

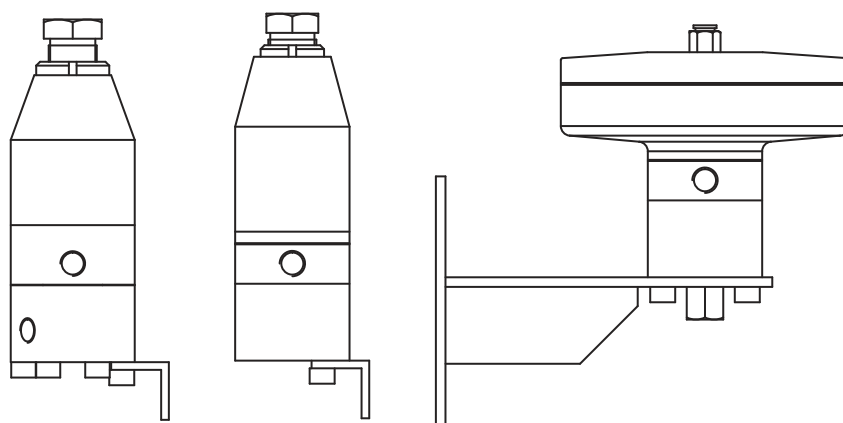


Translation of the original Operating Manual

Paint Pressure Regulators T090, T092

Edition 01 / 2014

Paint Pressure Regulators T090, T092



II 2G IIB T5

Contents

1	ABOUT THESE INSTRUCTIONS	5
1.1	Languages	5
1.2	Warnings, notes and symbols in these instructions	5
2	GENERAL SAFETY INSTRUCTIONS	6
2.1	Safety instructions for the operator	6
2.1.1	Electrical equipment	6
2.1.2	Personnel qualifications	6
2.1.3	A safe work environment	6
2.2	Safety instructions for staff	6
2.2.1	Safe handling of WAGNER spray units	7
2.2.2	Earth the unit	7
2.2.3	Material hoses	7
2.2.4	Cleaning	8
2.2.5	Handling hazardous liquids, varnishes and paints	8
2.2.6	Touching hot surfaces	8
2.3	Correct use	8
2.4	Use in an explosion hazard area	9
2.4.1	Correct use	9
2.4.2	Explosion protection identification	9
2.4.3	Max. surface temperature	9
2.4.4	Safety regulations	9
3	PRODUCT LIABILITY AND WARRANTY	11
3.1	Important notes on product liability	11
3.2	Warranty	11
3.3	CE-conformity	12
4	DESCRIPTION	13
4.1	Field of application	13
4.1.1	Using in accordance with the instructions	13
4.2	Extent of delivery	13
4.3	Data	13
4.3.1	Materials of the parts transporting paint	13
4.3.2	Technical data	14
4.4	Functioning	16
4.4.1	Pressure regulator	16
5	STARTING UP AND OPERATING	18
5.1	Installation and connection	18
5.1.1	Installation of pressure regulator	18
5.1.2	Earthing	19
5.2	Start up	20
5.2.1	Safety regulations	20
5.2.2	Cleaning	21
5.2.3	Pressure discharge procedure	22
5.2.4	How to adjust fluid pressure	22
5.3	Finishing work and cleaning	24
5.3.1	Washing	24

Contents

5.3.2	Surface cleaning	24
5.4	Storing for longer periods of time	24
6	FAULT LOCATION, MAINTENANCE AND REPAIR	25
6.1	Trouble shooting and solution	25
6.2	Maintenance	25
7	SPARE PARTS	26
7.1	How to order spare parts	26
7.2	Exploded views	28
7.2.1	T090.00A - T090.00B - T090.00C	28
7.2.2	T090.00CR	30
7.2.3	T090.00MAG	32
7.2.4	T092.00AI - T092.00BI	34
7.2.5	T092.00PNI	36

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	ZZB022GER	English	ZZB022ENG
French	ZZB022FRE	Dutch	--
Italian	ZZB022ITA	Spanish	ZZB022SPA
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

 SIHI_0100_GB	⚠ DANGER 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.
---	---

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

 SIHI_0103_GB	⚠ 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.
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Caution - a possibly hazardous situation. Non-observance can result in minor injury.

 SIHI_0101_GB	⚠ 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.
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Caution - a possibly hazardous situation. Non-observance can cause material damage.

SIHI_0102_GB	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.
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Note - provide information on particular characteristics and how to proceed.

2 GENERAL SAFETY INSTRUCTIONS

2.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

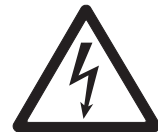
- Keep these operating instructions to hand near the unit at all times.
- Always follow local regulations concerning occupational safety and accident prevention.



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.

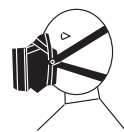


2.1.2 PERSONNEL QUALIFICATIONS

- 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 label

9998911 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.



- Check the equipment periodically.
Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum allowed pressure. Refer to technical data section.
- Use the equipment only with fluids and solvents that are chemically compatible with the equipment's wetted parts.

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 gas
IIB: Explosion class
T5: Temperature class: maximum surface temperature < 100°C; 212°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

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.

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.



Never use chlorinated and halogenated solvents (for ex. Trichloroethane and Methylene chloride) with equipment containing aluminium or having galvanised and zinc plated parts, since they could react chemically with serious risks of explosion. Read the classification sheet and all information referring to the product and solvent that are going to be used and ask for the manufacturer's advice in case of doubts.

3 PRODUCT LIABILITY AND WARRANTY

3.1 IMPORTANT NOTES ON PRODUCT LIABILITY

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

If other makes of accessory and spare parts are used, the manufacturer's liability could be fully or partially null and void.

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

3.2 WARRANTY

This unit is covered by our warranty on the following terms:

We will at our discretion repair or replace free of charge all parts which within 36 months in single-shift, 18 months in 2-shift or 9 months in 3-shift operation from date of receipt by the Purchaser are found to be wholly or substantially unusable due to causes prior to the sale, in particular faulty design, defective materials or poor workmanship.

The terms of the warranty are met at our discretion by the repair or replacement of the unit or parts thereof. 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 unit to a location other than the address of the purchaser.

This warranty does not cover damage caused by:

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

Abrasive coating products such as redlead, emulsions, glazes, liquid abrasives, zinc dust paints and similar reduce the service life of valves, packings, spray guns, nozzles, cylinders, pistons etc. Any wear resulting from the aforementioned causes is not covered by this warranty.

Components not manufactured by Wagner are subject to the warranty terms of the original maker.

The replacement of a part does not extend the warranty period of the unit.

The unit should be inspected immediately upon receipt.

To avoid loss warranty, any apparent defect should be notified to us or the dealer in writing within 14 days from date of sale of the unit.

The right to commission warranty services to a third party is reserved.

Warranty claims are subject to proof of purchase by submitting an invoice or delivery note.

If an inspection finds damage not covered by the present warranty, the repair will be carried out at the expense of the purchaser.

Note that this warranty does not in any way restrict legally entitled claims or those contractually agreed to in our general terms and conditions.

J. Wagner AG

3.3 CE-CONFORMITY

Herewith we declare that the supplied version of:
Pressure regulators with article no.

T090.00A
T090.00B
T090.00C
T090.00CR
T090.00MAG
T092.00AI
T092.00BI
T092.00PNI

Complies with the following provisions applying to it:

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

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

Marking:

  II 2G IIB T5

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.19

4 DESCRIPTION

4.1 FIELD OF APPLICATION

4.1.1 USING IN ACCORDANCE WITH THE INSTRUCTIONS

The pressure regulator is suitable for working with liquid materials.

CAUTION

Abrasive fluids and pigments !

Greater wear of the parts carrying the material.

- Use suitable model see chapter 4.3.2.
- Verify that fluids and solvents used are compatible with the construction material of the regulator as described in chapter 4.3.1.

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4.2 EXTENT OF DELIVERY

Pressure regulator
consisting of:

- Pressure regulator

CE-conformity see
Operating manual in english
Operating manual for the other language see

Chapter 3
Part No. : ZZB022ENG
Chapter 1

The delivery note shows the exact scope of delivery.

4.3 DATA

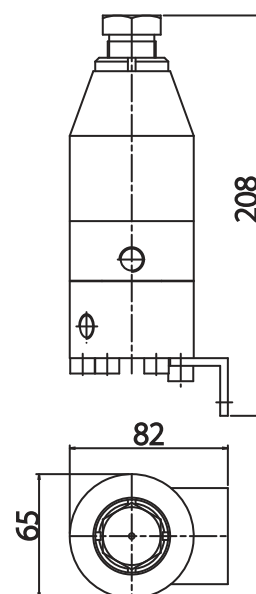
4.3.1 MATERIALS OF THE PARTS TRANSPORTING PAINT

	Regulator body	Gaskets	Product diaphragm	Shutter ball	Shutter seat	
T090.00A	Carbon steel	PE	-	Tungsten carbide	Tempered steel	
T090.00MAG						
T090.00B						
T090.00C						
T090.00CR	Carbon steel	PE	-			Tungsten carbide
T092.00AI	Stainless Steel	-	PE			Tungsten carbide
T092.00BI						
T092.00PNI						

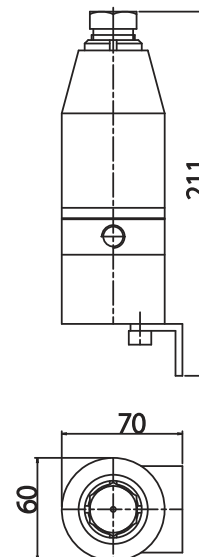
4.3.2 TECHNICAL DATA

Description	Units	T090.00A	T090.00B	T090.00C
Max allowed fluid temperature	°C F	60° 140	60° 140	60° 140
Max inlet pressure	MPa bar psi	30 300 4351	30 300 4351	30 300 4351
Adjustment range	MPa bar psi	1 ÷ 6 10 ÷ 60 145 ÷ 870	3 ÷ 12 30 ÷ 120 435 ÷ 1740	4 ÷ 18 40 ÷ 180 580 ÷ 2610
Product inlet connection (Female)	Inch	G 1/4"	G 1/4"	G 1/4"
Product outlet connection (Female)	Inch	G 1/4"	G 1/4"	G 1/4"
Manometer connection (Female)	Inch	G 1/4"	G 1/4"	G 1/4"
Weight	Kg lb	3.43 7.56	3.43 7.56	3.43 7.56

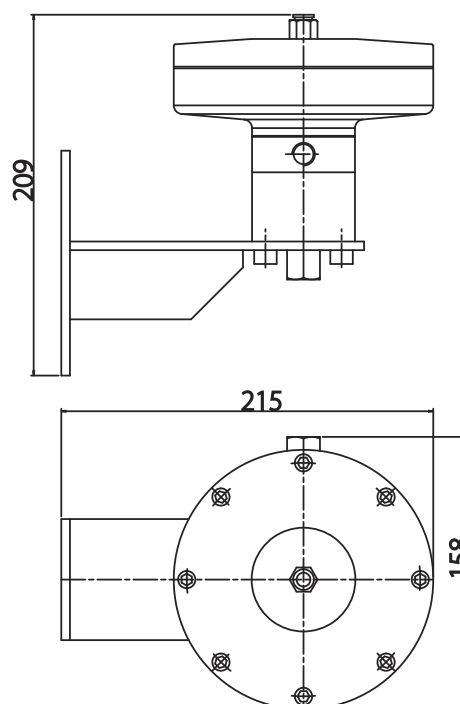
Description	Units	T090.00CR	T090.00MAG
Max allowed fluid temperature	°C F	60° 140	60° 140
Max inlet pressure	MPa bar psi	30 300 4351	30 300 4351
Adjustment range	MPa bar psi	4 ÷ 18 40 ÷ 180 580 ÷ 2610	1 ÷ 6 10 ÷ 60 145 ÷ 870
Product inlet connection (Female)	Inch	G 1/4"	G 1/4"
Product outlet connection (Female)	Inch	G 1/4"	G 1/4"
Manometer connection (Female)	Inch	G 1/4"	G 1/4"
Weight	Kg lb	3.43 7.56	3.43 7.56



Description	Units	T092.00BI	T092.00AI
Max allowed fluid temperature	°C F	60° 140	60° 140
Max inlet pressure	MPa bar psi	30 300 4351	30 300 4351
Adjustment range	MPa bar psi	3 ÷ 12 30 ÷ 120 435 ÷ 1740	1 ÷ 6 10 ÷ 60 145 ÷ 870
Product inlet connection (Female)	Inch	G 1/4"	G 1/4"
Product outlet connection (Female)	Inch	G 1/4"	G 1/4"
Manometer connection (Female)	Inch	G 1/4"	G 1/4"
Weight	Kg lb	3.20 7.05	3.20 7.05



Description	Units	T092.00PNI
Max allowed fluid temperature	°C F	60° 140
Max inlet pressure	MPa bar psi	30 300 4351
Guiding air inlet max. pressure	MPa bar psi	0.6 6 87
Adjustment range	MPa bar psi	2 ÷ 12 20 ÷ 120 290 ÷ 1740
Product inlet connection (Female)	Inch	G 1/4"
Product outlet connection (Female)	Inch	G 1/4"
Manometer connection (Female)	Inch	G 1/4"
Air inlet connection (Female)	Inch	G 1/4"
Weight	Kg lb	4.43 9.77



4.4 FUNCTIONING**4.4.1 PRESSURE REGULATOR**

- 1 Product diaphragm
- 1a Air diaphragm
- 2 Piston
- 3 Pilot air inlet
- 4 Small piston
- a Valve ball and seat
- b Regulation spring
- c Regulation knob
- P1 Fluid outlet / pressure gauge
- P2 Fluid inlet

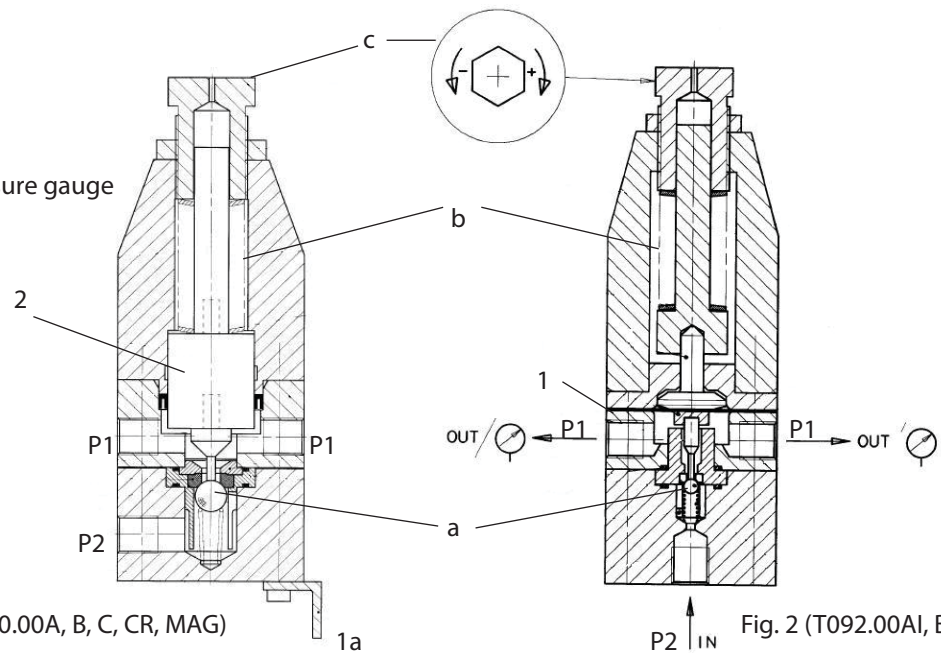


Fig. 1 (T090.00A, B, C, CR, MAG)

Fig. 2 (T092.00AI, BI)

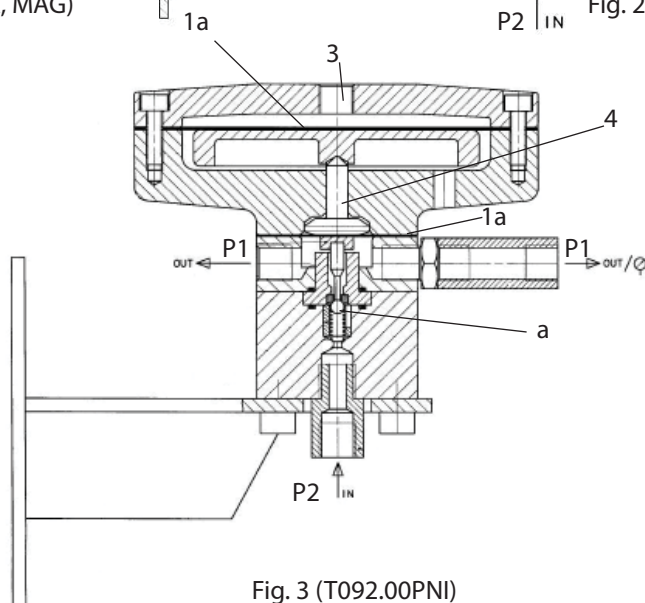


Fig. 3 (T092.00PNI)

General description

The fluid pressure regulator is normally used in the painting systems to assure a good fluid pressure control to the equipment. A regulator installed on a line reduces the pressure of the main line until reaching the pressure required by this equipment.

The working principles of pressure regulators with manual control – referring to the section of Fig. 1 and 2 – are as follows:

The regulation device is composed of a spring (b) loaded by a screw with knob (c) and works through a piston (2) or the diaphragm (1) on the adjusting ball valve (a). The pressure exerted by the spring on the piston (2) or on the adjusting diaphragm (3) is counterbalanced by the fluid outlet pressure (P1).

An increase of the outlet pressure provokes the diaphragm displacement and the following closing of the ball valve.

The spring works through piston (2) or diaphragm (1) on ball (a), monitoring the product outlet pressure.

The working principles of pressure regulators with pneumatic remote control – referring to the section of Fig. 3 – are as follows:

The air-compressed guiding device (3) works by means of the diaphragm (1a) on the small piston (4) that on its turn works through the product diaphragm (1) on the adjusting ball valve (a). The pressure exerted by the air on the adjusting diaphragm (1a) is counterbalanced by the outlet fluid pressure (P1).

An increase in the outlet pressure causes the diaphragm shifting and the consequent closing of the ball valve.

The compressed air acts by means of the diaphragm on the ball (a), controlling the pressure of the outlet product.

5 STARTING UP AND OPERATING

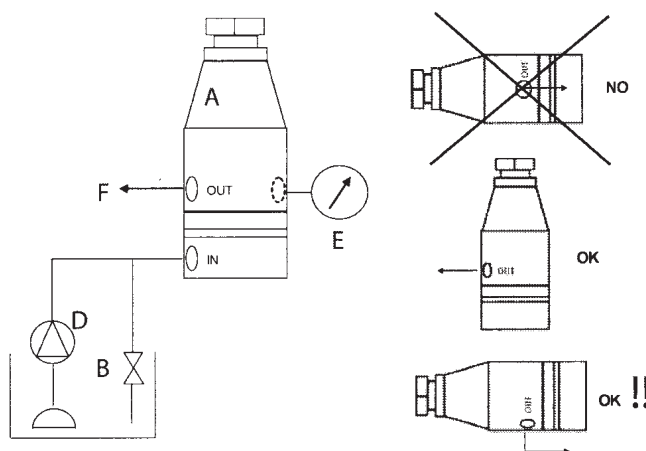
5.1 INSTALLATION AND CONNECTION

5.1.1 INSTALLATION OF PRESSURE REGULATOR

Warning

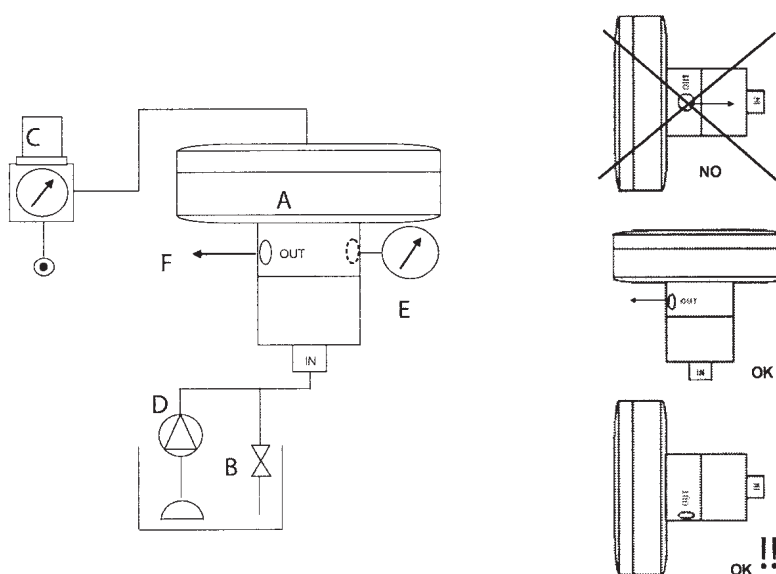
WAGNER Colora Srl pressure regulators shall be installed and maintained in compliance with the maintenance regulations provided for environments classified against explosion risk for the presence of Gas EN 60079-14, EN 60079-17.

1. If necessary, apply some thread braking to the connections.
2. Make sure the fluid direction is in compliance with the indications specified on the regulator body.
3. Install pressure regulator upstream the equipment. Connect the equipment fluid line to the pressure regulator outlet.
4. Test the whole system to detect any air or fluid leakage.



Figures show an example of installation.

- A. Pressure regulator
- B. Recycling valve
- C. Piloting air regulator
- D. Pump
- E. Outlet pressure manometer
- F. Equipment



5.1.2 EARTHING

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

SIHI_0041_GB

	 WARNING
	Heavy paint mist if earthing is insufficient! Risk of poisoning. Insufficient paint application quality. → Earth all unit components. → Earth the workpieces being painted.

SIHI_0003_GB

The regulator base shall be put to earth by means of the contact with the supporting brackets, frames or fluid manifolds.

Make sure to avoid electrostatic charges on connecting pipes, using pipes in conductive material where necessary. The earthing connection can be carried out also by means of conductive pipes.

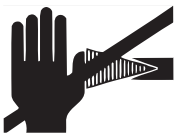
NOTE : After any repairing, cleaning or maintenance intervention, make sure to restore/ check the efficiency of the equipment earthing, before starting it up again.

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.
- Before carrying out any maintenance or cleaning operation, close the piloting compressed air feeding and discharge the pressure of the regulator and connected pipes, both upstream and downstream.

	! 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.
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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.
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SIHI_0028_GB

In case of doubt, please refer to the details given on the equipment body. When replacing any of the components, make sure the new ones can operate at the equipment maximum working pressure.

The max. pressure in the equipment is equal to the highest value between inlet liquid pressure and piloting air.

Never exceed the max. working pressure value allowed by this equipment and connected components.

5.2.2 CLEANING

Pressure regulator has been tested with oil. Before using it, it is advisable to clean it by pumping an adequate solvent to remove all residues of this liquid or other residues that could have entered during the assembling phase.

NOTE: In case liquids subject to chemical hardening (such as catalysed resins) are used, at the end of the work it is recommended to carefully wash the pressure reducer by means of a solvent adequate to that particular kind of resin, leaving the reducer full of solvent when not in use.

5.2.3 PRESSURE DISCHARGE PROCEDURE

Always discharge pressure in case of stop, maintenance or check of any equipment of the circuit being fed by the pressure reducer as well as in case of installation or cleaning of a nozzle.

To discharge pressure upstream and downstream the equipment:

1. Close the feeding air to the pump and the pressure regulator piloting air.
2. Pull the trigger of the equipment, if any, or the equipment opening device, to discharge the fluid under pressure.
3. Open the recycling valve (B) to discharge all the fluid under pressure above the regulator.

5.2.4 HOW TO ADJUST FLUID PRESSURE

Pressure regulator controls the pressure downstream the product outlet. For a correct operation, fluid inlet pressure shall always be higher than fluid outlet pressure.

When it is necessary to reduce the pressure, pull the gun trigger or the equipment opening device to discharge the under pressure fluid downstream the reducer and to obtain a correct reading of the value.

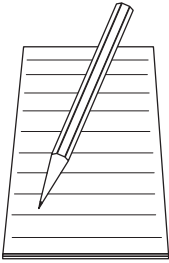
Adjust the pump feeding air and regulator piloting air to guarantee the best combination of parameters necessary for the use.

1. After closing the regulator fluid feeding line, set to zero the regulator guiding air pressure. Turn the regulation knob clockwise, in manually controlled models.
2. Open the fluid feeding line to the regulator.
3. Increase the fluid guiding pressure or turn the regulation knob clockwise, in manually controlled models, until the fluid output pressure from the regulator reaches the required level.

NOTE: with this kind of equipment, adjustments should be always carried out "by increasing".

	! 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 FINISHING WORK AND CLEANING

5.3.1 WASHING

Wash before any product or colour change and at the end of the working day if necessary; wash before any stop of the equipment and before carrying out any maintenance operation.

In case of use of pre-mixed plural component paints, flush the equipment before the reaction time (Pot-life - see technical data sheets of the product to be processed).

Use a washing fluid that is compatible with the fluid being pumped and with the equipment wet parts.

Check with your supplier the most suitable product and the most adequate washing frequency.

Discharge the pressure in the regulator after washing operation.

Do not leave paints or solvents in the reducer for a long time since the fluid could dry up inside the regulator, causing leakages.

In case of leakage, discharge pressure, disassemble and clean the regulator.

Before carrying out any maintenance or cleaning operation:

- provide the adequate tools,
- wear the specific clothes and protections according to the nature of fluids being used,

A regular cleaning and an inspection of inner parts are necessary for the regulator good functioning.

1. Discharge both parts air and fluid under pressure.
2. Remove the regulator from the system.
3. Disassemble the regulator (see the exploded views in this manual)
4. Clean and check all components, paying particular attention to the ball and its seat. If these parts are damaged, leakages and a poor efficiency may occur.
5. Check the wear and tear of diaphragms, fittings and o-rings. Check any dents, wear and tear and damages of the ball and its seat.
6. Lubricate diaphragms, fittings and o-rings when re-assembling the regulator.

5.3.2 SURFACE CLEANING

An essential element to the explosion protection is the surface electric conductivity of the equipment, that should be cleaned regularly. Make sure to remove all deposits on the surface, since they could reduce conductivity.

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.

6 FAULT LOCATION, MAINTENANCE AND REPAIR

6.1 TROUBLE SHOOTING AND SOLUTION

Problem	Cause	Solution
Pressure drop of outlet fluid.	Ball blocked on the seat – passage clogging	Disassemble and clean
	Air leakage from piloting air feeding circuit (where foreseen)	Check connections and piloting air pipes.
Fluid outlet pressure increases until reaching the level of the fluid inlet pressure	Valve ball and seat are worn or clogged Broken diaphragm.	Clean both ball and seat. Replace worn or damaged parts.
Fluid leakage from regulator body or fluid going up from piloting air inlet.	Broken diaphragm	Replace diaphragms.

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. Check and clean the filter every day or as required.
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).

7 SPARE PARTS

7.1 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:

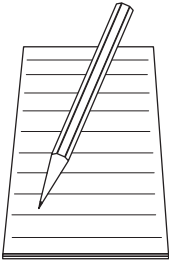
- Address for the invoice
- Address for delivery
- Name of the person to be contacted in the event of any queries
- Type of delivery required (air freight or mail, sea route or overland route, etc.)

Marks in spare parts lists

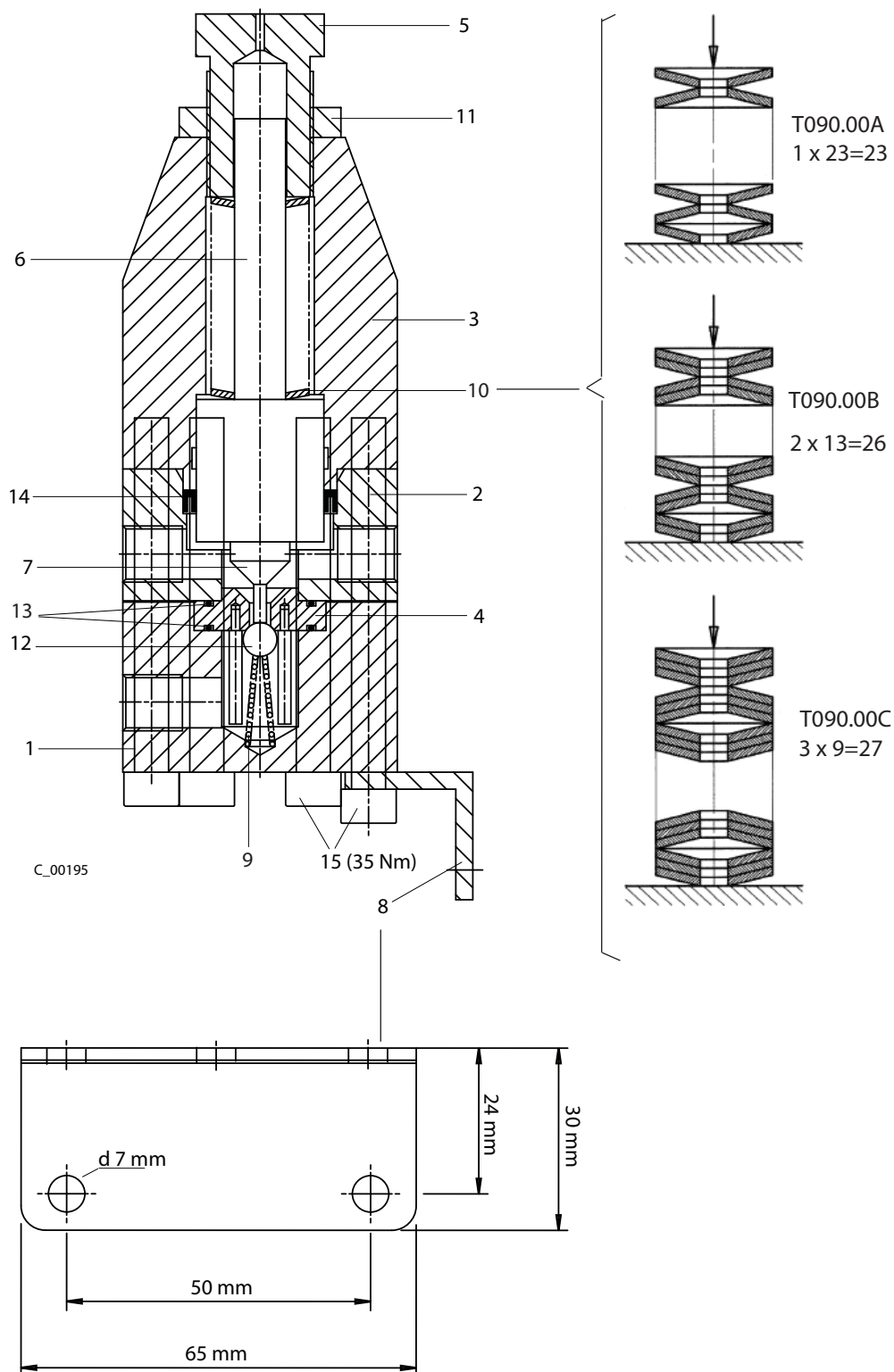
Note to column „K“ in the following spare parts lists.

- ◆ = Wearing parts
Note: No liability is assumed for wearing parts
- = Not part of standard equipment, available, however, as additional extra.

	 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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7.2 EXPLODED VIEWS**7.2.1 T090.00A - T090.00B - T090.00C**



! WARNING

Incorrect maintenance/repair!

Risk of injury and damage to the equipment.

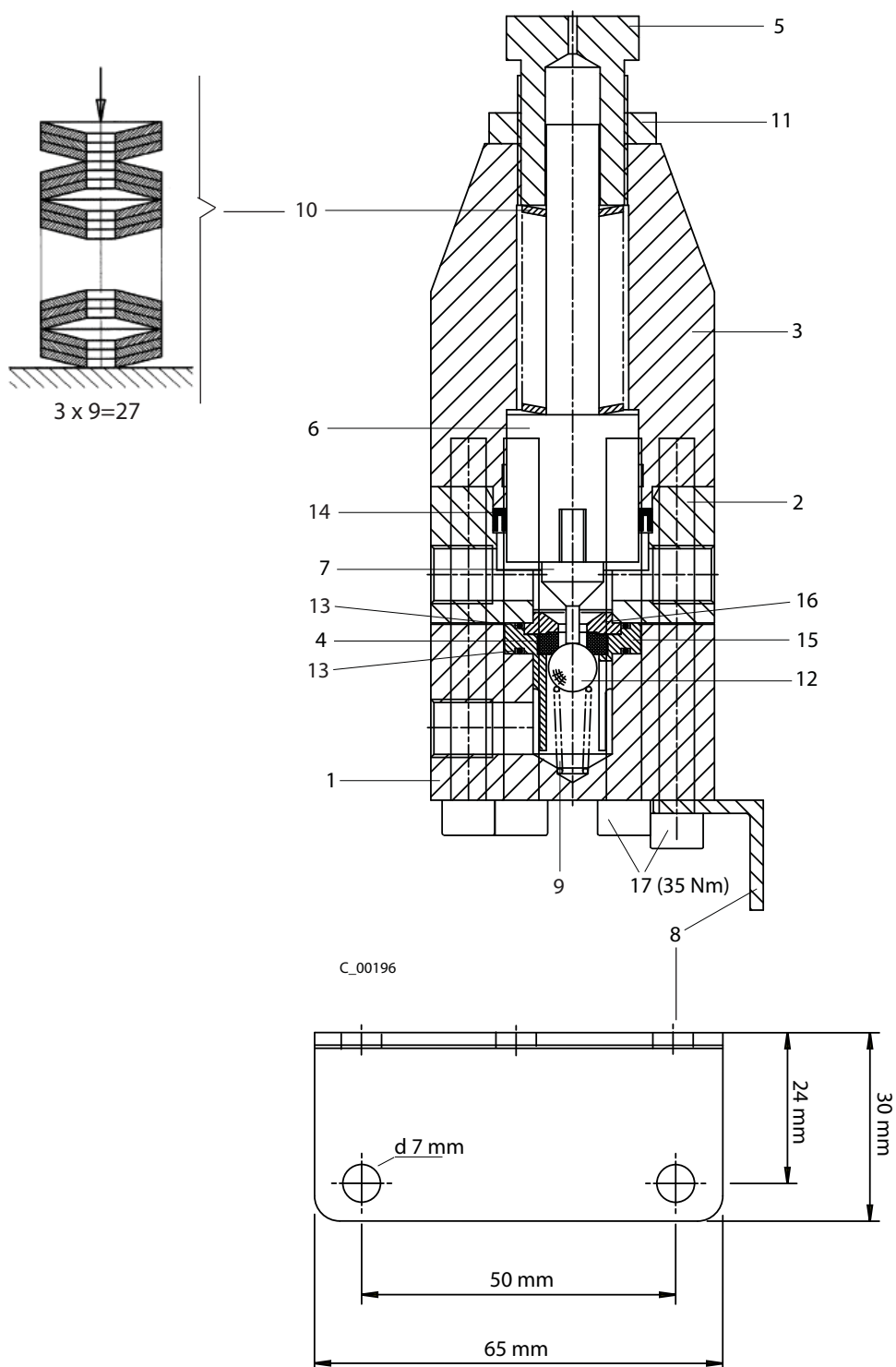
- Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center.
- Before all work on the unit and in the event of work interruptions:
 - Switch off the energy/compressed air supply.
 - Relieve the pressure from the spray gun and unit.
 - Secure the spray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

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Spare parts list				T090.00A T090.00B T090.00C
Pos	K	Description	Q.ty	No.
1		Lower reducer body	1	B589.22
2		Main reducer body	1	B590.22
3		Upper reducer body	1	B591.22
4	◆	Ball seat	1	T6044.00
5		Adjustment screw	1	B594.03
6		Shutter piston	1	B595.53
7	◆	Shutter stem	1	B619.03
8		Pressure reducer support	1	E506.62
9	▲	Valve spring	1	H218.03A
10		Cup spring	see exploded view	H266.02
11		Ring nut M25	1	K303.62A
12	◆	Ball	1	K813.04
13	▲	O-ring	2	L149.06
14	▲	Gasket	1	L418.08
15		Socket screw 8x90	6	K139.62
		Seal gasket set		T9062.00

◆ = Wearing parts

▲ = Included in seal gasket set

7.2.2 T090.00CR

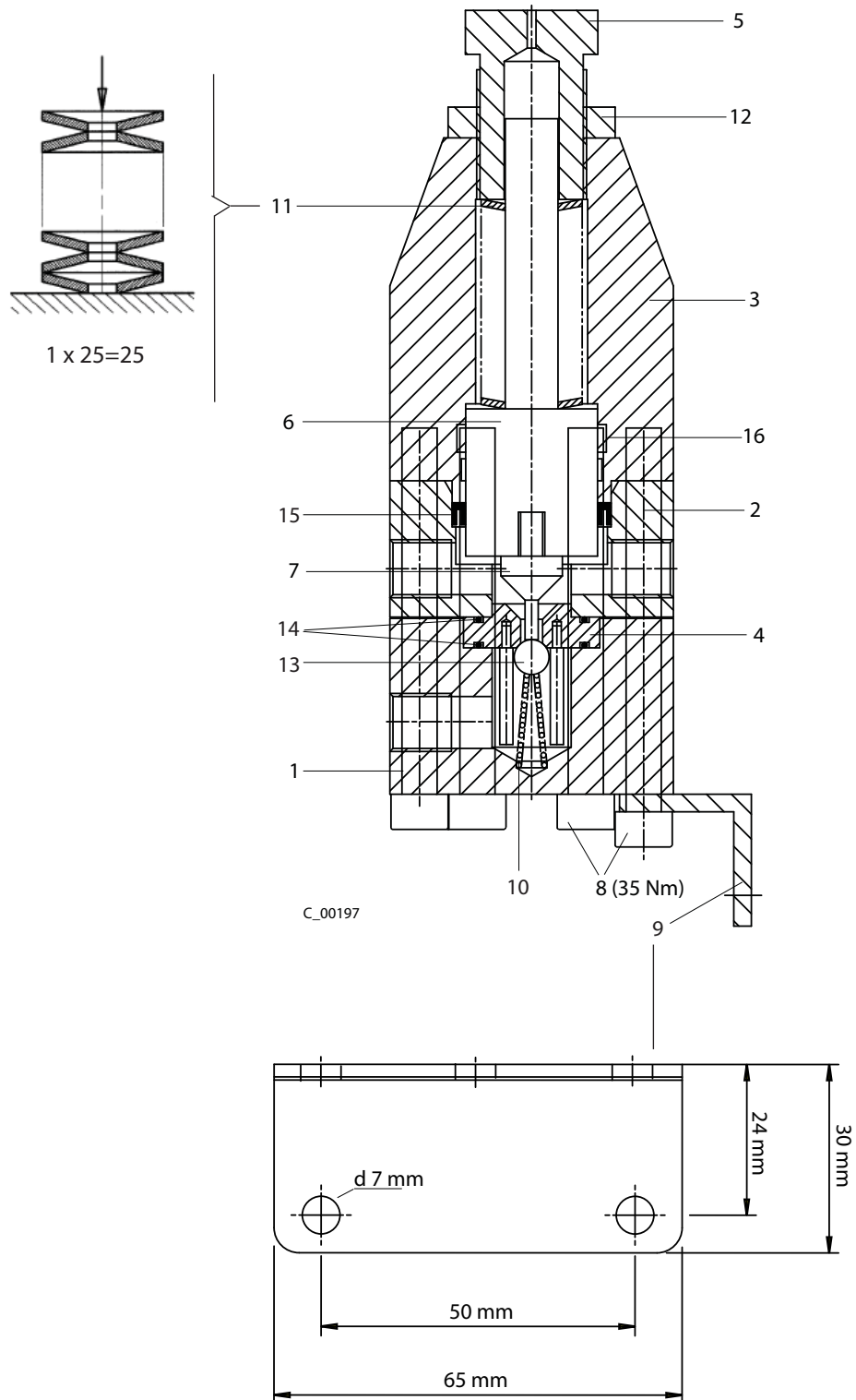
	 WARNING
	Incorrect maintenance/repair! Risk of injury and damage to the equipment. → Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center. → Before all work on the unit and in the event of work interruptions: - Switch off the energy/compressed air 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.

SIHL_0004_GB

Spare parts list			T090.00CR	
Pos	K	Description	Q.ty	No.
1		Lower reducer body	1	B589.22
2		Main reducer body	1	B590.22
3		Upper reducer body	1	B591.22
4	◆	Ball seat	1	K069.04
5		Adjustment screw	1	B594.03
6		Shutter piston	1	B595.53
7	◆	Shutter stem	1	B0253.03
8		Pressure reducer support	1	E506.62
9	▲	Valve spring	1	H218.03A
10		Cup spring	27	H266.02
11		Ring nut M25	1	K303.62A
12	◆	Ball	1	K839.04
13	▲	O-ring	2	L149.06
14	▲	Gasket	1	L418.08
15		Ball seat body	1	B0323.03
16		Ball seat block	1	B0324.03
17		Socket screw 8x90	6	K139.62
		Seal gasket set		T9062.00

◆ = Wearing parts

▲ = Included in seal gasket set

7.2.3 T090.00MAG

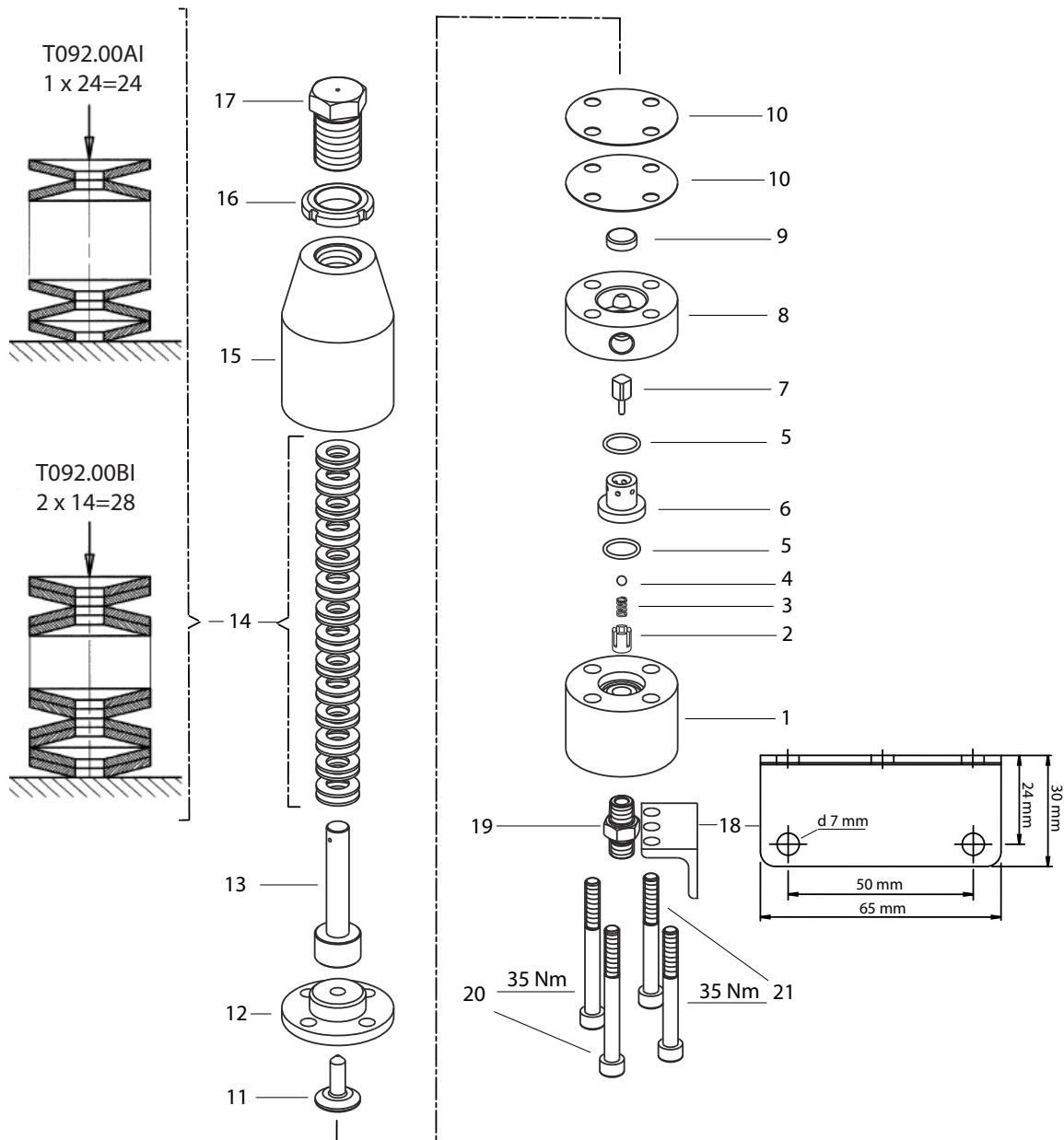
	 WARNING
	Incorrect maintenance/repair! Risk of injury and damage to the equipment. → Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center. → Before all work on the unit and in the event of work interruptions: - Switch off the energy/compressed air 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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Spare parts list			T090.00MAG	
Pos	K	Description	Q.ty	No.
1		Lower reducer body	1	B0252.22
2		Main reducer body	1	B590.22
3		Upper reducer body	1	B591.22
4	◆	Ball seat	1	T6044.00A
5		Adjustment screw	1	B594.03
6		Shutter piston	1	B595.53
7	◆	Shutter stem	1	B0253.03
8		Socket screw 8x90	6	K139.62
9		Pressure reducer support	1	E506.62
10	▲	Valve spring	1	H224.03
11		Cup spring	25	H266.02
12		Ring nut M25	1	K303.62A
13	◆	Carbide 1/2 ball	1	K823.04
14	▲	O-ring	2	L126.06
15	▲	Gasket	1	L418.08
16	▲	Sliding ring	1	L835.08
		Complete piston (6+7)		T6174.00
		Seal gasket set		T9062.00AA

◆ = Wearing parts

▲ = Included in seal gasket set

7.2.4 T092.00AI - T092.00BI

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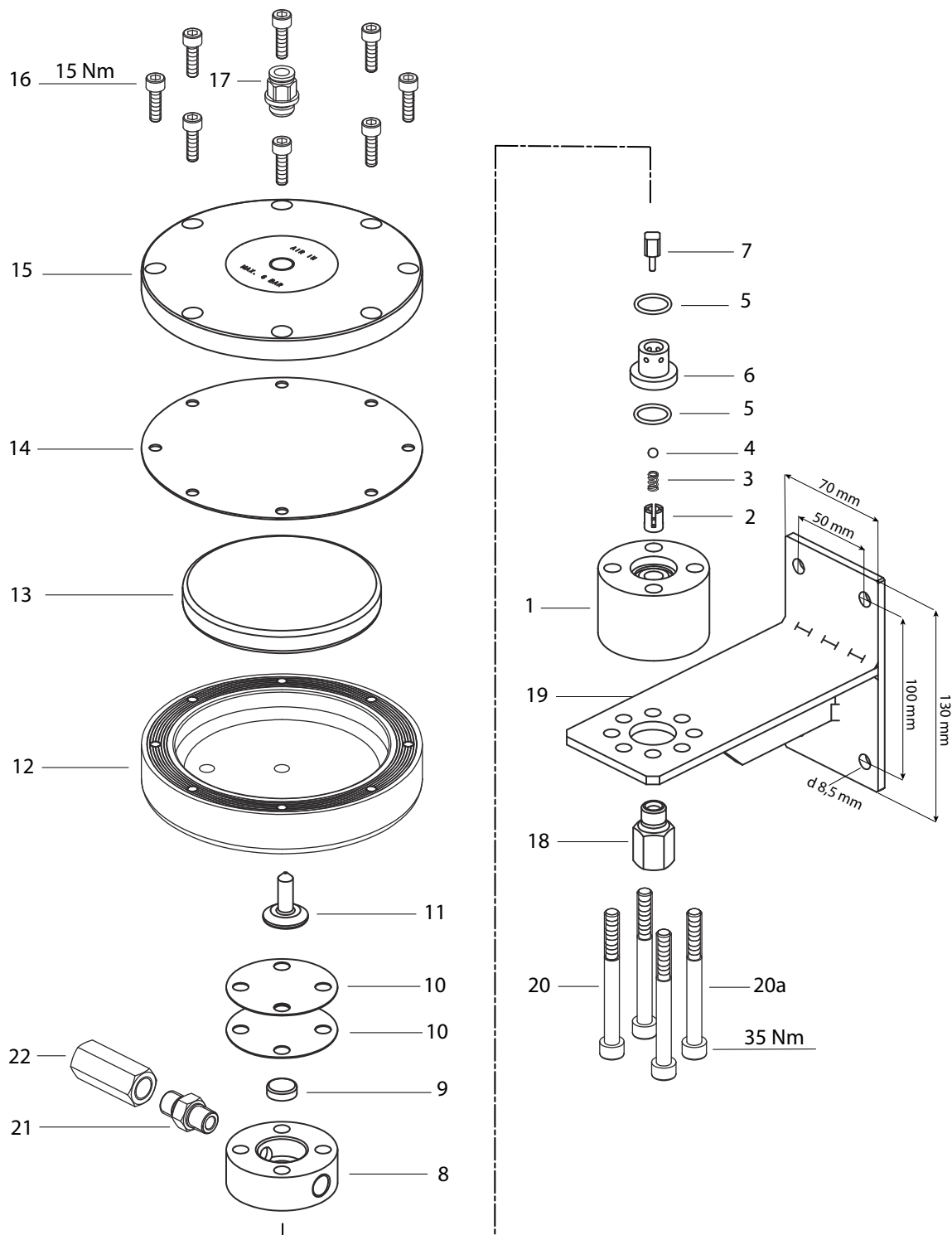
	 WARNING
	Incorrect maintenance/repair! Risk of injury and damage to the equipment. → Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center. → Before all work on the unit and in the event of work interruptions: - Switch off the energy/compressed air 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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Spare parts list				T092.00AI		T092.00BI
Pos	K	Description	Q.ty	No.	Q.ty	No.
1		Lower reducer body	1	B640.03A	1	B640.03A
2		Ball guide	1	B637.03	1	B637.03
3	▲	Spring	1	H261.03	1	H261.03
4	◆	Carbide D5 ball	1	K828.04	1	K828.04
5	◆ ▲	EPDM O-ring	2	L130.06	2	L130.06
6	◆	Complete ball seat body	1	T6008.00	1	T6008.00
7	◆	Shutter stem	1	B391.03	1	B391.03
8		Main reducer body	1	B639.03	1	B639.03
9		Product diaphragm disk	1	B641.03	1	B641.03
10	◆ ▲	Diaphragm	2	G760.07	2	G760.07
11	◆	Small piston	1	B148.03	1	B148.03
12	◆	Intermediate flange	1	B145.12	1	B145.12
13	◆	Spring guide	1	B634.52	1	B634.52
14		Cup spring (see exploded view)	24	H266.02	28	H266.02
15		Upper reducer body	1	B147.12	1	B147.12
16		Ring nut M25	1	K303.62A	1	K303.62A
17		Adjustment screw	1	B594.03	1	B594.03
18		Pressure reducer support	1	E506.62	1	E506.62
19		SSt 1/4 Nipple	1	M801.03B	1	M801.03B
20		Socket screw 8x80	2	K109.62	2	K109.62
21		Socket screw M8x70	2	K193.62	2	K193.62
		Seal gasket set		T9061.00		T9061.00

◆ = Wearing parts

▲ = Included in seal gasket set

7.2.5 T092.00PNI

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! 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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Spare parts list			T092.00PNI	
Pos	K	Description	Q.ty	No.
1		Lower reducer body	1	B640.03A
2		Ball guide	1	B637.03
3	▲	Spring	1	H261.03
4	◆	Carbide D5 ball	1	K828.04
5	◆ ▲	EPDM O-ring	2	L130.06
6	◆	Complete ball seat body	1	T6008.00
7	◆	Shutter stem	1	B391.03
8		Main reducer body	1	B639.03
9	◆	Product diaphragm disk	1	B641.03
10	◆ ▲	Diaphragm	2	G760.07
11	◆	Small piston	1	B148.03
12		Intermediate flange	1	B0428.71
13	◆	Diaphragm disk - air side	1	B0427.62
14	◆ ▲	Diaphragm - air side	1	G7035.06
15		Air closing flange	1	B0429.71
16		Socket screw 6x20	8	K107.62
17		Fast fitting	1	M226.04
18		SSt extension MF	1	M810.03B
19		Pressure reducer support	1	E3342.62
20		Socket screw 8x80	2	K109.62
20a		Socket screw M8x70	2	K193.62
21		SSt 1/4 nipple	1	M801.03B
22		Extension 1/4 FF L=45	1	M810.03C
		Seal gasket set		T9061.00A

◆ = Wearing parts

▲ = Included in seal gasket set

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
Belgium WAGNER Spraytech Benelux BV Veilinglaan 56 B- 1861 Wolvenstem Telephone: ++32/ (0)2 / 269 4675 Telefax: ++32/ (0)2 / 269 7845 E-Mail: info@wagner-group.be	Denmark WAGNER Spraytech Scandinavia A/S Kornmarksvej 26 DK- 2605 Brøndby Telephone: ++45/ 43 271 818 Telefax: ++45/ 43 43 05 28 E-Mail: wagner@wagner-group.dk
United Kingdom WAGNER Spraytech (UK) Ltd. Haslemere Way Tramway Industrial Estate GB- Banbury, OXON OX16 8TY Telephone: ++44/ (0)1295 / 265 353 Telefax: ++44/ (0)1295 / 269861 E-Mail: enquiry@wagnerspraytech.co.uk	France J. WAGNER France S.A.R.L. 5, Ave. du 1er Mai – BP 47 F- 91122 Palaiseau-Cedex Telephone: ++33/ (0)1 / 69 19 46 76 Telefax: ++33/ (0)1 / 69 81 72 57 E-Mail: division.batiment@wagner-france.fr
Netherlands WAGNER SPRAYTECH Benelux BV Zonnebaan 10 NL- 3542 EC Utrecht PO Box 1656 3600 BR Maarssen Telephone: ++31/ (0)30 / 241 4155 Telefax: ++31/ (0)30 / 241 1787 E-Mail: info@wagner-group.nl	Italy WAGNER COLORA S.r.l. Via Italia, 34 I- 20060 Gessate (MI) Telephone: ++39/ 02 / 9592921 Telefax: ++39/ 02 / 95780187 E-Mail: info@wagnercolora.com
Japan WAGNER Spraytech Ltd. 2-35, Shinden Nishimachi J- Daito Shi, Osaka, 574-0057 Telephone: ++81/ (0)720 / 874 3561 Telefax: ++81/ (0)720 / 874 3426 E-Mail: marketing@wagner-japan.co.jp	Austria 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
Sweden WAGNER SVERIGE AB Muskötgatan 19 S- 25466 Helsingborg Telephone: ++46/ (0)42 150 020 Telefax: ++46/ (0)42 150 035 E-Mail: mailbox@wagner.se	Spain WAGNER Spraytech Iberica S.A. Ctra. N- 340, Km. 1245,4 E- 08750 Molins de Rei (Barcelona) Telephone: ++34/ (0)93/ 680 0028 Telefax: ++34/ (0)93/ 668 0156 E-Mail: info@wagnerspain.com
Czechoslovakia WAGNER s.r.o. Na Belidle 1/63 C- 15000 Praha 5 Telephone: ++420/ (0)2/ 573 123 24 Telefax: ++420/ (0)2/ 545 001 E-Mail: wagner.s.r.o.@telecom.cz	USA Walter Pilot North America 46890 Continental Drive Chesterfield, MI 48047 USA Telephone: ++1/ 877 / 925-8437 Telefax: ++1/ 586 / 598-1457 http://www.waltherpilotna.com



Order number ZZB022ENG

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

www.wagner-group.com