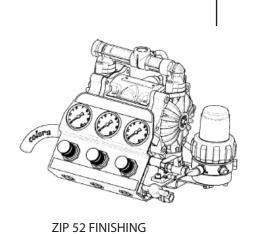


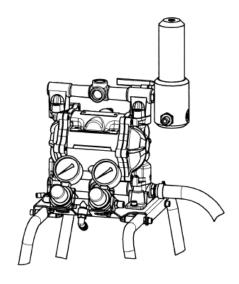
# Translation of the original Operating Manual

ZIP52 ALU SP
ZIP 52 INOX SP
ZIP 52 ACETAL SP
ZIP 52 PERFECT FLOW SP

Edition 01 / 2010

# **Diaphragms pump**

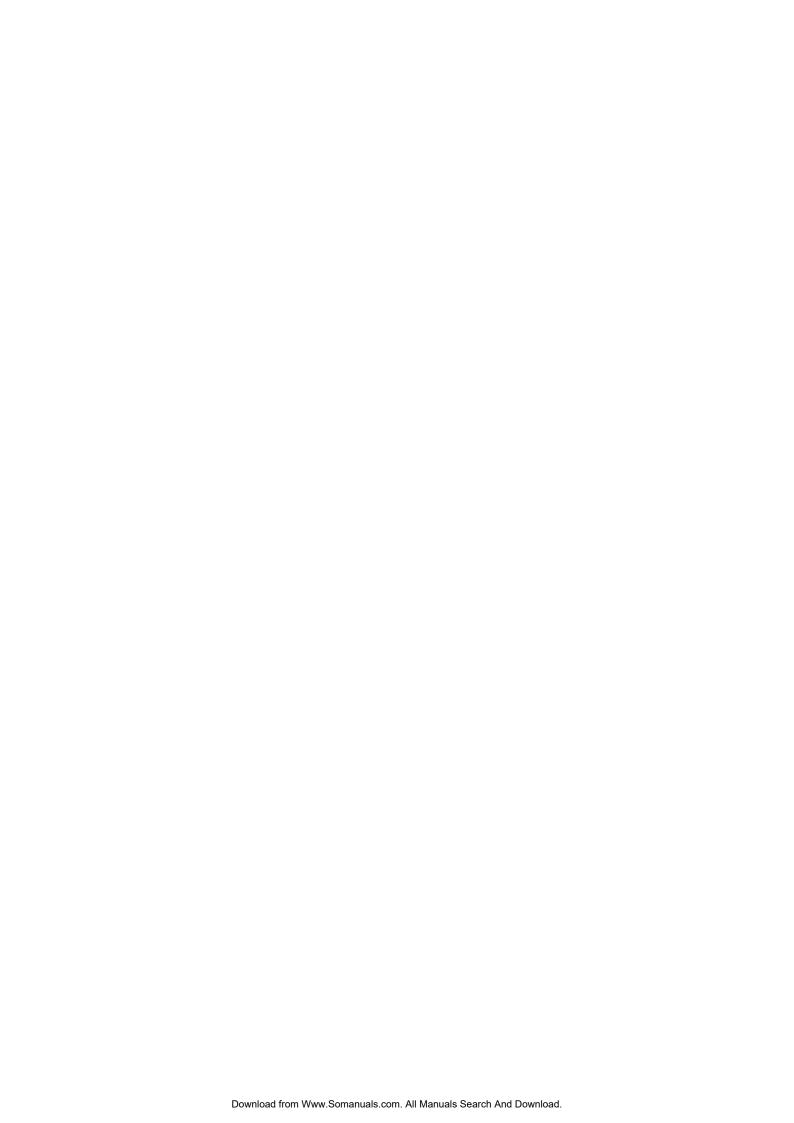




ZIP 52 PF











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# **ZIP52 FINISHING - PF**

### OPERATING MANUAL



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### 1 ABOUT THESE INSTRUCTIONS

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

→ Always follow these instructions when operating the unit.

#### 1.1 LANGUAGES

This operating manual is available in the following languages:

Language:	Part No.	Language:	Part No.
German	ZZB012GER	English	ZZB012ENG
French	ZZB012FRE	Dutch	
Italian	ZZB012ITA	Spanish	
Danish		Swedish	
Portuguese		Turkish	

#### 1.2 WARNINGS, NOTES AND SYMBOLS IN THESE INSTRUCTIONS

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

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



## $oldsymbol{\Lambda}$ Danger

his line warns of the hazard!

Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.

→ The measures for preventing the hazard and its consequences.

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



### **№** WARNING

This line warns of the hazard!

Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.

→ The measures for preventing the hazard and its consequences.

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



# **!** CAUTION

This line warns of the hazard!

Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.

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→ The measures for preventing the hazard and its consequences.

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

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#### **CAUTION**

This line warns of the hazard!

Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.

→ The measures for preventing the hazard and its consequences.

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



### **2** GENERAL SAFETY INSTRUCTIONS

#### 2.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

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



#### 2.1.1 ELECTRICAL EQUIPMENT

Electrical plant and unit

- → To be provided in accordance with the local safety requirements with regard to the operating mode and ambient influences.
- → May only be maintained by skilled electricians or under their supervision.
- → Must be operated in accordance with the safety regulations and electrotechnical regulations.
- → Must be repaired immediately in the event of problems.
- → Must be put out of operation if they pose a hazard.
- → Must be de-energized before work is commenced on active parts. Inform staff about planned work, observe electrical safety regulations.



#### 2.1.2 PERSONNEL QUALIFICATIONS

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

#### 2.1.3 A SAFE WORK ENVIRONMENT

- → Ensure that the floor of the working area is anti-static in accordance with EN 50053 Part 1 §7-2.
- → Ensure that all persons within the working area wear anti-static shoes, e.g. shoes with leather soles.
- → Ensure that during spraying, persons wear anti-static gloves so that they are earthed via the handle of the spray gun.
- → Customer to provide paint mist extraction systems conforming to local regulations.
- → Ensure that the following components of a safe working environment are available:
  - Material/air hoses adapted to the working pressure
  - Personal safety equipment (breathing and skin protection)
- → Ensure that there are no ignition sources such as naked flame, glowing wires or hot surfaces in the vicinity. Do not smoke.



### 2.2 SAFETY INSTRUCTIONS FOR STAFF

- → Always follow the information in these instructions, particularly the general safety instructions and the warning instructions.
- → Always follow local regulations concerning occupational safety and accident prevention.



#### 2.2.1 SAFE HANDLING OF WAGNER SPRAY UNITS

The spray jet is under pressure and can cause dangerous injuries.

Avoid injection of paint or cleaning agents:

- → Never point the spray gun at people.
- → Never reach into the spray jet.
- → Before all work on the unit, in the event of work interruptions and functional faults:
  - Switch off the energy/compressed air supply
  - Secure the spray gun against actuation.
  - Relieve the pressure from the spray gun and unit.
  - By functional faults: If possible, remove the defect as described in chap. "Trouble shooting", otherwise apply to an authorised after-sale service point.

In the event of skin injuries caused by paint or cleaning agents:

- → Note down the paint or cleaning agent that you have been using.
- → Consult a doctor immediately.

Avoid danger of injury through recoil forces:

- → Ensure that you have a firm footing when operating the spray gun.
- → Only hold the spray gun briefly in any one position.

#### 2.2.2 EARTH THE UNIT

Electrostatic charges can occur on the unit due to the electrostatic charge and the flow speed involved in spraying. These can cause sparks and flames upon discharge.

- → Ensure that the unit is earthed for every spraying operation.
- → Earth the workpieces to be coated.
- → Ensure that all persons inside the working area are earthed, e.g. that they are wearing antistatic shoes.
- → When spraying, wear antistatic shoes to earth yourself via the spray gun handle. If gloves are used, they must be antistatic

### 2.2.3 MATERIAL HOSES

- → Ensure that the hose material is chemically resistant to the sprayed materials.
- → Ensure that the material hose is suitable for the pressure generated in the unit.
- → Ensure that the following information is visible on the high-pressure hose:
  - Manufacturer
  - Permissible operating overpressure
  - Date of manufacture.
- → The electrical resistance of the complete high-pressure hose must be less than 1 MOhm.







#### 2.2.4 CLEANING

- → De-energize the unit electrically.
- → Disconnect the pneumatic supply line.
- → Relieve the pressure from the unit.
- → Ensure that the flash point of the cleaning agent is at least 5 K above the ambient temperature.
- → To clean, use only solvent-free cloths and brushes. Never use hard objects or spray on cleaning agents with a gun.

An explosive gas/air mixture forms in closed containers.

- → When cleaning units with solvents, never spray into a closed container.
- → Earth the container.



#### 2.2.5 HANDLING HAZARDOUS LIQUIDS, VARNISHES AND PAINTS

- → When preparing or working with paint and when cleaning the unit, follow the working instructions of the manufacturer of the paints, solvents and cleaning agents being used.
- → Take the specified protective measures, in particular wear safety goggles, protective clothing and gloves, as well as hand protection cream if necessary.
- → Use a mask or breathing apparatus if necessary.
- → For sufficient health and environmental safety: Operate the unit in a spray booth or on a spraying wall with the ventilation (extraction) switched on.
- → Wear suitable protective clothing when working with hot materials.



#### **2.2.6** TOUCHING HOT SURFACES

- → Touch hot surfaces only if you are wearing protective gloves.
- → When operating the unit with a coating material with a temperature of >43°C; 109.4°F:
  - Identify the unit with a warning label that says "Warning hot surface".



#### Order No.

9998910 Information label9998911 Safety label

#### 2.3 CORRECT USE

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

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





#### 2.4 USE IN AN EXPLOSION HAZARD AREA

#### 2.4.1 CORRECT USE

The unit is suitable for working liquid materials in accordance with the classification into explosion classes.

#### 2.4.2 EXPLOSION PROTECTION IDENTIFICATION

As defined in the Directive 94/9/CE (ATEX 95), the unit is suitable for use in areas where there is an explosion hazard.



CE: Communautés Européennes Ex: Symbol for explosion protection

II: Unit class II

2: Category 2 (Zone 1)G: Ex-atmosphere gasIIB: Explosion class

T4: Temperature class: maximum surface temperature < 135°C; 275°F.

#### 2.4.3 MAX. SURFACE TEMPERATURE

Max. surface temperature: same as the permissible material temperature Permissible ambient temperature: see under Technical data, Section 4.3.2

# **2.4.4** SAFETY REGULATIONS

#### Safe handling of WAGNER spray units

The maximum surface temperature of the piston pump can be reached if it runs dry.

- → Ensure that the piston pump is filled with sufficient working or cleaning medium.
- → Ensure that the separating agent container is filled with sufficient separating agent.

Mechanical sparks can form if the unit comes into contact with metal.

In an explosive atmosphere:

- → Do not knock or push the unit against steel or rusty iron.
- → Do not drop the unit.
- → Use only tools that are made of a permitted material.

#### Ignition temperature of the coating material

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

#### **Medium supporting atomizing**

→ To atomize the material, use only weakly oxidizing gases, e.g. air.



# **ZIP52 FINISHING - PF**

#### **OPERATING MANUAL**



# **Surface spraying, electrostatic**

→ Do not spray unit parts with electrostatic (e.g. electrostatic spray gun).



### Cleaning

If there are deposits on the surfaces, the unit may form electrostatic charges. Flames or sparks can form if there is a discharge.

- → Remove deposits from the surfaces to maintain conductivity.
- → Use only a damp cloth to clean the unit.





### 3 PRODUCT LIABILITY AND WARRANTY (STATUS 01.02.2009)

#### 3.1 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.

#### **3.2** GUARANTEE PERIOD AND REGISTRATION (3+2)

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.

#### 3.3 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.



#### **3.4** 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, 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.

### 3.5 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.

J. Wagner GmbH Division Professional Finishing Otto Lilienthal Strasse 18 88677 Markdorf Federal Republic of Germany



## 3.6 CE-CONFORMITY

Herewith we declare that the supplied version of: Pneumatic pumps with article no.

2301832
2301836
2301837
2301838

Complies with the following provisons applying to it:

2006/42/EC	94/9/EC Atex	
------------	--------------	--

#### Applied standards, in particular:

UNI EN 12100-1	UNI EN 809	UNI EN 1127-1
UNI EN 12100-2	UNI EN ISO 14121-1	EN 12621
UNI EN 563	UNI EN ISO 3746	UNI EN ISO 13463

# Marking:



# **EC Certificate of Conformity**

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

#### Part number:

ZDI.20



# 4 DESCRIPTION

#### 4.1 FIELD OF APPLICATION

#### 4.1.1 USING IN ACCORDANCE WITH THE INSTRUCTIONS

The pneumatic diaphragm pump is suitable for process liquid materials.

# **CAUTION**

#### Abrasive fluids and pigments!

Greater wear of the parts carrying the material.

- → Use suitable pump model (delivery per cycle, material, valves, etc.) see chapter 4.3.2.
- → Verify that fluids and solvents used are compatible with the constrution material of the pump as described in chapter 4.3.1.

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#### **4.2** EXTENT OF DELIVERY

Pneumatic diaphragm pump consisting of:

- Material pump / Air motor
- Material regulator/Antipulsator and/or filter
- Support pump with regulators
- Suction hose
- Connections

CE-conformity see

Operating manual in english

Operating manual for the other language see

Chapter 3

Part No.: ZZB012ENG

Chapter 1

The delivery note shows the exact scope of delivery. Accessories: see chapter 7.

#### 4.3 DATA

#### 4.3.1 MATERIALS OF THE PARTS TRANSPORTING PAINT

	2301832	2301836	2301837	2301838
Covers/Manifolds	Aluminium	Stainless steel	Acetal	Aluminium
Balls	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Valve seats	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Diaphragms	PE	PE	PE	PE
Static gaskets (product side)	PTFE	PTFE	PTFE	PTFE



### 4.3.2 TECHNICAL DATA

Description	Units	2301832	2301836	2301837	2301838
Transmission ratio		1:1	1:1	1:1	1:1
Fluid max flow rate	l/min	52	52	52	28
Max. operating pressure	MPa bar psi	8 116 1682	8 116 1682	8 116 1682	8 116 1682
Min Max. air inlet pressure.	MPa bar psi	0.1-0.8 1-8 15-116	0.1-0.8 1-8 15-116	0.1-0.8 1-8 15-116	0.1-0.8 1-8 15-116
Ø air inlet connection (female)	BSP	1/4"	1/4"	1/4"	1/4"
Sound power at max. flow rate feeding 8 bar; 116 psi *.	dB(A)	99	99	97	99
Sound pressure equivalent to max.flow rate feeding 8 bar; 116 psi *.	dB(A)	85	85	85	85
Sound pressure equivalent to 50 cycles/min feeding 5 bar; 72,5 psi*.	dB(A)	76	76	73	76
Material outlet connection (female) (M16x1,5)	Inch	G 1/4"	G 1/4"	G 1/4"	G 1/4"
Weight	kg lb	3.8 8.4	6.1 13.4	2.9 6.4	3.8 8.4
Max. material pressure at pump inlet	MPa bar psi		0,1 1 14,5		0,1 1 14,5
Range of material temperature	°C;F	+4° ÷ +	40°; (+39 ÷	+104)	+4° ÷ +90°, (+39 ÷ +176)
Range of the ambient temperature	°C; F	+	4° ÷ +40°; (-	+39 ÷ +104)	)
Allowable sloping position at work	٩°		± 1	0	

<sup>\*</sup> A rated sound pressure level measured at 1m distance according to UNI EN ISO 3744.



# **!** WARNING

# Outgoing air containing oil!

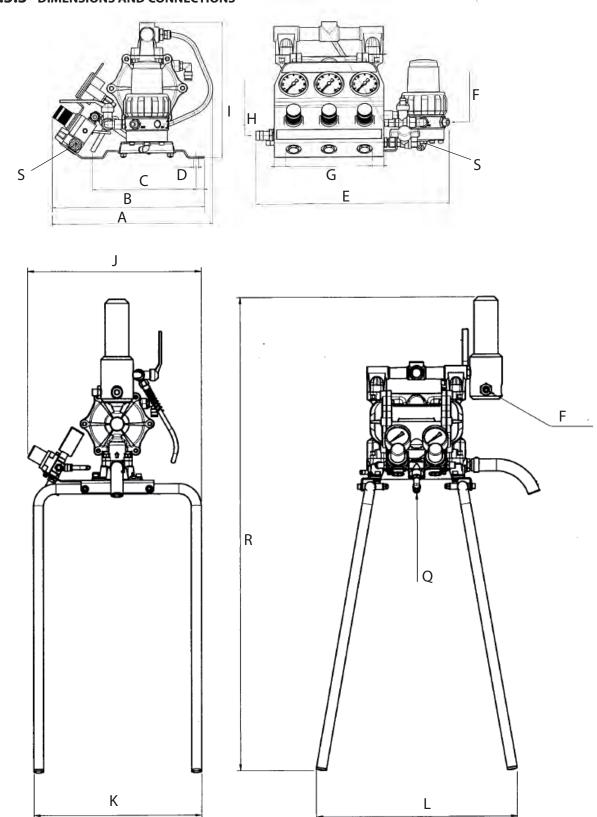
Risk of poisoning if inhaled. Function problem airmotor

 $\rightarrow$  Provide water-free and oil-free compressed air (quality standard 5.5.4 as per ISO 8573.1) 5.5.4 = 40  $\mu$ m / +7 / 5 mg/m³.

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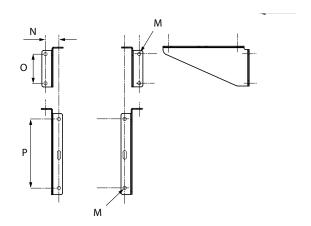


## **4.3.3** DIMENSIONS AND CONNECTIONS





# Mounting for wall for 2301832, 2301836, 2301837



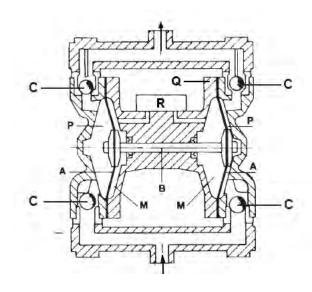
C\_00041

	2301832 mm; inch	2301836 mm; inch	2301837 mm; inch	2301838 mm; inch		2301832 mm; inch	2301836 mm; inch	2301837 mm; inch	2301838 mm; inch
Α	295; 11,6	295; 11,6	280;11	-	М	ø9; ø0.35	ø9; ø0.35	ø9; ø0.35	-
В	280; 11	280;11	280; 11	-	N	38.3; 1.5	38.3; 1.5	38.3; 1.5	-
C	189; 7,44	189; 7,44	189; 7,44	-	0	80; 3.2	80; 3.2	80; 3.2	-
D	ø9; ø0.35	ø9; ø0.35	ø9; ø0.35	-	Р	189; 7.4	189; 7.4	189; 7.4	-
Е	360; 14,1	360; 14,1	360; 14,1	-	Q	-	-	-	G1/4"
F	G1/4"	G1/4"	G1/4"	G1/4"	R	-	-	-	940; 37
G	158;6,2	158; 6,2	158; 6,2	-	S	G1/4"	G1/4"	G1/4"	-
Н	ø16	ø16	ø16	-	-	-	-	-	-
I	250;9,8	250; 9,8	260; 10,2	250; 9,8	-	-	-	-	-
J				360; 14,1	-	-	-	-	-
K				335; 13,1	-	-	-	-	-
L				405; 15,9	-	-	-	-	-

#### 4.4 FUNCTIONING

#### **4.4.1** PUMP

- A Diaphragms
- B Connecting shaft
- C Check valves
- M Driving chambers
- P Pumping chambers
- O Air motor
- R Inversion valve



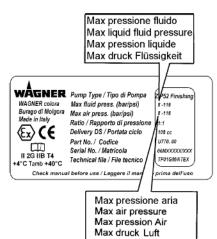
#### **General information**

The principle lying behind the functioning of diaphragm pumps driven by compressed air is just as simple as it is effective. Two diaphragms (A), which are connected to one another by means of a connecting shaft (B) so as to be integral, divide two adjacent capacities into four chambers. The inner ones function as driving chambers (M) while the outer ones function as pumping, chambers (P). A pneumatic distributor alternately conveys compressed air into one of the driving chambers, thus producing the diaphragms movement and consequently causing one of the pumping chambers to empty (as a result of volume decrease), while at the same time the other fills up (as a result of volume increase). A series of check valves (C) prevents the liquid from flowing back, thus producing the suction and delivery phases in each pumping chamber.

#### Air motor (Q)

The pneumatic motor must be powered at a pressure not exceeding the value given on the plate. Each component linked to the pump outlet must have an operating pressure equal to or higher than the pressure generated by the pump itself.

This fi nal pressure is given on the plate (see the picture on the right).





# **!**WARNING

#### Overpressure!

Risk of injury from bursting components.

→ Never change the safety valve setting.

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### **4.4.2** PRESSURE REGULATOR

- a Antipulsation Reducer Filter with pneum.control (FINE FLOW CONTROLLER)
- b Atomising air pressure reducer
- c Atomising air connection
- d Pump motor feeding air manometer
- e Controlling air manometer of pneumatic paint pressure reducer
- f Atomising air manometer
- g Controlling air pressure reducer of pneumatic paint reducer
- h PM motor feeding air pressure reducer
- i On-off and feeding air inlet valve
- I Re-cycle on-off valve
- m Fluid suction pipe
- n Fluid delivery connection

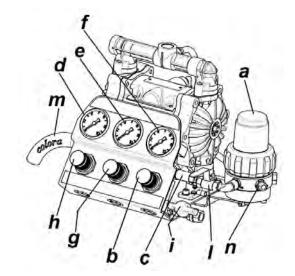


Figure: Pump 2301832, 2301836,

2301837

- a Pump feeding air pressure reducer
- b Atomising air pressure reducer
- c Pump feeding air manometer
- d Atomising air manometer
- e Atomising air connection
- f Fluid suction pipe
- g Filter material
- h Compressed air connection
- i Fluid delivery connection
- I Recycling valve

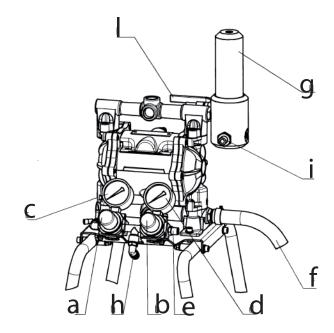


Figure: Pump 2301838

### **4.4.2.1** TECHNICAL SHEET FINE FLOW CONTROLLER COD. 2301832, 2301836, 2301837

### Part in contact with the product

Regulator body:(p): Konsistal (for T0180.00A)
Regulator body: (p): Stainless Stell (for T0180.00Al)

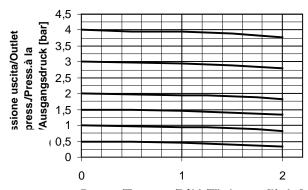
Antipulsation body (q): PP
Product diaphragm:: PTFE

Shutter ball: Stainless Stell
Shutter seat:: Tungsten carbide

# **Reducer section performances**

with fluids having a viscosity of 45 mPa.s (corresponding to about 20 s. Ford 4)

Inlet pressure: 5 Bar



Portata/Flow rate/Débit/Förderung [I/min.]

FILTER CARTRIDGE - INCLUDED(Mesh) 100

OPTIONAL (Mesh) 60 and 150

Dimensions

Diameter (mm): 90 Height (mm): 165

weight (gr): 850 (for T0180.00A) weight (gr): 1455 (for T0180.00Al)

## 5 STARTING UP AND OPERATING

#### **5.1** INSTALLATION AND CONNECTION

#### **5.1.1** PUMP INSTALLATION

#### Note

The pneumatic motor must be supplied with clean industrial air; make sure efficient filtering and condensate separation systems are installed on the air line. All impurities and the eventual condensate that has built up inside the air filter on top of the pump must be drained daily.

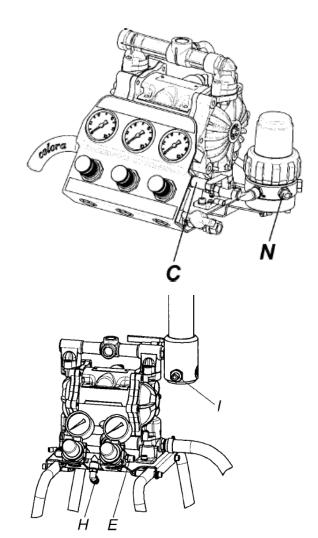
NOTE: Consult specific catalogues when choosing the pipes. The driving air pipe must be properly dimensioned.

#### Procedure for 2301832, 2301836, 2301837:

- 1. Mount the pump onto a basement
- Connect the air atomization and paint delivery hoses, respectively, to the corresponding attachments (C: air - N: paint), carefully tightening the fittings.

#### Procedure for 2301838:

- 1. Connect the air to the pump in the (H) fitting, installing an on-off valve on the line to stop the feeding air in case of emergency.
- 2. Connect the spraying air to its fitting (E). Carry out the same operation for the paint delivery pipe, to be connected to its fitting (I).





# **!**WARNING

#### Inclined surface!

Risk of accidents if the unit rolls away/falls.

- → Position the carriage with the piston pump horizontally.
- → If the surface is inclined, position the feet of the carriage towards the gradient.
- → Secure the carriage.

SIHI\_0012\_GB

### 5.1.2 EARTHING



# **MARNING**

Discharge of electrostatically charged components in atmospheres containing solvents!

Explosion hazard from electrostatic sparks.

→ Clean the piston pump only with a damp cloth.

SIHI\_0041\_GB



# **MARNING**

Heavy paint mist if earthing is insufficient!

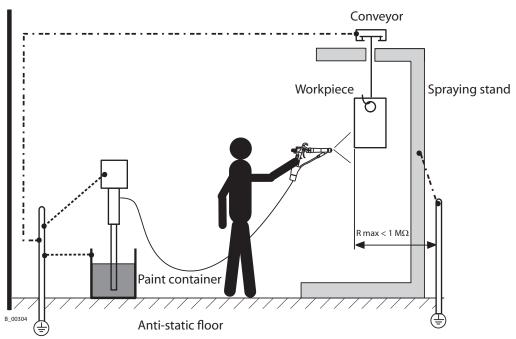
Risk of poisoning.

Insufficient paint application quality.

- → Earth all unit components.
- → Earth the workpieces being painted.

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# **Earthing schema (example)**



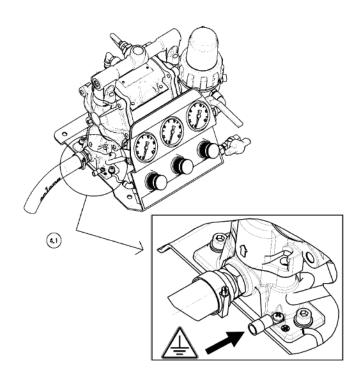


### **Cable cross sections**

Pump 4 mm²; AWG 11
Paint container 6 mm²; AWG 10
Conveyor 16 mm²; AWG 5
Spraying booth 16 mm²; AWG 5
Spraying stand 16 mm²; AWG 5

### **Procedure:**

- 1. Screw on earthing cable with eye.
- 2. Clamp the earthing cable clip to a earth connection on site.
- 3. Earth the material (paint) container to a local earth connection.
- 4. Earth the other parts of the system to a local earth connection.



#### 5.2 START UP

#### **5.2.1** SAFETY REGULATIONS

Every time before starting up the following points should be observed as laid down in the operating instructions:

- That it is possible to observe the safety regulations in Chap. 2.
- The starting up procedure, has been carried out properly.



# **!\WARNING**

#### High-pressure spray jet!

Danger to life from injecting paint or solvent.

- → Never reach into the spray jet.
- → Never point the spray gun at people.
- → Consult a doctor immediately in the event of skin injuries caused by paint or solvent. Inform the doctor about the paint or solvent used.
- → Never seal defective high-pressure parts, instead relieve the pressure from them and replace.

SIHI 0016 GB



# **!**WARNING

#### Toxic and/or flammable vapor mixtures!

Risk of poisoning and burns.

→ Operate the unit in a spraying booth approved for the working materials.

-or-

- → Operate the unit on an appropriate spraying wall with the ventilation (extraction) switched on.
- → Observe national and local regulations for the outgoing air speed.

SIHI\_0028\_GB



# **!** WARNING

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

Danger to life from flying parts.

- → Ensure that the piston pump and suction system are always completely filled with cleaning agent or working medium.
- → Do not spray the unit empty after cleaning.

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

- If installed secure gun with safety catch
- Check the permissible pressures
- Check all connections for leaks
- Check hose for damage

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

- The pressure should be released from the pump and high-pressure hose with gun (if installed).
- The gun should be secured with safety catch (if installed).
- The air supply should be interrupted

#### **5.2.2** EMERGENCY STOPPING

# Emergency stopping for 2301832, 2301836, 2301837

To stop the equipment in good time, close the air on-off valve (I) or release pressure through the regulator knob (H) thus stopping the feeding air to the motor.

Carry out the pump priming operations correctly to prevent pressurized air babbles from being trapped.

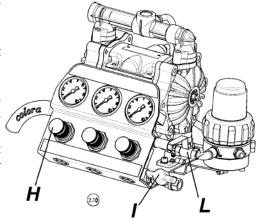
Pneumatic pumps can keep all components connected to the delivery under pressure, even when the driving air feed is closed. To prevent harm to people, as well as to avoid damaging things or the environment, after stopping the pump it is best to release the pressure by keeping the delivery valve open or opening the recycling valve (L).

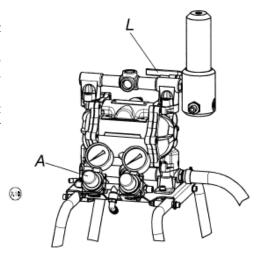
#### **Emergency stopping for 2301838**

To stop the equipment in good time, close the air on-off valve on the feeding line or release pressure through the regulator knob (A) thus stopping the feeding air to the motor.

Carry out the pump priming operations correctly to prevent pressurized air babbles from being trapped.

Pneumatic pumps can keep all components connected to the delivery under pressure, even when the driving air feed is closed. To prevent harm to people, as well as to avoid damaging things or the environment, after stopping the pump it is best to release the pressure by keeping the delivery valve open or opening the recycling valve (L).







#### **5.2.3 WASHING**

The pump has been tested using mineral oil. Before using it, it is best to let it wash once using an adequate solvent. To do this, place the metallic side of the suction pipe (M) inside a container full of solvent.

#### Open the re-cycle valve (L).

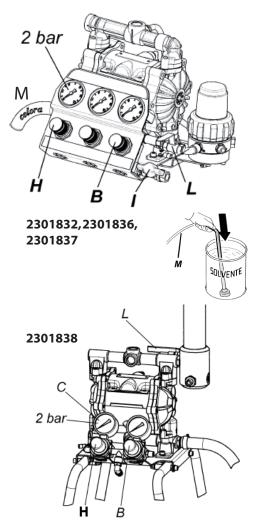
Make sure that the pressure regulator knob (H) is turned fully anti-clockwise (0 bar pressure). Open the air cutoff valve (I) (on the compressed air line for 2301838) and turn the motor air pressure regulator (H) knob clockwise until the pump starts. It is best to keep the atomization air valve (B) closed during washing operations.

Set the motor air pressure to 2 bar.

The pump sucks solvent and pours it back into the container through the re-cycle system, thus cleaning itself.

Let the solvent flow inside the pump for 2 or 3 minutes.

NOTE: In case the pump does not start, check that the gauge (C) reads at least 2 bar, close the delivery air on-off valve, discharge the residual pressure by turning the knob of the relative regulator anticlockwise, and then reset the pressure using the regulator and instantly reopen the air on-off valve. If necessary, repeat the operation several times.



Keeping the gun on the solvent container, pull the trigger and let the solvent re-cycle for some minutes through the gun delivery pipe. If the solvent flow coming out from the gun is poor, use the recycling valve lever (L) to obtain a higher pressure from the gun. At this point, all components have been through the first washing, the equipment has no unwanted fluid inside and is ready for painting; lift the suction pipe from the dirty solvent container and empty the pump completely.

Plunge the suction pipe and refill the pump with clean solvent, the turn off the air using the motor air pressure regulator (H).

NOTE: In case you are pumping liquids, such as catalyzed resins, which are bound to harden up, once: you have finished using the pump you must wash it, as well as anything that may be connected to it, in a thorough way, using a solvent suitable for the type of resin being used. You must then leave the pump full of solvent until it is next used.

#### **5.2.4** UNIT PRESSURE TIGHTNESS TEST

Close the gun, close the re-cycle valve (L), gradually increase the motor feeding air pressure (H) and the reducer controlling air (G) until reaching the max. acceptable value for the pump and connected equipment, make sure there are no leaks from fittings or pipe as well as from pump and antipulsation tank reducer filter.

# **ZIP52 FINISHING - PF**

#### **OPERATING MANUAL**



# **5.3** WORK **5.3.1** SPRAYING

#### for 2301832, 2301836, 2301837

Make sure that the pressure regulator knob (H) is turned fully anticlockwise (0 bar pressure).

Open the air cutoff valve (I) and turn the motor air pressure regulator knob (H) clockwise until the pump starts.

(Set the air pressure on the gauge (D) to 2 bar).

Open the re-cycle valve (L).

Lift the suction pipe and wait until the pump is completely empty from the solvent previously pumped for the first washing.

NOTE: The solvent used for the first washing may contain testing fluid residues, therefore avoid using it to dilute the paint.

Insert the suction pipe (M) into the paint container.

Wait until the pump is full. Close the re-cycle valve (L). If the product requires a continuous agitation, adjust the re-cycle valve opening so as to obtain the desired delivery.

Set the motor air pressure (H) on the gauge (D) to 5-5,5 bar or even more, if the paint viscosity requires it.

Open the gun (T) and drain the solvent contained inside the hose. Close the gun (T) as soon as paint starts coming out. The pump stops while it is still pressurized.

Set the paint pressure using the regulator (G) until obtaining a pressure of 1-1,5 bar on manometer (E).

Adjust the atomising air pressure using the regulator (B) and make sure the pressure on manometer (F) is 1,5-2 bar. You can now start painting.

#### for 2301838

Make sure that the pressure regulator knob (A) is turned fully anticlockwise (0 bar pressure).

Open the air cutoff valve and turn the motor air pressure regulator knob (A) clockwise until the pump starts. (Set the air pressure on the gauge (C) to 2 bar).

Open the re-cycle valve (L).

Lift the suction pipe and wait until the pump is completely empty from the solvent previously pumped for the first washing.

NOTE: The solvent used for the first washing may contain oil residues, therefore avoid using it to dilute the paint.

Insert the suction pipe (F) into the paint container.

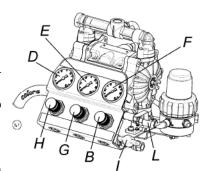
Wait until the pump is full. Close the re-cycle valve (L). If the product requires a continuous agitation, adjust the re-cycle valve opening so as to obtain the desired delivery.

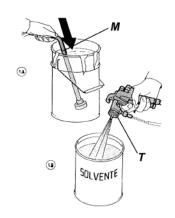
Set the motor air pressure (A) on the gauge (C) to 3-5 bar or even more, if the paint viscosity requires it.

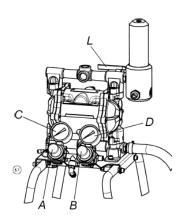
Open the gun (T) and drain the solvent contained inside the hose. Close the gun (T) as soon as paint starts coming out. The pump stops while it is still pressurized.

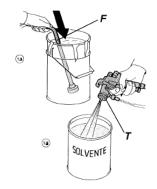
Adjust the atomising air pressure using the regulator (B) and make sure the pressure on manometer (D) is 1,5- 2 bar.

You can now start painting.









#### **5.3.2** PAINTING HINTS

If the pump speeds up suddenly and starts to shake, it means that there is no paint left inside it and that it is sucking air; you must therefore supply it with new paint. If the pump starts shaking like it would do if there were no paint left (but in fact there is), you must clean the suction pipe filter (see the "Filter cleaning operations" paragraph 6.3



# **!** WARNING

#### Overpressure!

Risk of injury from bursting components.

→ Frequently check for blocked recirculation pipe - the pipeline must be completely free.

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#### **5.3.3** WORKING BREAKS

Each time you stop spraying, close the motor input air valve (H) and open the re-cycle valve to release the pressure.

When using catalized paints, the interruption must be considerably shorter than the mixture lifetime.

In case it is not so, wash the system thoroughly.

If the system has been used with two component material:



# **WARNING**

Hardened material in the spraying system when 2-component material is worked!

Destruction of the pump and injection system.

- → Follow the manufacturer's working instructions, particularly regarding the pot life.
- → Rinse thoroughly before the end of the pot life.
- → The potlife time decreases at raising temperature.

SIHI 0069 GB

#### **5.3.4** SHUTTING DOWN AND CLEANING

#### Note

The device should be cleaned for maintenance purposes, etc. Ensure that no remaining material dries and sticks.

#### **Procedure:**

- 1. Working breaks -> procedure on chapter 5.3.2.
- 2. Basic cleaning -> procedure on chapter 5.2.3.
- 3. Maintain the gun as laid down in the operating instructions.
- 4. Clean and check the suction system and, in particular, the suction filter.
- 5. When using a high-pressure filter: Clean and check the filter insert.
- 6. Clean the outside of the system.



# **MARNING**

#### **Brittle filter pressure regulator!**

The container on the filter pressure regulator becomes brittle through contact with solvents and can burst.

Flying parts can cause injury.

→ Do not clean the container on the pressure regulator with solvent.

SIHI 0014 GB

- 7. Put the whole system back together.
- 8. Fill the system with solvent as laid down in Paragraph 5.2.3.



# **!**WARNING

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

Danger to life from flying parts.

- → Ensure that the piston pump and suction system are always completely filled with cleaning agent or working medium.
- → Do not spray the unit empty after cleaning.

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#### **5.4** STORING FOR LONGER PERIODS OF TIME

When storing the device for longer periods of time it is necessary to thoroughly clean it and protect it from corrosion. Replace solvent in the material pump with a suitable preserving oil.

#### **Procedure:**

- 1. Carry out Paragraph 5.3.4, Shutting down and cleaning", points 1 through 8.
- 2. Cleaning with preserving agent acc. Paragraph 5.2.3.
- 3. Protect the air motor with pneumatic oil: connect an oiler to the compressed air inlet and run for a few double strokes.

# **6** FAULT LOCATION, MAINTENANCE AND REPAIR

### **6.1** TROUBLE SHOOTING AND SOLUTION

Problem	Solution				
The pump does not	Check the line and the air cutoff valve				
start	Check the air treatment group if installed				
	Check the opening of any valves present on the suction and delivery lines.				
	Close the air on-off valve and reopen it rapidly after having increased the pressure				
	Only for FINISHING: check the pressure value of the paint reducer				
The unit is working (i.e.:the pump is	Accurately clean the filter if installed				
moving),but not liquid is coming out	Check liquid level				
	Check suction pipe				
Poor spray pattern	See gun instructions				
The product flow	Check that the suction pipe is not clogged				
into the delivery is discontinuous	Check that the pump is not cavitating				
aiscontinuous	There may be impurities on the valve seats				
The pump delivery	Partial obstruction on delivery line				
decreases during work	Slight variations of product characteristics (such as viscosity)				
	Ice formation inside the air outlet pipes				
The pump delivery	Complete obstruction on delivery line				
decreases during work, up to the point when it stops completely	Strong variations of product characteristics (such as viscosity)				
The unit stops	Increase the air pressure				
frequently	Adjust the lubricator output if installed				
	Put antifreezer in the lubricator and put an efficient condensate separator on the air line if installed				
The equipment remains in operation	Check the product cutoff valve and the outlet valve seals				
even with the delivery on-off valve closed.	There may be impurities on the valve seats				

If the problem is not listed above consult your WAGNER Service Center.

#### **6.2** MAINTENANCE



# **!**WARNING

### Incorrect maintenance/repair!

Danger to life and equipment damage.

- → Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts.
- → Only repair and replace parts that are listed in the chapter "Spare parts catalog".
- → Before all work on the unit and in the event of work interruptions:
  - Disconnect the control unit from the mains.
  - Relieve the pressure from the spray gun and unit.
  - Secure the spray gun against actuation.
- → Observe the operating and service instructions when carrying out all work.

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- 1. Every shut down should be carried out as laid down in paragraph 5.3.3!
- 2. Check and replace if necessary hoses, tubes, couplings every days.

WAGNER recommends to check the whole spray system every year from a technical expert (e.g. WAGNER service technician).



#### **6.3** FILTER CLEANING OPERATIONS

Before you clean the filters, you must close the compressed air input valve and release the pressure contained inside the pump and the pipes attached to it.

This pump has one filter inside the suction pipe and another inside the delivery circuit.

ALL FILTERS MUST BE CLEANED DAILY.

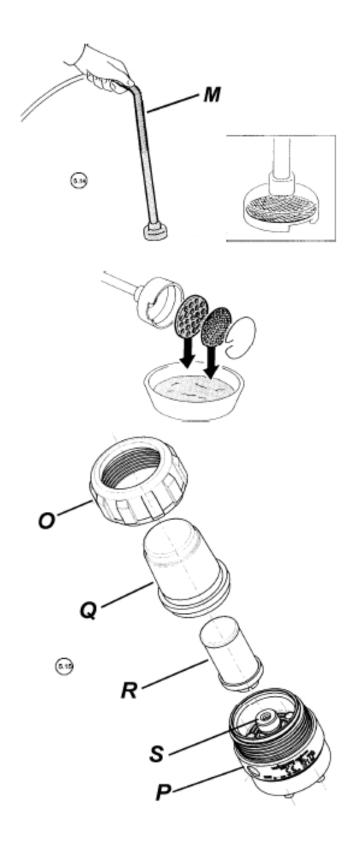
IT IS ALSO NECESSARY TO CLEAN THEM WHEN USING A DIFFERENT COLOUR PAINT FROM THE ONE PREVIOUSLY USED.

To clean the suction pipe (M) filter undo the spring, take out the filtering disk, leave it in some solvent, brush it and spray it with compressed air.

To clean the antipulsation filter, unscrew the plastic ring nut (O) from the reducer body (P), lift the cup (Q) paying attention to the PTFE gasket on the edge. Remove the filter (R) from the seat (S), pulling it upward, since it has a very simple fixing (clip).

Plunge the filtering cartridge into the solvent, then brush and blow it. Make sure to clean also the filter inner side with solvent and blow it with compressed air if necessary. To reassemble the filter, push it on the seat until hearing the fixing clip;

do not push the filter any further, to avoid damaging it. Reposition the cup making sure the gasket is in the perfect position, then screw the ring nut.



#### **6.4** MACHINE MAINTENANCE

The following instructions are general.

Refer to the specific diagrams of each pump model to operate correctly. ATTENTION: Before you perform any maintenance or cleaning operation:

- Supply yourself with the proper equipment,
- Wear the garments and specific protection devices with regard to the nature of the fluids with which you will come into contact,
- Close the compressed air delivery and discharge the pressure from the pump and pipes connected to it,
- If necessary, depending on the intervention, disconnect the product and air side connection pipes, remove the pump from the base or support it is fastened to and turn it over on top of a container suitable for collecting any liquid it may contain.

After the pump has been reassembled following maintenance operations, reset and check the efficiency of the earthing connection of the individual parts of the pump.



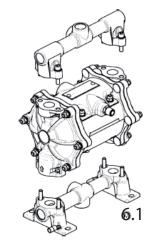
Mark the coupled parts with a felt-tip pin so as to make subsequent reassembly easier.

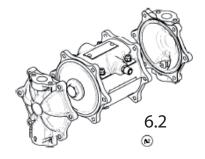
- a) Remove the suction and delivery manifolds. (6.1).
- b) Disassemble the fastening nuts and remove the external covers. (6.2).
- c) Turn the two end nuts of the external diaphragm disks in contraposition with the appropriate spanners and disassemble one of them.
- d) Remove the freed diaphragm with its relative internal disk, and extract the shaft from the motor block.(6.3).
- e) Lock the end of the shaft released from the diaphragm in a vice (adopting the proper precautions to avoid damaging it) and disassemble the external diaphragm disk from the opposite end. Now remove the second diaphragm with its internal disk.
- f) Assemble the new diaphragm with its internal disk and opportunely tighten it with the relevant external disk.
- g) Free the shaft from the vice, put it inside the motor block after lubricating it with grease, assemble the internal diaphragm disk, diaphragm and external disk, and then properly tighten it by using two spanners in contraposition on the nuts of the external disks.
- h) Reassemble the external covers and then the manifolds while making sure you check the positioning of the suction and delivery valves, the relative seals and proper tightening of the screws. (6.4).

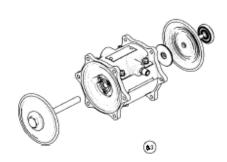
#### 2) Diaphragm replacement (due to breakage)

In the case the diaphragms are replaced as a consequence of breaking, it is necessary to clean all the internal parts of the motor and check the condition of the seals and reversing valve, which may have been damaged by contact with the pumped fluid.

- a) Follow the sequence described under paragraph 1, points a), b), c), d) and e).
- b) Disassemble the pressure side cover and extract the reversing valve.







# **ZIP52 FINISHING - PF**

#### **OPERATING MANUAL**



6.4 Sequenza di serraggio / Torque sequence Séquence de serrage / Anzugsreihenfolge

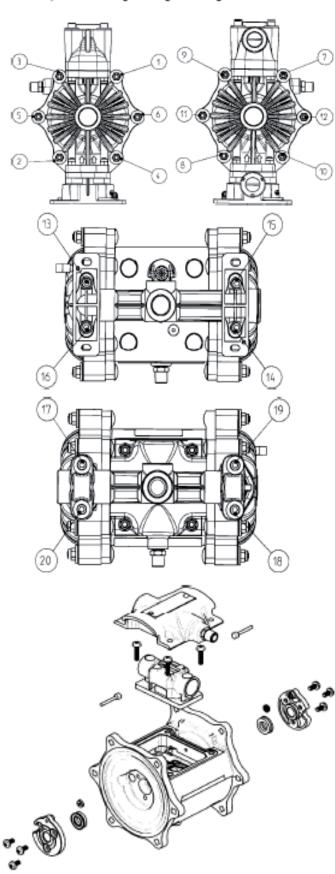
- c) Remove the rod guide bushings placed at the two ends of the motor block, the shaft seals and feeler pin underneath and extract the feeler pins. (6.4).
- d) Clean all the components, the lines and spaces inside the motor block.

Thoroughly blow the housing cavity of the safety valve with a jet of compressed air.

- e) Check the condition of the reversing valve and replace it, if necessary.
- f) Reassemble all the parts described under point c) while paying attention that you properly orient the seal lip of the gaskets.
- g) Reassemble the valve in its housing, check that the shoe is in the end of stroke position both vertically and horizontally, and then put the pressure side cover on.

As you are performing the operations described above, check the positioning of the valves seals and cover.

- h) Reassemble the remaining components by following the instructions under paragraph 1, points f), g), h).
- 3) Cleaning and/or replacement of the suction and delivery valves
- a) Remove the suction and delivery manifolds.
- b) Extract the gaskets, seats and ball valves from the external cover and manifold housings.
- c) Check the condition of wear of the ball guide/stops inside the covers and manifold.

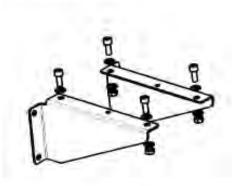




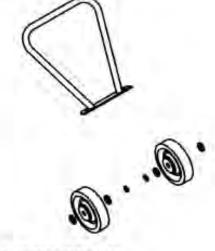
# 7 ACCESSORIES

# **7.1** ACCESSORIES ONLY FOR 2301832, 2301836, 2301837

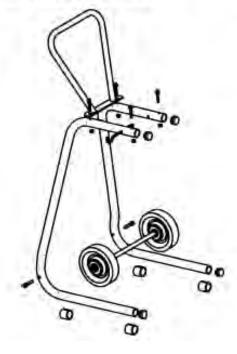
T760.00M (3825964) KIT SUPPORTO MURALE WALL SUPPORT KIT KIT SUPPORT MURAL SET MAUERTRÄGER T760.00R (3825551) KIT MANIGLIA + RUOTE HANDLE + WHEELS KIT KIT POIGNEE + ROUES SET GRIFF + RAD

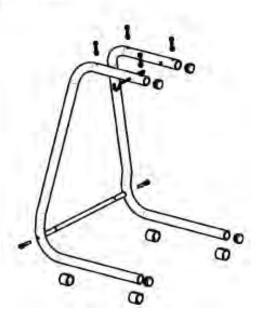


T760.00SR (3825546)
KIT CARRELLO CON RUOTE
TROLLEY WITH WHEELS KIT
KIT CHARIOT AVEC ROUES
SET WAGEN MIT RÄDERN



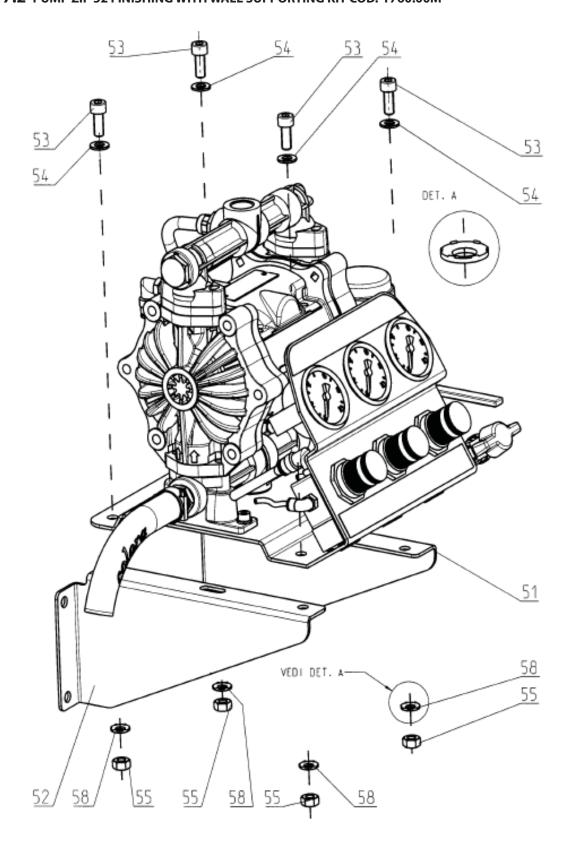
T760.00\$ (3825548) KIT CAVALLETTO STAND KIT KIT CHEVALET SET STÄNDER







## 7.2 PUMP ZIP 52 FINISHING WITH WALL SUPPORTING KIT COD. T760.00M

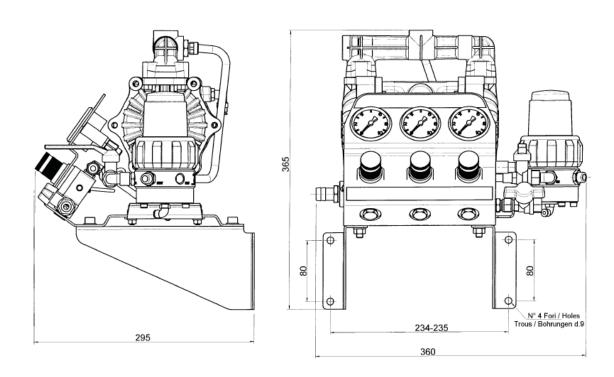


#### **OPERATING MANUAL**



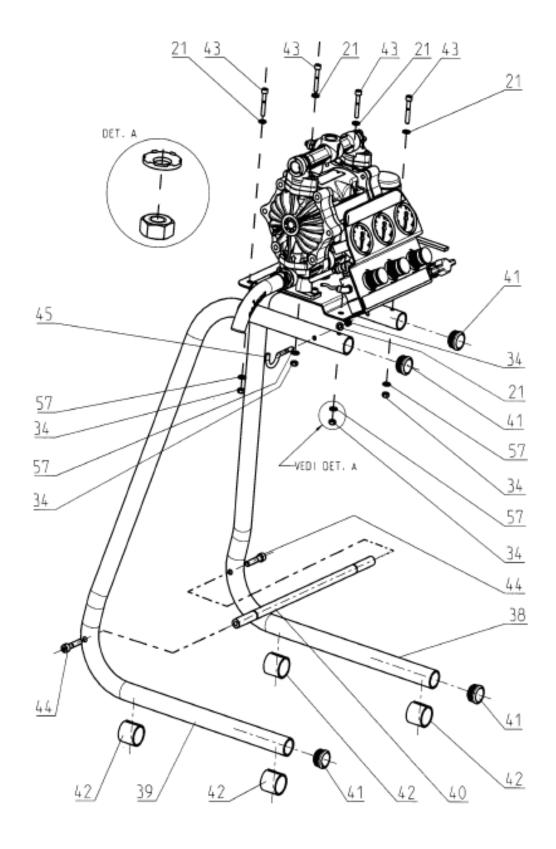
Spare parts list			T760.00M
Pos	Description	Qty.	No.
51	Right wall bracket	1	E3101.92B
52	Left wall bracket	1	E3101.92A
53	TCEI 8x20 screw	4	K120.62
54	RWasher 8	4	K509.62
55	Nut	4	K312.62
58	Washer	4	K572.62

#### 7.2.1 OVERALL DIMENSIONS COD. T760.00M





#### 7.3 PUMP ZIP 52 FINISHING WITH STAND KIT COD. T760.00S



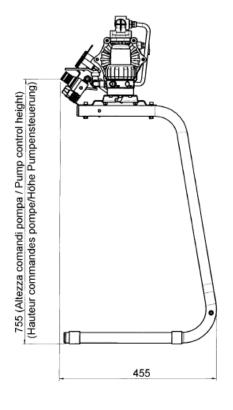


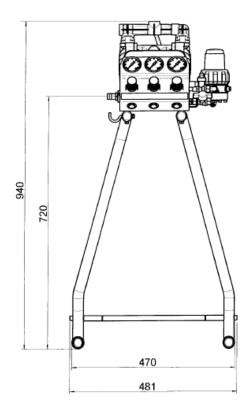
#### **OPERATING MANUAL**



Spare parts list			T760.00S
Pos	Description	Qty.	Code
21	Washer	5	K505.62
34	Nut	5	K311.62A
38	Right stand	1	E3107.92
39	Left stand	1	E3107.92A
40	Stand pin	1	H1156.62
41	Finned push rod	4	R204.07
42	Plyers foot	4	R244.07
43	TCEI 6x45 screw	4	K184.62
44	TCEI 8x40 screw	2	K1015.62
45	Gun hook	1	H009.62
57	Contact washer	4	K564.72

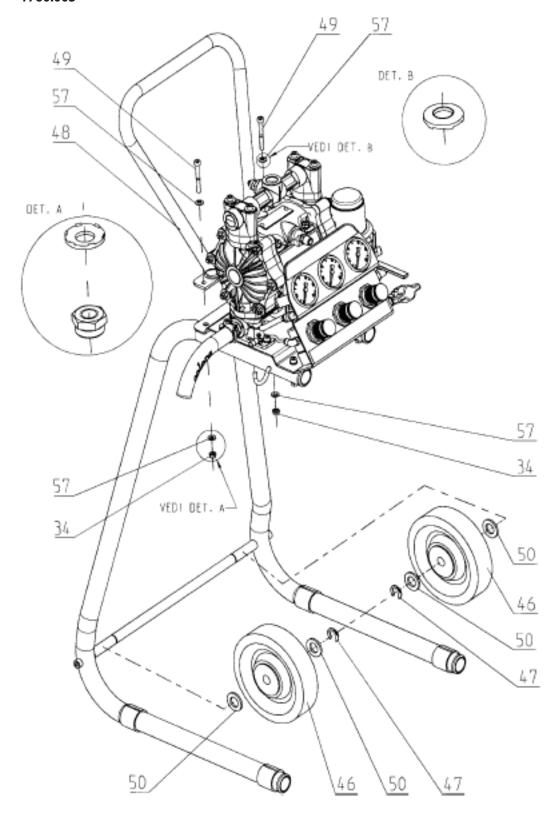
#### 7.3.1 OVERALL DIMENSIONS COD. T760.00S







### **7.4** PUMP ZIP 52 FINISHING WITH HANDLE+WHEELS KIT COD.T760.00R FOR STAND PUMPS COD. T760.00S



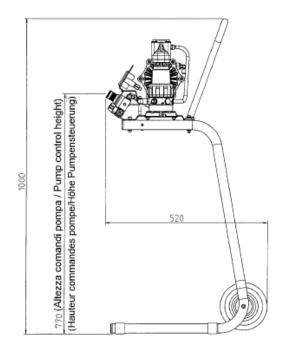


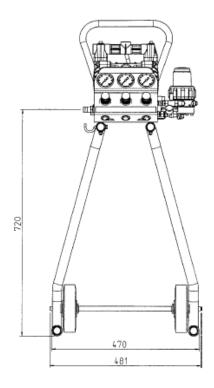
#### **OPERATING MANUAL**



Spare parts list			T760.00R
Pos	Description	Qty.	Code
34	Nut	2	K311.62A
46	Wheel	2	R118.00
47	Benzing ring	2	K607.02
48	Trolley handle	1	E3108.92
49	TCEI 6x50 screw	2	K159.62
50	Washer	4	K502.62
57	Contact washer	4	K564.72

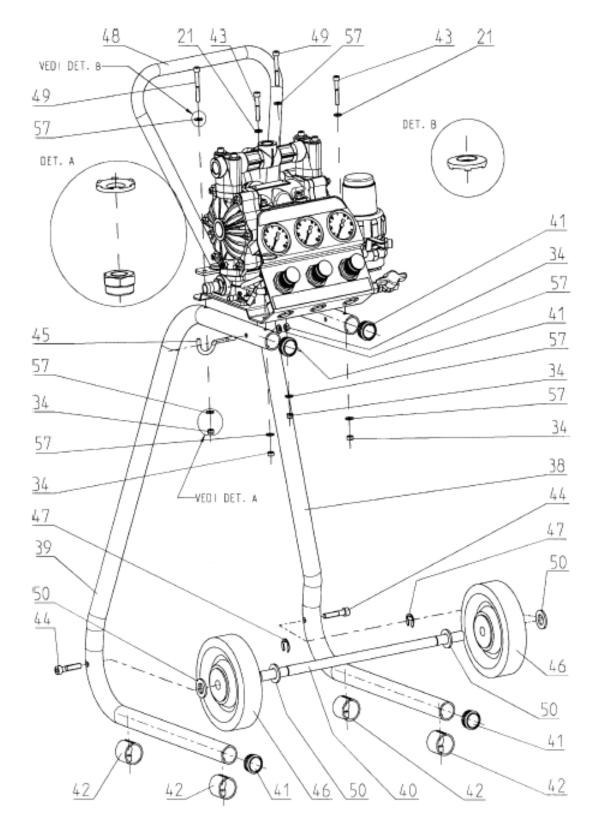
### 7.4.1 OVERALL DIMENSIONS COD. T760.00R







#### 7.5 POMPA ZIP 52 FINISHING WITH TROLLEY KIT COD. T760.00SR

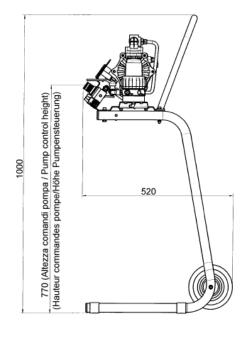


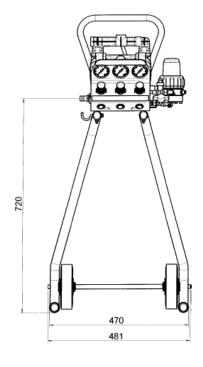
#### **OPERATING MANUAL**



Spare parts list			T760.00SR
Pos	Description	Qty.	Code
21	Washer	2	K505.62
34	Nut	5	K311.62A
38	Right stand	1	E3107.92
39	Left stand	1	E3107.92A
40	Stand pin	1	H1156.62
41	Finned push rod	4	R204.07
42	Plyers foot	4	R244.07
43	TCEI 6x45 screw	4	K184.62
44	TCEI 8x40 screw	2	K1015.62
45	Gun hook	1	H009.62
46	Wheel	2	R118.00
47	Benzing ring	2	K607.02
48	Trolley handle	1	E3108.92
49	TCEI 6x50 screw	2	K159.62
50	Washer	4	K502.62
57	Contact washer	7	K564.72

### **7.5.1** OVERALL DIMENSIONS COD. T760.00SR







#### **8** SPARE PARTS

#### **8.1** HOW TO ORDER SPARE PARTS

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

#### Part Number, description and quantity

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

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

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

#### Marks in spare parts lists



### **!** WARNING

#### **Incorrect maintenance/repair!**

Risk of injury and damage to the equipment.

- → Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center.
- → Before all work on the unit and in the event of work interruptions:
  - Switch off the energy/compressed air supply.
  - Relieve the pressure from the spray gun and unit.
  - Secure the spray gun against actuation.
- → Observe the operating and service instructions when carrying out all work.

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#### PART NO. ZZB012ENO

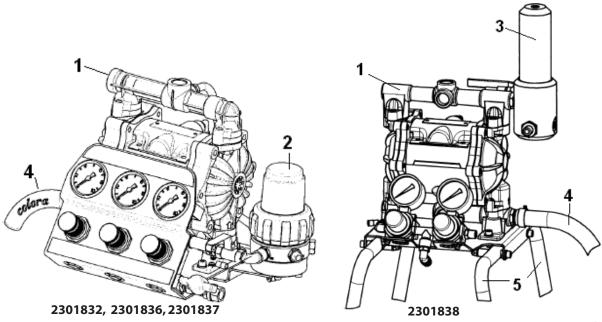
# ZIP52 FINISHING - PF

OPERATING MANUAL	WÂGNER



#### **8.2** OVERVIEW MODULES

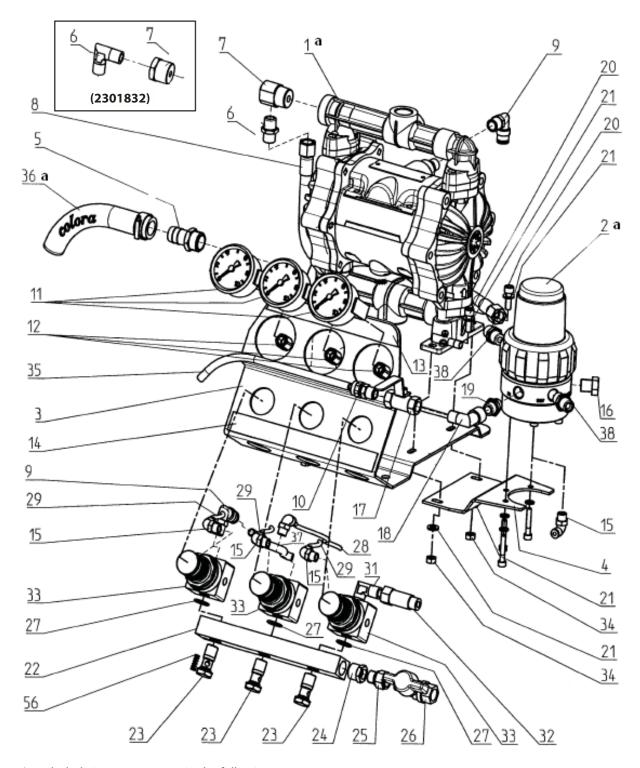
Z	IP52 FINISHING - PF	2301832 2301836		6	230183	7	2301838		
Pos	Description	No.	Qty	No.	Qty	No.	Qty	No.	Qty
1	Pump ZIP52 (see the exploded view 8.3.3)	Aluminium	1	lnox	1	Plastic	1	Alluminium	1
2	Fine Flow Controller (see the exploded view 8.3.1,8.3.5)	T0180.00A	1	T0180.00AI	1	T0180.00A T0180.00AI	1	-	-
3	Material tank filter (see the exploded view 8.3.6)	-	-	-	-	-	-	T4005.00ALS	1
4	Suction pipe (see the exploded view 8.3.7)	T406.00	1	T406.00	1	T406.00	1	T406.00	1
5	Leg	See Accessories	-	See Accessories	-	See Accessories	-	E111.92B	2
-		Pump equipped with protection panel - air pressure reducers and manometers to adjust: pump motor feeding air, fluid reducer controlling air, atomising air, re-cycle pipe with lever valve support.						support tre relevant gau pump feedi and atomisi - recycling pi manual va	ges for ing air ing air pe with





#### **8.3** EXPLODED VIEW

#### **8.3.1** PUMP COD. 2301832, 2301836, 2301837



a) Exploded view parts. 1,3, 36 in the following pages



### **MARNING**

#### Incorrect maintenance/repair!

Risk of injury and damage to the equipment.

- → Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center.
- → Before all work on the unit and in the event of work interruptions:
  - Switch off the energy/compressed air supply.
  - Relieve the pressure from the spray gun and unit.
  - Secure the spray gun against actuation.
- → Observe the operating and service instructions when carrying out all work.

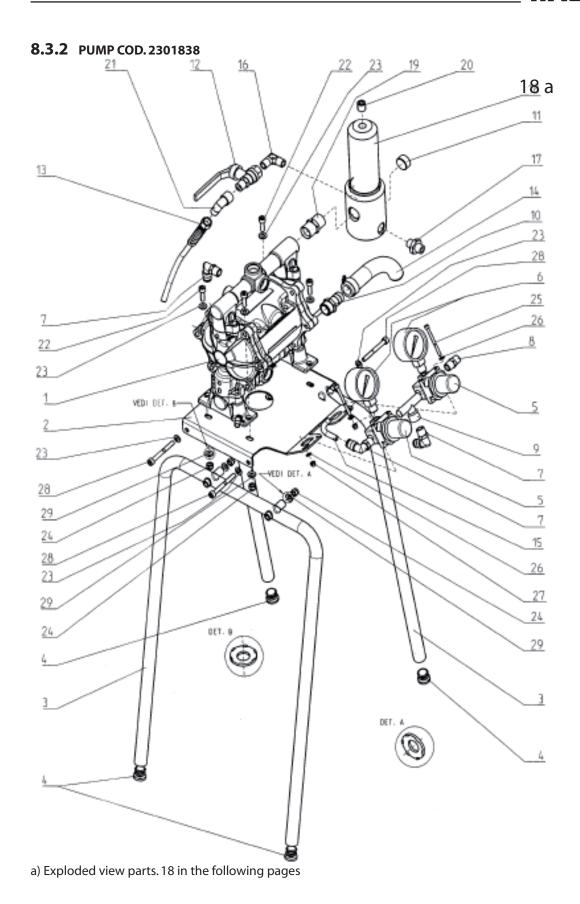
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Spare parts list			2301837		2301832		2301836
Pos	Description	Qty.	Code	Qty.	Code	Qty.	Code
1	ZIP 52 pump	1	see explod. view	1	see explod. view	1	see explod. view
2	Fine Flow controller	1	T0180.00AI	1	T0180.00AI	1	T0180.00AI
3	Pump support	1	E3105.92	1	E3105.92	1	E3105.92
4	Reducer support	1	E3106.92	1	E3106.92	1	E3106.92
5	Flexible pipe holder 1/2"x16 stainless steel	1	B274.03	1	B274.03	1	B274.03
6	Nipple 1/4"	1	M801.03B			1	M801.03B
7	Fitting spec.1/2"	1	B0264.03	1	M247.00	1	B0264.03
8	Paint hose	1	S591.00C	1	S591.00C	1	S591.00C
9	Rapid revolving connector L 1/4"x8	2	M336.00	2	M336.00	2	M336.00
10	Fitting 1/4x8	1	M057.07				
11	Pressure gauge	3	P904.00	3	P904.00	3	P904.00
12	Rapid connector D1/8"x4 F	3	M286.00	3	M286.00	3	M286.00
13	Control plate	1	Z547.00	1	Z547.00	1	Z547.00
14	"ZIP52 finishing" label	1	Z548.00	1	Z548.00	1	Z548.00
15	Rapid revolving connector L 1/8"x4	4	M335.00	4	M335.00	4	M335.00
16	Plug 1/4"	1	M826.03B	1	M259.00	1	M826.03B
17	Cock FF 1/4" lever	1	M513.00IA	1	M109.00	1	M513.00IA
18	Fitting L MF 1/4"	1	M881.03	1	M213.04	1	M881.03
19	Conical nipple 1/4"	1	M801.03C	1	M205.04	1	M801.03C
20	TCEI M6x20 screw	4	K107.62	4	K107.62	4	K107.62

# **ZIP52 FINISHING - PF**



Spare parts list			2301837		2301832		2301836
Pos	Description	Qty.	Code	Qty.	Code	Qty.	Code
21	Washer	8	K505.62	8	K505.62	8	K505.62
22	Air manifold	1	T139.01	1	T139.01	1	T139.01
23	Hollow screw 1/4"	3	M404.00	3	M404.00	3	M404.00
24	Reduction MF 3/8"x1/4"	1	M250.00	1	M250.00	1	M250.00
25	Fitting D MF 1/4"	1	M239.00	1	M239.00	1	M239.00
26	Throttle cock MF 1/4"	1	M101.00	1	M101.00	1	M101.00
27	O-ring	3	L212.06	3	L212.06	3	L212.06
28	Paint reducer air pipe	1	S455.07A	1	S455.07A	1	S455.07A
29	Manometer reducer pipe	3	S455.07	3	S455.07	3	S455.07
30	Rapid revolving connector L 1/4"x4	1	M354.00	1	M354.00	1	M354.00
31	Fitting L MM 1/4"	1	M215.04	2	M215.04	1	M215.04
32	Extension MF 1/4"	1	M204.04	1	M204.04	1	M204.04
33	Air pressure reducer 1/4"	3	P123.00	3	P123.00	3	P123.00
34	Nut	4	K311.62A	4	K311.62A	4	K311.62A
35	Re-cyle pipe	2 mt	S103.07N	2 mt	S401.00	2 mt	S103.07N
36	Suction pipe	1	T406.00	1	T406.00	1	T406.00
37	Pump feeding air pipe	1	S455.07B	1	S455.07B	1	S455.07B
38	Nipple 1/4"	2	M801.03B	2	M801.03B	2	M801.03B
56	Contact spring	1	H261.03	1	H261.03	1	H261.03







### **!**WARNING

#### Incorrect maintenance/repair!

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- → Before all work on the unit and in the event of work interruptions:
  - Switch off the energy/compressed air supply.
  - Relieve the pressure from the spray gun and unit.
  - Secure the spray gun against actuation.
- → Observe the operating and service instructions when carrying out all work.

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Spare	parts list		2301838
Pos	Description	Qty.	Code
1	ZIP52 PF pump	1	U551.AHSS1 see explod. view
2	Pump support	1	E3112.92
3	Leg	2	E111.92B
4	Finned push rod	4	R211.07
5	Air pressure reducer 1/4"	2	P123.00E
6	Pressure gauge	2	P936.00
7	Rapid revolving connector L 1/4"x8	3	M336.00
8	Conical nipple 1/4"	1	M205.04
9	Fitting T MFM 1/4"	1	M340.00
10	Flexible pipe holder 1/2"x16	1	M208.04
11	Cylindrical plug 1/2"	1	M254.14A
12	Cock MF 1/4" lever	1	M109.00
13	Re-cyle pipe	1	S401.00
14	Suction pipe ST	1	T406.00
15	Pipe	300 mm	S103.07N
16	Fitting L MM 1/4"	1	M215.04
17	Reduced nipple	1	M618.62
18	Material filter	1	T4005.00ALS
19	Nipple	1	M631.62

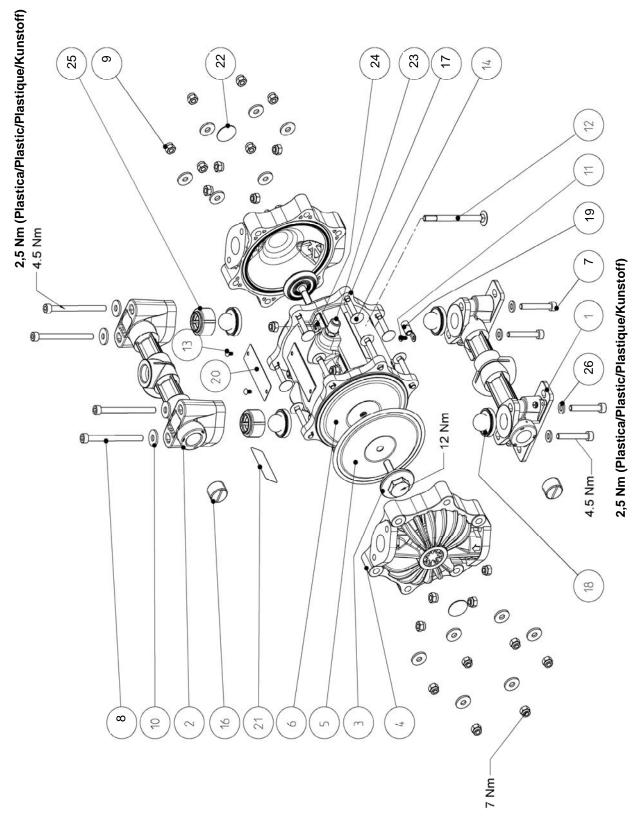
# **ZIP52 FINISHING - PF**



Spare parts list			2301838
Pos	Description	Qty.	Code
20	Plug E.I. 1/4"	1	M623.12
21	Fitting L MF 1/4"	1	M213.04
22	TCEI M6x20 screw	4	K107.62
23	Washer	8	K505.62
24	Self-tightening nut	8	K311.62
25	Vite TCEI M4x50	2	K166.62
26	Washer	4	K501.62
27	Nut	2	K302.62
28	TCEI M6x55 screw	4	K134.62
29	Contact washer	8	K564.72



#### 8.3.3 PUMP ZIP 52



### PART NO. ZZB012ENG

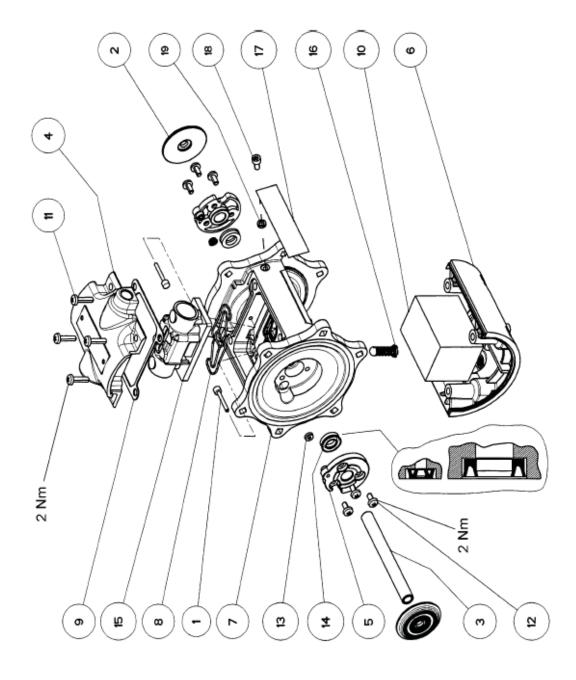
# ZIP52 FINISHING - PF



Spare parts list			2301837	2301832	2301836	2301838
Pos	Description	Qty.	Code	Code	Code	Code
1	Suction manifold	1	F833.07G-A	F184.01	F188.03	F184.01
2	Delivery manifold	1	F859.07G	F185.01	F189.03	F185.01
3	Outer diaphragm disk	2	F834.07D	F834.07R	F834.07R	F834.07R
4	Diaphragm cover	2	F831.07G-A	F978.01	F192.03	F978.01
5	Product diaphragm	2	G921.07B	G921.07B	G921.07B	G921.07B
7	Socket screw	4	K1076.62	K142.62	K142.62	K142.62
8	Screw	8	K128.62	K183.62	K142.62	K183.62
9	Nut	24	K311.62	K311.62	K311.62	K311.62
10	Washer	16	K508.62	K508.62	K508.62	K508.62
11	Self-tapping screw	1	K1012.62	K1012.62	K1012.62	K1012.62
12	Screw	4	K1040.62	K1040.62	K1040.62	K1040.62
13	Rivet	2	K1041.62	K1041.62	K1041.62	K1041.62
14	Screw	12	K1043.62	K1044.62	K1042.03	K1044.62
15	Nut	8	K311.62	K311.62A	K311.62	K311.62A
17	Motor	1	T6103.00	T6103.00	T6103.00	T6103.00S
18	Fluid valve unit	4	T6105.00	T6105.00	T6105.00	T6105.00
19	Lug	1	Y622.00A	Y622.00A	Y622.00A	Y622.00A
20	Cover plate	1	Z535.00X	Z535.00X	Z535.00X	Z535.00X
22	Cover round plate	2	Z543.00A	Z543.00A	Z543.00A	Z543.00A
23	Nipple	1	B0177.14A	B0177.14A	-	B0177.14A
24	Contact washer	4	K564.72	K564.72	K564.72	K564.72
25	Ball guide insert	2	F856.07D	-	-	-
26	Washer	4	K505.62	-	-	-
Revers	ing valve set ZIP52	1	P4003.00	P4003.00	P4003.00	P4003.00
Fluid se	ervice set	1	T9080.00B	T9080.00B	T9080.00B	T9080.00B
Kit PE [	Diaphragms - Gasket	1	T9083.00B	-	-	-
Produc	t o-ring set	1	T9077.00	T9077.00	T9077.00	T9077.00



#### **8.3.4** AIR MOTOR PUMP ZIP52



### PART NO. ZZB012ENG

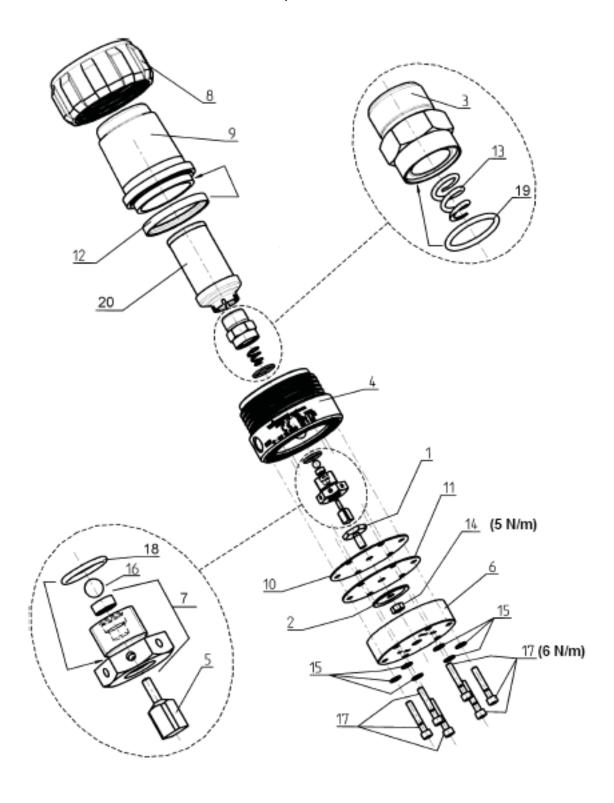
# **ZIP52 FINISHING - PF**



Spare parts list			2301837, 2301832, 2301836	2301838
Pos	Description	Qty.	Code	Code
	Motor ZIP52 Without cycle counter connection	1	T6103.00	T6103.00S
	Motor ZIP52 With cycle counter connection	1	T6103.00C	T6103.00G
1	Feeler pin	2	B0146.04	B0146.04
2	Inner diaphragm disk	2	B0147.71	B0147.71
3	Shaft	1	B0150.03	B0150.03S
4	Cover (pressure side)	1	F194.91	F194.91
5	Bushing guide rod	2	F829.07	F829.07
6	Cover (discharge side)	1	F830.07	F830.07
7	Motor block with safety valve			
	T6103.00, T6103.00S	1	T6103.00A	T6103.00A
	T6103.00C,T6103.00G	1	T6103.00F	T6103.00F
8	Reversing valve gasket	1	G925.06	G925.06
9	Pressure cover gasket	1	G7020.06	G7020.06
10	Silencer	1	H618.07	H618.07
11	Screw	4	K1038.62	K1038.62
12	Screw	6	K1039.62	K1039.62
13	Lip gasket	2	L470.06	L470.06
14	Lip gasket	2	L471.06	L471.06
15	Reversing valve	1	P4003.00 (*)	P4003.00 (*)
16	Safety valve	1	(**)	(**)
17	Side plate	1	Z546.00	Z546.00
18	Screw (T6103.00C o T6103.00G)	1	K174.62	K174.62
19	Washer(T6103.00C o T6103.00G)	1	K535.07	K535.07
(*)	The spare part includes the reversing and pressure cover gasket code G702	_	ket code G925.06	
(**)	Not available separately. See pos. 7			



#### **8.3.5** FINE FLOW CONTROLLER T0180.00A, T0180.00AI



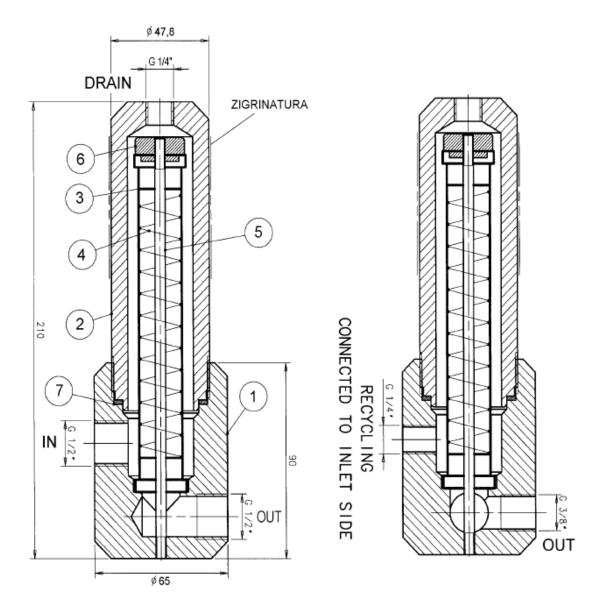
### **ZIP52 FINISHING - PF**



Spare parts list			T0180.00A, T0180.00Al
Pos	Description	Qty.	Code
1	Paint diaphragm disk	1	A588.03
2	Air diaphragm disk	1	A590.03
3	Ball guide body	1	B0172.03
4	Reducer body – fluid side T0180.00A T0180.00Al	1 1	B0180.01 B0180.03
5	Valve stem	1	B391.03
6	Reducer body – air side	1	B563.01
7	Complete ball seat body	1	T6007.00A
8	Lockring	1	F991.07
9	Cup	1	F992.07
10	PTFE paint pressure reducer diaphragm	1	G725.05
11	Paint pressure reducer diaphragm	1	G726.06
12	Gasket	1	G640.05B
13	Conical spring	1	H285.03
14	Self-tightening nut	1	K311.62
15	Washer	6	K515.62
16	Ball 1/4"	1	K811.03
17	TCEI M5x30 screw	6	K1055.62
18	O-ring	1	L148.06
19	O-ring	1	L118.06A
20	Filter with collar	1	T500.00A
	Service set FFC pos. 10-11-12-16-18-19	1	T9086.00



#### **8.3.6** MATERIAL FILTER 1/2 ALUMINIUM COD. T4005.00ALS (FOR 2301838)



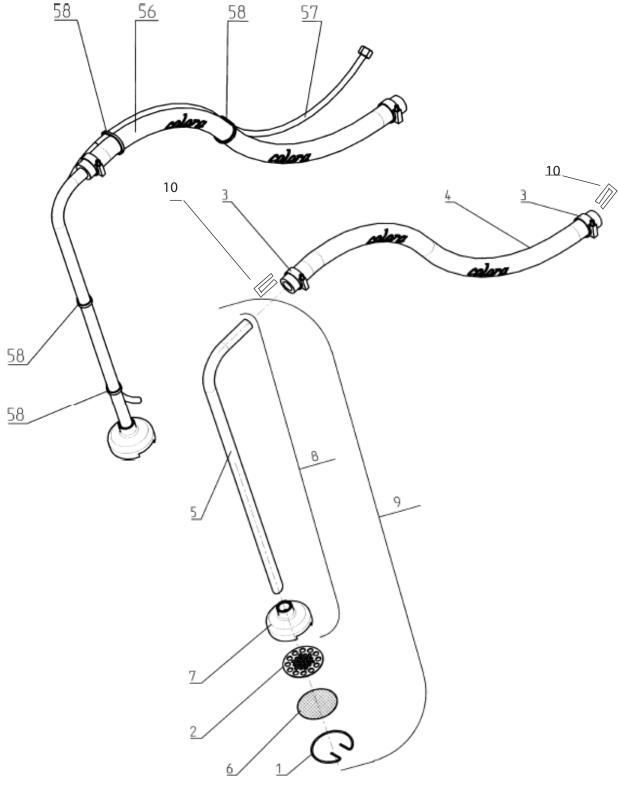
### PART NO. ZZB012ENG

# **ZIP52 FINISHING - PF**



Spare parts list			T4005.00ALS
Pos	Description	Qty.	Code
1	Filter body	1	B0259.01
2	Filter cover	1	B0127.01
3	Tank filter	1	T454.00
4	Stainless steel spring	1	H282.03
5	Filter tie rod	1	H1152.03
6	Filter lockring	1	B0128.03
7	Tank seal Joint reservoir	1	G605.07

#### 8.3.7 SUCTION PIPE + RE-CYCLE PIPE COD. T406.00, T406.00A



# **ZIP52 FINISHING - PF**



Spare parts list			T406.00, T406.00A
Pos	Description	Qty.	Code
1	Suction pipe spring	1	H206.03
2	Filter disk	1	H401.07
3	Hose clamp	2	R601.00
4	Solvent resistant Suction tube T406.00 (3811721) (L=900 mm) T406.00A (3811722) (L=1200 mm)	1	S402.06A S402.06C
5	Metal suction pipe	1	S637.03
6	Suction pipe filter	1	T453.03
7	ST Suction pipe cup	1	F141.07
8	Suction pipe ST - stiff part	1	T404.00
9	Suction pipe ST - complete metallic part	1	T420.00
10	Contact clip	2	E0107.03
56	Suction pipe	1	T406.00
57	Re-cycle pipe	1	S401.00
58	Plastic clamp	4	R602.07A

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### 9 EUROPEAN SERVICE NETWORK

#### A J. Wagner Ges.m.b.H.

Ottogasse 2/20 2333 Leopoldsdorf Österreich Tel. +43/ 2235 / 44 158 Telefax +43/ 2235 / 44 163 office@wagner-group.at

#### **DK Wagner Spraytech**

Scandinavia A/S Helgeshøj Allé 28 2630 Taastrup Denmark Tel. +45/43/ 27 18 18 Telefax +45/43/ 43 05 28 wagner@wagner-group.dk

#### GB Wagner Spraytech (UK) Limited

The Coach House 2 Main Road Middleton Cheney OX17 2ND Great Britain UK-Helpline 0844 335 0517 5 p per minute (landline)

#### B Wagner Spraytech Benelux b.v.

Veilinglaan 56 1861 Meise-Wolvertem Belgium Tel.+32/2/269 46 75 Telefax +32/2/269 78 45 info@wagner-wsb.nl

### E Wagner Spraytech Iberica S.A.

P.O. Box 132, Crta. N-340 08750 Molins de Rey Barcelona / Espania Tel. +34/93/6800028 Telefax +34/93/66800555 info@wagnerspain.com

#### Wagner Colora

Via Fermi, 3 20040 Burago di Molgora (MI) Italia Tel. +39/ 039 / 625 021 Telefax +39/ 039 / 685 18 00 info@wagnercolora.com

#### CH Wagner International AG F

Industriestrasse 22 9450 Altstätten Schweiz Tel. +41/71 / 7 57 22 11 Telefax +41/71 / 7 57 22 22 wagner@wagner-group.ch

#### J. Wagner France S.A.R.L

Parc de Gutenberg - Bâtiment F

8 voie la Cardon, 91127 Palaiseau Cedex France Tel. +33/1/825 011 111 Telefax +33/1/698 172 57 division.batiment@wagner-france.fr

### NL Wagner Spraytech Benelux b.v.

Zonneban 10, 3542 EC Utrecht Netherlands Tel. +31/30/241 41 55 Telefax +31/30/241 17 87 info@wagner-wsb.nl

#### D J. Wagner GmbH

Otto-Lilienthal-Straße 18
D-88677 Markdorf
Postfach 11 20
D-88669 Markdorf
Deutschland
Tel.: +49 / 75 44 / 505 - 664
Fax: +49 / 75 44 / 505 -155
wagner@wagner-group.com
www.wagner-group.com

#### CZ Wagner, spol. s r.o.

Nedasovská str. 345 155 21 Praha 5 -Zlicín Czechia Tel. +42/ 2 / 579 50 412 Telefax +42/ 2 / 579 51 052 info@wagner.cz

#### S Wagner Spraytech

Scandinavia A/S Helgeshøj Allé 28 2630 Taastrup Denmark Tel. +45/43/ 21 18 18 Telefax +45/43/ 43 05 28 wagner@wagner-group.dk EDITION 01 /2010

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# ZIP52 FINISHING - PF







Order number

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#### Germany

J.WAGNER GmbH
Otto-Lilienthal-Str. 18
Postfach 1120
D- 88677 **Markdorf**Telephone ++49/ (0)7544 / 5050
Telefax ++49/ (0)7544 / 505200
E-Mail: service.standard@wagner-group.com

#### **Switzerland**

J.WAGNER AG
Industriestrasse 22
Postfach 663
CH- 9450 **Altstätten**Telephone ++41/ (0)71 / 757 2211
Telefax ++41/ (0)71 / 757 2222
E-Mail: rep-ch@wagner-group.ch

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http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

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http://auto.somanuals.com

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