

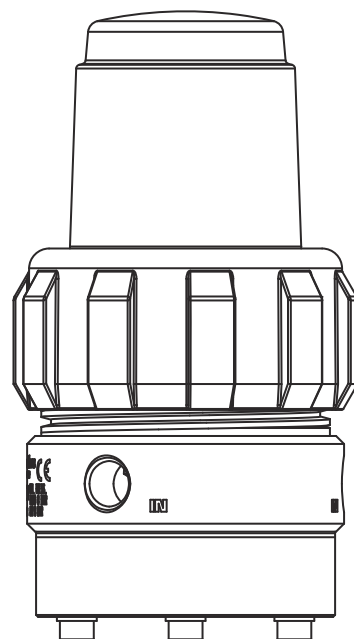


Translation of the Original Operating Manual

T0180.00A
T0180.00AI

Version 05 / 2013

Pressure Regulator for Paint



II 2G IIB T5

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1 ABOUT THIS OPERATING MANUAL

1.1 PREFACE

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

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

Operating and service staff should be instructed according to the safety instructions.

The device may only be operated in compliance with this operating manual.

This equipment can be dangerous if it is not operated according to the instructions in this operating manual.

1.2 WARNINGS, NOTICES, AND SYMBOLS IN THIS OPERATING MANUAL

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

Danger - immediate risk of danger.
Non-observance will result in death or serious injury.

	DANGER
	<p>This notice warns you of a hazard! Possible consequences of not observing the warning instructions. The signal word indicates the hazard level.</p> <p>→ The following are measures which can be taken to prevent the hazard and its consequences.</p>

Warning - possible imminent danger.
Non-observance may result in death or serious injury.

	WARNING
	<p>This notice warns you of a hazard! Possible consequences of not observing the warning instructions. The signal word indicates the hazard level.</p> <p>→ The following are measures which can be taken to prevent the hazard and its consequences.</p>

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

	CAUTION
	<p>This notice warns you of a hazard! Possible consequences of not observing the warning instructions. The signal word indicates the hazard level.</p> <p>→ The following are measures which can be taken to prevent the hazard and its consequences.</p>

Notice - a possibly hazardous situation.
Non-observance may result in material damage.

NOTICE
<p>This notice warns you of a hazard! Possible consequences of not observing the warning instructions. The signal word indicates the hazard level.</p> <p>→ The following are measures which can be taken to prevent the hazard and its consequences.</p>

Note - provides information about particular characteristics and how to proceed.

1.3 LANGUAGES

The operating manual is available in the following languages:

Language:	Order No.	Language:	Order No.
German	2338923	English	2338925
Italian	2338928	French	2338926
Spanish	2338929		

1.4 ABBREVIATIONS IN THE TEXT

Stk	Number of pieces
Pos	Position
K	Marking in the spare parts lists
Order No.	Order Number
FFC	Fine-Flow Controller (precisely adjustable filter flow controller with filter and integrated pulsation damper)
Materials:	
PP	Polyoxymethylene (Acetal)
PTFE	Polytetrafluorethylene

2 CORRECT USE

2.1 DEVICE TYPES

Pressure regulator for paint with order no.

T0180.00A
T0180.00AI

2.2 TYPE OF USE

The device is suitable for processing liquid materials such as paints and varnishes in accordance with their classification into explosion classes IIA or IIB.

2.3 USE IN AN EXPLOSION HAZARD AREA

The device can be employed in explosion hazard zones (Zone 1).



2.4 SAFETY PARAMETERS



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

- Use the device only to work with the materials recommended by WAGNER.
- Only operate the device as a whole.
- Do not deactivate safety fixtures.
- Use only WAGNER original spare parts and accessories.

The pressure regulator for paint may only be operated under the following conditions:

- The operating staff have previously been trained on the basis of this operating manual.
- The safety regulations listed in this operating manual must be observed.
- The operating, maintenance, and repair information in this operating manual must be observed.
- The statutory requirements and accident prevention regulation standards in the country of use must be observed.

2.5 PROCESSIBLE MATERIALS

- Fluid materials such as paints and varnishes.

NOTICE

Abrasive materials and pigments!

Greater wear of parts carrying the material.

- Use the application-oriented model (flow rate/cycle, material, valves, etc.) as indicated in Chapter 5.3.2.
- Check if the fluids and solvents used are compatible with the construction materials as indicated in Chapter 5.3.1.

2.6 REASONABLY FORESEEABLE MISUSE

The following is prohibited:

- coating work pieces which are not grounded,
- unauthorized conversions and modifications to the device,
- processing dry or similar coating materials, and
- using defective components, spare parts or accessories other than those described in Chapter 10 of this operating manual.

The forms of misuse listed below may result in health issues and/or material damage:

- use of powder as a coating material

Wagner pressure regulators for paint are not designed for use with food.

2.7 RESIDUAL RISKS

Residual risks are risks which cannot be excluded even in the event of correct use.

If necessary, warning and prohibition signs at the relevant points of risk indicate residual risks.

Residual risk	Source	Consequences	Specific measures	Lifecycle phase
Skin contact with paints and cleaning agents	Handling of paints and cleaning agents	Skin irritations, allergies	Wear protective clothing, observe safety data sheets	Operation, maintenance, disassembly
Paint in air outside the defined working area	Painting outside the defined working area	Inhalation of substances which are hazardous to health	Observe working and operating instructions	Operation, maintenance

3 IDENTIFICATION

3.1 EXPLOSION PROTECTION IDENTIFICATION

Pressure regulator for paint with order no.

T0180.00A
T0180.00AI

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

CE  II 2G IIB T5



CE: European Communities
 Ex: Symbol for explosion protection
 II: Device class II
 2: Category 2 (Zone 1)
 G: Ex-atmosphere gas
 IIB: Explosion group
 T5: Temperature class: maximum surface temperature < 100 °C; 212 °F

3.2 MAXIMUM SURFACE TEMPERATURE

		T0180.00A	T0180.00AI
Maximum surface temperature	°C	+100	
	°F	+212	
Permissible ambient temperature	°C	+4 ÷ +40	
	°F	+39 ÷ +104	

4 GENERAL SAFETY INSTRUCTIONS

4.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

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



4.1.1 ELECTRICAL EQUIPMENT

Electrical devices and equipment

- 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 decommissioned 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.

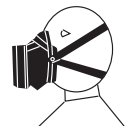


4.1.2 STAFF QUALIFICATIONS

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

4.1.3 SAFE WORK ENVIRONMENT

- Make sure that the floor in the area where you are working is electrostatically conductive in accordance with EN 61340-4-1.
- Ensure that all persons within the working area wear electrostatically conductive shoes.
- Ensure that during spraying, persons wear electrically conductive gloves. The grounding takes place via the spray gun handle.
- Paint mist extraction systems must be fitted on site according 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 flames, sparks, glowing wires, or hot surfaces in the vicinity. Do not smoke.



4.2 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.



4.2.1 SAFE HANDLING OF WAGNER SPRAY DEVICES

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 device, 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 device.
 - In the event of functional faults: remedy the fault as described in the "Troubleshooting" chapter.
- The liquid emitters are to be checked for safe working conditions by an expert (e.g. Wagner Service Technician) as often as necessary or at least every 12 months, in accordance with the guidelines for liquid emitters (ZH 1/406 and BGR 500 Part 2 Chapter 2.36).
 - For shut down devices, the examination can be suspended until the next commissioning.



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 firm footing when operating the spray gun.
- Only hold the spray gun briefly in a position.

4.2.2 GROUNDING THE UNIT

In order to avoid electrostatic charging of the device, the device must be grounded.

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

- Ensure that the device is grounded for every spraying operation.
- Ground the work pieces to be coated.
- Ensure that all persons inside the working area are grounded, e.g. that they are wearing electrostatically conductive shoes.
- Wear electrostatically conductive gloves when spraying. The grounding takes place via the spray gun handle.



4.2.3 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 device.
- Make sure that the hoses are laid only in suitable places. In no case, should hoses be laid in the following places:
 - in high-traffic areas,
 - on sharp edges,
 - on moving parts, or
 - on hot surfaces
- Make sure that the hoses are never used to pull or move the equipment.
- The electrical resistance of the complete high-pressure hose must be less than 1 Mohm. Several liquids have a high expansion coefficient. In some cases their volume can rise with consequent damage to pipes, fittings, etc. and cause fluid leakage.



4.2.4 CLEANING

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

An explosive gas/air mixture forms in closed containers.

- When cleaning devices with solvents, never spray into a closed container.
- Ground the container.



4.2.5 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 a breathing apparatus if necessary.
- For sufficient health and environmental safety: operate the device in a spray booth or on a spraying wall with the ventilation (extraction) switched on.
- Wear suitable protective clothing when working with hot materials.



4.2.6 TOUCHING HOT SURFACES

- Only touch hot surfaces 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 device with a warning label "Warning - hot surface".

**Order No.**

9998910	Instruction label
9998911	Protection sticker

Note: Order the two stickers together.

4.2.7 EXPLOSION HAZARD

Never use chloride or halogenated solvents (such as trichloroethane and methylene chloride) with units containing aluminium or galvanized and zinc-plated parts. They may react chemically thus producing an explosion danger.

Read the classification and information leaflet concerning the product and solvent to be used.



4.2.8 MATERIAL CHEMICAL COMPATIBILITY

Make sure that the construction materials are chemically compatible with the fluid to be pumped. A wrong choice can cause harm to persons (as a result of the influence of harmful products and products which irritate skin) as well as polluting the environment, along with premature damage to the unit and its hoses.

4.2.9 EMERGENCY STOP

A cut-off valve should be used upstream of the pressure regulator so that it can be depressurized in an emergency. It must be provided and properly installed by the user.

Caution: The unit's delivery circuits can remain pressurized, even when the cut-off valve is closed.

4.2.10 TIGHTNESS CHECK

When using the unit after a long period of inactivity, check tightness of all parts subject to pressure.

4.2.11 MAINTENANCE

Depending on the type of use and the substances used, the user has to check for the presence of deposits on the unit as well as check its cleanliness at regular intervals and the state of wear of the components and proper operation of the device assembly. Repair or replace worn or damaged parts immediately.

The operation must be carried out in conformity with what is written in this manual.

4.3 USE IN AREAS SUBJECT TO EXPLOSION HAZARDS

The pressure regulators for paint can be used in areas subject to explosion hazards. The following safety regulations must be observed and followed.



4.3.1 SAFETY REGULATIONS

Safe handling of WAGNER spray devices

Mechanical sparks can form if the device 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 device.
- Use suitable tools only.

Ignition temperature of the pumped material

- Check that the ignition temperature of the pumped material is higher than the max. allowable surface temperature.

Medium supporting atomizing

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

Surface spraying, electrostatics

- Do not spray device parts using electrostatic equipment.



Cleaning

If there are deposits on the surfaces, the device may form electrostatic charges. Flames or sparks can form during discharge.

- Remove deposits from the surfaces to maintain conductivity.
- Only use a damp cloth to clean the device.

**4.3.2 OPERATION WITHOUT FLUID**

Avoid running the device so that it sucks in air (without fluid inside). The air, combined with the vapor of flammable fluids, can generate internal areas with an explosion hazard.

Periodically check that the pump is working regularly, paying special attention to the presence of air in the pumped fluid, which may be caused by a breakage in the pumped fluid.

4.3.5 MAXIMUM SURFACE TEMPERATURE - EXOTHERMIC REACTIONS

Fluids incompatible with the pump's materials or particularly reactive mixtures of products with several components may cause exothermic reactions and develop dangerous temperatures or pressure.

4.3.6 CONNECTION PIPES

Connection pipes must be made of conductive material and properly grounded.

4.3.7 PROTECTING THE UNIT

Pumping fluids can contain solid particles which could damage the internal parts of the unit. The filter in the pressure regulator prevents solid bodies which are too large from entering the unit. Refer to the Technical Data chapter to verify the maximum size of solids that can be conveyed.

Keep metal surfaces clean. Electric conductivity of the surfaces is essential for explosion protection.

Frequently clean the equipment so as to prevent insulating substance residue from accumulating.

Do not use rusted parts or metal tools that may cause sparks of a mechanical origin inside the explosion hazard area.

5 DESCRIPTION

5.1 AREAS OF APPLICATION

NOTICE

Abrasive materials and pigments!

Greater wear of parts carrying the material.

- Use the application-oriented model as indicated in Chapter 5.3.2.
- Check if the fluids and solvents used are compatible with the construction materials as indicated in Chapter 5.3.1.

5.2 SCOPE OF DELIVERY

- Pressure regulator
- Filter with integrated pulsation damper

CE Conformity

see Chapter 12

Operating manual, German

Order No.: 2338923

Operating manual for other languages

see Chapter 1

The delivery note shows the exact scope of delivery.

Accessories: see Chapter 10.

5.3 DATA

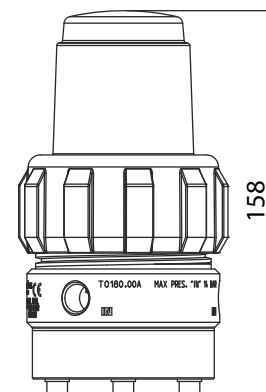
5.3.1 MATERIALS OF THE FLUID TRANSPORTING PARTS

Order No.	Regulating part	Anti-pulsator housing	Diaphragm disc	Valve ball
T0180.00A	Consistal	PP	PTFE	Stainless steel
T0180.00AI	Stainless steel			

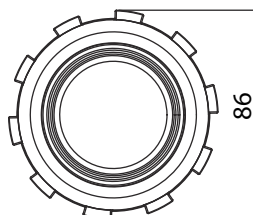
Positions of the individual parts: see spare parts list.

5.3.2 TECHNICAL DATA

Description	Unit	T0180.00A	T0180.00AI
Material temperature	°C	+4 ÷ 40	+4 ÷ 40
	°F	+39 ÷ 104	+39 ÷ 104
Ambient temperature	°C	+4 ÷ 40	+4 ÷ 40
	°F	+39 ÷ 104	+39 ÷ 104
Maximum feed pressure	MPa	1.4	1.4
	bar	14	14
	psi	203	203
Max. inlet pressure control air	MPa	0.8	0.8
	bar	8	8
	psi	116	116
Regulation field	MPa	0.05 ÷ 0.8	0.05 ÷ 0.8
	bar	0.5 ÷ 8	0.5 ÷ 8
	psi	7 ÷ 116	7 ÷ 116
Product inlet connection (internal thread)	Inch	G 1/4" (2x)	G 1/4" (2x)
Product outlet connection (internal thread)	Inch	G 1/4" (2x)	G 1/4" (2x)
Pressure gauge connection (internal thread)	Inch	(G 1/4")	(G 1/4")
Air inlet (internal thread)	Inch	G 1/8"	G 1/8"
Filter cartridge (standard)	Mesh	100	100
Filter cartridge (accessory)	Mesh	60 and 150	60 and 150
Weight	Kg	0.84	1.45
	lb	1.85	3.20



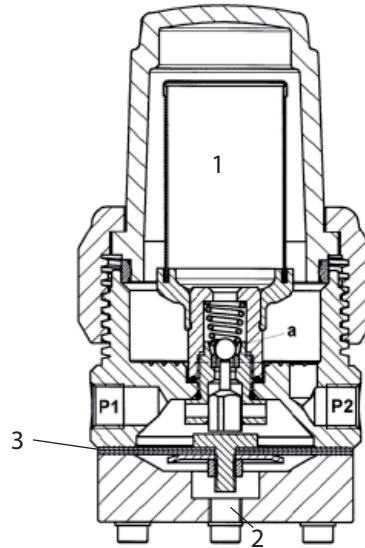
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5.4 MODE OF OPERATION

5.4.1 PRESSURE REGULATOR

- 1 Filter
- 2 Control air inlet 1:1
- 3 Diaphragm
- a Valve ball and seat
- P1 Material outlet/ manometer
- P2 Material inlet



Description of the unit

The pressure regulator is usually used in paint application systems in order to control the pressure of the medium on the device to which it is connected. An in-line pressure regulator lowers the pressure in the main line to the target pressure of the consumer connected to it.

Pressure regulators with remote pneumatic control work on the following principle:

The control air (2) acts on the ball valve (a) via the diaphragm. The pressure the air exerts on the diaphragm is balanced by the pressure of the discharged medium (P1).

If the pressure in the outlet rises, the diaphragm moves and the ball valve closes.

The control air therefore acts on the ball valve (a) via the diaphragm, which controls the pressure of the medium in the outlet.

6 ASSEMBLY AND COMMISSIONING

6.1 TRANSPORTATION

The pressure regulator can be moved manually, without lifts or cranes.

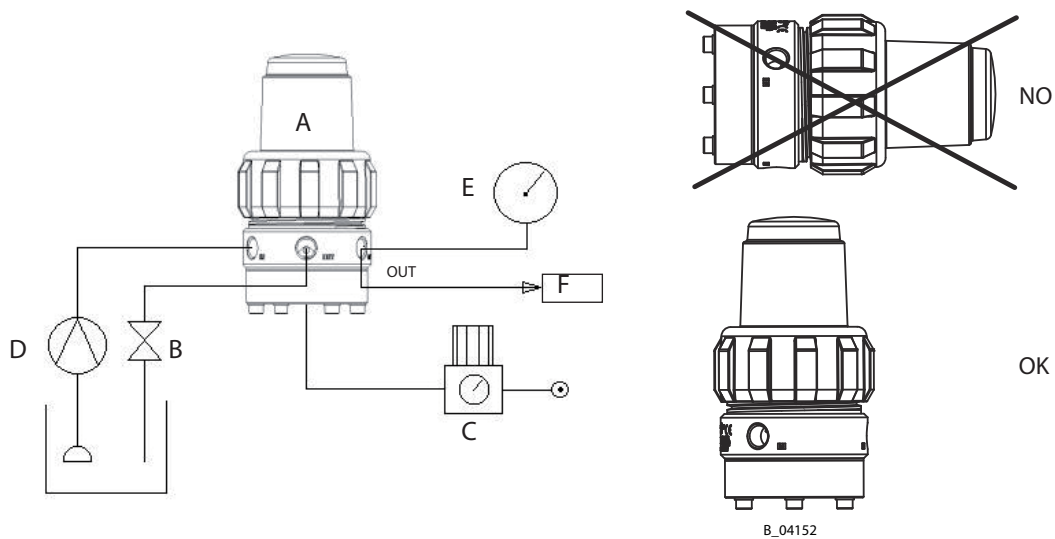
6.2 STORAGE

Store the pressure regulator in a closed and dry environment.
 Thoroughly clean the pressure regulator if long-term decommissioning is planned.
 When resuming operation, proceed as described in the following sections.

	WARNING
	<p>Discharge of electrostatically charged components in atmospheres containing solvents! Explosion hazard from electrostatic sparks.</p> <p>→ Only use a damp cloth to clean the device.</p>

6.3 ASSEMBLY

WAGNER pressure regulators must be installed and maintained in compliance with the system maintenance regulations for explosive atmospheres.





1. If necessary, threaded connections must be secured as appropriate.
2. Ensure that the direction of flow of the medium accords with the information on the housing of the pressure regulator.
3. The pressure regulator must be installed upstream of the consumer connected to it. Connect the line for the medium between the consumer device and the outlet on the pressure regulator.
4. Test the whole system to find any leaks (air or medium).



Note: In the T0180.xx models, the circulation can be connected to any "IN" connections not used for the fluid. This solution allows pressure to be released upstream of the filter, even if the filter is completely blocked.

The figure shows a possible installation.

- A Pressure regulator
- B Circulation valve
- C Control air regulator
- D Pump
- E Outlet pressure manometer
- F Consumer

6.4 GROUNDING

	 WARNING
	<p>Discharge of electrostatically charged components in atmospheres containing solvents! Explosion hazard from electrostatic sparks.</p> <p>→ Only use a damp cloth to clean the device.</p>

	 WARNING
	<p>Heavy paint mist if grounding is insufficient! Danger of poisoning. Insufficient paint application quality.</p> <p>→ Ground all device components. → Ground the work pieces to be coated.</p>

The lower part of the pressure regulator should be grounded via the bracket or the manifold.

Electrostatic charge in the connection should be prevented by using conductive material for the pipe work. The unit can also be grounded via pipework made of conductive material.

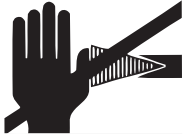

Note: After undertaking any repairs, cleaning or maintenance, ensure that the unit is grounded before putting it back into operation.



6.5 COMMISSIONING

6.5.1 SAFETY INSTRUCTIONS

Before carrying out any work, the following points must be observed in accordance with the operating manual:

- Observe all safety regulations in accordance with Chapter 4.
- Carry out commissioning properly.
- Before undertaking any maintenance or cleaning the unit, the control air must be shut off and pressure discharged from the pressure regulator and the pipework both up and downstream of it.

	 WARNING
	<p>High-pressure spray jet! Danger to life from injecting paint or solvent.</p> <ul style="list-style-type: none"> → 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 them.

	 WARNING
	<p>Toxic and/or flammable vapor mixtures! Risk of poisoning and burns.</p> <ul style="list-style-type: none"> → Operate the device in a spray booth approved for the working materials. -or- → Operate the device on an appropriate spraying wall with the ventilation (extraction) switched on. → Observe national and local regulations for the outgoing air speed.

If in doubt, check the information on the unit housing. Ensure that any replacement parts are designed for the pressure at which the unit operates.

The maximum pressure on the unit is equivalent to the sum of the maximum pressure of the incoming medium and the control air pressure.

Never exceed the permitted operating pressure of the unit and the connected consumers.

6.5.2 BASIC FLUSHING

The pressure regulator was tested with oil. We recommend flushing the pressure regulator with an appropriate solvent before using it to remove traces of oil and deposits from manufacture.

Note: When chemically cured media are processed (such as resin with a catalyst), the pressure regulator must be carefully flushed through after use. Choose the appropriate solvent for the resin that has been processed. The pressure regulator should remain filled with solvent during periods when it is not used.

6.5.3 PRESSURE RELIEF

Release the pressure whenever:

- one is prompted to do so.
- when the unit is not being used.
- Before carrying out maintenance work on devices supplied via the pressure regulator.
- Before fitting or cleaning the nozzles on the consumers connected to it.

Releasing the pressure upstream and downstream of the unit:

1. Shut off the compressed air supply to the pump and the control air of the pressure regulator.
2. Press the relevant button or activate the valve on the connected consumer to discharge the pressurized medium.
3. Open the circulation valve (B) to discharge fully the pressurized medium upstream of the pressure regulator.

6.5.4 PRESSURE TIGHTNESS TEST

Close the spray gun and the material return valve, when the pump is filled.

Gradually increase the pressure of the material pressure regulator until the maximum allowed value for the pump and the devices connected to it is reached. Ensure that the fittings do not leak.

7 OPERATION

7.1 REGULATING THE PRESSURE OF THE MEDIUM



The pressure regulator controls the pressure of the medium which comes from the pressure regulator. In order for the unit to function without any problems, the pressure of the incoming medium must be higher than the pressure at the outlet.

If necessary lower the pressure, activate the gun or the relevant valve on the consumer attached to release pressure downstream of the pressure regulator and read off the correct value.

Adjust the compressed air supply from the pump and the pressure on the pressure regulator so that all the factors are optimally coordinated for the application in question.

1. Close the feed to the pressure regulator and bring the control pressure on the pressure regulator down to zero, or turn the control knob clockwise (version with manual control system).
2. Open the supply of the medium to the pressure regulator.
3. Increase the control pressure of the medium or turn the control knob anticlockwise (version with manual control system) until the medium coming from the pressure regulator is at the designated pressure.

Note: Always adjust this type of device so that the pressure is increased.

	 WARNING
	Overpressure! Risk of injury from bursting components. → Check frequently to see whether the circulation system is blocked - it must be completely clear.

7.2 CLEANING AND DECOMMISSIONING

7.2.1 FLUSHING

Flush the unit when the color or product is changed, at the end of the working day where necessary, before shutting the system down and before repairs are carried out.

When processing ready-mixed paints with several components:
Clean the unit before the wetting process starts (pot-life (processing time) - see data sheets for the processed product).

Use a flushing fluid that is compatible with the medium conveyed and with the parts of the unit which come into contact with it.

Consult the supplier regarding a suitable product and the recommended cleaning intervals.

After flushing, release the pressure on the pressure regulator.

Neither paint nor solvent should remain in the pressure regulator for too long. The medium can dry out in situ and cause the unit to leak.

The filter must be cleaned daily as described in the Maintenance chapter. When a new product or a paint in a different color is processed, it should be cleaned again.

Release the pressure when leaks are detected. Remove the pressure regulator and clean and repair it as described in the chapter on Maintenance. Regular cleaning and inspection of the internal parts are essential to allow the unit to function without any problems.

7.2.2 SURFACE CLEANING

An important aspect where the danger of explosion is concerned is the electrical conductivity of the surface of the unit, which must be cleaned frequently for this reason. Deposits on the surface which could impair conductivity must be removed.

7.3 STORAGE OVER 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. Use a suitable preserving fluid, depending on the material of the wetted parts of the unit.


8 TROUBLE SHOOTING AND RECTIFICATION

8.1 TROUBLE SHOOTING AND RECTIFICATION

Problem	Cause	Remedy
Pressure of medium at outlet falls	Ball jammed in seat - blockage.	Remove and clean it.
	Control air line leaking (where present).	Check the connections and pipework for the control air.
	Filter blocked.	Clean/replace filter.
Pressure of medium at outlet increases up to pressure at inlet	Valve ball and seat are worn or jammed, diaphragm torn.	Clean ball and seat. Replace damaged or worn parts.
Leak (medium escaping) from regulator housing or medium sucked back into control section	Diaphragm torn.	Replace diaphragm.

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

9 CLEANING AND MAINTENANCE

	<p>WARNING</p> <p>Incorrect maintenance/repair! Danger to life and equipment damage.</p> <ul style="list-style-type: none"> → 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 "Spare Parts Catalogue" chapter and that are assigned to the device. → Before all work on the device and in the event of work interruptions: <ul style="list-style-type: none"> - Disconnect the control unit from the mains. - Relieve the pressure from the spray gun and device. - Secure the spray gun against actuation. → Observe the operating manual and service instructions at all times when carrying out work.
---	--

1. Check and clean the filter every day or as required.
 2. Check hoses, pipes, and couplings every day and replace if necessary.
- In accordance with the guideline for liquid emitters (ZH 1/406 and BGR 500 Part 2 Chapter 2.36):
- The liquid emitters should be checked by an expert (e.g. Wagner service technician) for their safe working conditions as required and at least every 12 months.
 - If devices have been decommissioned, the examination can be suspended until the next start-up.

9.1 SAFETY INSTRUCTIONS

Prior to maintenance and cleaning measures note:

- Wear protective clothing and use specific protection devices with regard to the nature of the fluids involved.
- Provide the correct tools.
- Close the compressed air supply and release the pressure from the pump and pipes connected to it.
- Depending on the operation, disconnect the material and air side connection pipes.
- After the unit has been reassembled and reinstalled following maintenance operations:
Check the efficiency of the ground connection of the individual parts of the unit.
Carry out pressure retention test in accordance with Chapter 6.5.4. Check that no air flows out.

Note: All threads are right-hand threads.

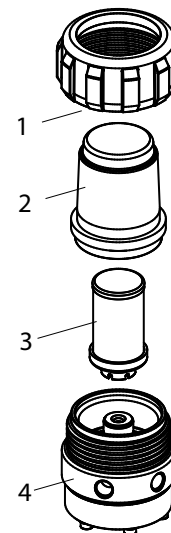
9.2 FILTER CLEANING

To clean the filter of the pressure regulator, unscrew the union nut (1) from the metal body, lift the cup (2) paying attention to the PTFE seal on the edge. Remove the filter (3) from the body (4), pulling it upward, since it has a very simple fixing (clip). Plunge the filtering cartridge into the flushing agent, then brush and blow it. Make sure that the inside of the filter is cleaned with flushing agent and is blown out.

Insert the filter by pushing it onto the filter seat until the fixing clip audibly clicks into place. Do not push the filter any further, to avoid damaging it. Reposition the cup making sure the PTFE seal is in the perfect position. Then screw the union nut tight.

In the T0180.xx the filter must always be correctly positioned so that the ball is tight. If this is not the case, the pressure upstream of the unit can rise to unpermitted levels.

The function of the filter must be checked frequently.

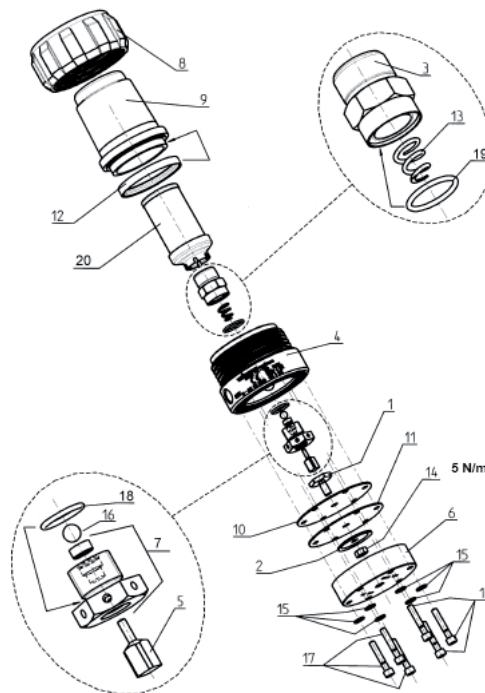


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9.3 CLEANING THE PRESSURE REGULATOR

Regular cleaning and inspection of internal parts are essential for the optimum function of the pressure regulator.



1. Release the compressed air and the control air (if present) and depressurize the medium.
2. Remove the pressure regulator from the system.
3. Dismantle the pressure regulator (see overview diagram in the manual provided).
4. Clean and inspect all the components, paying special attention to the ball and the seat. If these parts are damaged, performance is impaired and the unit can leak.
5. Check the diaphragms, seals and O-rings for wear. Check whether the ball and the seat are distorted, worn or otherwise damaged.
6. Lubricate the seals and O-rings when reassembling the pressure regulator (see Chapter 11).



9.4 MATERIAL HOSES

The service life of the fluid hoses is reduced due to environmental influences even when handled correctly.

- Check hoses, pipes, and couplings every day and replace if necessary.
- As a precaution, fluid hoses should be replaced after a period specified by the operator.

	 WARNING
	<p>Bursting hose, bursting threaded joints! Danger to life from injection of material.</p> <ul style="list-style-type: none"> → Ensure that the hose material is chemically resistant to the sprayed materials. → Ensure that the spray gun, threaded joints, and material hose between the device and the spray gun are suitable for the pressure generated in the device.

9.5 DECOMMISSIONING

When the equipment must be scrapped, please differentiate the disposal of the waste materials.

The following materials have been used:

- Steel
- Aluminum
- Elastomers
- Plastics
- Carbide

The consumable materials (paints, adhesives, sealers, solvents) must be disposed of according to the valid specific standards.

10 ACCESSORIES

10.1 ACCESSORIES

Filter cartridges with mesh 60 and 150 are listed in Chapter 11.

11 SPARE PARTS

11.1 HOW CAN SPARE PARTS BE ORDERED?

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

Order number, designation, and quantity

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

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

- Billing address
- Delivery address
- Name of the person to be contacted in the event of any queries
- Type of delivery (normal mail, express delivery, air freight, courier, etc.)



Identification in spare parts lists

Explanation of column "K" (labeling) in the following spare parts lists:

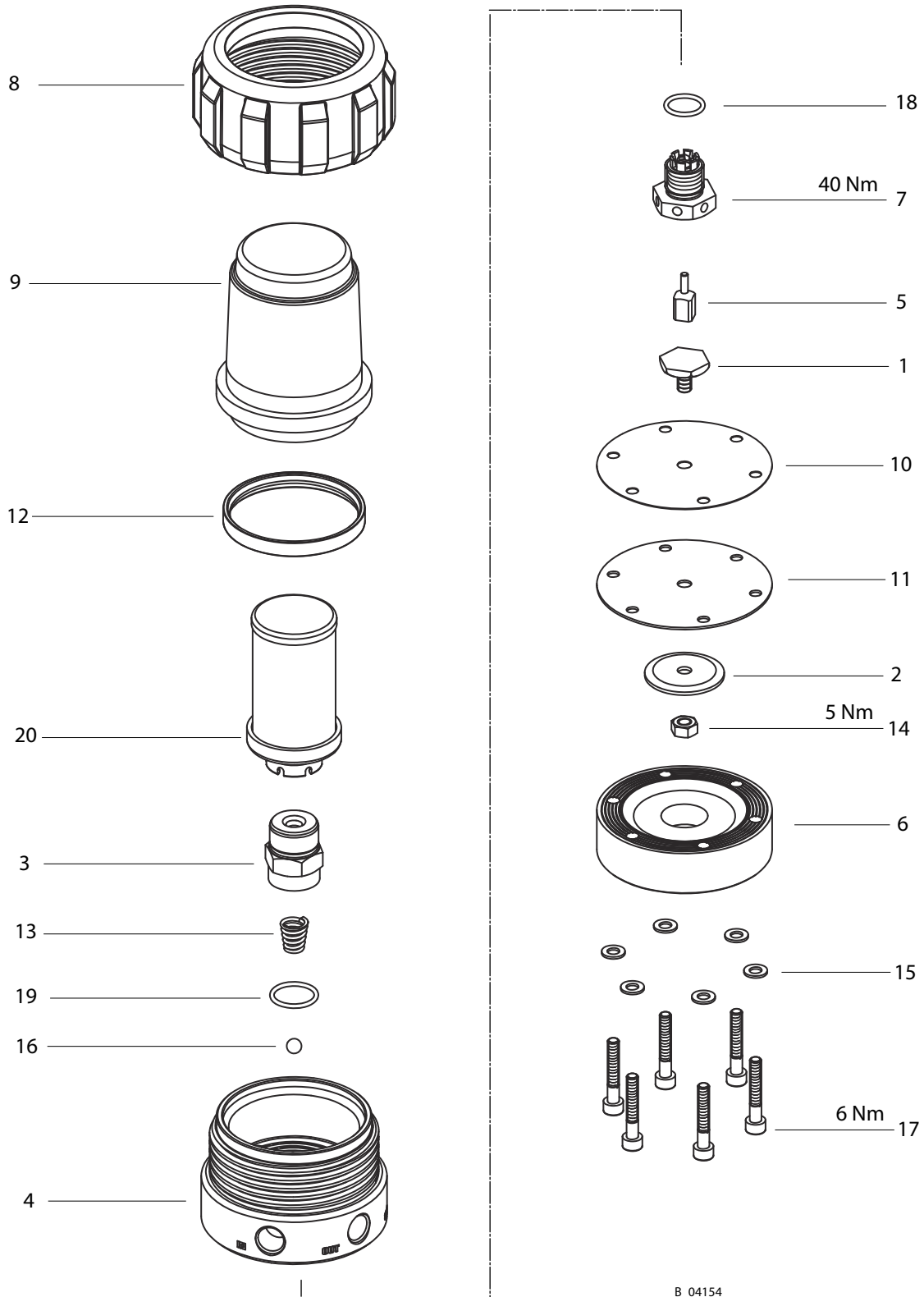
- ◆ Wearing part

Note: No liability is assumed for wearing parts.

- Not part of the standard equipment but available as a special accessory.

	<p> WARNING</p> <p>Incorrect maintenance/repair! Risk of injury and equipment damage.</p> <ul style="list-style-type: none"> → Have repairs and part replacements carried out only by specially trained staff or a WAGNER service center. → Before all work on the device and in the event of work interruptions: <ul style="list-style-type: none"> - Switch off the energy/compressed air supply. - Relieve the pressure from the spray gun and device. - Secure the spray gun against actuation. → Observe the operating manual and service instructions at all times when carrying out work.
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11.2 FINE FLOW CONTROLLER



B_04154

Fine Flow Controller

		T0180.00A	T0180.00AI		
Pos	K	Stk	Order No.	Order No.	Designation
		1	T0180.00A	T0180.00AI	Fine Flow Controller, 14/0.5-8 bar
1		1	A588.03	A588.03	Diaphragm disc - material side
2		1	A590.03	A590.03	Diaphragm disc - air side
3		1	B0172.03	B0172.03	Ball guide
4		1	B0180.01	B0180.03	Housing - material side
5	◆ ★	1	B391.03	B391.03	Shut-off needle
6		1	B563.01	B563.01	Housing - air side
7	◆ ★	1	T6007.00A	T6007.00A	Ball seat body, complete
8		1	F991.07	F991.07	Union nut
9		1	F992.07	F992.07	Filter cup
10	◆ ★ ▲	1	G725.05	G725.05	RVO PTFE Diaphragm
11	◆ ★ ▲	1	G726.06	G726.06	RVO Diaphragm
12	◆ ★ ▲	1	G640.05B	G640.05B	Seal
13	◆ ★	1	H285.03	H285.03	Conical spring
14		1	K311.62	K311.62	Self-locking nut, M6
15		6	K515.62	K515.62	Plain washer
16	◆ ★ ▲	1	K811.03	K811.03	Ball, 1/4"
17		6	K1055.62	K1055.62	Screw, M5x30
18	◆ ★ ▲	1	L148.06	L148.06	O-ring
19	◆ ★ ▲	1	L118.06A	L118.06A	O-ring
20	◆	1	T500.00A	T500.00A	Filter insert, 100 mesh, white
20	◆	1	T500.00	T500.00	Filter insert, 60 mesh, black
20	◆	1	T500.00B	T500.00B	Filter insert, 150 mesh
			T6193.00	T6193.00	FFC-Service set
			T6193.00	T6193.00	FFC-Sealing set

◆ Wearing part

★ included in FFC-Service set

▲ included in FFC-Sealing set

12 GUARANTEE AND CONFORMITY DECLARATIONS

12.1 IMPORTANT NOTES REGARDING PRODUCT LIABILITY

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

The manufacturer will not be held liable or will only be held partially liable if third-party accessories or spare parts have been used.

With genuine WAGNER accessories and spare parts, you have the guarantee that all safety regulations are complied with.

12.2 WARRANTY CLAIM

Full warranty is provided for this device:

We will at our discretion repair or replace free of charge all parts which within 36 months in single-shift, 18 months in double-shift or 9 months in triple-shift operation from date of receipt by the purchaser are found to be wholly or substantially unusable due to causes prior to the sale, in particular faulty design, defective materials or poor workmanship.

The type of warranty provided is such that the device or individual components of the device are either replaced or repaired as we see fit. The resulting costs, in particular shipping charges, road tolls, labour and material costs will be borne by us except where these costs are increased due to the subsequent shipment of the device to a location other than the address of the purchaser.

We do not provide warranty for damage that has been caused or contributed to for the following reasons:

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

Abrasive coating products such as red lead, emulsions, glazes, liquid abrasives, zinc dust paints and so forth reduce the service life of valves, packaging, spray guns, nozzles, cylinders, pistons etc. Wear and tear due to such causes are not covered by this warranty.

Components that have not been manufactured by WAGNER are subject to the original warranty of the manufacturer.

Replacement of a component does not extend the period of warranty of the device.

The device should be inspected immediately upon receipt. To avoid losing the warranty, we or the supplier company are to be informed in writing about obvious faults within 14 days upon receipt of the device.

We reserve the right to have the warranty compliance met by a contracting company.

The services provided by this warranty are dependent on evidence being provided in the form of an invoice or delivery note. If the examination discovers that no warranty claim exists, the costs of repairs are charged to the purchaser.

It is clearly stipulated that this warranty claim does not represent any constraint on statutory regulations or regulations agreed to contractually in our general terms and conditions.

J. Wagner AG

12.3 CE DECLARATION OF CONFORMITY

Herewith we declare that the supplied version of the pressure regulator with Order No.

T0180.00A	T0180.00AI
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comply with the following guidelines:

2006/42/EC	94/9/EC Atex Directive
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Applied standards, in particular:

DIN EN ISO 12100: 2011	DIN EN 1127-1: 2011	
DIN EN ISO 4413: 2011	DIN EN 12621: 2011	
DIN EN ISO 13732-1: 2008	DIN EN ISO 13463-1: 2009	

Applied national technical standards and specifications, in particular:

TRBS 2153: 2009	
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Identification:

CE  II 2G IIB T5

EC Certificate of Conformity

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

Order number: 2339213

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Order No. 2338925

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