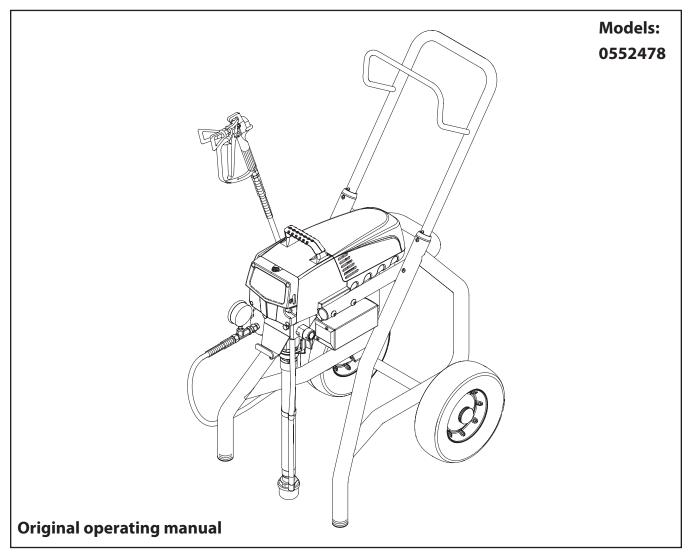




**Operating manual** 

# **ProSpray 3.21** Airless high-pressure spraying unit



# ProSpray 3.21



# Warning!

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





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.



# 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.
- 4. Check allowable operating pressure of high-pressure hose and spray gun.
- 5. Check all connections for leaks.



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

## 1.1 Explanation of symbols used

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.
	Danger of skin injection
	Danger of fire from solvent and paint fumes
	Danger of explosion from solvent, paint fumes and incompatible materials
	Danger of injury from inhalation of harmful vapors
i	Notes give important information which should be given special attention.



#### HAZARD: INJECTION INJURY

Attention: Danger of injury by injection! A high pressure stream produced by this equipment can pierce the skin and underlying tissues, leading to serious injury and possible amputation.

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.

#### **PREVENTION:**

- NEVER aim the gun at any part of the body.
- NEVER allow any part of the body to touch the fluid stream. DO NOT allow body to touch a leak in the fluid hose.
- NEVER put your hand in front of the gun. Gloves will not provide protection against an injection injury.
- 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.
- ALWAYS keep tip guard in place while spraying. The tip guard provides some protection but is mainly a warning device.
- ALWAYS remove the spray tip before flushing or cleaning the system.
- NEVER use a spray gun without a working trigger lock and trigger guard in place.

All accessories must be rated at or above the maximum operating pressure range of the sprayer. This includes spray tips, guns, extensions, and hose.



#### HAZARD: HIGH PRESSURE HOSE

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.

#### **PREVENTION:**

- High-pressure hoses must be checked thoroughly before they are used.
- Replace any damaged high-pressure hose immediately.
- Never repair defective high-pressure hoses yourself!
- Avoid sharp bends and folds: the smallest bending radius is about 20 cm.
- Do not drive over the high-pressure hose. Protect against sharp objects and edges.
- Never pull on the high-pressure hose to move the device.
- Do not twist the high-pressure hose.
- Do not put the high-pressure hose into solvents. Use only a wet cloth to wipe down the outside of the hose.
- Lay the high-pressure hose in such a way as to ensure that it cannot be tripped over.



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



# HAZARD: EXPLOSION OR FIRE

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

#### **PREVENTION:**

- 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.
- Do not use the unit in work places which are covered by the explosion protection regulations.
- 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.
- Do not smoke in spray area.
- Place sprayer sufficient distance 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).
- 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.

Safety regulations

- 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.
- Use lowest possible pressure to flush equipment.
- When cleaning the unit with solvents, the solvent should never be sprayed or pumped back into a container with a small opening (bunghole). An explosive gas/air mixture can arise. The container must be earthed.



#### HAZARD: HAZARDOUS VAPORS

Paints, solvents, and other materials can be harmful if inhaled or come in contact with body. Vapors can cause severe nausea, fainting, or poisoning.

#### PREVENTION:

- Wear respiratory protection when spraying. Read all instructions supplied with the mask to be sure it will provide the necessary protection.
- All local regulations regarding protection against hazardous vapors must be observed.
- Wear protective eyewear.
- Protective clothing, gloves and possibly skin protection cream are necessary for the protection of the skin. Observe the regulations of the manufacturer concerning coating materials, solvents and cleaning agents in preparation, processing and cleaning units.



#### HAZARD: GENERAL

This product can cause severe injury or property damage.

#### **PREVENTION:**

- Follow all appropriate local, state, and national codes governing ventilation, fire prevention, and operation.
- 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.
- 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.
- ALWAYS follow the material manufacturer's instructions for safe handling of paint and solvents.
- Clean up all material and solvent spills immediately to prevent slip hazard.
- Wear ear protection. This unit can produce noise levels above 85 dB(A).
- Never leave this equipment unattended. Keep away from children or anyone not familiar with the operation of airless equipment.
- Device weighs in excess of 18 kg. Two-person lift is required.
- Do not spray on windy days.
- The device and all related liquids (i.e. hydraulic oil) must be disposed of in an environmentally friendly way.

#### 1.2 Electric Safety

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. Connection to the mains only through a special feed point, e.g. through an error protection insallation with INF < 30 mA.



DANGER — Work or repairs at the electrical equipment may only be carried out by a skilled electrician. No liability is assumed for incorrect installation. Switch the unit off. Before all repair work, unplug the power plug from the outlet.

Danger of short-circuits caused by water ingressing into the electrical equipment. Never spray down the unit with high-pressure or high-pressure steam cleaners.

#### Work or repairs at the electrical equipment:

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

# 1.3 Electrostatic charging (formation of sparks or flames)



Electrostatic charging of the unit may occur during spraying due to the flow speed of the coating material. These can cause sparks and flames upon discharge. The unit must therefore always be earthed via the electrical system. The unit must be connected to an appropriately-grounded safety outlet.

An electrostatic charging of spray guns and the high-pressure hose is discharged through the high-pressure hose. For this reason the electric resistance between the connections of the high-pressure hose must be equal to or lower than 1 M $\Omega$ .

#### **General view of application** 2.

#### Application 2.1

					Mode		
Materials	Object Size	PS 3.21	PS 3.23	PS 3.25	PS 3.29	PS 3.31	
Release agents, oils, undercoats, primers, fillers,	up to 200 m <sup>2</sup>					-	

synthetic resin-based paints, acrylic paints recommended nozzle size: FineFinish 0.008" - 0.014"	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-scrapers 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, twocomponent 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 sprav gun, filtering of the coating material is generally advisable.

Stir coating material before commencement of work.



Attention: Make sure, when stirring up with motordriven 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 cane be reduced appreciably through this.

#### 3. **Description of unit**

= Recommended

#### 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 highpressure 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.

#### Description of unit

PS 3.34

3.39 S

= Not-recommended

# 3.3 Legend for explanatory diagram ProSpray 3.21

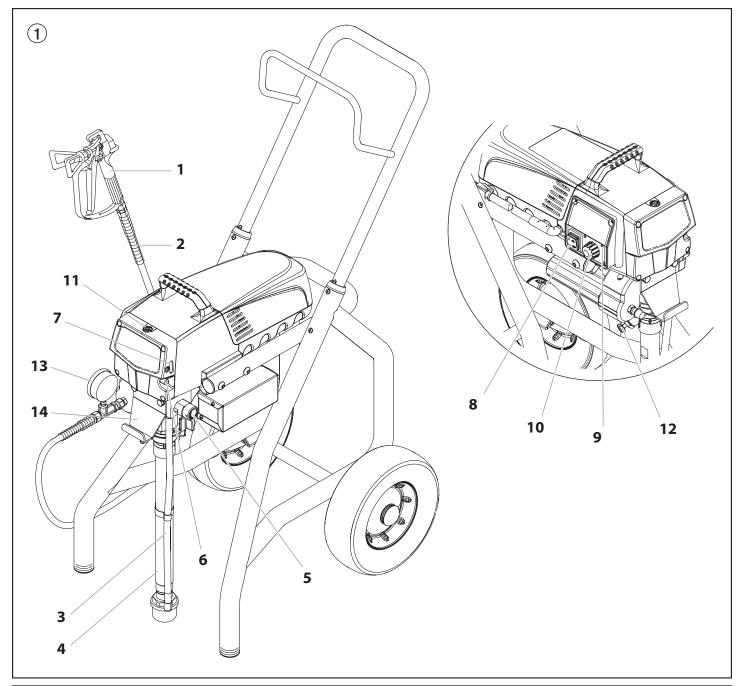
- 1 Spray gun
- 2 High-pressure hose
- 3 Return hose
- 4 Suction hose
- 6 Oil button
- 7 Oil level gauge

8 ON/OFF switch

(GB)

- 9 Control panel indicators
- 10 Pressure control knob
- 11 Oil cup for EasyGlide (EasyGlide prevents increased wear of the packings)
- 12 Pusher stem
- 13 Manometer
- 14 Pail bracket

## 3.4 Explanatory diagram ProSpray 3.21



#### 3.5 Technical data

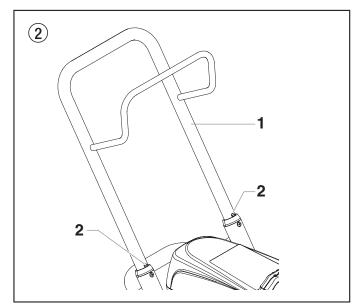
Voltage:	110 Volt , 50 Hz
Max. current consumption:	9.0 A
Power cord:	3 x 1.5 mm <sup>2</sup> – 6 m or 2.5 m
Acceptance capacity:	900 Watt
Max. operating pressure:	221 bar (22.1 MPa)
Volume flow at 12 MPa (120 bar) with water:	2.0 l/min
Max tip size:	0.023 inch – 0.58 mm
Max. temperature of the coating material:	43°C
Max viscosity:	20.000 mPa·s
Weight:	30 kg
Special high-pressure hose:	DN 6 mm, 15 m, connection thread M 16 x 1.5
Dimensions (L X W X H):	611 x 481 x 734 mm
Max sound pressure level:	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

#### Pushing or pulling the unit

Pull out the handle (Fig. 2, Item 1) until it will come no further. Insert the handle – push the buttons (2) on the spars, and then push in the handle.



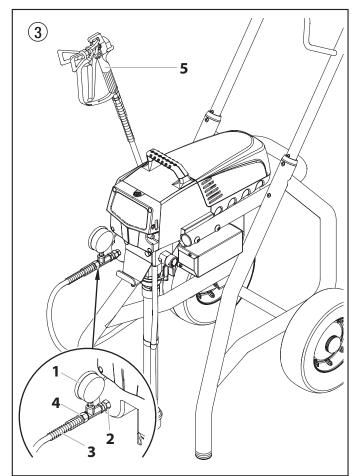
#### 3.6 Transportation in vehicle

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. 3, Item 2).
- 2. Screw the high-pressure hose (3) to the coating material outlet on the pressure gauge (Fig. 3, 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.

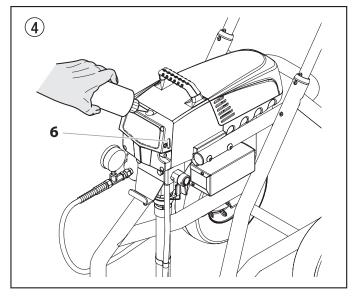


- 5. Remove the oil cup cap with a straight-slot screwdriver.
- 6. Fill the oil cup with EasyGlide (Fig. 4) until the oil gauge (6) is showing that it is full.



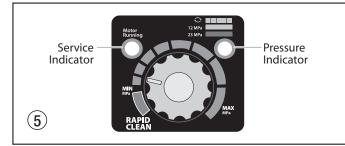
EasyGlide prevents increased wear and tear to the packings.

- 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

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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:

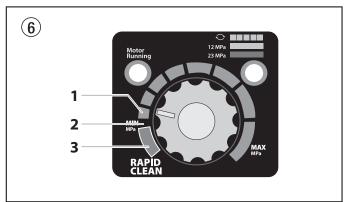
- The sprayer is at the proper pressure setting for spraying oilbased and latex house paints
- The sprayer is operating at peak performance at a high pressure setting
- If the pressure indicator goes to solid yellow when the pressure is set so that it starts at solid green, it indicates one of the following:
- 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. 6)

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



# 4.4 Connection to the mains network



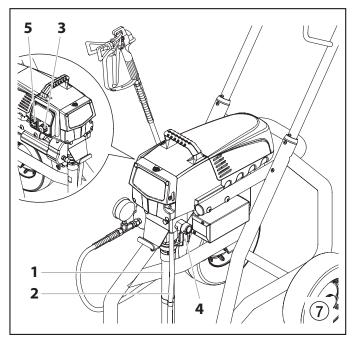
The unit must be connected to an appropriatelygrounded safety outlet.

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. 7, 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.
- Open the relief valve (4), valve position PRIME (O 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 ( $^{>}\eta$  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. 7, 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 (O 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 ( $^{>}\eta$  spray).
- 7. Trigger the spray gun several times and spray into a collecting container until the coating material exits the spray gun without interruption.
- Increase the pressure by slowly turning up the pressure control knob.
  Check the spray pattern and increase the pressure until the

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.

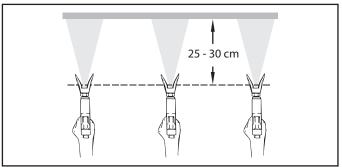
# 5. Spraying technique



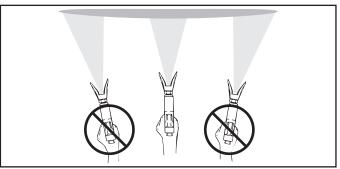
GB

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.

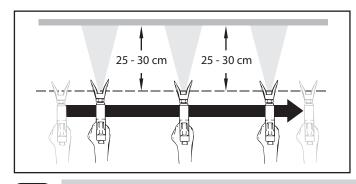


Keep the spray gun at right angles to the surface. This means moving your entire arm back and forth rather than just flexing your wrist.



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.

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



6.

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

Never repair defective high-pressure hoses yourself!

The high-pressure hose is to be handled with care. Avoid sharp bends and folds: the smallest bending radius is about 20 cm.

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

Never pull on the high-pressure hose to move the device. Make sure that the high-pressure hose cannot twist. This can be avoided by using a Wagner spray gun with a swivel joint and a hose system.



When using the high-pressure hose while working on scaffolding, it is best to always guide the hose along the outside of the scaffolding.

The risk of damage rises with the age of the highpressure hose. Wagner recommends replacing highpressure hoses after 6 years.



Use only WAGNER original-high-pressure hoses in order to ensure functionality, safety and durability.

# 7. Interruption of work

- Open the relief valve, valve position PRIME (O 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.



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  $^{\circ}$ 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.

GR

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 ( $^{>}\eta$  spray).
- 3. Switch the unit ON.
- Pull the trigger of the spray gun in order to pump the remaining coating material from the suction hose, highpressure hose and the spray gun into an open container.



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.

- 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.
- Open the relief valve, valve position PRIME (O circulation).
- 8. Pump a suitable cleaning agent in the circuit for a few minutes.
- 9. Close the relief valve, valve position SPRAY ( $^{>}\eta$  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.



Danger of short circult through panetrating water! Never spray down the unit with high-pressure or high-pressure steam cleaners.



Do not put the high-pressure hose into solvents. Use only a wet cloth to wipe down the outside of the hose.

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

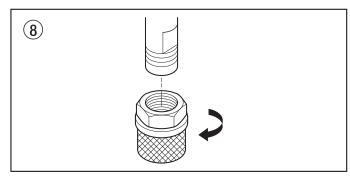




A clean suction filter always guarantees maximum feed quantity, constant spraying pressure and problem-free functioning of the unit.

- 1. Screw off the filter (Fig. 8) 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.

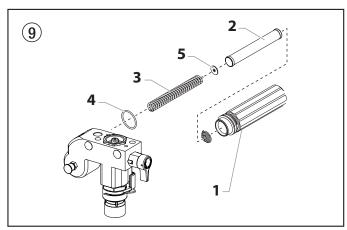
A soiled or clogged high-pressure filter can cause a poor spray pattern or a clogged tip.

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



#### Unplug the power plug from the outlet.

- 4. Unscrew the filter housing (Fig. 9, 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

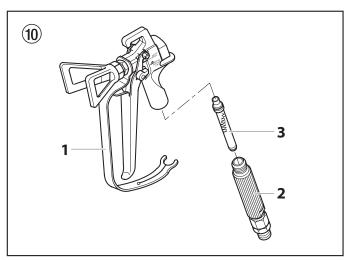
#### Disassembly (Fig. 10)

- 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

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- 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).



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# 9. Remedy in case of faults

Type of malfunction		unction Possible cause			Measures for eliminating the malfunction			
A.	Unit does not start	1.	No voltage applied.	1.	Check voltage supply.			
		2.	Pressure setting too low.	2.	Turn up pressure control knob.			
		3.	ON/OFF switch defective.	3.	Replace.			
В.	Unit does not draw in material	1.	Relief valve is set to SPRAY ( <sup>&gt;</sup> ↑ spray).	1.	Set relief valve to PRIME ( ${\mathfrak O}$ circulation).			
		2.	Filter projects over the fluid level and sucks air.	2.	Refill the coating material.			
		3.	Filter clogged.	3.	Clean or replace the filter.			
		4.	Suction hose/suction tube is loose, i.e. the unit is sucking in outside air.	4.	Clean connecting points. Replace O-rings if necessary Secure suction hose with retaining clip.			
C.	Unit draws in material, but the	1.	Tip heavily worn.	1.	Replace			
	pressure does not build up	2.	Tip too large.	2.	For selection of a smaller tip, see Tip table on Page 18			
		3.	Pressure setting too low.	3.	Turn pressure control knob clockwise to increase.			
		4.	Filter clogged.	4.	Clean or replace the filter.			
		5.	Coating material flows through the return hose when the relief valve is in the SPRAY (ैंगे spray) position.	5.	Remove and clean or replace relief valve.			
		6.	Packings sticky or worn.	6.	Remove and clean or replace packings.			
		7.	Valve balls worn.	7.	Remove and replace valve balls.			
		8.	Valve seats worn.	8.	Remove and replace valve seats.			
D.	Coating material exits at the top of the fluid section	1.	Upper packing is worn.	1.	Remove and replace packing.			
		2.	Piston is worn.	2.	Remove and replace piston.			
E.	Increased pulsation at the spray gun	1.	Incorrect high-pressure hose type.	1.	Only use WAGNER original-high-pressure hoses in ord to ensure functionality, safety and durability.			
		2.	Tip worn or too large.	2.	Replace tip.			
		3.	Pressure too high.	3.	Turn pressure control knob to a lower number.			
F.	Poor spray pattern	1.	Tip is too large for the coating material which is to be sprayed.	1.	Replace tip, see Tip table on Page 18.			
		2.	Pressure setting incorrect.	2.	Turn pressure control knob until a satisfactory sprayin pattern is achieved.			
		3.	Volume too low.	3.	Clean or replace all filters.			
		4.	Coating material viscosity too high.	4.	Thin out according to the manufacturer's instructions			
G.	Unit loses power	1.	Pressure setting too low.	1.	Turn pressure control knob clockwise to increase.			

#### 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.



The risk of damage rises with the age of the highpressure hose. Wagner recommends replacing highpressure hoses after 6 years.

## 11. Repairs at the unit

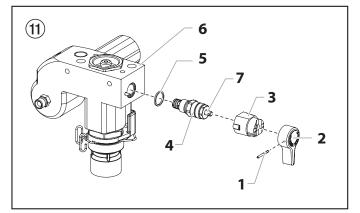


Switch the unit OFF.

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. 11, 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.



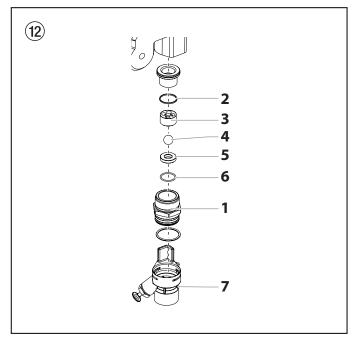
#### 11.2 Inlet and outlet valve

- 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.

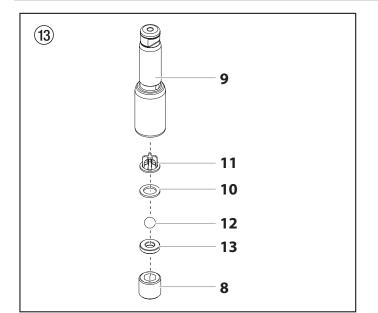


# Danger of crushing - do not reach with the fingers or tool between the moving parts.

- 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. 12, 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.

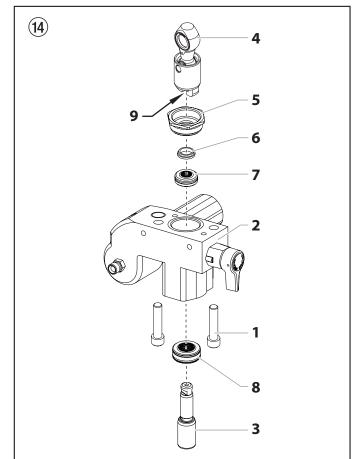


- 11. Unscrew outlet valve housing (Fig. 13, Item 8) from the piston (9) with adjusting wrench.
- 12. Remove the upper ball cage (11), crush washer (10), outlet valve ball (12), and outlet valve seat (13).
- 13. Clean all the parts with the corresponding cleaning agent. Check outlet valve housing (8), 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. 12, Item 6) with machine grease and ensure proper seating in the inlet valve housing (Fig. 12, Item 1).

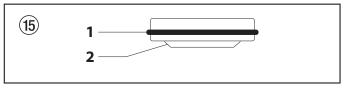


#### 11.3 Packings

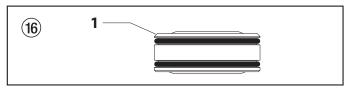
- 1. Remove inlet valve housing in accordance with the steps in Chapter 11.2, Page 14.
- 2. It is not necessary to remove the outlet valve.
- 3. Unscrew both cylinder head screws (Fig. 13, Item 1) from the pump manifold (2) with a 3/8 inch hexagon socket head wrench.
- 4. Slide the pump manifold (2) 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. 15) with O-ring (1) and protruding lip (2) downward.



11. Insert lower packing (Fig. 16) with the beveled edge (1) facing upward.

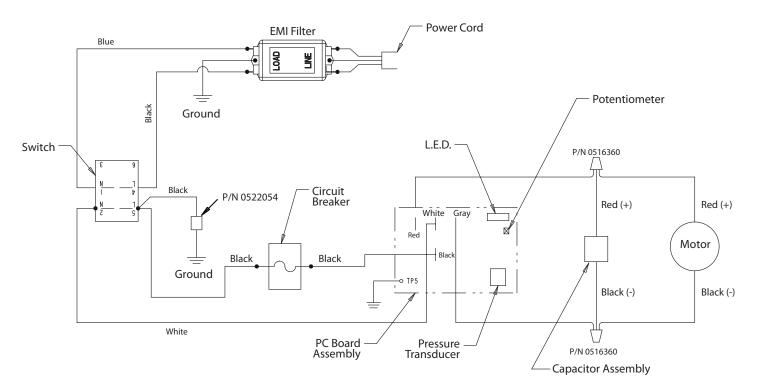


- 12. Insert piston guide (Fig. 14, Item 6) into the retainer nut (5). Screw retainer nut (5) into the pump manifold (2) and tighten by hand.
- 13. Push installation tool (included with the replacement packings) for the piston (3) from above onto the piston.
- 14. Lubricate installation tool and piston (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

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- 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. 12, 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 to 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 ( $\bigcirc$  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	0999 057
20	0.18 - 0.48	5 - 50 cm	Paints, fillers	0999 053
28	0.28 - 0.66	8 - 55 cm	Paints, dispersions	0999 054
41	0.43 - 0.88	10 - 60 cm	Rust protection paints - dispersions	0999 055
49	0.53 - 1.37	10 - 40 cm	Large-area coats	0999 056

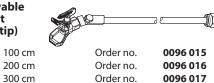
**Contact protection** for the flat jet adjustment tip



Order No. 0097 294

Tip extension with slewable knee joint (without tip)

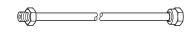
Length Length Length



#### **Tip extension**

17

15 cm, F-thread, Order no. **0556 051** 30 cm, F-thread, Order no. **0556 052** 45 cm, F-thread, Order no. **0556 053** 60 cm, F-thread, Order no. **0556 054** 



15 cm, G-thread, Order no. **0556 074** 30 cm, G-thread, Order no. **0556 075** 45 cm, G-thread, Order no. **0556 076** 60 cm, G-thread, Order no. **0556 077** 

Appendix



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** 

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uliantian		The second stars as	Conversion and a	Dana (in sh. (	<b>C</b> oncerting of the second 1)	] (
oplication		Tip marking 407	Spray angle 40°	Bore (inch / mm)	Spraying width mm <sup>1)</sup> 160	
itural paints		407 507	40 50°	0.007 / 0.18 0.007 / 0.18	190	
ar paints		209	20°	0.009 / 0.23	145	
S	č	309	30°	0.009 / 0.23	160	
	"RED"	409	40°	0.009 / 0.23	190	
	Н,	509 609	50° 60°	0.009 / 0.23	205 220	
-	Spray gun filter	111	<u>80</u>	0.009/0.23	85	1
thetic-resin paints	fit	211	20°	0.011 / 0.28	95	
paints	Ē	311	30°	0.011 / 0.28	125	
	n6	411	40°	0.011/0.28	195	
	A N	511	50°	0.011 / 0.28	215	
	— <u> </u>	<u>611</u> 113	<u>60°</u>	0.011 / 0.28	<u> </u>	
ts, primers	Š	213	20°	0.013 / 0.33	100	
chromate base		313	30°	0.013 / 0.33	135	
rs		413	40°	0.013 / 0.33	200	
		513	50°	0.013 / 0.33	245	
		613 813	60° 80°	0.013 / 0.33	275 305	
	×	115		0.015 / 0.38	90	1
'S	0	215	20°	0.015 / 0.38	100	1
y plasters protection paints	"YELLOW"	315	30°	0.015 / 0.38	160	1
protection paints	(EI	415	40°	0.015 / 0.38	200	
	5	515	50°	0.015 / 0.38	245	
	Spray gun filter	615 715	60° 70°	0.015 / 0.38 0.015 / 0.38	265 290	
	Ξ.	815	80°	0.015 / 0.38	325	
	<b>_</b> _	217	20°	0.017 / 0.43	110	1
y plasters protection paints	gu	317	30°	0.017 / 0.43	150	
ead	ay	417	40°	0.017 / 0.43	180	
c paints	pr	517	50°	0.017 / 0.43	225	
	S	617 717	60° 70°	0.017 / 0.43	280 325	
	1 Mar 1997	219	20°	0.017 / 0.43 0.019 / 0.48	145	
		319	30°	0.019 / 0.48	160	
		419	40°	0.019/0.48	185	
		519	50°	0.019 / 0.48	260	
		619 719	60° 70°	0.019 / 0.48 0.019 / 0.48	295 320	
	ų	819	80°	0.019 / 0.48	400	
• •	⊑	221	20°	0.021 / 0.53	145	1
paints dust paints	N N	421	40°	0.021 / 0.53	190	
ersions		521	50°	0.021 / 0.53	245	
cipions	tei	621	60°	0.021 / 0.53	290	
	÷	<u>821</u> 223	<u> </u>	0.021 / 0.53	<u> </u>	1
protection paints	5	423	40°	0.023 / 0.58	180	
	<u> d</u>	523	50°	0.023 / 0.58	245	
	Spray gun filter "WHITE"	623	60°	0.023 / 0.58	275	
	pr	723	70°	0.023 / 0.58	325	
	v	823	<u>80°</u>	0.023 / 0.58	345	1
ersions		225	20°	0.025 / 0.64	130	
er, glue		425 525	40° 50°	0.025 / 0.64 0.025 / 0.64	190 230	1
filler paints		625	50°	0.025 / 0.64	250	
		825	80°	0.025 / 0.64	295	
		227	20°	0.027 / 0.69	160	
		427	40°	0.027 / 0.69	180	
		527	50°	0.027 / 0.69	200	
	Spray gun filter "GREEN"	627	60°	0.027 / 0.69	265	
	<b>H</b>	827 629	80° 60°	0.027 / 0.69	340 285	
	IRI	231	20°	0.029 / 0.75 0.031 / 0.79	155	1
	5	431	40°	0.031 / 0.79	185	1
	er	531	50°	0.031 / 0.79	220	1
	ilt	631	60°	0.031 / 0.79	270	
	n f	433	40°	0.033 / 0.83	220	
	) Inf	235	20°	0.035 / 0.90	160	
	<u>ک</u> و	435	40°	0.035 / 0.90	195	
	ra	535	50°	0.035 / 0.90	235	
		635	60°	0.035 / 0.90	295	1
	d		0.00	0.020 / 0.00	400	
	Sp	839	80° 20°	0.039 / 0.99	480 185	
ge-area coatings	Sp		80° <u>20°</u> 50°	0.039 / 0.99 0.043 / 1.10 0.043 / 1.10	480 185 340	

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

#### 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 •

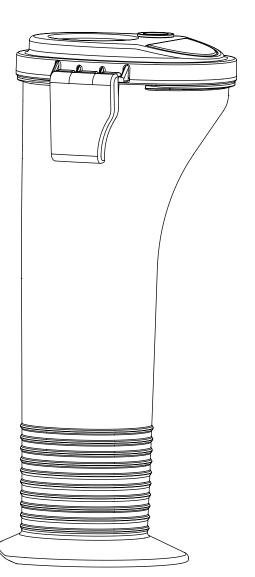
#### Suitable for the following models:

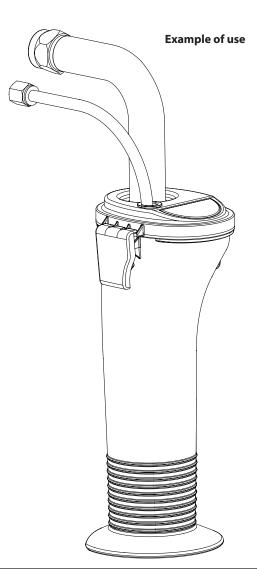
Diaphragm Pumps		Double-stroke piston pumps			
SF 21	Finish 270/370	PS 24	PS 3.25		
SF 23	Nespray Deco	PS 26	PS 3.29		
SF 27	Nespray 31	PS 30	PS 3.31		
SF 31		PS 34	PS 3.34		
SF 7000					

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







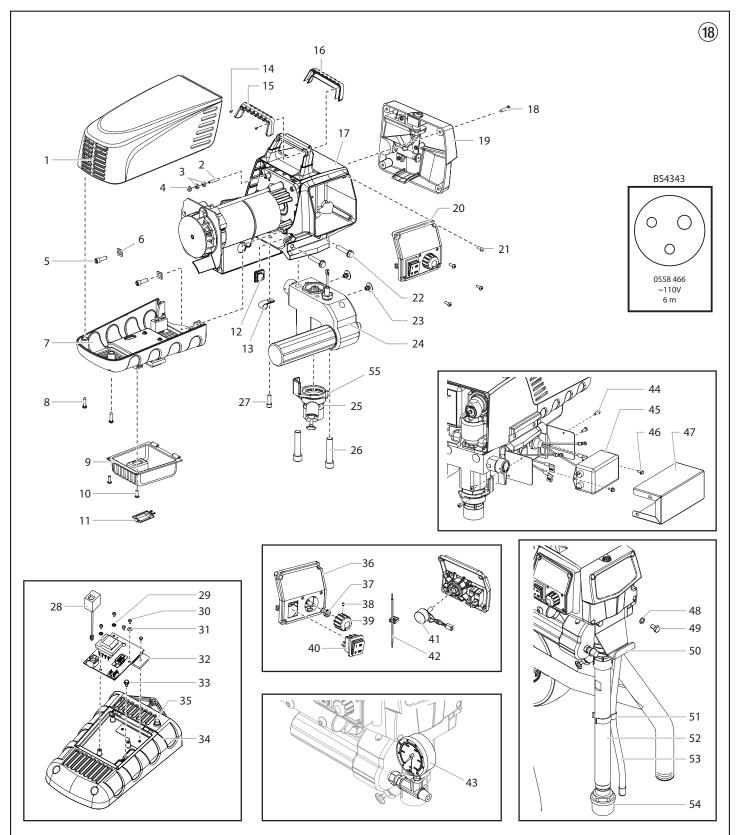
# **Accessories illustration**

ProSpray 3.21



ltem	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

# **Main Assembly**

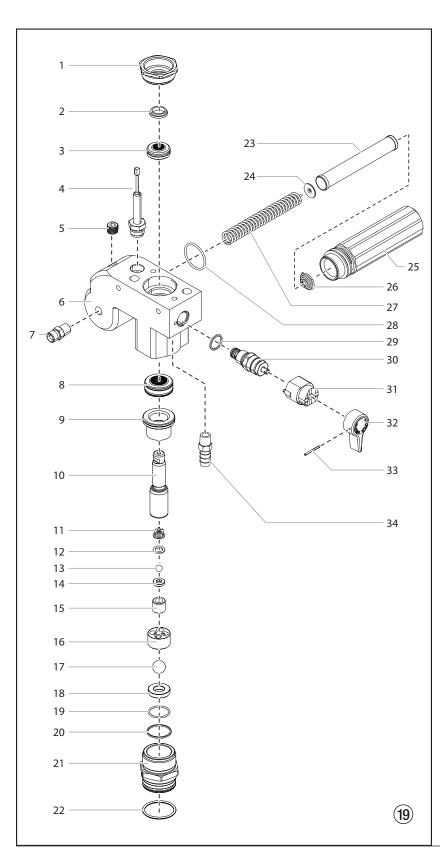


ltem	Part No.	Description
1	0290 230	Motor shroud
2	9805 403	Set screw
3	9810 103	Nut
4	0524 353	Nut
5	9800 319	Screw (2)
6	9822 627	Washer (2)
7	0558 332A	Belly pan assembly (includes items 28-34)
8	9802 266	Screw (2)
9	0558 408	Dust cover
10	0509 218	Screw (2)
11	0290 222	Door
12	0558 460	Plug*
13		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
25	0290 205	Pusher assembly (includes item 55)
26	0508 553	Screw (2)
27	9800 319	Screw
28	0551 757	Transducer jumper

ltem	Part No.	Description
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	0508 239	Manometer
44	0509 218	Screw (4)*
45	0522 424	EMI filter, 20A*
46	9800 340	Ground screw (2)*
47	0558 452	Bracket cover (2)*
48	0508 549	Washer (2)
49	0508 550	Screw (2)
50	0508 551	Pail hook
51	0507 783	Clip
52	0290 224	Suction tube
53	0508 293	Retun tube
54	5006 536	Inlet screen
55	0558 742	Clip
	0522 052	Arrestor (not shown, see schematic)

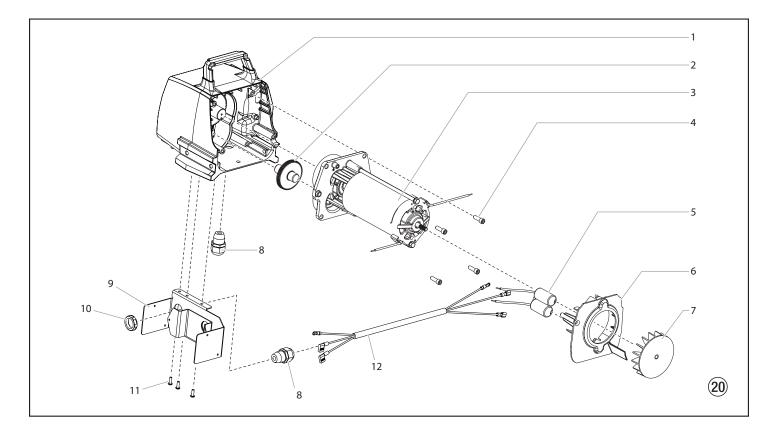
\* UK only

# Fluid section



ltem	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, PTFE
20	0509 581	Inlet valve seal
21	0290 216	Inlet valve housing
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	9885 612	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).

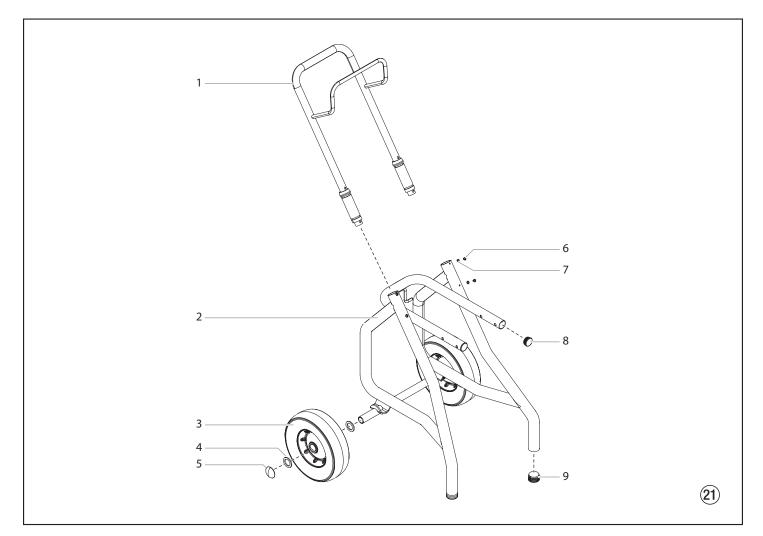
# **Drive Assembly**



ltem	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

# Upright Cart Assembly



ltem	Part No.	Description
1	0290 207	Handle assembly (includes items 6-7)
2	0290 208	Cart weldment
3	0278 373	Wheel (2)
4	0294 534	Spacer (4)
5	9890 104	Axle cap (2)
6	0295 608	Screw (2)
7	0509 386	Washer (6)
8	0294 635	Plug (2)
9	9885 571	Plug (2)



#### 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.

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. 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, meanscarrying 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, overoperation 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 concludingly. 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.

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Note on disposal:

In observance of the European Directive 2002/96/ EC on waste electrical and electronic equipment and implementation in accordance with national law, this product is not to be disposed of together with household waste material but must be recycled in an environmentally friendly way!



Wagner or one of our dealers will take back your used Wagner waste electrical or electronic equipment and will dispose of it for you in an environmentally friendly way. Please ask your local Wagner service centre or dealer for details or contact us direct.