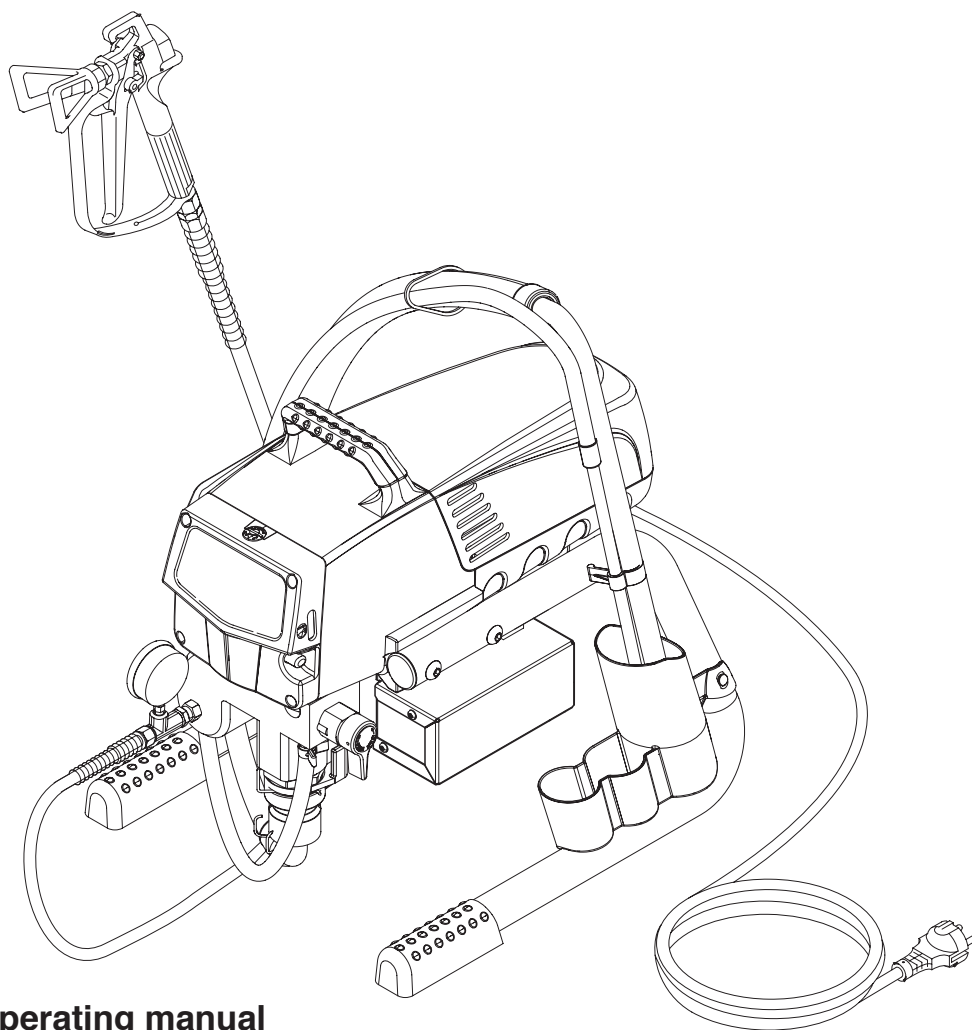


# ProSpray 3.21

## Airless high-pressure spraying unit

Models:  
0558019  
0558046



Original operating manual

# ProSpray 3.21

# Warning!

**Attention: Danger of injury by injection!**  
Airless units develop extremely high spraying pressures.

**1**

Never put your fingers, hands or any other parts of the body into the spray jet!



Never point the spray gun at yourself, other persons or animals. Never use the spray gun without safety guard.



Do not treat a spraying injury as a harmless cut. In case of injury to the skin through coating materials or solvents, consult a doctor immediately for quick and expert treatment. Inform the doctor about the coating material or solvent used.



**2**

The operating instructions state that the following points must always be observed before starting up.

1. Faulty units must not be used.
2. Secure Wagner spray gun using the safety catch on the trigger.

3. Ensure that the unit is properly earthed. The connection must take place through a correctly earthed two-pole and earth socket outlet.



4. Check allowable operating pressure of high-pressure hose and spray gun.



5. Check all connections for leaks.

**3**

The instructions regarding regular cleaning and maintenance of the unit must be strictly observed.



Before any work is done on the unit or for every break in work the following rules must be observed:

1. Release the pressure from spray gun and hose.



2. Secure the Wagner spray gun using the safety catch on the trigger



3. Switch off unit.



# Be safety-conscious!

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## 1. Safety regulations for Airless spraying

This manual contains information that must be read and understood before using the equipment. When you come to an area that has one of the following symbols, pay particular attention and make certain to heed the safeguard.



This symbol indicates a potential hazard that may cause serious injury or loss of life. Important safety information will follow.



Attention

This symbol indicates a potential hazard to you or to the equipment. Important information that tells how to prevent damage to the equipment or how to avoid causes of minor injuries will follow.



A hazard symbol such as this one refers to a specific, task-related risk. Be sure to heed the safeguard.



Notes give important information which should be given special attention.

	<p><b>HAZARD: INJECTION INJURY</b> A high pressure stream produced by this equipment can pierce the skin and underlying tissues, leading to serious injury and possible amputation.</p> <p><b>DO NOT TREAT AN INJECTION INJURY AS A SIMPLE CUT! Injection can lead to amputation. See a physician immediately.</b></p> <p><b>The maximum operating range of the unit is 221 bar (22.1 MPa, 3200 PSI) fluid pressure.</b></p>
	<p><b>PREVENTION:</b></p> <ul style="list-style-type: none"> <li>• NEVER aim the gun at any part of the body.</li> <li>• NEVER allow any part of the body to touch the fluid stream. DO NOT allow body to touch a leak in the fluid hose.</li> <li>• NEVER put your hand in front of the gun. Gloves will not provide protection against an injection injury.</li> </ul>
	<p>0 bar</p> <ul style="list-style-type: none"> <li>• ALWAYS lock the gun trigger, shut the fluid pump off and release all pressure before servicing, cleaning the tip guard, changing tips, or leaving unattended. Pressure will not be released by turning off the engine. The PRIME/SPRAY valve or pressure bleed valve must be turned to their appropriate positions to relieve system pressure.</li> </ul>
	<ul style="list-style-type: none"> <li>• ALWAYS keep tip guard in place while spraying. The tip guard provides some protection but is mainly a warning device.</li> <li>• NEVER use a spray gun without a working trigger lock and trigger guard in place.</li> <li>• ALWAYS remove the spray tip before flushing or cleaning the system.</li> </ul>
	<ul style="list-style-type: none"> <li>• The paint hose can develop leaks from wear, kinking and abuse. A leak can inject material into the skin. Inspect the hose before each use.</li> </ul>
	<ul style="list-style-type: none"> <li>• All accessories must be rated at or above the maximum operating pressure range of the sprayer. This includes spray tips, guns, extensions, and hose.</li> </ul>



### NOTE TO PHYSICIAN:

Injection into the skin is a traumatic injury. It is important to treat the injury as soon as possible. **DO NOT** delay treatment to research toxicity. Toxicity is a concern with some coatings injected directly into the blood stream. Consultation with a plastic surgeon or reconstructive hand surgeon may be advisable.



### HAZARD: EXPLOSION OR FIRE

Solvent and paint fumes can explode or ignite. Severe injury and/or property damage can occur.

#### PREVENTION:



- Provide extensive exhaust and fresh air introduction to keep the air within the spray area free from accumulation of flammable vapors.
- Avoid all ignition sources such as static electricity sparks, electrical appliances, flames, pilot lights, hot objects, and sparks from connecting and disconnecting power cords or working light switches.
- Plastic can cause static sparks. Never hang plastic to enclose spray area. Do not use plastic drop cloths when spraying flammable materials.
- Always flush unit into separate metal container, at low pump pressure, with spray tip removed. Hold gun firmly against side of container to ground container and prevent static sparks.




- Do not smoke in spray area.
- Fire extinguisher must be present and in good working order.
- Place sprayer at least 6.1 m (20 feet) from the spray object in a well ventilated area (add more hose if necessary). Flammable vapors are often heavier than air. Floor area must be extremely well ventilated. The pump contains arcing parts that emit sparks and can ignite vapors.
















- The equipment and objects in and around the spray area must be properly grounded to prevent static sparks.
- Use only conductive or earthed high pressure fluid hose. Gun must be earthed through hose connections.
- Power cord must be connected to a grounded circuit (electric units only).
- The unit must be connected to an earthed object. Use the green earthing wire to connect the unit to a water pipe, steel beam, or other electrically earthed surface.



- Follow material and solvent manufacturer's warnings and instructions. Be familiar with the coating material's MSDS sheet and technical information to ensure safe use.
- Do not use materials with a flashpoint below 21° C (70° F). Flashpoint is the temperature at which a fluid can produce enough vapors to ignite.
- Use lowest possible pressure to flush equipment.

	<b>HAZARD: EXPLOSION HAZARD DUE TO INCOMPATIBLE MATERIALS</b> Will cause severe injury or property damage.
	<b>PREVENTION:</b> <ul style="list-style-type: none"> <li>Do not use materials containing bleach or chlorine.</li> <li>Do not use halogenated hydrocarbon solvents such as methylene chloride and 1,1,1 - trichloroethane. They are not compatible with aluminum and may cause an explosion. If you are unsure of a material's compatibility with aluminum, contact your coating's supplier.</li> </ul>

	<b>HAZARD: GENERAL</b> This product can cause severe injury or property damage.
	<b>PREVENTION:</b> <ul style="list-style-type: none"> <li>Read all instructions and safety precautions before operating equipment.</li> <li>Follow all appropriate local, state, and national codes governing ventilation, fire prevention, and operation.</li> <li>Pulling the trigger causes a recoil force to the hand that is holding the spray gun. The recoil force of the spray gun is particularly powerful when the tip has been removed and a high pressure has been set on the airless pump. When cleaning without a spray tip, set the pressure control knob to the lowest pressure.</li> <li>Use only manufacturer authorized parts. User assumes all risks and liabilities when using parts that do not meet the minimum specifications and safety devices of the pump manufacturer.</li> <li>Before each use, check all hoses for cuts, leaks, abrasion or bulging of cover. Check for damage or movement of couplings. Immediately replace the hose if any of these conditions exist. Never repair a paint hose. Replace it with another earthed high-pressure hose.</li> <li>Make sure power cord, air hose and spray hoses are routed in such a manner to minimize slip, trip and fall hazard.</li> <li>Clean up all material and solvent spills immediately to prevent slip hazard.</li> <li>ALWAYS follow the material manufacturer's instructions for safe handling of paint and solvents.</li> </ul>
	
	
	
	<ul style="list-style-type: none"> <li>Do not use this unit in workshops that are covered under the explosion prevention regulations.</li> </ul>
	<ul style="list-style-type: none"> <li>Always unplug cord from outlet before working on equipment (electric units only).</li> </ul>
	<ul style="list-style-type: none"> <li>Always keep the power cord plug in sight during usage to prevent any accidental shutdown or startup.</li> <li>If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.</li> </ul>
	<ul style="list-style-type: none"> <li>Wear ear protection. This unit can produce noise levels above 85 dB(A).</li> <li>This equipment is designed to operate at high pressures and recoil forces may occur. Under certain circumstances, such forces could result in repetitive strain injury.</li> </ul>
	<ul style="list-style-type: none"> <li>Never leave this equipment unattended. Keep away from children or anyone not familiar with the operation of airless equipment.</li> <li>Do not move unit while unit is running.</li> <li>Do not spray on windy days.</li> </ul>

	<b>HAZARD: HAZARDOUS VAPORS</b> Paints, solvents, insecticides, and other materials can be harmful if inhaled or come in contact with body. Vapors can cause severe nausea, fainting, or poisoning.
  	<b>PREVENTION:</b> <ul style="list-style-type: none"> <li>Use a respirator or mask if vapors can be inhaled. Read all instructions supplied with the mask to be sure it will provide the necessary protection.</li> <li>Wear protective eyewear.</li> <li>Wear protective clothing as required by coating manufacturer.</li> </ul>

## 1.1 Earthing Instructions



Electric models must be earthed. In the event of an electrical short circuit, earthing reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having an earthing wire with an appropriate earthing plug. The plug must be plugged into an outlet that is properly installed and earthed in accordance with all local codes and ordinances.



**DANGER — Improper installation of the earthing plug can result in a risk of electric shock. If repair or replacement of the cord or plug is necessary, do not connect the green earthing wire to either blade terminal. The wire with insulation having a green outer surface with or without yellow stripes is the earthing wire and must be connected to the earthing pin.**

Check with a qualified electrician or serviceman if the earthing instructions are not completely understood, or if you are in doubt as to whether the product is properly earthed. Do not modify the plug provided. If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

### Work or repairs at the electrical equipment:





















































































These may only be carried out by a skilled electrician. No liability is assumed for incorrect installation.

A list of the materials used in the construction of the equipment will be made available on request to validate compatibility with the coating materials to be used.

## 2. General view of application

### 2.1 Application

 = Recommended  = Not-recommended

Materials	Object Size	Model						
		PS 3.21	PS 3.23	PS 3.25	PS 3.29	PS 3.31	PS 3.34	PS 3.39
Release agents, oils, undercoats, primers, fillers, synthetic resin-based paints, acrylic paints recommended nozzle size: FineFinish 0.008" - 0.014"	up to 200 m <sup>2</sup> 200 m <sup>2</sup> - 800 m <sup>2</sup> more than 800 m <sup>2</sup>	  	  	  	  	  	  	  
Emulsion paints, latex paints recommended nozzle size: 0.017" - 0.027"	up to 200 m <sup>2</sup> 200 m <sup>2</sup> - 800 m <sup>2</sup> more than 800 m <sup>2</sup>	  	  	  	  	  	  	  
Anti-corrosive agents, flame retardants, fabric adhesive recommended nozzle size: 0.021" - 0.031"	up to 200 m <sup>2</sup> 200 m <sup>2</sup> - 800 m <sup>2</sup> more than 800 m <sup>2</sup>	  	  	  	  	  	  	  
Airless-scrappers recommended nozzle size: 0.027" - 0.039"	up to 200 m <sup>2</sup> 200 m <sup>2</sup> - 800 m <sup>2</sup> more than 800 m <sup>2</sup>	  	  	  	  	  	  	  

### 2.2 Coating materials

#### Processible coating materials



**Pay attention to the Airless quality of the coating materials to be processed.**

Dilutable lacquers and paints or those containing solvents, two-component coating materials, dispersions, latex paints.

No other materials should be used for spraying without WAGNER's approval.

#### Filtering

Despite suction filter and insertion filter in the spray gun, filtering of the coating material is generally advisable.

Stir coating material before commencement of work.



**Attention: Make sure, when stirring up with motor-driven agitators that no air bubbles are stirred in. Air bubbles disturb when spraying and can, in fact, lead to interruption of operation.**

#### Viscosity

With this unit it is possible to process highly viscous coating materials of up to around 20.000 MPa·s.

If highly viscous coating materials cannot be taken in by suction, they must be diluted in accordance with the manufacturer's instructions.

#### Two-component coating material

The appropriate processing time must be adhered to exactly. Within this time rinse through and clean the unit meticulously with the appropriate cleaning materials.

#### Coating materials with sharp-edged additional materials

These have a strong wear and tear effect on valves, high-pressure hose, spray gun and tip. The durability of these parts can be reduced appreciably through this.

## 3. Description of unit

### 3.1 Airless process

The main areas of application are thick layers of highly viscous coating material for large areas and a high consumption of material.

A piston pump takes in the coating material by suction and conveys it to the tip. Pressed through the tip at a pressure of up to a maximum of 221 bar (22,1 MPa), the coating material is atomised. This high pressure has the effect of micro fine atomisation of the coating material.

As no air is used in this process, it is described as an AIRLESS process.

This method of spraying has the advantages of finest atomisation, cloudless operation and a smooth, bubble-free surface. As well as these, the advantages of the speed of work and convenience must be mentioned.

### 3.2 Functioning of the unit

In the following there is a short description of the technical construction for better understanding of the function.

WAGNER ProSpray units are electrically driven high-pressure spraying units.

A gear unit transfers the driving force to a crankshaft. The crankshaft moves the pistons of the material feed pump up and down.

The inlet valve is opened automatically by the upwards movement of the piston. The outlet valve is opened when the piston moves downward.

The coating material flows under high pressure through the high-pressure hose to the spray gun. When the coating material exits from the tip it atomizes.

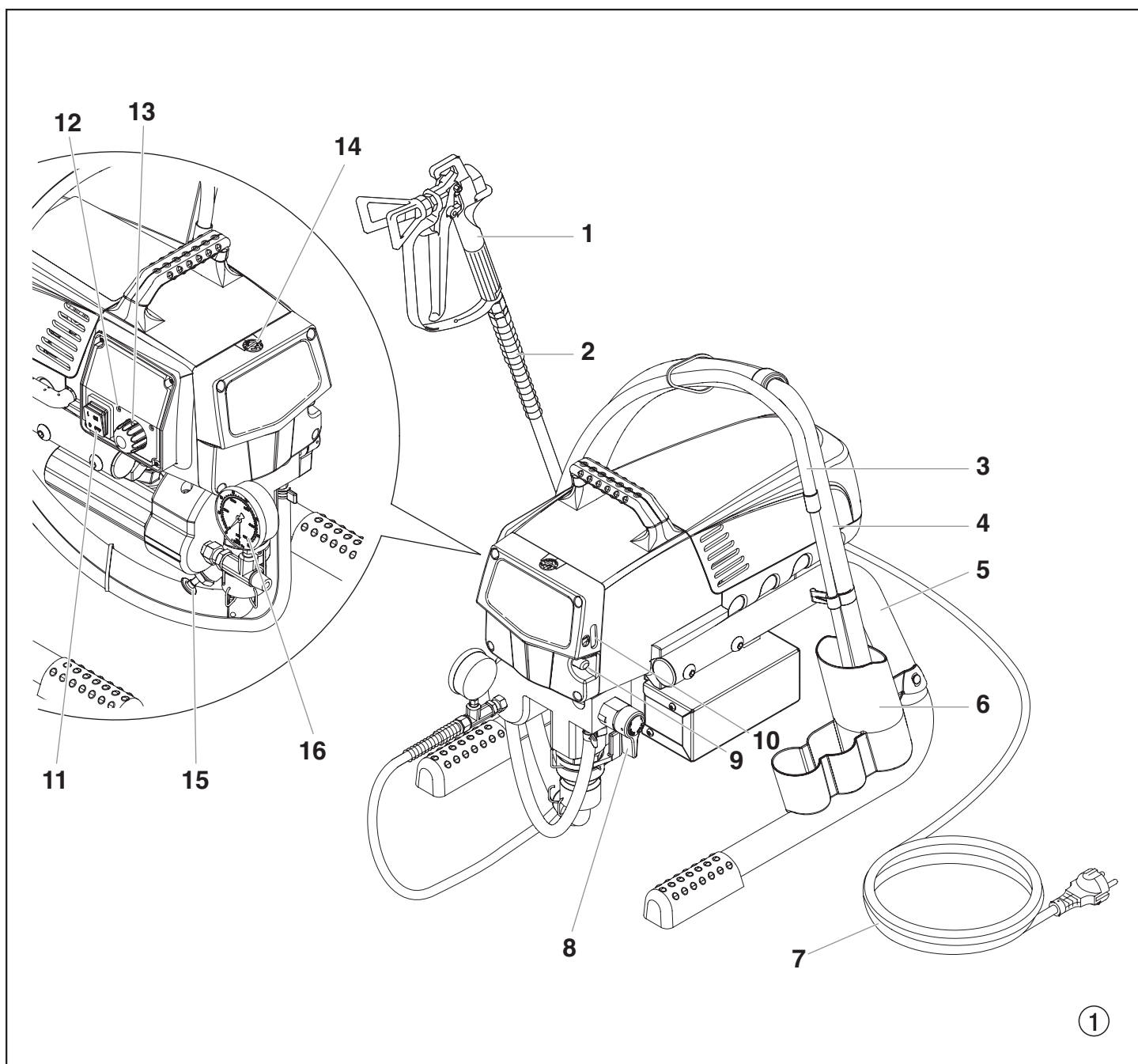
The pressure regulator controls the volume and the operating pressure of the coating material.



### 3.3 Legend for explanatory diagram ProSpray 3.21

- |                      |  |
|----------------------|--|
| 1 Spray gun          | 9 Oil button   |
| 2 High-pressure hose | 10 Oil level gauge   |
| 3 Return hose        | 11 ON/OFF switch   |
| 4 Suction hose       | 12 Control panel indicators  |
| 5 Frame              | 13 Pressure control knob   |
| 6 Drip cup           | 14 Oil cup for EasyGlide (EasyGlide prevents increased wear of the packings) |
| 7 Power cord         | 15 Pusher stem   |
| 8 Relief valve       | 16 Manometer   |
- Lever position vertical – PRIME (↻ circulation)  
Lever position horizontal – SPRAY (➤)

### 3.4 Explanatory diagram ProSpray 3.21



### 3.5 Technical data

<b>Voltage:</b>	100-120 Volt , 50/60 Hz
<b>Max. current consumption:</b>	9.0 A
<b>Power cord:</b>	3 x 1.5 mm <sup>2</sup> – 6 m or 2.5 m
<b>Acceptance capacity:</b>	900 Watt
<b>Max. operating pressure:</b>	221 bar (22.1 MPa)
<b>Volume flow at 12 MPa (120 bar) with water:</b>	2.0 l/min
<b>Max tip size:</b>	0.023 inch – 0.58 mm
<b>Max. temperature of the coating material:</b>	43°C
<b>Max viscosity:</b>	20.000 mPa·s
<b>Weight:</b>	17.9 kg
<b>Special high-pressure hose:</b>	DN 6 mm, 15 m, connection thread M 16 x 1.5
<b>Dimensions (L X W X H):</b>	437 x 363 x 416 mm
<b>Max sound pressure level:</b>	80 dB (A) *

\* Place of measuring: 1 m in distance from the unit and 1.6 m above the floor, 12 MPa (120 bar) operating pressure, reverberant floor.

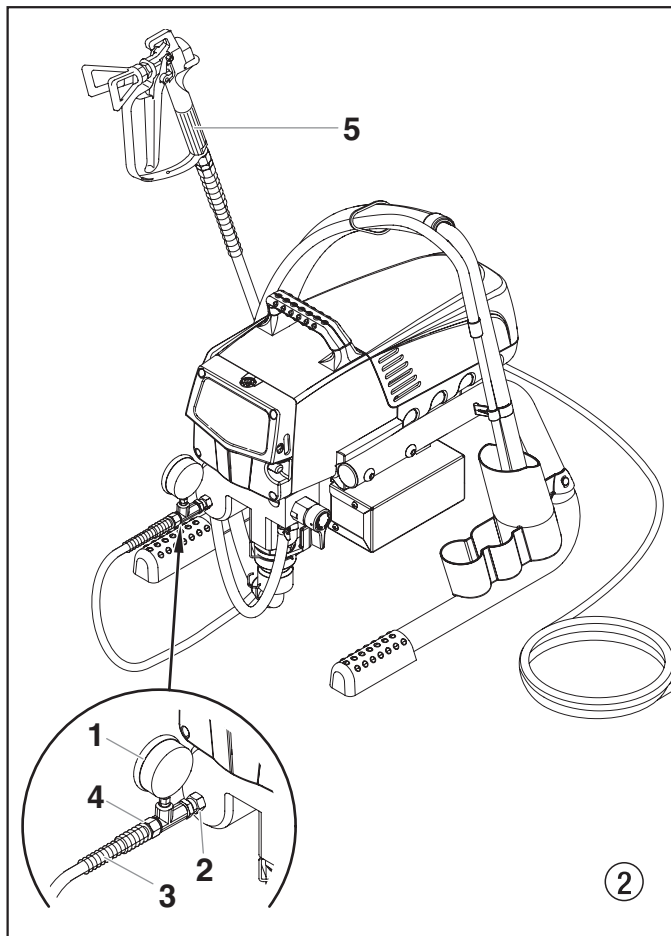
### 3.6 Transportation in vehicle

Secure the unit with a suitable fastening.

## 4. Starting operation

### 4.1 High-pressure hose, spray gun and separating oil

1. Screw the pressure gauge (1) to the coating material outlet (Fig. 2, Item 2).
2. Screw the high-pressure hose (3) to the coating material outlet on the pressure gauge (Fig. 2, Item 4).
3. Screw the spray gun (5) with the selected tip onto the high-pressure hose.
4. Tighten the union nuts at the high-pressure hoses firmly so that coating material does not leak.



5. Remove the oil cup cap with a straight-slot screwdriver.
6. Fill the oil cup with EasyGlide (Fig. 3) until the oil gauge (6) is showing that it is full.

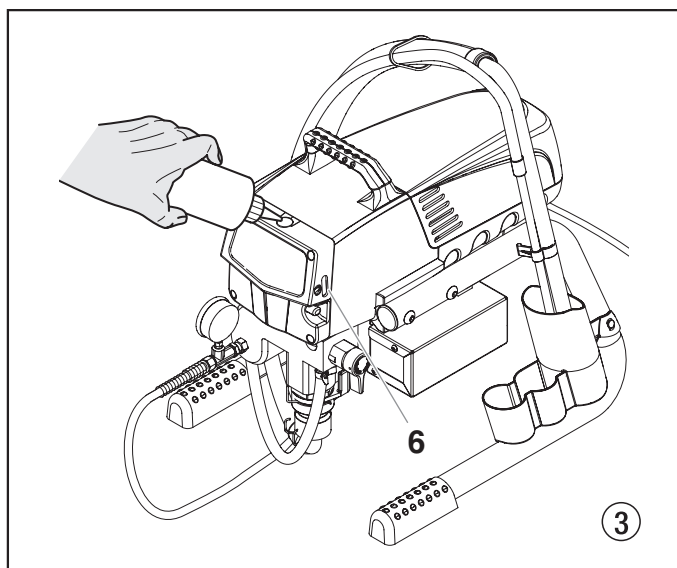


Attention

**EasyGlide prevents increased wear and tear to the packings.**

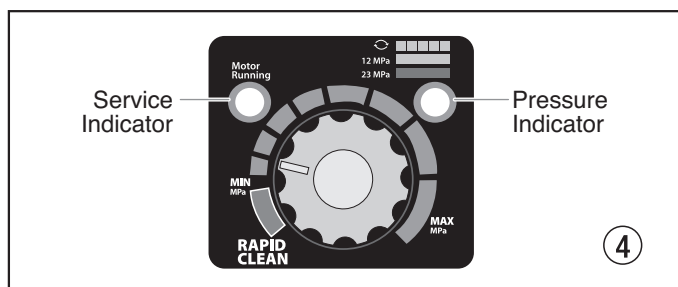
7. Replace oil cup cap.
8. Press oil button 2-5 times to prime the oiler. Press once for every eight hours of usage to lubricate the fluid section.
9. Fully depress the pusher stem to make sure the inlet ball is free.





## 4.2 Control Panel Indicators

The following is a description of the control panel indicators.



### Pressure Indicator

The pressure indicator shows the current operating pressure of the sprayer. It has three different indications: blinking yellow, solid yellow, and solid green.

#### Blinking Yellow

When the pressure indicator is blinking yellow, the sprayer is operating between 0 and 1.4 MPa (14 bar). A blinking yellow pressure indicator means:

- The sprayer is plugged in and turned “ON”
- The sprayer is at priming pressure (little or no pressure)
- It is safe to move the relief valve between positions
- It is safe to change or replace the spray tip



If the pressure indicator begins blinking yellow when the pressure control knob is set at a higher pressure and the relief valve is in the SPRAY position, either the spray tip is worn or the sprayer is in need of service/repair.

#### Solid Yellow

When the pressure indicator is solid yellow, the sprayer is operating between 1.4 MPa (14 bar) and 12 MPa (120 bar). A solid yellow pressure indicator means:

- The sprayer is at the proper pressure setting for spraying stain, lacquer, varnish, and multi-colors

#### Solid Green

When the pressure indicator is solid green, the sprayer is operating between 12 MPa (120 bar) and 23 MPa (230 bar). A solid green pressure indicator means:

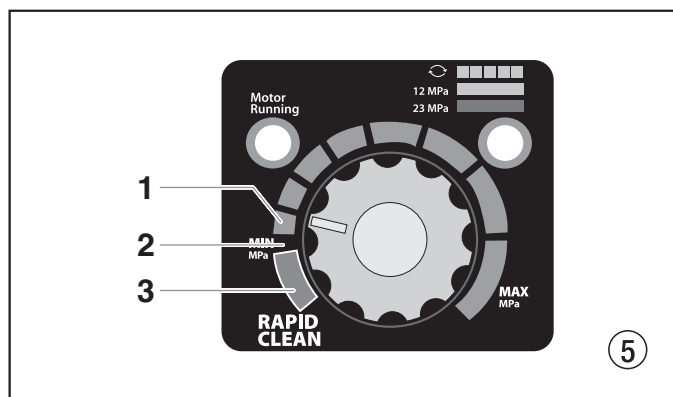
- The sprayer is at the proper pressure setting for spraying oil-based and latex house paints
- The sprayer is operating at peak performance at a high pressure setting
- If the pressure indicator goes to solid yellow when the pressure is set so that it starts at solid green, it indicates one of the following:
  - a. **Tip Wear Indicator** — when spraying with latex or at high pressure the solid yellow appears. This means the tip is worn and needs to be replaced.
  - b. **Tip Too Large** — when a tip that is too large for the sprayer is put in the gun, the pressure indicator will turn from solid green to solid yellow.
  - c. **Fluid Section Wear** — if a solid yellow pressure indicator appears when using a new tip and the pressure is set at maximum, service may be required (worn packings, worn piston, stuck valve, etc...).

#### Service Indicator

The Service indicator is on when the motor is commanded to run. This indicator is used by service centers to troubleshoot motor problems.

## 4.3 Pressure control knob settings (Fig. 5)

1. Minimum pressure setting
2. Black zone – no pressure generation
3. Blue zone – pulsating pressure for cleaning



## 4.4 Connection to the mains network



Attention

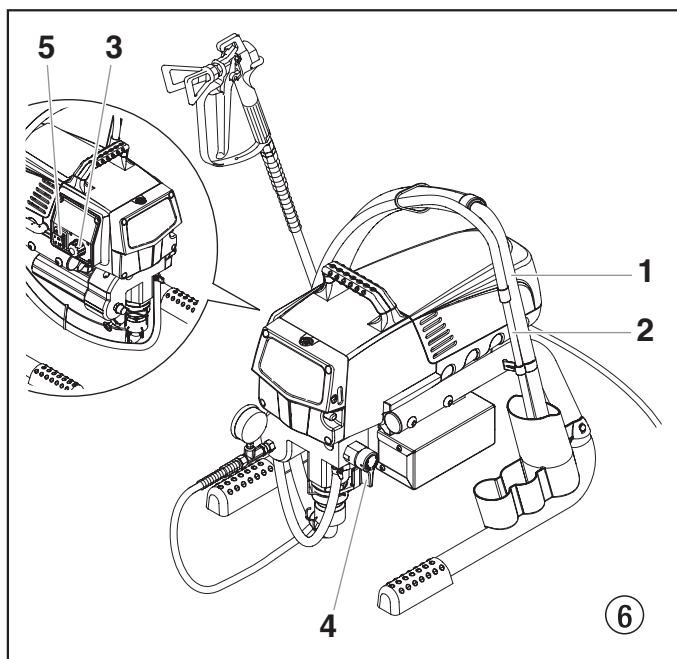
The unit must be connected to an appropriately-grounded safety outlet.

Before connecting the unit to the mains supply, ensure that the line voltage matches that specified on the unit's rating plate.

The connection must be equipped with a residual current protective device with  $INF \leq 30$  mA.

#### 4.5 Cleaning preserving agent when starting-up of operation initially

1. Immerse the suction tube (Fig. 6, Item 1) and return hose (2) into a container with a suitable cleaning agent.
2. Turn the pressure control knob counterclockwise (3) to minimum pressure.
3. Open the relief valve (4), valve position PRIME (↻ circulation).
4. Switch the unit (5) ON.
5. Wait until the cleaning agent exudes from the return hose.
6. Close the relief valve, valve position SPRAY (→ spray).
7. Pull the trigger of the spray gun.
8. Spray the cleaning agent from the unit into an open collecting container.



#### 4.6 Taking the unit into operation with coating material

1. Immerse the suction tube (Fig. 6, Item 1) and return hose (2) into the coating material container.
2. Turn the pressure control knob counterclockwise (3) to minimum pressure.
3. Open the relief valve (4), valve position PRIME (↻ circulation).
4. Switch the unit (5) ON.
5. Wait until the coating material exudes from the return hose.
6. Close the relief valve, valve position SPRAY (→ spray).
7. Trigger the spray gun several times and spray into a collecting container until the coating material exits the spray gun without interruption.
8. Increase the pressure by slowly turning up the pressure control knob.

Check the spray pattern and increase the pressure until the atomization is correct.

Always turn the pressure control knob to the lowest setting with good atomization.

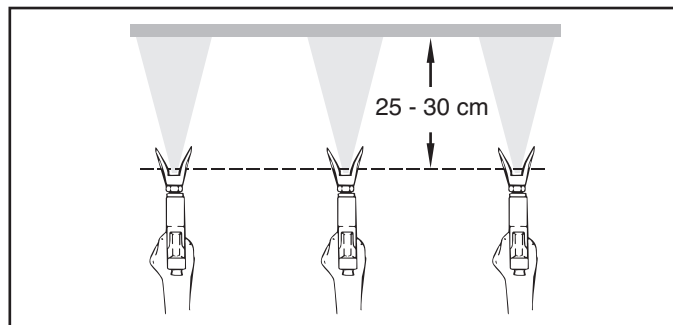
9. The unit is ready to spray.

#### 5. Spraying technique

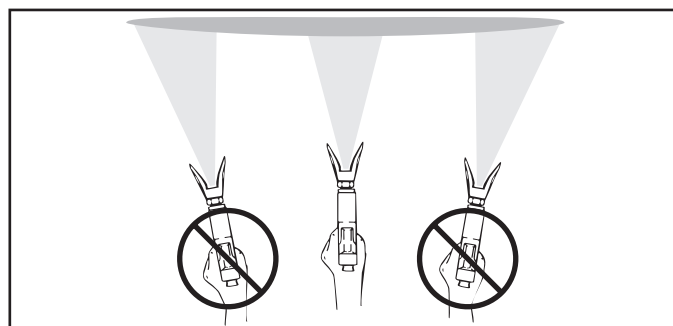


**Injection hazard. Do not spray without the tip guard in place. NEVER trigger the gun unless the tip is completely turned to either the spray or the unclog position. ALWAYS engage the gun trigger lock before removing, replacing or cleaning tip.**

The key to a good paint job is an even coating over the entire surface. Keep your arm moving at a constant speed and keep the spray gun at a constant distance from the surface. The best spraying distance is 25 to 30 cm between the spray tip and the surface.

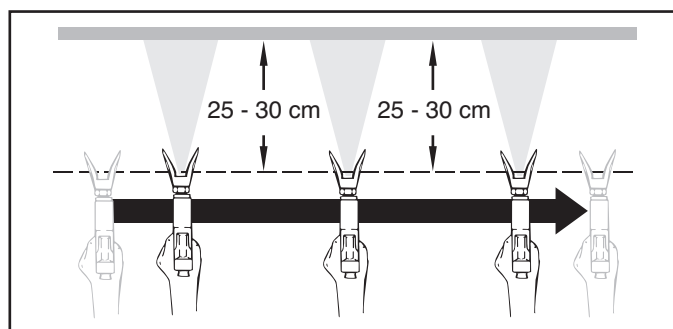


Keep the spray gun at right angles to the surface. This means moving your entire arm back and forth rather than just flexing your wrist.



Keep the spray gun perpendicular to the surface, otherwise one end of the pattern will be thicker than the other.

Trigger gun after starting the stroke. Release the trigger before ending the stroke. The spray gun should be moving when the trigger is pulled and released. Overlap each stroke by about 30%. This will ensure an even coating.



**If very sharp edges result or if there are streaks in the spray jet – increase the operating pressure or dilute the coating material.**

## 6. Handling the high-pressure hose

Avoid sharp bending or kinking of the high-pressure hose. The smallest bending radius amounts to about 20 cm.

Do not drive over the high-pressure hose. Protect against sharp objects and edges.



**Danger of injury through leaking high-pressure hose. Replace any damaged high-pressure hose immediately.**

**Never repair defective high-pressure hoses yourself!**

### 6.1 High-pressure hose

The unit is equipped with a high-pressure hose specially suited for piston pumps.



**Only use WAGNER original-high-pressure hoses in order to ensure functionality, safety and durability.**

## 7. Interruption of work

1. Open the relief valve, valve position PRIME (↻ circulation).
2. Switch the unit OFF.
3. Turn the pressure control knob counterclockwise to minimum pressure.
4. Pull the trigger of the spray gun in order to release the pressure from the high-pressure hose and spray gun.
5. Secure the spray gun, refer to the operating manual of the spray gun.
6. If a standard tip is to be cleaned, see Page 17, Section 12.2.  
If a non-standard tip is installed, proceed according to the relevant operating manual.
7. Depending on the model, leave the suction tube or the suction hose and return hose immersed in the coating material or swivel or immerse it into a corresponding cleaning agent.



Attention

**If fast-drying or two-component coating material is used, ensure that the unit is rinsed with a suitable cleaning agent within the processing time.**

## 8. Cleaning the unit (shutting down)

A clean state is the best method of ensuring operation without problems. After you have finished spraying, clean the unit. Under no circumstances may any remaining coating material dry and harden in the unit.

The cleaning agent used for cleaning (only with an ignition point above 21 °C) must be suitable for the coating material used.

- **Secure the spray gun**, refer to the operating manual of the spray gun.

Clean and remove tip.

For a standard tip, refer to Page 17, Section 12.2.

If a non-standard tip is installed, proceed according to the relevant operating manual.

1. Remove suction hose from the coating material.
2. Close the relief valve, valve position SPRAY (↗ spray).
3. Switch the unit ON.
4. Pull the trigger of the spray gun in order to pump the remaining coating material from the suction hose, high-pressure hose and the spray gun into an open container.



Attention

**The container must be earthed in case of coating materials which contain solvents.**



**Caution! Do not pump or spray into a container with a small opening (bunghole)! Refer to the safety regulations.**

5. Immerse suction hose with return hose into a container with a suitable cleaning agent.
6. Turn the pressure control knob into the blue zone - pulsating pressure for unit cleaning.
7. Open the relief valve, valve position PRIME (↻ circulation).
8. Pump a suitable cleaning agent in the circuit for a few minutes.
9. Close the relief valve, valve position SPRAY (↗ spray).
10. Pull the trigger of the spray gun.
11. Pump the remaining cleaning agent into an open container until the unit is empty.
12. Switch the unit OFF.

### 8.1 Cleaning unit from outside



**First of all pull out mains plug from socket.**



Attention

**Danger of short circuit through penetrating water!**

**Never spray down the unit with high-pressure or high-pressure steam cleaners.**

Wipe down unit externally with a cloth which has been immersed in a suitable cleaning agent.

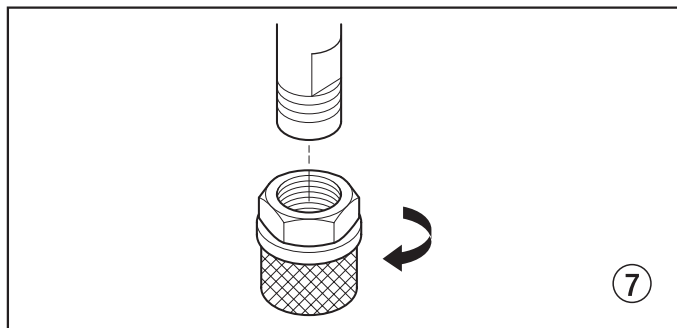
## 8.2 Suction filter



**A clean suction filter always guarantees maximum feed quantity, constant spraying pressure and problem-free functioning of the unit.**

1. Screw off the filter (Fig. 7) from suction pipe.
2. Clean or replace the filter.

Carry out cleaning with a hard brush and an appropriate cleaning agent.



## 8.3 Cleaning the high-pressure filter

Clean the filter cartridge regularly.

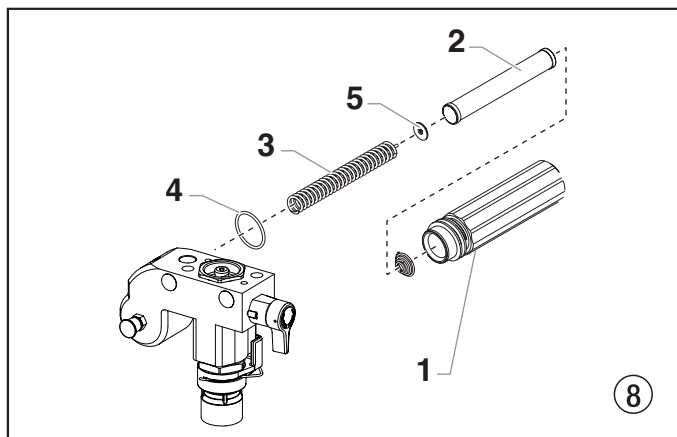
A soiled or clogged high-pressure filter can cause a poor spray pattern or a clogged tip.

1. Turn the pressure control knob counterclockwise to minimum pressure.
2. Open the relief valve, valve position PRIME (↻ circulation).
3. Switch the unit OFF.



**Unplug the power plug from the outlet.**

4. Unscrew the filter housing (Fig. 8, Item 1). with a strap wrench.
5. Pull the filter cartridge (2) from the bearing spring (3).
6. Clean all the parts with the corresponding cleaning agent. If necessary, replace the filter cartridge.
7. Check the O-ring (4), replace it if necessary.
8. Place the bearing ring (5) against the bearing spring (3). Slide the filter cartridge (2) over the bearing spring.
9. Screw in filter housing (1) and tighten it as far as possible with the strap wrench.



## 8.4 Cleaning Airless spray gun

1. Rinse Airless spray gun with an appropriate cleaning agent.
2. Clean tip thoroughly with appropriate cleaning agent so that no coating material residue remains.
3. Thoroughly clean the outside of the Airless spray gun.

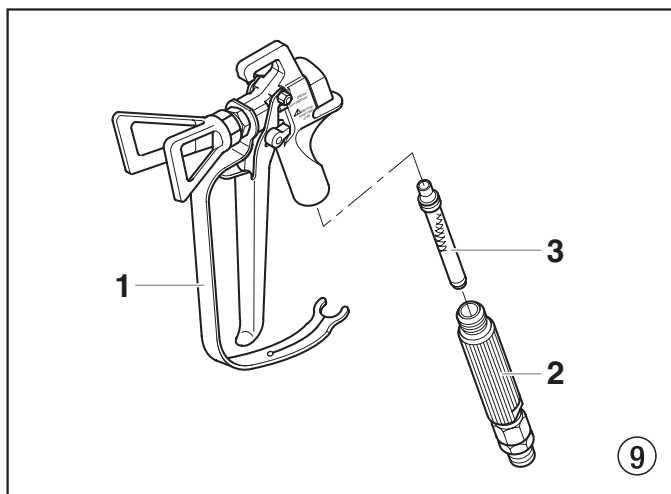
### Intake filter in Airless spray gun

#### Disassembly (Fig. 9)

1. Pull protective guard (1) forward vigorously.
2. Screw grip (2) out of the gun housing. Remove intake filter (3).
3. Intake filter congested or defective – replace.

#### Assembly

1. Place intake filter (3) with the long cone into the gun housing.
2. Screw in grip (2) into the gun housing and tighten.
3. Slot in protective guard (1).



## 9. Remedy in case of faults

Type of malfunction	Possible cause	Measures for eliminating the malfunction
A. Unit does not start	<ol style="list-style-type: none"> <li>1. No voltage applied.</li> <li>2. Pressure setting too low.</li> <li>3. ON/OFF switch defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check voltage supply.</li> <li>2. Turn up pressure control knob.</li> <li>3. Replace.</li> </ol>
B. Unit does not draw in material	<ol style="list-style-type: none"> <li>1. Relief valve is set to SPRAY (☞ spray).</li> <li>2. Filter projects over the fluid level and sucks air.</li> <li>3. Filter clogged.</li> <li>4. Suction hose/suction tube is loose, i.e. the unit is sucking in outside air.</li> </ol>	<ol style="list-style-type: none"> <li>1. Set relief valve to PRIME (↻ circulation).</li> <li>2. Refill the coating material.</li> <li>3. Clean or replace the filter.</li> <li>4. Clean connecting points. Replace O-rings if necessary. Secure suction hose with retaining clip.</li> </ol>
C. Unit draws in material, but the pressure does not build up	<ol style="list-style-type: none"> <li>1. Tip heavily worn.</li> <li>2. Tip too large.</li> <li>3. Pressure setting too low.</li> <li>4. Filter clogged.</li> <li>5. Coating material flows through the return hose when the relief valve is in the SPRAY (☞ spray) position.</li> <li>6. Packings sticky or worn.</li> <li>7. Valve balls worn.</li> <li>8. Valve seats worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace</li> <li>2. For selection of a smaller tip, see Tip table on Page 18.</li> <li>3. Turn pressure control knob clockwise to increase.</li> <li>4. Clean or replace the filter.</li> <li>5. Remove and clean or replace relief valve.</li> <li>6. Remove and clean or replace packings.</li> <li>7. Remove and replace valve balls.</li> <li>8. Remove and replace valve seats.</li> </ol>
D. Coating material exits at the top of the fluid section	<ol style="list-style-type: none"> <li>1. Upper packing is worn.</li> <li>2. Piston is worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove and replace packing.</li> <li>2. Remove and replace piston.</li> </ol>
E. Increased pulsation at the spray gun	<ol style="list-style-type: none"> <li>1. Incorrect high-pressure hose type.</li> <li>2. Tip worn or too large.</li> <li>3. Pressure too high.</li> </ol>	<ol style="list-style-type: none"> <li>1. Only use WAGNER original-high-pressure hoses in order to ensure functionality, safety and durability.</li> <li>2. Replace tip.</li> <li>3. Turn pressure control knob to a lower number.</li> </ol>
F. Poor spray pattern	<ol style="list-style-type: none"> <li>1. Tip is too large for the coating material which is to be sprayed.</li> <li>2. Pressure setting incorrect.</li> <li>3. Volume too low.</li> <li>4. Coating material viscosity too high.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace tip, see Tip table on Page 18.</li> <li>2. Turn pressure control knob until a satisfactory spraying pattern is achieved.</li> <li>3. Clean or replace all filters.</li> <li>4. Thin out according to the manufacturer's instructions.</li> </ol>
G. Unit loses power	<ol style="list-style-type: none"> <li>1. Pressure setting too low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn pressure control knob clockwise to increase.</li> </ol>

## 10. Servicing

### 10.1 General servicing

Servicing of the unit should be carried out once annually by the WAGNER service.

1. Check high-pressure hoses, device connecting line and plug for damage.
2. Check the inlet valve, outlet valve and filter for wear.

### 10.2 High-pressure hose

Inspect the high-pressure hose visually for any notches or bulges, in particular at the transition in the fittings. It must be possible to turn the union nuts freely.

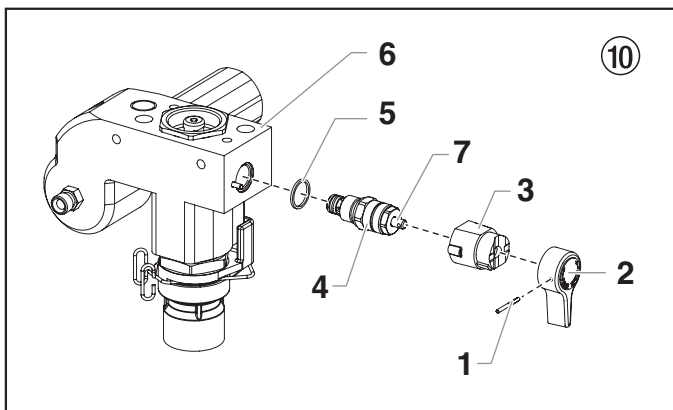
## 11. Repairs at the unit



**Switch the unit OFF.**  
**Before all repair work: Unplug the power plug from the outlet.**

### 11.1 Relief valve

1. Use a drift punch of 2 mm to remove the grooved pin (Fig. 10, Item 1) from the relief valve handle (2).
2. Remove the relief valve handle (2) and cam base (3).
3. Using a wrench, remove the valve housing (4) from the pump manifold (6).
4. Ensure that the seal (5) is seated correctly, then screw the new valve housing (4) completely into the pump manifold (6). Tighten securely with a wrench.
5. Align the cam base (3) with the hole in the pump manifold (6). Lubricate the cam base with grease and slide on the cam base.
6. Bring the hole in the valve shaft (7) and in the relief valve handle (2) into alignment.
7. Insert the grooved pin (1) to secure the relief valve handle in position.



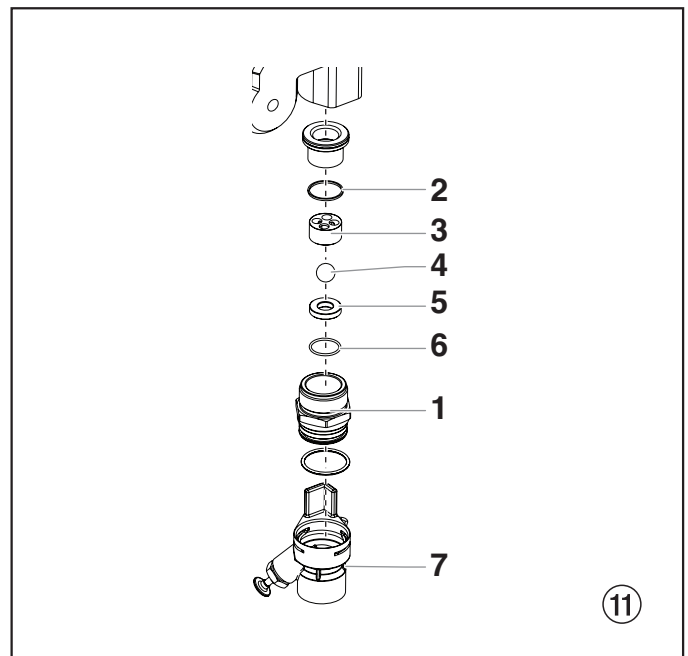
### 11.2 Inlet and outlet valve

1. Remove the four screws in the front cover and then remove the front cover.
2. Switch the unit ON and then OFF so that the piston rod is positioned in the lower stroke position.



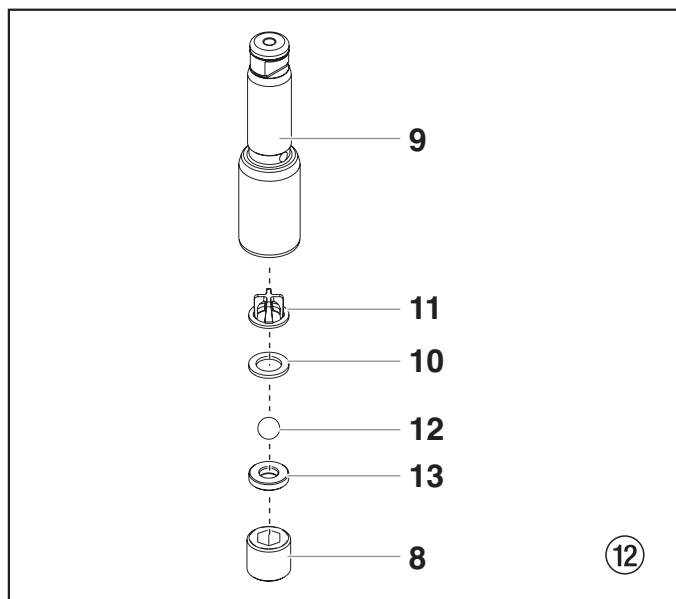
**Danger of crushing - do not reach with the fingers or tool between the moving parts.**

3. Unplug the power plug from the outlet.
4. Remove the retaining clip from the connecting bend at the suction hose and pull off the suction hose.
5. Screw off the return hose.
6. Swivel the unit 90° to the rear in order to work more easily on the material feed pump.
7. Remove the pusher stem clip and slide the pusher stem housing (7) from the inlet valve housing (1).
8. Unscrew the inlet valve housing (Fig. 11, Item 1) from the pump manifold.
9. Remove the lower seal (2), lower ball guide (3), inlet valve ball (4), inlet valve seat (5) and O-ring (6).
10. Clean all the parts with the corresponding cleaning agent. Check the inlet valve housing (1), inlet valve seat (5) and inlet valve ball (4) for wear and replace the parts if necessary. If the worn inlet valve seat (5) is unused on one side, install it the other way round.



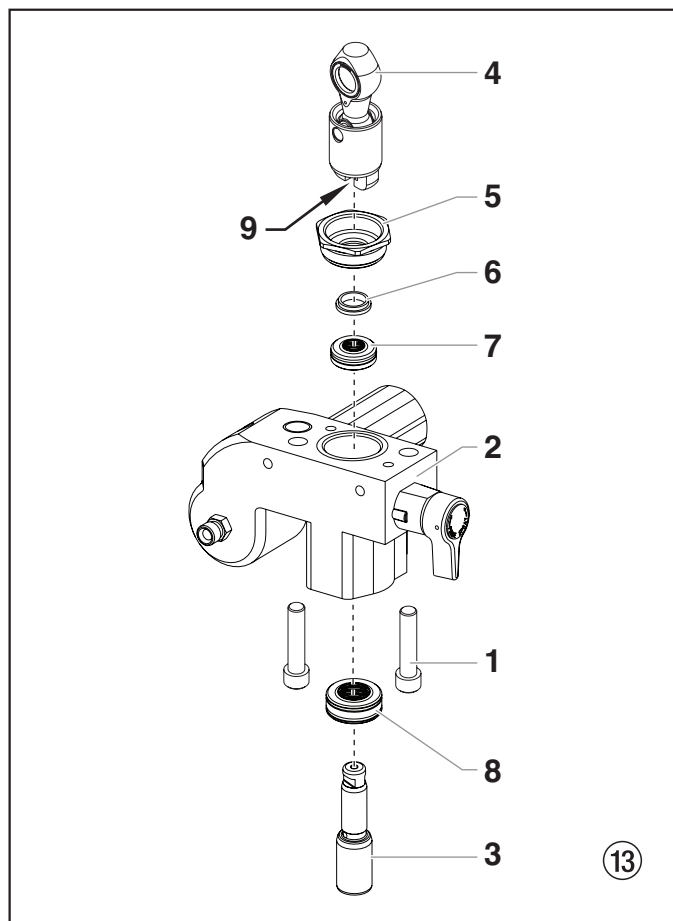
11. Unscrew outlet valve housing (Fig. 12, Item 8) from the piston (9) with adjusting wrench.
12. Remove the upper ball cage (11), crush washer (10), outlet valve ball (12), and outlet valve seat (13).
13. Clean all the parts with the corresponding cleaning agent. Check outlet valve housing (8), outlet valve seat (13), outlet valve ball (12), crush washer (10), and upper ball cage (11) for wear and replace parts if necessary. If the worn outlet valve seat (13) is unused on one side, install it the other way round.
14. Carry out installation in the reverse order. Lubricate O-ring (Fig. 11, Item 6) with machine grease and ensure proper seating in the inlet valve housing (Fig. 11, Item 1).



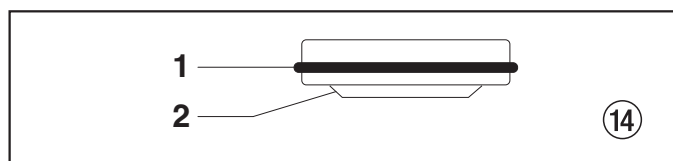


### 11.3 Packings

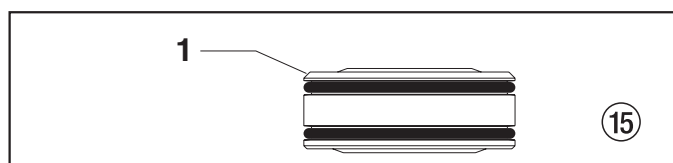
1. Remove inlet valve housing in accordance with the steps in Chapter 11.2, Page 14.
2. It is not necessary to remove the outlet valve.
3. Unscrew both cylinder head screws (Fig. 13, Item 1) from the pump manifold (2) with a 3/8 inch hexagon socket head wrench.
4. Slide the pump manifold (2) and piston (3) forward until the piston is out of the T-slot (9) on the slider assembly (4).
5. Push piston (3) downward out of the pump manifold (2).
6. Unscrew retainer nut (5) from the pump manifold (2) and remove piston guide (6).
7. Remove upper packing (7) and lower packing (8) from the pump manifold (2).



8. Clean pump manifold (2).
9. Lubricate upper packing (7) and lower packing (8) with machine grease.
10. Insert upper packing (Fig. 14) with O-ring (1) and protruding lip (2) downward.



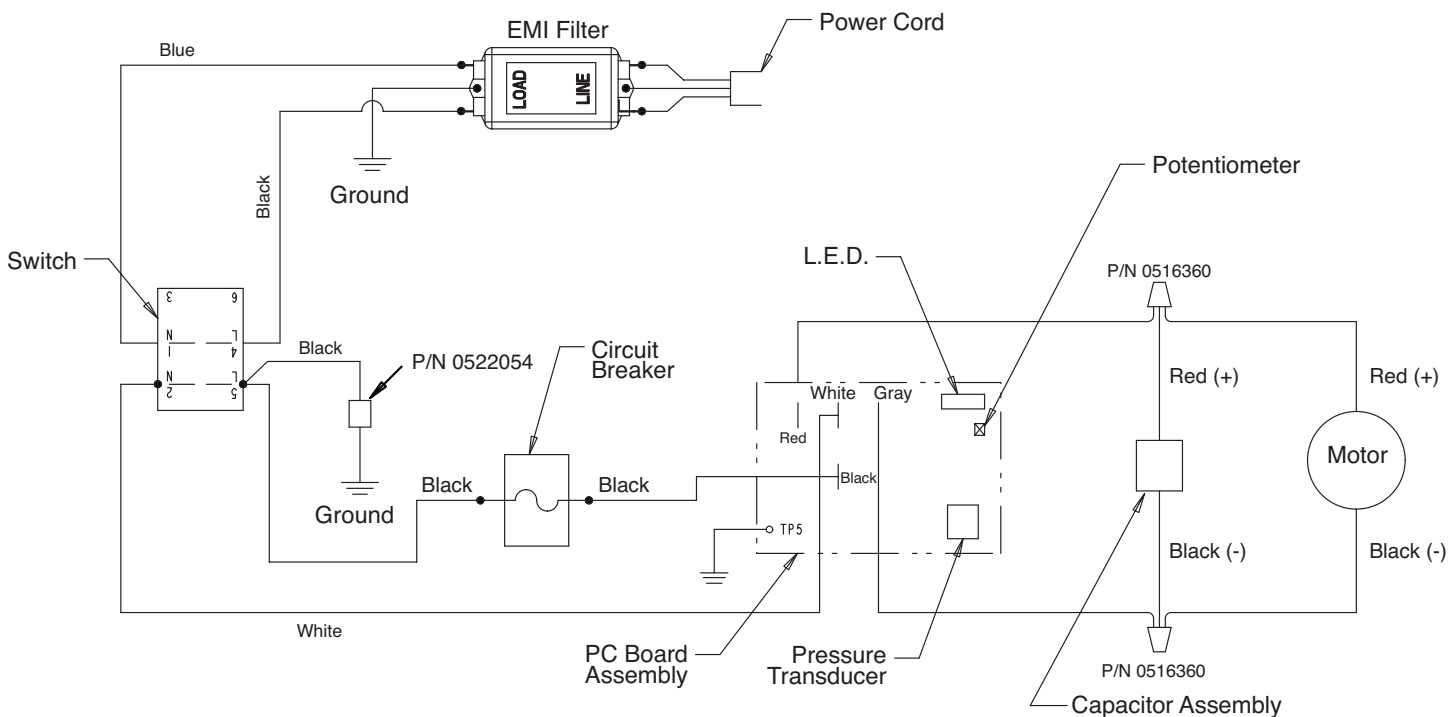
11. Insert lower packing (Fig. 15) with the beveled edge (1) facing upward.



12. Insert piston guide (Fig. 13, Item 6) into the retainer nut (5). Screw retainer nut (5) into the pump manifold (2) and tighten by hand.
13. Push installation tool (included with the replacement packings) for the piston (3) from above onto the piston.
14. Lubricate installation tool and piston (3) with machine grease.
15. Guide piston (3) through the lower packings (8) into the pump manifold (2) from below. Using a rubber mallet, lightly tap the piston (3) from below until it can be seen above the pump manifold.
16. Remove installation tool from piston (3).

17. Carefully tighten retainer nut (5) with adjusting wrench
18. Slide the top of the piston (3) into the T-slot (9) on the slider assembly (4).
19. Position the pump manifold (2) underneath the gear unit housing and push up until it rests against the gear unit housing.
20. Attach pump manifold (2) to the gear unit housing.
21. Screw pump manifold (2) tightly to gear unit housing.
22. Lubricate O-ring (Fig. 11, Item 6) between pump manifold (2) and inlet valve housing with machine grease. Screw inlet valve housing to the pump manifold.
23. Insert the elbow on the siphon assembly into the bottom of the pusher stem housing. Push the retaining clip up into the groove inside the foot valve housing to secure the siphon assembly in position. Place the return tube over the return tube fitting and secure with the clip.
24. Install front cover.

## 11.4 ProSpray 3.21 connection diagram



## 12. Appendix

### 12.1 Selection of tip

To achieve faultless and rational working, the selection of the tip is of the greatest importance. In many cases the correct tip can only be determined by means of a spraying test.

#### Some rules for this:

The spray jet must be even.

If streaks appear in the spray jet the spraying pressure is either too low or the viscosity of the coating material too high.

**Remedy:** Increase pressure or dilute coating material. Each pump conveys a certain quantity in proportion to the size of the tip:

The following principle is valid:

large tip =	low pressure
small tip =	high pressure

There is a large range of tips with various spraying angles.

### 12.2 Servicing and cleaning of Airless hard-metal tips

#### Standard tips

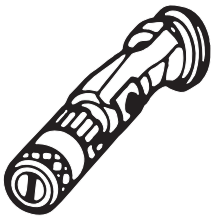
If a different tip type has been fitted, then clean it according to manufacturer's instructions.

The tip has a bore processed with the greatest precision. Careful handling is necessary to achieve long durability. Do not forget the fact that the hard-metal insert is brittle! Never throw the tip or handle with sharp metal objects.

#### The following points must be observed to keep the tip clean and ready for use:

1. Turn the relief valve handle fully counterclockwise (↺ Circulation).
2. Switch off the gasoline engine.
3. Dismount the tip from the spray gun.
4. Place tip in an appropriate cleaning agent until all coating material residue is dissolved.
5. If there is pressure air, blow out tip.
6. Remove any residue by means of a sharp wooden rod (toothpick).
7. Check the tip with the help of a magnifying glass and, if necessary, repeat points 4 to 6.

### 12.3 Spray gun accessories

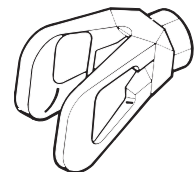


**Flat jet adjusting tip**  
up to 250 bar (25 MPa)

Tip marking	Bore mm	Spray width at about 30 cm removal of spray object Pressure 100 bar (10 MPa)	Use	Flat jet adjusting tip Order No.
15	0.13 - 0.46	5 - 35 cm	Paints	<b>0999 057</b>
20	0.18 - 0.48	5 - 50 cm	Paints, fillers	<b>0999 053</b>
28	0.28 - 0.66	8 - 55 cm	Paints, dispersions	<b>0999 054</b>
41	0.43 - 0.88	10 - 60 cm	Rust protection paints - dispersions	<b>0999 055</b>
49	0.53 - 1.37	10 - 40 cm	Large-area coats	<b>0999 056</b>

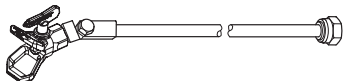
#### Contact protection

for the flat jet adjustment tip



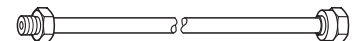
Order No. **0097 294**

#### Tip extension with slewable knee joint (without tip)



Length	100 cm	Order no.	<b>0096 015</b>
Length	200 cm	Order no.	<b>0096 016</b>
Length	300 cm	Order no.	<b>0096 017</b>

#### Tip extension

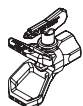


15 cm, F-thread, Order no.	<b>0556 051</b>
30 cm, F-thread, Order no.	<b>0556 052</b>
45 cm, F-thread, Order no.	<b>0556 053</b>
60 cm, F-thread, Order no.	<b>0556 054</b>

15 cm, G-thread, Order no.	<b>0556 074</b>
30 cm, G-thread, Order no.	<b>0556 075</b>
45 cm, G-thread, Order no.	<b>0556 076</b>
60 cm, G-thread, Order no.	<b>0556 077</b>

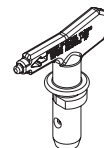
## 12.4 Airless tip table

**WAGNER**  
Trade Tip 2  
up to 270 bar  
(27 MPa)



without tip  
F thread (11/16 - 16 UN)  
for Wagner spray guns  
Order no. **0556 042**

without tip  
G thread (7/8 - 14 UN)  
for Graco/Titan spray guns  
Order no. **0556 041**



Application		Tip marking	Spray angle	Bore inch / mm	Spraying width mm <sup>1)</sup>	Order no.
Natural paints	Spray gun filter "RED"	407	40°	0.007 / 0.18	160	0552 407
Clear paints		507	50°	0.007 / 0.18	190	
Oils		209	20°	0.009 / 0.23	145	0552 209
		309	30°	0.009 / 0.23	160	0552 309
		409	40°	0.009 / 0.23	190	0552 409
		509	50°	0.009 / 0.23	205	0552 509
		609	60°	0.009 / 0.23	220	0552 609
Synthetic-resin paints	Spray gun filter "RED"	111	10°	0.011 / 0.28	85	0552 111
PVC paints		211	20°	0.011 / 0.28	95	0552 211
		311	30°	0.011 / 0.28	125	0552 311
		411	40°	0.011 / 0.28	195	0552 411
		511	50°	0.011 / 0.28	215	0552 511
		611	60°	0.011 / 0.28	265	0552 611
Paints, primers	Spray gun filter "RED"	113	10°	0.013 / 0.33	100	0552 113
Zinc chromate base		213	20°	0.013 / 0.33	110	0552 213
Fillers		313	30°	0.013 / 0.33	135	0552 313
		413	40°	0.013 / 0.33	200	0552 413
		513	50°	0.013 / 0.33	245	0552 513
		613	60°	0.013 / 0.33	275	0552 613
		813	80°	0.013 / 0.33	305	0552 813
Fillers	Spray gun filter "YELLOW"	115	10°	0.015 / 0.38	90	0552 115
Spray plasters		215	20°	0.015 / 0.38	100	0552 215
Rust protection paints		315	30°	0.015 / 0.38	160	0552 315
		415	40°	0.015 / 0.38	200	0552 415
		515	50°	0.015 / 0.38	245	0552 515
		615	60°	0.015 / 0.38	265	0552 615
		715	70°	0.015 / 0.38	290	0552 715
		815	80°	0.015 / 0.38	325	0552 815
Spray plasters	Spray gun filter "YELLOW"	217	20°	0.017 / 0.43	110	0552 217
Rust protection paints		317	30°	0.017 / 0.43	150	0552 317
Red lead		417	40°	0.017 / 0.43	180	0552 417
Latex paints		517	50°	0.017 / 0.43	225	0552 517
		617	60°	0.017 / 0.43	280	0552 617
		717	70°	0.017 / 0.43	325	0552 717
	Spray gun filter "WHITE"	219	20°	0.019 / 0.48	145	0552 219
		319	30°	0.019 / 0.48	160	0552 319
		419	40°	0.019 / 0.48	185	0552 419
		519	50°	0.019 / 0.48	260	0552 519
		619	60°	0.019 / 0.48	295	0552 619
		719	70°	0.019 / 0.48	320	0552 719
		819	80°	0.019 / 0.48	400	0552 819
Mica paints	Spray gun filter "WHITE"	221	20°	0.021 / 0.53	145	0552 221
Zinc dust paints		421	40°	0.021 / 0.53	190	0552 421
Dispersions		521	50°	0.021 / 0.53	245	0552 521
		621	60°	0.021 / 0.53	290	0552 621
		821	80°	0.021 / 0.53	375	0552 821
		223	20°	0.023 / 0.58	155	0552 223
Rust protection paints	Spray gun filter "WHITE"	423	40°	0.023 / 0.58	180	0552 423
		523	50°	0.023 / 0.58	245	0552 523
		623	60°	0.023 / 0.58	275	0552 623
		723	70°	0.023 / 0.58	325	0552 723
		823	80°	0.023 / 0.58	345	0552 823
		225	20°	0.025 / 0.64	130	0552 225
Dispersions	Spray gun filter "GREEN"	425	40°	0.025 / 0.64	190	0552 425
Binder, glue		525	50°	0.025 / 0.64	230	0552 525
and filler paints		625	60°	0.025 / 0.64	250	0552 625
		825	80°	0.025 / 0.64	295	0552 825
		227	20°	0.027 / 0.69	160	0552 227
		427	40°	0.027 / 0.69	180	0552 427
	Spray gun filter "GREEN"	527	50°	0.027 / 0.69	200	0552 527
		627	60°	0.027 / 0.69	265	0552 627
		827	80°	0.027 / 0.69	340	0552 827
		629	60°	0.029 / 0.75	285	0552 629
		231	20°	0.031 / 0.79	155	0552 231
		431	40°	0.031 / 0.79	185	0552 431
	Spray gun filter "GREEN"	531	50°	0.031 / 0.79	220	0552 531
		631	60°	0.031 / 0.79	270	0552 631
		433	40°	0.033 / 0.83	220	0552 433
		235	20°	0.035 / 0.90	160	0552 235
		435	40°	0.035 / 0.90	195	0552 435
		535	50°	0.035 / 0.90	235	0552 535
	Spray gun filter "GREEN"	635	60°	0.035 / 0.90	295	0552 635
		839	80°	0.039 / 0.99	480	
		243	20°	0.043 / 1.10	185	0552 243
Large-area coatings	Spray gun filter "GREEN"	543	50°	0.043 / 1.10	340	0552 543
		552	50°	0.052 / 1.30	350	0552 552

1) Spray width at about 30 cm to the object and 100 bar (10 MPa) pressure with synthetic-resin paint 20 DIN seconds.

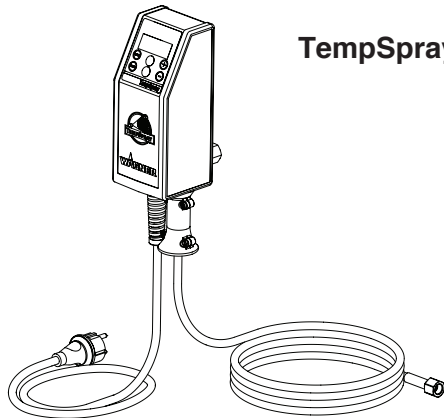
## 12.5 TempSpray

The paint material is heated to the required temperature uniformly by an electric heating element, which is located inside the hose (regulated from 20°C to 60°C).

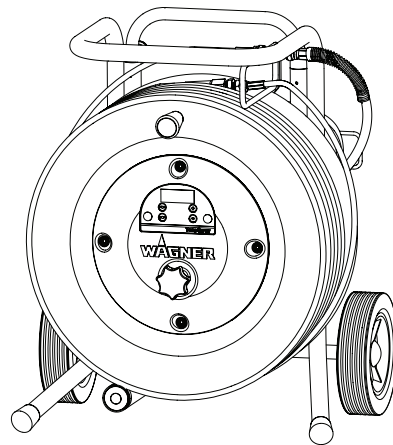
### Advantages:

- Constant paint temperature even at low outside temperatures
- Considerably better working of high viscosity coating materials
- Increased application efficiency
- Savings in solvents due to reduction in viscosity
- Adaptable to all airless units

Order No.	Description
2311659 2311852	<b>TempSpray H 126 (ideal for lacquer jobs)</b> Basic unit 1/4" incl. stainless steel hose, DN6, 1/4", 10m Spraypack consisting of: basic unit (2311659), Airless gun AG 14 NPS 1/4", incl. Trade Tip 2 nozzler holder (F-thread) and Trade Tip 2 Fine Finish 410
2311660 2311853	<b>TempSpray H 226 (ideal for dispersions/materials with high viscosity)</b> Basic unit 1/4" incl. Hose reel, heated hose DN10, 15m, hose 1/4" DN4, 1m Spraypack consisting of: Basic unit (2311660), Airless gun AG 14 NPS 1/4", incl. Trade Tip 2 nozzler holder (F-thread) and Trade Tip 2 nozzle 419
2311661 2311854	<b>TempSpray H 326 (ideal for dispersions/materials with high viscosity)</b> Basic unit 1/4" incl. Hose reel, heated hose DN10, 30m, hose 1/4" DN4, 1m Spraypack consisting of: Basic unit (2311661), Airless gun AG 14 NPS 1/4", incl. Trade Tip 2 nozzler holder (F-thread) and Trade Tip 2 nozzle 421



TempSpray H 126



TempSpray H 226  
TempSpray H 326

## 12.6 Pump-Runner

(Order No. 2306987)

Universal accessories for cleaning, clean transportation and preservation of the pump unit.

### Features:

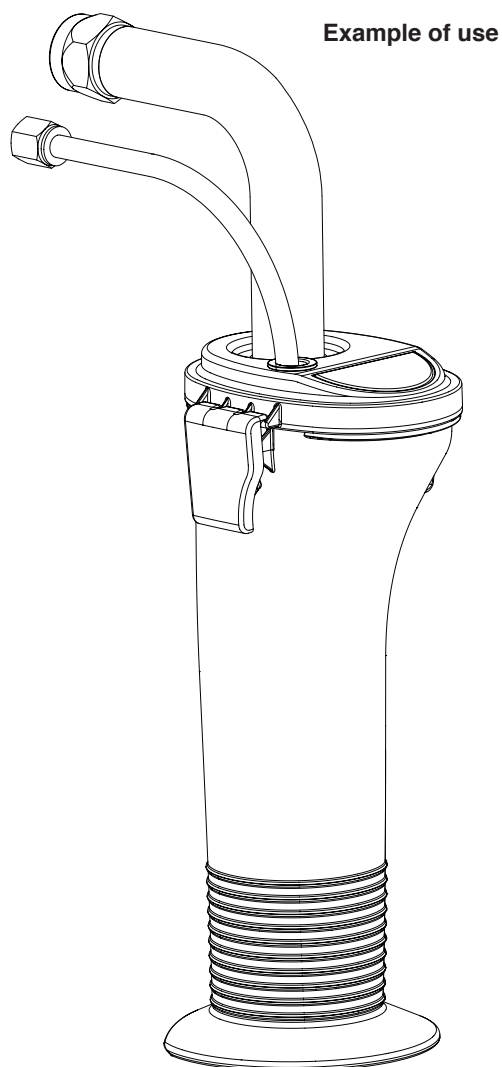
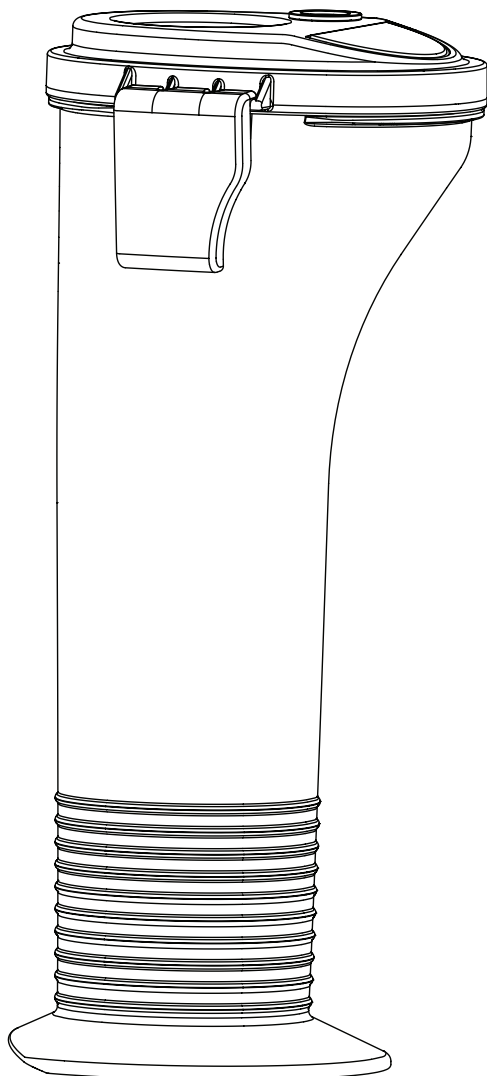
- Simpler cleaning – the cleaning liquid circulates constantly through the pump making thorough cleaning of the interior
- No cleaning necessary during work stoppage or change of location because the paint in the pump cannot dry out or leak
- Better protection
- Simple assembly

### Suitable for the following models:

Diaphragm Pumps		Double-stroke piston pumps	
SF 21	Finish 270/370	PS 24	PS 3.25
SF 23	Nespray Deco	PS 26	PS 3.29
SF 27	Nespray 31	PS 30	PS 3.31
SF 31		PS 34	PS 3.34
SF 7000			



Order this at the same time: EasyClean, cleaning and preservation agent (118ml) Order no. 0508 620.





Deutschland	J. Wagner GmbH • Otto-Lilienthal-Straße 18 • 88677 Markdorf Tel. 0043/07544/5050 • Fax: 0043/07544/505/200 • info@wagner-group.com
Österreich	J. Wagner Ges.m.b.H • Ottogasse 2/20 • 2333 Leopoldsdorf Tel. 0043/2235/44 158 • Fax: 0043/2235/44 163 • office@wagner-group.at
Schweiz	J. Wagner AG • Industriestrasse 22 • 9450 Altstätten Tel. 0041/71/7572211 • Fax: 0041/71/7572222 • wagner@wagner-group.ch
Japan	Wagner Spraytech Japan/Ltd. • 2-35, Shinden-Nishimachi • Osaka/Japan Tel. 728/743562 • Fax: 728/744684
China	Wagner Spraytech Shanghai Co LTD • 4th Floor, No. 395 • Jianchang Xi Road Shibei Industrial Zone • Shanghai, 200436 China Tel. 0086/2166521858 • Fax: 0086/2166529819 • wagnersh@public8.sta.net.cn
France	J. Wagner France S.A.R.L. • Parc de Gutenberg - Bâtiment F • 8 voie la Cardon • 91127 Palaiseau Cedex Tel. +33/1/825 011 111 • Fax: +33/1/698 172 57 • division.batiment@wagner-france.fr
Italia	Wagner Colora S.R.L. • Via Fermi, 3 • 20040 Burago Molgora • Milano Tel. 0039/039/625021 • Fax: 0039/039/6851800 • info@wagnercolora.com
Belgie	Wagner Spraytech • Belgium SA • Veilinglaan 58 • 1861 Meise-Wolvertem Tel. 0032/2/2694675 • Fax: 0032/2/2697845 • info@wagner-group.be
Nederland	Wagner Spraytech Benelux B.V. • Zonnebaan 10 • 3542 EC Utrecht Tel. 0031/30/2414155 • Fax: 0031/30/2411787 • info@wagner-group.nl
USA	Wagner Spraytech Corp. • P.O. Box 279 • Minneapolis, MN 55440 USA Tel. 001/763/553-7000 • Fax: 001/763/553-7288 • info@wagnersystemsinc.com
Australia	Wagner Spraytech Australia Pty. Ltd. • POB 286 • Braeside, Vic., 3195 Australia Tel. 03/95872000 • Fax: 03/95809120 • wagner@wagnerspraytech.cm.au
Great Britain	Wagner Spraytech (UK) Ltd. • The Coach House • 2 Main Road • Middleton Cheney • OX17 2ND • Great Britain Tel. 0844/335/0517 • Fax: 0044/1295/269861 • enquiry@wagnerspraytech.co.uk
España	Wagner Spraytech Ibérica S.A. • P.O. Box 132, Crta. N-340 • KM 1.245,4 • 08750 Molins de Rey - Barcelona Spain Tel. 0034/93/6800028 • Fax: 0034/93/6800555 • info@wagnerspain.com
Danmark	Wagner Spraytech Scandinavia A/S • Helgeshøj Allé 28 • DK2605 Taastrup • Denmark Tel. 0045/43/271818 • Fax: 0045/43/430528 • wagner@wagner-group.dk
Sverige	Wagner Spraytech Scandinavia A/S • Helgeshøj Allé 28 • DK2605 Taastrup • Denmark Tel. 0046/42/150020 • Fax: 0046/42/150020 • mailbox@wagner.se

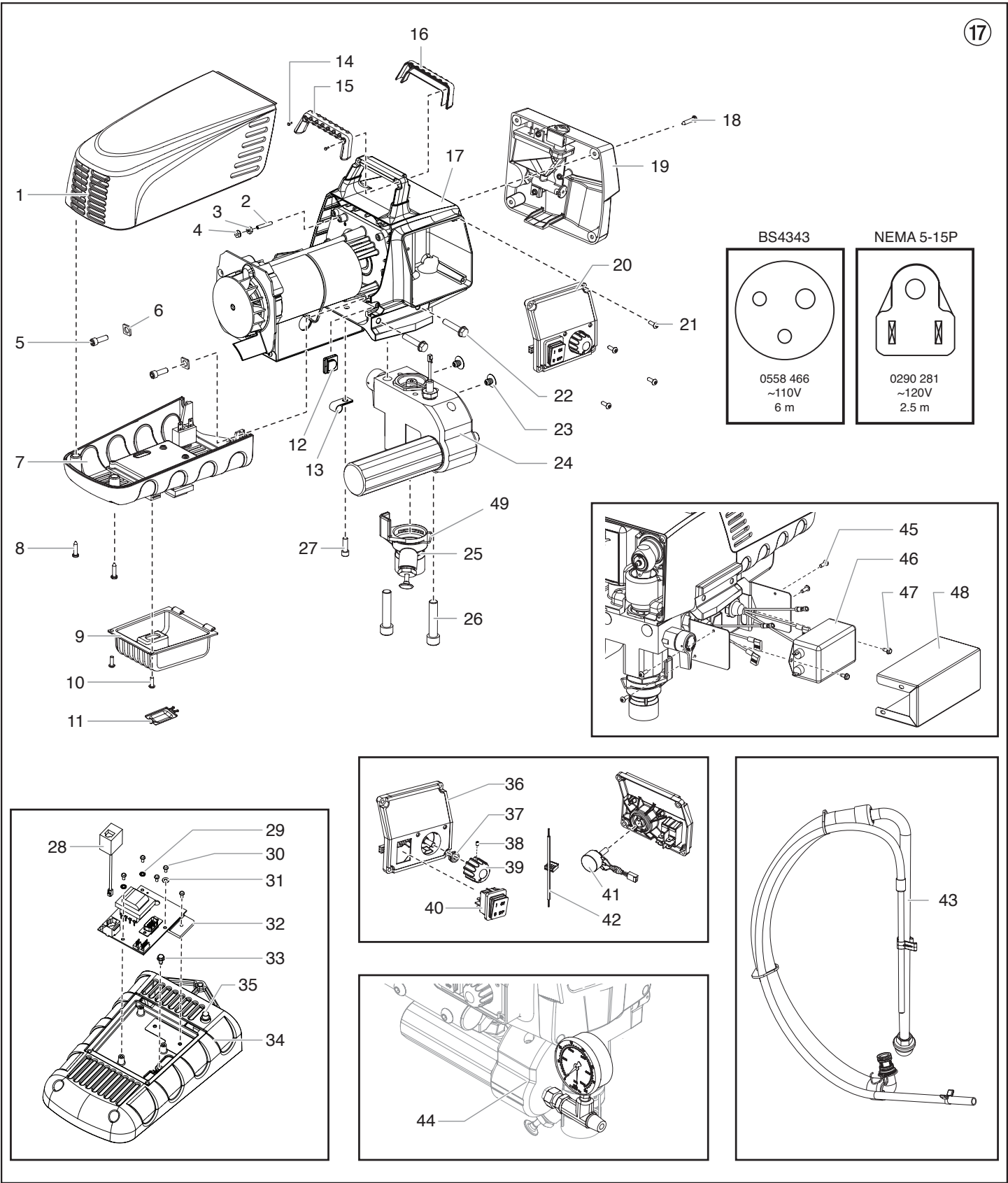
ProSpray 3.21



Item	Part No.	Description
1	0296 388	Spray gun AG 08, F-thread
	0296 386	Spray gun AG 08, G-thread
	0502 166	Spray gun AG 14, F-thread
	0502 119	Spray gun AG 14, G-thread
2	0296 441	Pole gun 120 cm, G-thread 7/8"
	0296 443	Pole gun 120 cm, F-thread 11/16"
	0296 442	Pole gun 200 cm, G-thread 7/8"
	0296 444	Pole gun 200 cm, F-thread 11/16"
3	0345 010	In-line roller IR-100
4	9984 573	High-pressure hose DN 4 mm, 7.5 m with stainless steel nipple, 1/4"
	9984 574	High-pressure hose DN 6 mm, 15 m for dispersion, 1/4"
	9984 575	High-pressure hose DN 6 mm, 30 m for dispersion, 1/4"
5	0034 038	Double socket for coupling high-pressure hoses (1/4" x 1/4")
6	0034 950	Metex-Reuse Reuse for pre-filtering of coating material in vessel. Place suction pipe in the reuse.
	0034 952	Sieve package (5 pcs) for paint
	0034 951	Sieve package (5 pcs) for dispersion
7	0034 383	Gun filter, red, 1 piece; 180 mesh extra fine
	0097 022	Gun filter, red, 10 pieces; 180 mesh extra fine
	0043 235	Gun filter, yellow, 1 piece; 100 mesh fine
	0097 023	Gun filter, yellow, 10 pieces; 100 mesh fine
	0034 377	Gun filter, white, 1 piece; 50 mesh medium
	0097 024	Gun filter, white, 10 pieces; 50 mesh medium
	0089 323	Gun filter, green, 1 piece; 30 mesh coarse
	0097 025	Gun filter, green, 10 pieces; 30 mesh coarse
8	0097 108	TipClean Cleaning Set for easy cleaning and conservation of nozzles
	0508 619	EasyGlide, special oil (118ml)
	0508 620	EasyClean, cleaning and conservation agent (118 ml)
9	0551 969	Hopper kit

ProSpray 3.21

Main Assembly



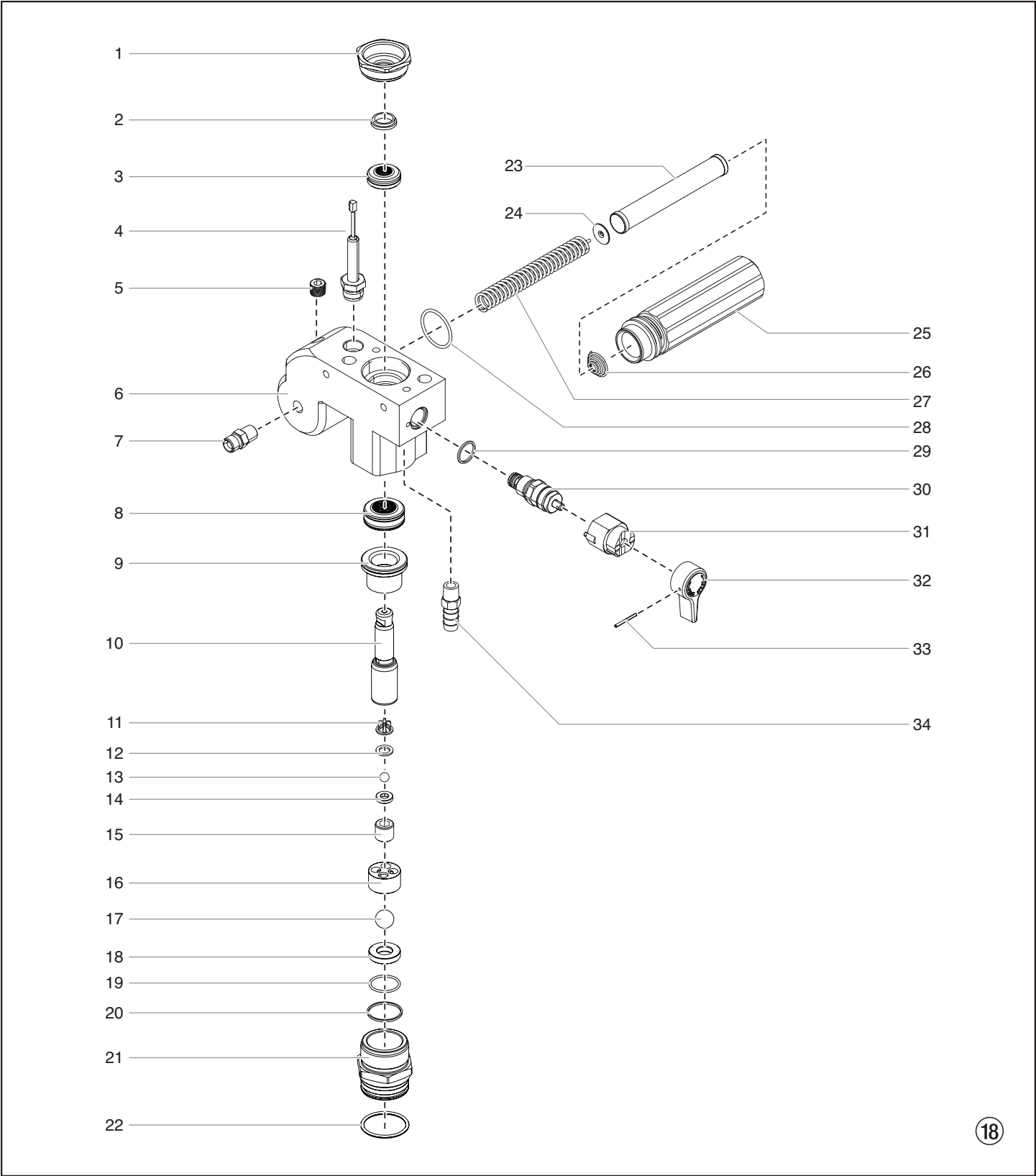
Item	Part No.	Description
1	0290 230	Motor shroud
2	9805 403	Set screw
3	9810 103	Nut
4	0524 353	Nut
5	9800 319	Screw (2)
6	9822 627	Washer (2)
7	0558 332A	Belly pan assembly (includes items 28-34)
8	9802 266	Screw (2)
9	0558 408	Dust cover
10	0509 218	Screw (2)
11	0290 222	Door
12	0558 460	Plug*
13	-----	Strap*
14	9805 317	Screw (2)
15	0290 212	Handle cover, back
16	0290 213	Handle cover, front
17	-----	Drive assembly
18	0509 218	Screw (4)
19	0290 278	Face plate / oiler assembly
20	0558 305A	Control panel assembly, complete includes items 36-42)
21	0509 218	Screw (4)
22	9805 348	Screw (4)
23	0509 636	Plug (2)
24	0558 298A	Fluid section assembly

Item	Part No.	Description
25	0290 205	Pusher assembly (includes item 49)
26	0508 553	Screw (2)
27	9800 319	Screw
28	0551 757	Transducer jumper
29	9822 624	Washer (2)
30	9800 607	Screw (5)
31	54054	Washer
32	0290 221	PC board assembly
33	9800 340	Screw
34	0290 231	Belly pan
35	0551 515	Circuit breaker
36	0290 227	Control panel cover with label
37	0507 749A	Nut with seal
38	0290 202	Set screw
39	0290 218	Knob
40	9850 936	Switch
41	0508 579	Potentiometer
42	0522 007	LED assembly
43	0558 672	Siphon assembly
44	0508 239	Manometer
45	0509 218	Screw (4)*
46	0522 424	EMI filter, 20A*
47	9800 340	Ground screw (2)*
48	0558 452	Bracket cover (2)*
49	0558 742	Clip
	0522 052	Arrestor (not shown, see schematic)

\* UK only

ProSpray 3.21

Fluid section





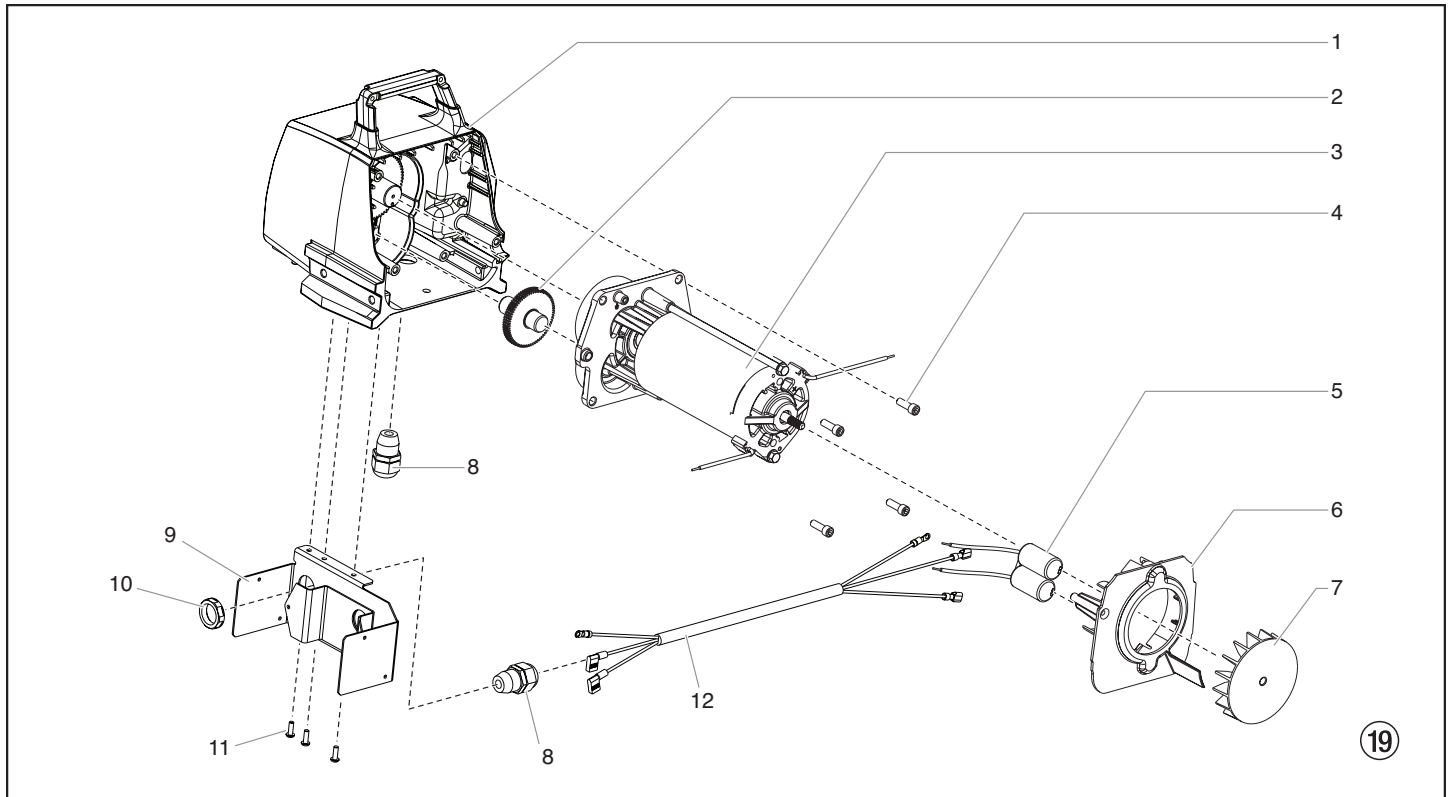
Item	Part No.	Description
1	0509 594	Retainer
2	0509 584	Piston guide
3	-----	Upper packing
4	0551 756	Transducer assembly
5	0507 517	Pipe plug
6	0290 209	Pump manifold
7	0509 873	Fitting
8	-----	Lower packing
9	0552 489	Bushing
10	0290 277	Piston rod
11	0551 262	Upper cage
12	0551 263	Crush washer
13	50164	Outlet valve ball
14	0551 620	Outlet valve seat
15	13481	Outlet valve retainer
16	0509 591	Lower ball guide
17	0509 583	Inlet valve ball
18	0551 534	Inlet valve seat
19	0509 582	O-ring, Teflon
20	0509 581	Inlet valve seal
21	0290 216	Inlet valve housing

Item	Part No.	Description
22	9871 160	O-ring
23	0508 748	Filter
24	0508 603	Bearing ring
25	0508 601	Filter housing
26	0508 602	Conical spring
27	0508 749	Bearing spring
28	0508 604	O-ring
29	0507 745	Gasket
30	0558 727	Bypass valve assembly (includes item 29)
31	0507 931	Cam base
32	0508 744	Relief valve knob
33	5006 543	Groove pin
34	193-200	Return tube fitting
	0509 151	Piston assembly (includes items 10-15)
	0290 201	Repacking kit - 1 (includes items 2-3, 8, 11-13, 17 and 19-20).
	0558 728	Repacking kit - 2 (includes items 2-3 and 8).
	0507 254	Relief valve kit (includes items 29-33).

## Spare parts list

### ProSpray 3.21

#### Drive Assembly



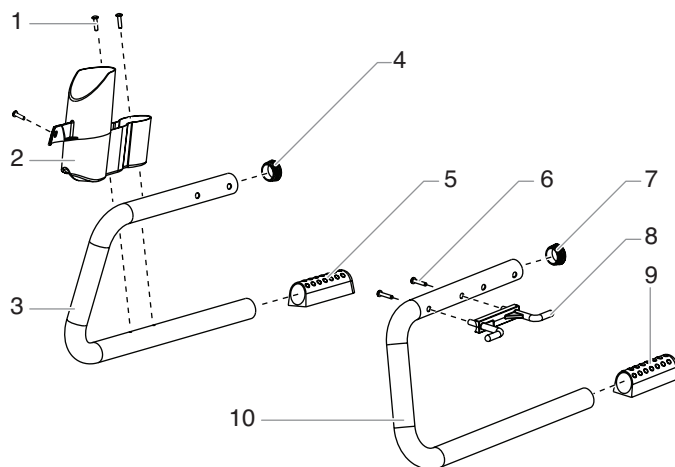
Item	Part No.	Description
1	0524 637A	Housing assembly
2	0509 121	2nd stage gear
3	0558 373	Motor assembly, 120V (includes items 5-7)
4	9800 319	Screw (4)
5	0522 018	Capacitor assembly
6	0290 217	Baffle assembly
7	0512 340	Fan
8	0551 714	Cord grip (2)*
9	0558 449	Bracket*
10	0551 980	Lock nut*
11	0509 218	Screw (3)*
12	0558 476	Power cord jumper*
	-----	Double sided tape (not shown)
	0551 543	Tie wrap (not shown)
	0508 645	Motor brush kit

\* UK only

## Spare parts list

### ProSpray 3.21

#### Stand

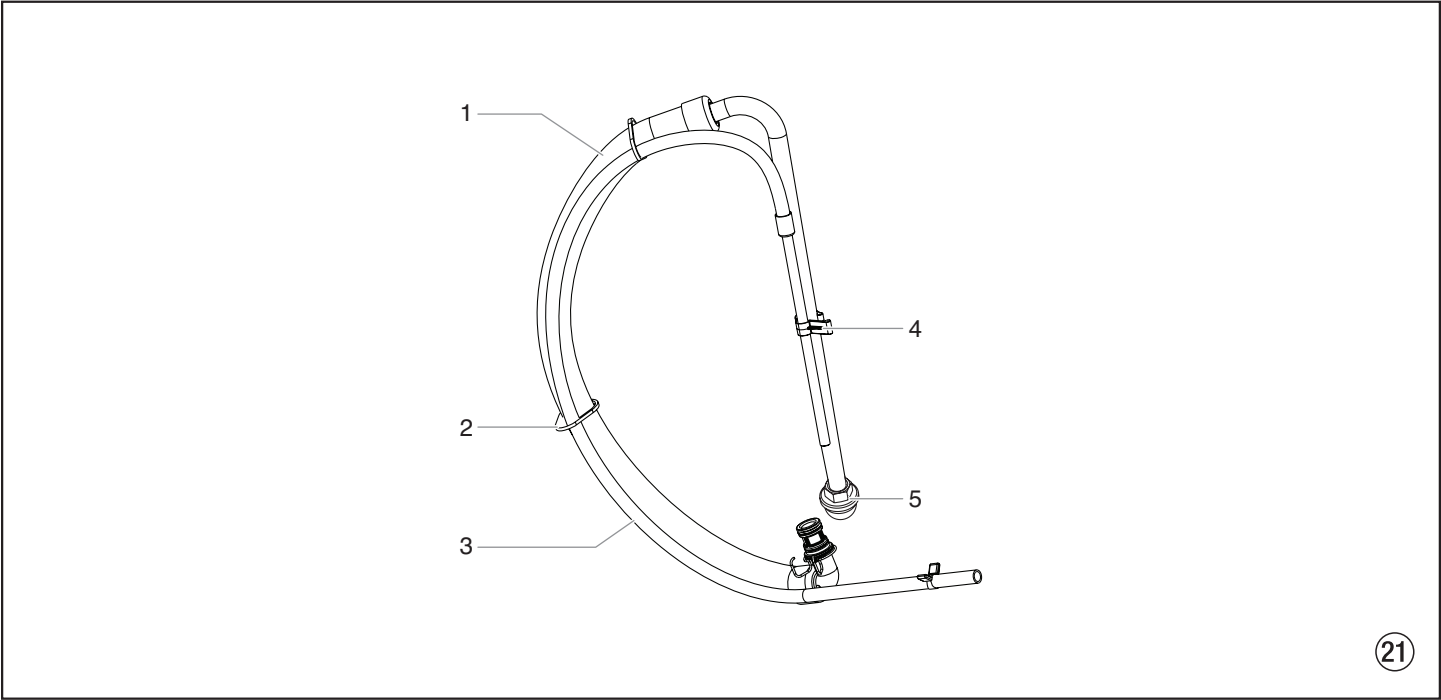


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Item	Part No.	Description
1	9805 367	Screw (3)
2	0290 215	Drip cup
3	0290 211	Leg, right
4	0294 635	Plug
5	0290 214	Foot
6	0508 660	Screw (2)
7	0294 635	Plug
8	0290 219	Cord holder
9	0290 214	Foot
10	0290 210	Leg, left
	0290 203	Left leg assembly (includes items 6-10)
	0290 204	Right leg assembly (includes items 1-5)

ProSpray 3.21

Suction system



Item	Part No.	Description
1	0551 706	Siphon hose
2	9850 638	Tie wrap (2)
3	0558 659A	Return tube
4	0279 459	Clip
5	0295 565	Filter
	0558 672	Siphon tube assembly (includes items 1-5)



## Important notes on product liability

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

If the user applies outside accessories and spare parts, the manufacturer's liability can fully or partially be inapplicable; in extreme cases usage of the entire device can be prohibited by the competent authorities (employer's liability insurance association and factory inspectorate division).

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

## 3+2 years guarantee for professional finishing

Wagner professional guarantee  
(Status 01.02.2009)

### 1. Scope of guarantee

All Wagner professional colour application devices (hereafter referred to as products) are carefully inspected, tested and are subject to strict checks under Wagner quality assurance. Wagner exclusively issues extended guarantees to commercial or professional users (hereafter referred to as "customer") who have purchased the product in an authorised specialist shop, and which relate to the products listed for that customer on the Internet under [www.wagner-group.com/profi-guarantee](http://www.wagner-group.com/profi-guarantee).

The buyer's claim for liability for defects from the purchase agreement with the seller as well as statutory rights are not impaired by this guarantee.

We provide a guarantee in that we decide whether to replace or repair the product or individual parts, or take the device back and reimburse the purchase price. The costs for materials and working hours are our responsibility. Replaced products or parts become our property.

### 2. Guarantee period and registration

The guarantee period amounts to 36 months. For industrial use or equal wear, such as shift operations in particular, or in the event of rentals it amounts to 12 months.

Systems driven by petrol or air are also guaranteed for a 12 month period.

The guarantee period begins with the day of delivery by the authorised specialist shop. The date on the original purchase document is authoritative.

For all products bought in authorised specialist shops from 01.02.2009 the guarantee period is extended to 24 months providing the buyer of these devices registers in accordance with the following conditions within 4 weeks of the day of delivery by the authorised specialist shop.

Registration can be completed on the Internet under [www.wagner-group.com/profi-guarantee](http://www.wagner-group.com/profi-guarantee). The guarantee certificate is valid as confirmation, as is the original purchase document that carries the date of the purchase. Registration is only possible if the buyer is in agreement with having the data being stored that is entered during registration.

When services are carried out under guarantee the guarantee period for the product is neither extended nor renewed.

Once the guarantee period has expired, claims made against the guarantee or from the guarantee can no longer be enforced.

### 3. Handling

If defects can be seen in the materials, processing or performance of the device during the guarantee period, guarantee claims must be made immediately, or at the latest within a period of 2 weeks.

The authorised specialist shop that delivered the device is entitled to accept guarantee claims. Guarantee claims may also be made to the service centres named in our operating instructions. The product has to be sent without charge or presented together with the original purchase document that includes details of the purchase date and the name of the product. In order to claim for an extension to the guarantee, the guarantee certificate must be included.

The costs as well as the risk of loss or damage to the product in transit or by the centre that accepts the guarantee claims or who delivers the repaired product, are the responsibility of the customer.

### 4. Exclusion of guarantee

Guarantee claims cannot be considered

- for parts that are subject to wear and tear due to use or other natural wear and tear, as well as defects in the product that are a result of natural wear and tear, or wear and tear due to use. This includes in particular cables, valves, packaging, jets, cylinders, pistons, means-carrying housing components, filters, pipes, seals, rotors, stators, etc. Damage due to wear and tear that is caused in particular by sanded coating materials, such as dispersions, plaster, putty, adhesives, glazes, quartz foundation.
- in the event of errors in devices that are due to non-compliance with the operating instructions, unsuitable or unprofessional use, incorrect assembly and/or commissioning by the buyer or by a third party, or utilisation other than is intended, abnormal ambient conditions, unsuitable coating materials, unsuitable operating conditions, operation with the incorrect mains voltage supply/frequency, over-operation or defective servicing or care and/or cleaning.
- for errors in the device that have been caused by using accessory parts, additional components or spare parts that are not original Wagner parts.
- for products to which modifications or additions have been carried out.
- for products where the serial number has been removed or is illegible
- for products to which attempts at repairs have been carried out by unauthorised persons.
- for products with slight deviations from the target properties, which are negligible with regard to the value and usability of the device.
- for products that have been partially or fully taken apart.

### 5. Additional regulations.

The above guarantees apply exclusively to products that have been bought by authorised specialist shops in the EU, CIS, Australia and are used within the reference country.

If the check shows that the case is not a guarantee case, repairs are carried out at the expense of the buyer.

The above regulations manage the legal relationship to us conclusively. Additional claims, in particular for damages and losses of any type, which occur as a result of the product or its use, are excluded from the product liability act except with regard to the area of application.

Claims for liability for defects to the specialist trader remain unaffected.

German law applies to this guarantee. The contractual language is German. In the event that the meaning of the German and a foreign text of this guarantee deviate from one another, the meaning of the German text has priority.

**J. Wagner GmbH**

**Division Professional Finishing**

**Otto Lilienthal Strasse 18**

**88677 Markdorf**

**Federal Republic of Germany**

