO 8573.1: 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7: Particle concentration 5 – 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5: Humidity: pressure dew point: ≤ +7 °C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4: Oil content ≤ 5 mg/m³</td>
</tr>
<tr>
<td>Air inlet pressure</td>
<td>MPa</td>
<td>0.15 – 0.8</td>
</tr>
<tr>
<td></td>
<td>bar</td>
<td>1.5 – 8</td>
</tr>
<tr>
<td></td>
<td>psi</td>
<td>22 – 116</td>
</tr>
<tr>
<td>Air inlet (inside thread)</td>
<td>inch</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Sound pressure level at 0.4 MPa; 4 bar; 58 psi air pressure*</td>
<td>dB(A)</td>
<td>58.4</td>
</tr>
<tr>
<td>Sound pressure level at 0.6 MPa; 6 bar; 87 psi air pressure*</td>
<td>dB(A)</td>
<td>61.6</td>
</tr>
<tr>
<td>Sound pressure level at 0.8 MPa; 8 bar; 116 psi air pressure*</td>
<td>dB(A)</td>
<td>64.0</td>
</tr>
<tr>
<td>Product inlet connection (inside thread)</td>
<td>inch</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Product outlet (inside thread)</td>
<td>inch</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>kg; lb</td>
<td>4.1</td>
</tr>
<tr>
<td>Product pH value</td>
<td>pH</td>
<td>3.5 – 9</td>
</tr>
<tr>
<td>Product viscosity</td>
<td>DIN 4 sec</td>
<td>15 – 60</td>
</tr>
<tr>
<td>Product temperature</td>
<td>°C</td>
<td>4 – 60</td>
</tr>
<tr>
<td></td>
<td>°F</td>
<td>39.2 – 140</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>°C</td>
<td>4 – 40</td>
</tr>
<tr>
<td></td>
<td>°F</td>
<td>39.2 – 104</td>
</tr>
<tr>
<td>Allowable inclination for operation</td>
<td>±°</td>
<td>± 10</td>
</tr>
</tbody>
</table>

* A-rated sound pressure level measured at 1 m distance, LpA1m, according to DIN EN 14462: 2015. Reference measurements have been made by SUVA (Swiss Accident Insurance Institute).

⚠️ WARNING

Exhaust air containing oil!
Risk of poisoning if inhaled.

→ Provide compressed air free from oil and water.
5.5.3 DIMENSIONS AND CONNECTIONS

<table>
<thead>
<tr>
<th>Pos</th>
<th>mm; inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>191; 7.52</td>
</tr>
<tr>
<td>B</td>
<td>135; 5.31</td>
</tr>
<tr>
<td>C</td>
<td>141; 5.55</td>
</tr>
<tr>
<td>D</td>
<td>236; 9.29</td>
</tr>
<tr>
<td>E</td>
<td>264; 10.39</td>
</tr>
<tr>
<td>F</td>
<td>149; 5.87</td>
</tr>
<tr>
<td>G</td>
<td>170; 6.69</td>
</tr>
<tr>
<td>H</td>
<td>192; 7.56</td>
</tr>
<tr>
<td>I</td>
<td>G1/2&quot;</td>
</tr>
<tr>
<td>K</td>
<td>G1/4&quot;</td>
</tr>
<tr>
<td>L</td>
<td>G1/4&quot;</td>
</tr>
<tr>
<td>M</td>
<td>G3/8&quot;</td>
</tr>
</tbody>
</table>

5.5.4 PERFORMANCE DIAGRAMS

Example

- Stroke frequency DH/min
- Product pressure bar (MPa) psi
- Air consumption nl/min <scfm>
- Water delivery rate l/min <gpm>

![Performance Diagrams](image)

**TOPFINISH DD10**

- Water flow rate
  - A = 8 bar (0.8 MPa; 116 psi) air pressure
  - B = 6 bar; 0.6 MPa; 87 psi air pressure
  - C = 4 bar; 0.4 MPa; 58 psi air pressure
  - D = 2 bar; 0.2 MPa; 29 psi air pressure
5.6 PRESSURE REGULATOR UNIT ON TOPFINISH DD10

<table>
<thead>
<tr>
<th>Pos</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pressure gauge - pump</td>
</tr>
<tr>
<td>2</td>
<td>Pressure gauge - atomizing air</td>
</tr>
<tr>
<td>3</td>
<td>Pressure regulator - atomizing air</td>
</tr>
<tr>
<td>4</td>
<td>Pressure regulator - pump</td>
</tr>
<tr>
<td>5</td>
<td>Compressed air Inlet</td>
</tr>
<tr>
<td>6</td>
<td>Ball valve</td>
</tr>
<tr>
<td>7</td>
<td>Air outlet for gun air</td>
</tr>
</tbody>
</table>

5.6.1 RETURN VALVE

<table>
<thead>
<tr>
<th>Pos</th>
<th>Positions of the ball valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open: working position</td>
</tr>
<tr>
<td>2</td>
<td>Closed: the air motor can still be under pressure.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pos</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Material return line</td>
</tr>
<tr>
<td>4</td>
<td>Product outlet</td>
</tr>
</tbody>
</table>
6 ASSEMBLY AND COMMISSIONING

6.1 TRAINING OF ASSEMBLY/COMMISSIONING STAFF

→ The assembly and commissioning staff must have the technical skills to safely commission the device.

→ When assembling, commissioning and carrying out all work, read and follow the operating manuals and safety regulations for the additionally required system components.

A skilled person must check to ensure that the device is in a reliable state after it is installed and commissioned.

6.2 STORAGE CONDITIONS

Until the point of assembly, the device must be stored in a dry location, free from vibrations and with a minimum of dust. The device must be stored in closed rooms.

The air temperature at the storage location must be between -20 °C and 60 °C (-4 °F and 140 °F).

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

6.3 INSTALLATION CONDITIONS

The air temperature at the installation site must be in a range between 0 °C and 40 °C; 32 °F and 132 °F.

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

6.4 TRANSPORTATION

The pump can be moved on a trolley or manually without lifting equipment e.g., a crane.
6.5 ASSEMBLY AND INSTALLATION

⚠️ WARNING

Inclined ground!
Risk of accidents if the device rolls away/falls.
→ Position the trolley with the double diaphragm pump horizontally.
→ If the surface is inclined, position the feet of the trolley towards the gradient.
→ Secure the trolley.

National regulations
→ Ensure that the national explosion prevention rules and regulations are observed when setting up the device.

Procedure:
1. Mount the pump on a frame, trolley or wall mount.
2. Connect the suction system and air supply.
3. Connect the material and air supply of the gun in accordance with the operating manual.

This pump can be used as part of a spraying system for Airspray applications. The components can be found in the accessories list, provided that the system was not obtained as a spray pack. The nozzles must be selected according to the spray gun instructions.

6.5.1 VENTILATION OF THE SPRAY BOOTH

→ Operate the device in a spray booth approved for the working materials.
   - or -
→ Operate the device on an appropriate spraying wall with the ventilation (extraction) switched on.
→ Observe national and local regulations for the exhaust air speed.
6.5.2 AIR SUPPLY LINES

Ensure that only dry, clean atomizing air is used in the spray gun! Dirt and moisture in the atomizing air worsens the spraying quality and spray pattern.

⚠️ WARNING

Hose connections!
Risk of injury and damage to the device.

→ Do not mix up hose connections of product hose and air hose.

6.5.3 PRODUCT SUPPLY LINES

⚠️ DANGER

Bursting hose, bursting threaded joints!
Danger to life from injection of product.

→ Ensure that the hose material is chemically resistant to the sprayed products.

→ Ensure that the spray gun, fittings and product hose between the device and the spray gun are suitable for the pressure generated in the device.

→ Ensure that the following information can be seen on the hose:
  - Manufacturer
  - Permissible operating pressure
  - Date of manufacture.

6.6 GROUNDING

⚠️ WARNING

Discharge of electrostatically charged components in atmospheres containing solvents!
Explosion hazard from electrostatic sparks.

→ Clean the pump only with a damp cloth.

⚠️ WARNING

Heavy paint mist if grounding is insufficient!
Danger of poisoning.
Insufficient paint application quality.

→ Ground all device components.

→ Ground the work pieces to be coated.
**Grounding scheme (example)**

<table>
<thead>
<tr>
<th>Part / workstation</th>
<th>Cable cross section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump</td>
<td>4 mm²; AWG12</td>
</tr>
<tr>
<td>Paint tank</td>
<td>6 mm²; AWG10</td>
</tr>
<tr>
<td>Conveyor</td>
<td>16 mm²; AWG6</td>
</tr>
<tr>
<td>Booth</td>
<td>16 mm²; AWG6</td>
</tr>
<tr>
<td>Spraying stand</td>
<td>16 mm²; AWG6</td>
</tr>
</tbody>
</table>

Safe operation of the pump is only guaranteed with a grounding connection. Connect all ground cables using a short and direct route.

**Procedure**

1. Screw on grounding cable with eye.
2. Clamp the grounding cable clip to a grounding connection on site.
3. Ground the product (paint) tank to an on-site grounding connection.
4. Ground the other parts of the system to an on-site grounding connection.

**Ex zone**

All devices and equipment must be suitable for use in potentially explosive areas.

→ All paints, flushing agents and waste tanks have to be electrically conductive.
→ All tanks must be grounded.
6.7 COMMISSIONING

⚠️ WARNING
Gas mixtures can explode if there is an incompletely filled pump!
Danger to life from flying parts.
→ Ensure that the pump and suction system are always completely filled with flushing agent or working medium.
→ Do not spray the device empty after cleaning.

⚠️ NOTICE
Impurities in the spraying system!
Spray gun blockage.
→ Flush the spray gun and paint supply with a suitable flushing agent before commissioning.

→ Emergency stop, see Chapter 7.2.

Preparation
Before every start-up, the following points should be observed as laid down in the operating manual:

− Secure spray gun with safety lever.
− Check the permissible pressures.
− Check all connections for leaks.
− Check hoses for damage in accordance with Chapter 8.2.3.

Fill the pump with flushing agent
The devices are tested during manufacturing with emulsifying oil, pure oil or solvent.
Possible residues must be flushed out of the circuits with a solvent (flushing agent) before commissioning.

− Fill the empty device with flushing agent in accordance with Chapter 8.2.5.

Pressure tightness test

⚠️ WARNING
Overpressure!
Risk of injury from bursting components.
→ The operating pressure must not exceed the value shown on the type plate.

− Gradually increase the pressure in pump with the pressure regulator until maximum pressure is reached. Maintain the pressure for 3 minutes and check all connection points for leaks.
− Depressurization in accordance with Chapter 7.4.

Verifying a Safe Operational Condition
A skilled person must check to ensure that the device is in a reliable state after it is installed and commissioned.
This includes:

− Carry out safety checks in accordance with Chapter 8.2.3.

Filling with working material
− According to Chapter 8.2.5.
7 OPERATION

7.1 TRAINING THE OPERATING STAFF

→ The operating staff 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 staff must receive appropriate system training.

7.2 EMERGENCY STOP

In the case of unforeseen occurrences:

→ Close ball valve.
→ The air supply should be interrupted.

7.3 WORK

Ensure that:

→ commissioning is carried out in accordance with Chapter 6.7.

1. Visual check:
   personal safety equipment, grounding and all devices ready to use.
2. Secure spray gun and insert valve into the spray gun.
3. Slowly open the ball valve.
4. Set the required working pressure on the pressure regulator.
5. Optimize the spray pattern as laid down in the spray gun instructions.
6. Start work process.
7.4 PRESSURE RELIEF/WORK INTERRUPTION

The pressure must always be relieved:
- after the spraying tasks are finished.
- before servicing or repairing the system.
- before carrying out cleaning tasks on the system.
- before moving the system to another location.
- before something needs to be checked on the system.
- before the nozzle or the filter is removed from the spray gun.

The components for pressure relief on a CE-compliant spraying system include:
- Outlet equipment (return valve) mounted between pump and spray gun.

Process for relieving pressure

1. Close the spray gun.
2. Close ball valve (2).
3. Release the system of pressure by opening the spray gun.
   → Attention: If a blocked nozzle is preventing relief, first carry out the additional steps 4 and 5, then clean the nozzle.
4. Close and secure the spray gun.
5. Open and close the return valve (3) slowly to completely depressurize the system.

Note:
Control air pressure is still present.

If the system has been used with 2K products:

⚠️ NOTICE
Hardened working material in the spraying system when 2K product is processed!
Destruction of pump and injection system.
   → Follow the manufacturer’s processing rules, particularly regarding the pot life.
   → Flush thoroughly before the end of the pot life.
   → The pot life is decreased by warmth.
7.5 BASIC CLEANING

Flush regularly
- Regular flushing, cleaning and maintenance ensures the pumps' high pumping and suction capacity.
- The cleaning and flushing agents used must be compatible with the working material.

WARNING
Incompatibility of flushing / cleaning agent with the working medium!
Risk of explosion and danger of poisoning by toxic gases.
- Examine the compatibility of the flushing and cleaning agents and working media on the basis of the safety data sheets.

Procedure
1. Visual check: personal safety equipment, grounding and all devices ready to use.
2. Place empty, grounded tank (7) under the return tube (6).
3. Place the suction hose (3) in the grounded tank with flushing agent (4).
4. Adjust the pressure regulator (1) to approx. 0.2 MPa; 2 bar; 29 psi.
Flush via the return flow valve
5. Open return valve (5).
6. Slowly open the ball valve (8).
7. Adjust the air pressure on the pressure regulator (1) so that the pump runs smoothly.
8. Flush the system until clean flushing agent flows into the tank (7).
9. Close ball valve (8).
10. As soon as there is no pressure remaining in the system, close the return valve (5).
Flush using gun
11. Point the spray gun, without nozzle, into the tank (7) and open it.
12. Slowly open the ball valve (8).
13. Flush until clean cleaning agent flows from the spray gun.
14. Close ball valve (8).
15. When there is no pressure remaining in the system, close the spray gun.
17. Dispose of the contents of the tank (7) according to the local regulations.

7.5.1 FILLING WITH WORKING MATERIAL

After basic flushing, the pump can be filled with working material. Proceed according to Chapter 8.2.5, but use working material instead of flushing agent.
8 CLEANING AND MAINTENANCE

8.1 CLEANING

8.1.1 CLEANING STAFF

Cleaning work should be undertaken regularly and carefully by qualified and trained staff. They should be informed of specific hazards during their training. The following hazards may arise during cleaning work:

- Health hazard from inhaling solvent vapors.
- Use of unsuitable cleaning tools and aids.

8.1.2 DECOMMISSIONING AND CLEANING

The device should be cleaned for maintenance purposes, etc. Ensure that no remaining product dries on and sticks to the device.

Procedure

1. Carry out work interruption → Chapter 7.4.
2. Carry out the basic flushing → Chapter 7.5.
3. Empty system in a controlled manner → Chapter 8.2.4.
4. Service spray gun in accordance to its operating instructions.
5. Clean and check the suction system and the suction filter.
6. Clean the outside of the system.

**WARNING**

Brittle filter pressure regulator!

The tank on the filter pressure regulator becomes brittle through contact with solvents and can burst. Flying parts can cause injury.

→ Do not clean the tank on the filter pressure regulator with solvent.

7. Fully assemble the system.
8. Fill the system with flushing agent in accordance with Chapter 8.2.5.

8.1.3 LONG-TERM STORAGE

If storing the system for a prolonged period of time, thorough cleaning and corrosion protection are necessary. Replace the water or solvent in the product pump with a suitable preserving oil.

Procedure

1. Carry out points 1 to 7 in Chapter 8.1.2 "Decommissioning and Cleaning".
2. Fill the system with preservative in accordance with Chapter 8.2.5.
3. Empty the system in a controlled manner in accordance with Chapter 8.2.4 and seal the openings.
8.2 MAINTENANCE

8.2.1 MAINTENANCE STAFF

Maintenance work should be undertaken regularly and carefully by qualified and trained staff. They should be informed of specific hazards during their training.

The following hazards may arise during maintenance work:

– Health hazard from inhaling solvent vapors.
– Use of unsuitable tools and aids.

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

8.2.2 MAINTENANCE INSTRUCTIONS

**DANGER**

Incorrect maintenance/repair!

Danger to life and equipment damage.

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

→ Use only WAGNER original spare parts and accessories.

→ Only repair and replace parts that are listed in the "Spare parts" chapter and that are assigned to the unit.

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

→ Observe the operating and service manual for all work.

**Prior to maintenance**

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

– Flush and clean the system. → Chapter 8.1.2.
– Relieve the pressure from the pump, product hose and spray gun.
– Secure spray gun with safety lever.
– The air supply should be interrupted.

**After maintenance**

– Carry out safety checks in accordance with Chapter 8.2.3.
– Put the system into operation and check for leaks as described in Chapter 6.7.
– Have the system checked for safe condition by an authorized person.
– Function test in accordance with section 11.
8.2.3 SAFETY CHECKS AND MAINTENANCE INTERVALS

**Every day**
- Check grounding: see Chapter 6.5.
- Check hoses, tubes and couplings: see Chapter 8.2.3.1
- For each decommissioning, the process according to Chapter 8.1.2 must be followed.
- If the pump has to be emptied for maintenance work, proceed according to Chapter 8.2.4.

**Weekly**
- Check system for damage.
- Check that the safety fixtures function properly (see Chapter 5.3).

**Yearly or as required**
- In accordance with DGUV regulation 100-500 Chapter 2.29 and 2.36:
  - The liquid ejection devices should be checked by an expert (e.g., WAGNER service technician) for their safe working conditions as required and at least every 12 months.
  - For shut down devices, the examination can be suspended until the next start-up.

8.2.3.1 PRODUCT HOSES, TUBES AND COUPLINGS

The service life of the complete hoses between product pressure generator and application device is reduced due to environmental influences even when handled correctly.
- Check hoses, pipes, and couplings every day and replace if necessary.
- Before every commissioning, check all connections for leaks.
- Additionally, the operator must regularly check the complete hoses for wear and tear as well as for damage at intervals that he/she has set. Records of these checks must be kept.
- The complete hose is to be replaced as soon as one of the two following intervals has been exceeded:
  - 6 years from the date of the hose crimping (see fitting embossing).
  - 10 years from the date of the hose imprinting.

<table>
<thead>
<tr>
<th>Fitting embossing</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>xxx bar</td>
<td>Pressure</td>
</tr>
<tr>
<td>yymm</td>
<td>Crimping date (year/month)</td>
</tr>
<tr>
<td>XX</td>
<td>Internal code</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hose imprinting</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wagner</td>
<td>Name / Manufacturer</td>
</tr>
<tr>
<td>yymm</td>
<td>Date of manufacture (year/month)</td>
</tr>
<tr>
<td>xxx bar (xx MPa)</td>
<td>Pressure</td>
</tr>
<tr>
<td>e.g., 270 bar (27 MPa)</td>
<td></td>
</tr>
<tr>
<td>XX</td>
<td>Internal code</td>
</tr>
<tr>
<td>DNxx (e.g., DN10)</td>
<td>Nominal diameter</td>
</tr>
</tbody>
</table>
8.2.4 EMPTYING PUMP

**WARNING**

Gas mixtures can explode if there is an incompletely filled pump!

Danger to life from flying parts.
Ignition of potentially explosive surrounding atmosphere.

→ Empty the device slowly and in a controlled manner.
→ Avoid potentially explosive atmosphere in the surroundings.
→ If the pumping product becomes heated, switch off all heaters and let the product cool off.

1. Carry out basic flushing in accordance with Chapter 7.5.
2. Place an empty, grounded collection tank (7) under the return tube (6).
3. Place the suction hose (3) in an empty, grounded tank (4).
4. Close pressure regulator (1) (0 MPa; 0 bar; 0 psi).

**Empty using return line**

5. Open return valve (5).
6. Slowly open the ball valve (8).
7. Slowly turn air pressure up on the pressure regulator (1) and only until the pump is running normally (approx. 0.15 MPa; 1.5 bar; 21.75 psi).
8. Be ready for the switch from working material to air.
9. As soon as working material is no longer flowing from the return tube (6), close ball valve (8).
10. Close return valve (5).

**Empty up to the gun**

11. Point the spray gun, without nozzle, into the tank (7) and open it.
12. Slowly open the ball valve (8). Be ready for the switch from working material to air.
13. As soon as working material is no longer flowing from the return tube, close the ball valve (8).
14. Close and secure the spray gun.
15. Depressurization in accordance with Chapter 7.4.
16. Dispose of the contents of the tank (7) according to the local regulations.
8.2.5 FILLING THE EMPTY PUMP

⚠️ WARNING
Gas mixtures can explode if there is an incompletely filled pump!
Danger to life from flying parts.
Ignition of potentially explosive surrounding atmosphere.
→ Empty and fill the device slowly and in a controlled manner.
→ Avoid potentially explosive atmosphere in the surroundings.

1. Visual check: personal safety equipment, grounding and all devices ready to use.
2. Place grounded collection tank (7) under the return tube (6).
3. Place the suction hose (3) in a grounded tank with working material (4).
4. Close pressure regulator (1) (0 MPa; 0 bar; 0 psi).
5. Open return valve (5).
6. Slowly open the ball valve (8).
7. Slowly turn the air pressure up on the pressure regulator (1) and only until the pump is running normally (approx. 0–0.2 MPa; 0–2 bar; 0–29 psi). Be ready to switch from working material to air and prevent back spray.
8. Close ball valve (8) as soon as pure working material starts coming from the return tube (6).
9. Close return valve (5).
10. Point the spray gun, without nozzle, into the tank (*) and open it.
11. Slowly open the ball valve (8).
    Be ready to switch from working material to air and prevent back spray.
12. As soon as pure working material without air bubbles is flowing, close ball valve (8).
13. Close and secure the spray gun.
14. Depressurization in accordance with Chapter 7.4.
15. Dispose of the contents of the tank (7) according to the local regulations.
8.3 REPLACING THE DIAPHRAGM

1. Unscrew the four screws (1) and remove the plate (2) from the pump.
2. Unscrew the four screws (3) and remove the plate (4) from the pump.
3. Unscrew the Allen screws (5) on both halves of the pump housing.
4. Pull the pump housing (6) apart.
5. The components (7) can be removed from the two housing halves with gentle movements.
6. Unscrew the screws (8) on both components.
7. The diaphragms (9) can now be removed from the components and can be replaced.
8. Re-assemble the pump in reverse order. Spread Loctite® 222 (10) on screws (8). Observe tightening torque.
8.4 REPLACING VALVES

1. Unscrew the screws (1).
2. Remove the valve housing (2).
3. Replace the component (3).
4. Re-assemble the pump in reverse order.
# TROUBLESHOOTING AND RECTIFICATION

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The pump does not work.</td>
<td>The pump does not start or stops.</td>
<td>Open and close ball valve on the pressure regulator unit or briefly disconnect compressed air supply.</td>
</tr>
<tr>
<td></td>
<td>No pressure indication on the pressure gauge (air pressure regulator defective).</td>
<td>Disconnect compressed air supply briefly or repair or change pressure regulator.</td>
</tr>
<tr>
<td></td>
<td>Spray nozzle is clogged.</td>
<td>Clean the nozzle according to the instructions.</td>
</tr>
<tr>
<td></td>
<td>Insufficient compressed air supply.</td>
<td>Check compressed air supply.</td>
</tr>
<tr>
<td></td>
<td>Filter insert in spray gun is clogged.</td>
<td>Clean the parts and use a suitable working material.</td>
</tr>
<tr>
<td></td>
<td>The fluid section or hose are blocked (e.g., 2K product hardened).</td>
<td>Dismount and clean fluid section, replace high-pressure hose.</td>
</tr>
<tr>
<td></td>
<td>Grease in spool and sleeve assembly. Pump stops at the stroke end occasionally.</td>
<td>Degrease spool and sleeve assembly. Check detent body.</td>
</tr>
<tr>
<td>Poor spray pattern.</td>
<td>See the gun instructions.</td>
<td></td>
</tr>
<tr>
<td>Irregular operation of product pump: spray jet collapses (pulsation)</td>
<td>Viscosity is too high.</td>
<td>Thin spraying product.</td>
</tr>
<tr>
<td></td>
<td>Spraying pressure is too low.</td>
<td>Increase incoming air pressure.</td>
</tr>
<tr>
<td></td>
<td>Foreign body in suction valve.</td>
<td>Use a smaller nozzle.</td>
</tr>
<tr>
<td></td>
<td>Diameter of compressed air line too small.</td>
<td>Assemble a larger supply line -&gt; Technical data, see Chapter 5.5.2.</td>
</tr>
<tr>
<td></td>
<td>Worn out valves.</td>
<td>Replace the parts.</td>
</tr>
<tr>
<td></td>
<td>Control air filter or work air filter is clogged.</td>
<td>Check filter and clean it if necessary.</td>
</tr>
<tr>
<td>Strongly irregular operation of product pump</td>
<td>Diaphragms &quot;blocked&quot; because suction is too fast.</td>
<td>Operate pump with ball valve opened a minimal amount for a while.</td>
</tr>
<tr>
<td>The pump runs evenly, does not however, suck up product.</td>
<td>The suction system's union nut is loose; the pump is taking in air.</td>
<td>Tighten.</td>
</tr>
<tr>
<td>Pump runs fast when the spray gun is closed.</td>
<td>Suction filter is clogged.</td>
<td>Clean filter.</td>
</tr>
<tr>
<td>Loss of power due to severe icing.</td>
<td>Valves worn.</td>
<td>Replace the parts.</td>
</tr>
<tr>
<td></td>
<td>There is a lot of condensation water in the air supply.</td>
<td>Install a water separator.</td>
</tr>
</tbody>
</table>

If none of the causes of malfunction mentioned are present, the defect can be remedied by a WAGNER Service Center.
10 REPAIR WORK

10.1 REPAIR STAFF

Repair work must be carried out carefully and by qualified and trained personnel. They should be informed of specific hazards during their training. The following hazards may arise during repair work:

- Health hazard from inhaling solvent vapors.
- Use of unsuitable tools and aids.

A skilled person must check to ensure that the device is in a reliable state after it is repaired. Carry out function test in accordance with Chapter.

10.2 REPAIR NOTES

⚠️ DANGER

Incorrect maintenance/repair!

Danger to life and equipment damage.

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

→ Use only WAGNER original spare parts and accessories.

→ Only repair and replace parts that are listed in the “Spare parts” chapter and that are assigned to the unit.

→ Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the energy and compressed air supply.
  - Disconnect the control unit from the mains.

→ Observe the operating and service manual for all work.

Before a Repair

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

- Flush and clean the system. → Section 8.1.2
- Empty pump according to Chapter 8.2.4.
- The air supply should be interrupted.

After a Repair

- Carry out safety checks in accordance with Chapter 8.2.3.
- Put the system into operation in accordance with Chapter 6.7 and check for leaks in accordance with Chapter 11.
- Function test in accordance with section 11.

10.3 TOOLS

The following tools are required for assembling and disassembling the device (if possible, always bring entire tool sets with you):

- Torque wrench with Torx 5 Nm; 3.68 lbft, 7 Nm; 5.16 lbft.
- Allen wrench set
10.4 CLEANING THE PARTS AFTER DISASSEMBLY

⚠️ WARNING
Incompatibility of cleaning agent and working medium!
Risk of explosion and danger of poisoning by toxic gases.
→ Examine the compatibility of the cleaning agents and working media on the basis of the safety data sheets.

Please note:
→ Thoroughly clean all reusable parts with a suitable cleaning agent.
→ All uninstalled parts have to be clean and dry after cleaning. Care should be taken that these parts remain free of solvents, grease or sweat from the hands (salt water).
Clean and mount wearing gloves.

10.5 ASSEMBLY OF THE DEVICE

In Chapter 14 the order numbers for device spare parts can be found, as well as for wearing parts such as seals.
→ Defective parts, O-rings and seal sets must always be re-placed.
→ Use greases and glues in accordance with Chapter 14.
→ Observe torque specifications in Chapter 14.

Mounting materials

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Quantity</th>
<th>Designation</th>
<th>Smaller tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>9992590</td>
<td>1 pc</td>
<td>Loctite® 222</td>
<td></td>
</tr>
<tr>
<td>322912</td>
<td>1 pc</td>
<td>Hydraulic oil - Wagner</td>
<td></td>
</tr>
</tbody>
</table>

Brand notice
The brands specified in this document are property of the respective owners. Loctite®, for example, is a registered brand of Henkel.
11 FUNCTION TEST AFTER THE REPAIR

After all repairs, the device must be checked for safe condition before recommissioning. The necessary scope of inspection and testing depends on the repair carried out and must be documented by the repair staff.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Aid tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>EX-relevant inspections</strong></td>
<td>Ohmmeter</td>
</tr>
<tr>
<td>- Check mass connection between grounding connection of the pump and the frame/trolley and between the individual components of the frame/trolley: ≤100kΩ</td>
<td>These inspections are relevant!!</td>
</tr>
<tr>
<td>2. <strong>Testing for leaks</strong></td>
<td>Air motor: Test medium compressed air, Leak spray, Fluid section: Test medium: suitable flushing agent</td>
</tr>
<tr>
<td>- Connect the pump to the air supply 6 bar.</td>
<td>To perform a leak test on the device, the product pressure with the flushing agent is slowly increased in increments until the maximum pressure indicated on the type plate is reached. Close pump outlet. Allow to stand in this position for 0.5-1 minute and listen for audible blowing off. Close air-supply ball-valve without relieving and check for pressure-loss.</td>
</tr>
<tr>
<td>3. <strong>General inspections</strong></td>
<td>Torque wrench, Visual check</td>
</tr>
<tr>
<td>- Check tightening torque of various screws. see Chapter</td>
<td>- Check all threaded connections.</td>
</tr>
<tr>
<td>- Empty device (Chapter 8.2.4) and depressurize it (Chapter 7.4).</td>
<td>- Check function of frame or transport trolley. Check whether the pump is mounted horizontally on the frame.</td>
</tr>
</tbody>
</table>

12 DISPOSAL

When the equipment must be scrapped, please differentiate the disposal of the waste materials. The following materials have been used:

- Stainless steel
- Aluminum
- Elastomerics
- Plastics
- Ceramic

**Consumable products**

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

<table>
<thead>
<tr>
<th>Designation</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi Boy</td>
<td>2368206</td>
</tr>
<tr>
<td>Lo Boy</td>
<td>2368231</td>
</tr>
<tr>
<td>Wall mount</td>
<td>2368422</td>
</tr>
<tr>
<td>Circulation</td>
<td>2368428</td>
</tr>
<tr>
<td>5 liter hopper</td>
<td>2368487</td>
</tr>
<tr>
<td>2 liter hopper</td>
<td>2368788</td>
</tr>
<tr>
<td>Product distributor 4-fold</td>
<td>2369013</td>
</tr>
<tr>
<td>Suction hose</td>
<td>2369022</td>
</tr>
<tr>
<td>Sliding tables</td>
<td>2368424</td>
</tr>
<tr>
<td>Filter</td>
<td>2368427</td>
</tr>
<tr>
<td>Filter with circulation</td>
<td>2368434</td>
</tr>
<tr>
<td>Distributor for 2 guns</td>
<td>2368439</td>
</tr>
<tr>
<td>Product pressure regulator, manual</td>
<td>T6232.00</td>
</tr>
<tr>
<td>FFC - Fine Flow Control</td>
<td>2368735</td>
</tr>
<tr>
<td>Drum cover</td>
<td>2368238</td>
</tr>
<tr>
<td>Agitator Ex</td>
<td>2370629</td>
</tr>
<tr>
<td>Agitator, non-Ex</td>
<td>T6233.00</td>
</tr>
</tbody>
</table>
14  SPARE PARTS

14.1  HOW CAN SPARE PARTS BE ORDERED?
Always supply the following information to ensure delivery of the right spare part:

Order number, designation and quantity
The quantity need not be the same as the number given in the quantity column "Stk" on the list. This number merely indicates how many of the respective parts are used in each component.

The following information is also required to ensure smooth processing of your order:
- Address for the invoice
- Address for delivery
- Name of the person to be contacted in the event of any queries
- Type of delivery (normal mail, express delivery, air freight, courier etc.)

Identification in spare parts lists
Explanation of column "K" (labeling) in the following spare parts lists:
- Wearing parts Wearing parts are not included in the warranty terms.
- Included in service set

Notice
Note: These parts are not covered by warranty terms
- Not part of standard equipment, available, however, as additional extra.

Explanation of Order No. column
- Item not available as spare part.
/ Position does not exist.

⚠️ DANGER
Incorrect maintenance/repair!
Danger to life and equipment damage.
- Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts.
- Use only WAGNER original spare parts and accessories.
- Only repair and replace parts that are listed in the "Spare parts" chapter and that are assigned to the unit.
- Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the energy and compressed air supply.
  - Disconnect the control unit from the mains.
- Observe the operating and service manual for all work.
### 14.2 OVERVIEW OF THE COMPONENTS

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370189</td>
<td>Cover spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1</td>
<td>2370193</td>
<td>Selection spare parts set</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1</td>
<td>2370195</td>
<td>Liquidbody spare parts set</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>1</td>
<td>2370200</td>
<td>Diaphragm spare parts set</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1</td>
<td>2370202</td>
<td>Valve spare parts set</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>1</td>
<td>2370203</td>
<td>Air piston spare parts set</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>1</td>
<td>2370181</td>
<td>Product sealing spare parts set</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>1</td>
<td>2370212</td>
<td>Inlet spare parts set</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>1</td>
<td>2370214</td>
<td>Outlet spare parts set</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>1</td>
<td>2370215</td>
<td>Airbody spare parts set</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>1</td>
<td>2370219</td>
<td>Shaped packing spare parts set</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>1</td>
<td>2370220</td>
<td>Distributor spare parts set</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>1</td>
<td>2370221</td>
<td>Regulator unit spare parts set</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>1</td>
<td>2370222</td>
<td>Grounding spare parts set</td>
</tr>
</tbody>
</table>
14.2.1 COVER SPARE PARTS SET

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370189</td>
<td>Cover spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td>--</td>
<td>Cover</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4</td>
<td>--</td>
<td>Screw, M8x180</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>4</td>
<td>--</td>
<td>Nut, M8</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1</td>
<td>--</td>
<td>Type plate</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>1</td>
<td>--</td>
<td>Cable lug</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>1</td>
<td>--</td>
<td>Screw for cable lug</td>
</tr>
</tbody>
</table>

14.2.2 SPARE PARTS SET FOR SWITCHING COMPONENT

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370193</td>
<td>Selection spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1</td>
<td>--</td>
<td>Switch unit preassembled</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>2</td>
<td>--</td>
<td>Shaped packing</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>4</td>
<td>--</td>
<td>Screw</td>
</tr>
</tbody>
</table>
14.3 LIQUIDBODY SPARE PARTS SET

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370195</td>
<td>Liquidbody incl. safety valve</td>
</tr>
</tbody>
</table>

14.4 DIAPHRAGM SPARE PARTS SET

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2370200</td>
<td>Diaphragm spare parts set</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td></td>
<td>Diaphragms</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>2</td>
<td></td>
<td>Washer</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td>Screw</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td></td>
<td>Loctite® 222</td>
</tr>
</tbody>
</table>

◆ = Wearing parts

14.5 VALVE SPARE PARTS SET

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2370202</td>
<td>Valve spare parts set</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td>Valve seat</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td>Ball</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td>Spring support ring</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td>Spring</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
<td>O-ring</td>
</tr>
</tbody>
</table>

◆ = Wearing parts

14.6 AIR PISTON SPARE PARTS SET

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2370203</td>
<td>Air piston spare parts set</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td>Air piston</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>2</td>
<td></td>
<td>Air cylinder</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td>O-ring, 42x3</td>
</tr>
</tbody>
</table>

◆ = Wearing parts

14.7 PRODUCT SEALING SPARE PARTS SET

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2370181</td>
<td>Product sealing spare parts set</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td>O-ring</td>
</tr>
</tbody>
</table>

◆ = Wearing parts

14.8 INLET SPARE PARTS SET

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2370212</td>
<td>Inlet spare parts set</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>Inlet distributor</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td>Screw</td>
</tr>
</tbody>
</table>
### 14.9 Outlet Spare Parts Set

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370214</td>
<td>Outlet spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td>Outlet distributor</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4</td>
<td></td>
<td>Screw</td>
</tr>
</tbody>
</table>

![Outlet spare parts set](B_06247)

### 14.10 Airbody Spare Parts Set

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370215</td>
<td>Airbody spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td>Air body preassembled</td>
</tr>
</tbody>
</table>

![Airbody spare parts set](B_06248)

### 14.11 Shaped Packing Spare Parts Set

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370219</td>
<td>Shaped packing spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td>Shaped packing</td>
</tr>
</tbody>
</table>

![Shaped packing spare parts set](B_06249)

### 14.12 Distributor Spare Parts Set

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370220</td>
<td>Distributor spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td>Distributor unit, complete</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4</td>
<td></td>
<td>Screw</td>
</tr>
</tbody>
</table>

![Distributor spare parts set](B_06250)

### 14.13 Regulator Unit Spare Parts Set

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370221</td>
<td>Regulator unit spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td>Regulator unit preassembled</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4</td>
<td></td>
<td>Screw</td>
</tr>
</tbody>
</table>

![Regulator unit spare parts set](B_06251)

### 14.14 Grounding Spare Parts Set

<table>
<thead>
<tr>
<th>Pos</th>
<th>K</th>
<th>Stk</th>
<th>Order No.</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>2370222</td>
<td>Grounding spare parts set</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td>Cable lug</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1</td>
<td></td>
<td>Screw for cable lug</td>
</tr>
</tbody>
</table>

![Grounding spare parts set](B_06253)
15 GUARANTEE AND CONFORMITY DECLARATIONS

15.1 IMPORTANT NOTES ON PRODUCT LIABILITY

As a result of an EC regulation effective from January 1, 1990, the manufacturer shall only be liable for his product if all parts originate from him or are approved by him, and if the devices are properly mounted, operated and maintained. The manufacturer will not be held liable or will only be held partially liable if third-party accessories or spare parts have been used. With genuine WAGNER accessories and spare parts, you have the guarantee that all safety regulations are complied with.

15.2 WARRANTY CLAIM

Full warranty is provided for this device: 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 type of warranty provided is such that the device or individual components of the device are either replaced or repaired as we see fit. The resulting costs, in particular shipping charges, road tolls, labor and material costs will be borne by us except where these costs are increased due to the subsequent shipment of the device to a location other than the address of the purchaser. We do not provide warranty for damage that has been caused or contributed to for the following reasons:

- Unsuitable or improper use, faulty assembly or commissioning by the purchaser or a third party, normal wear, negligent handling, defective maintenance, unsuitable coating products, substitute products and the influence of chemical, electrochemical or electrical agents, except when the damage is attributable to us.
- Abrasive coating products such as red lead, emulsions, glazes, liquid abrasives, zinc dust paints and so forth reduce the service life of valves, packings, spray guns, nozzles, cylinders, pistons etc. Wear and tear due to such causes are not covered by this warranty.
- Components that have not been manufactured by WAGNER are subject to the original warranty of the manufacturer.

Replacement of a component does not extend the period of warranty of the device. The device should be inspected immediately upon receipt. To avoid losing the warranty, we or the supplier company are to be informed in writing about obvious faults within 14 days upon receipt of the device. We reserve the right to have the warranty compliance met by a contracting company. The services provided by this warranty are dependent on evidence being provided in the form of an invoice or delivery note. If the examination discovers that no warranty claim exists, the costs of repairs are charged to the purchaser. It is clearly stipulated that this warranty claim does not represent any constraint on statutory regulations or regulations agreed to contractually in our general terms and conditions.

Wagner International AG
15.3 EU DECLARATION OF CONFORMITY

We hereby declare that the supplied version of diaphragm pumps and spray packs:

**TOPFINISH DD10**

complies with the following guidelines:

2006/42/EC

2014/34/EU (ATEX Directive)

Applied standards, in particular:

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 14462:2015</td>
<td></td>
</tr>
</tbody>
</table>

Applied national technical standards and specifications, in particular:

DGUV Regel 100-500 Chapter 2.29 and Chapter 2.36  TRGS 727

**Identification:**

CE II 2 G Ex h IIB T4 Gb X

**EU Declaration of Conformity**

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

**Order number:** 2367686