



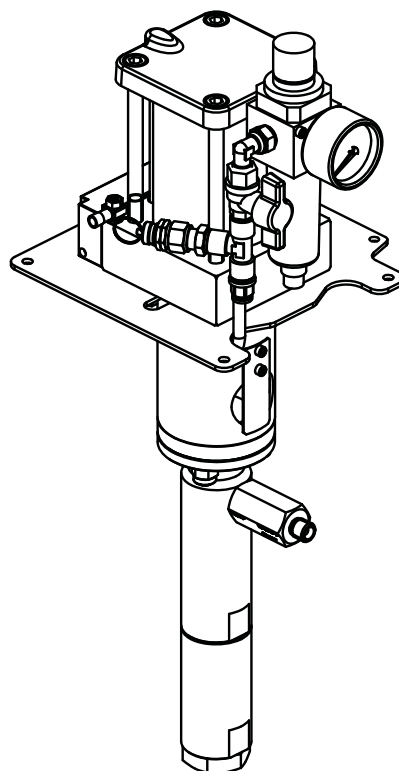
Translation of the original Operating Manual

EvoMotion Stainless Steel 40 - 15 / 20 - 30

Edition 05 /2010

Piston pump

Volume 15 cc – 30 cc



II 2G IIB T3

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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	ZZB020GER	English	ZZB020ENG
French	ZZB020FRE	Dutch	ZZB020DUT
Italian	ZZB020ITA	Spanish	ZZB020SPA
Danish	ZZB020DAN	Swedish	ZZB020SWE
Portuguese	ZZB020POR	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

 SIHL_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.

 SIHL_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.

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

 SIHL_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.

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

SIHL_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.	

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:

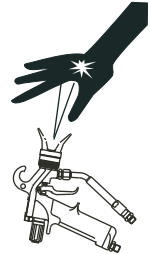
- Never point the spray gun at people.
- Never reach into the spray jet.
- Before all work on the unit, in the event of work interruptions and functional faults:
 - Switch off the energy/compressed air supply
 - Secure the spray gun against actuation.
 - Relieve the pressure from the spray gun and unit.
 - 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.



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
T3: Temperature class: maximum surface temperature < 200°C; 392°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.

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

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:
Pneumatic pumps and Spraypacks with article no.

Mod. 40-15	Mod. 20-30
U1S40015P	U1S20030P
U6S40015M..	U6S20030M..

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

Marking:

  II 2G IIB T3

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.16

4 DESCRIPTION

4.1 FIELD OF APPLICATION

4.1.1 USING IN ACCORDANCE WITH THE INSTRUCTIONS

The pneumatic piston 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 construction material
of the pump as described in chapter 4.3.1.

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4.2 EXTENT OF DELIVERY

Pneumatic piston pump
consisting of:

- Fluid section
- Air motor
- Connection elements

Separating fluid 250 ccm

CE-conformity see

Operating manual in english

Operating manual for the other language see

Part No.: 9992504

Chapter 3

Part No.: ZZB020ENG

Chapter 1

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

4.3 DATA

4.3.1 MATERIALS OF THE PARTS TRANSPORTING PAINT

Pump body	Stainless steel
Piston	Stainless steel
Valves balls	Stainless steel
Valves seats	Stainless steel

O-rings	EPDM
Seal packings	PE/ TF

PE = UHMW - PE

TF = (PTFE)

4.3.2 TECHNICAL DATA

Description	Units	40-15	20-30
Transmission ratio		40:1	20:1
Flow volume per double stroke (DS)	cm ³ cc	15	30
Max. operating pressure (Pump)	MPa bar psi	32.0 320 4641	16.0 160 2320
Max. operating pressure (Spraypack)	MPa bar psi	25.0 250 3626	16.0 160 2320
Max. possible strokes in operation	DC/min DS/min	60	60
Min. - Max. air inlet pressure	MPa bar psi	0.2-0.8 2-8 28-116	0.2-0.8 2-8 28-116
Ø air inlet connection (female)	mm Inch	8,0 0.314	8,0 0.314
Min. Ø compressed air hose	mm Inch	9,0 0.354	9,0 0.354
Air consumption (at 0.6 MPa; 6 bar; 87 psi) per DS	nl scf	3,9 0,14	3,9 0,14
Sound pressure level at max. permissible air pressure*	dB(A)	72	72
Sound pressure level at 0.6 MPa; 6 bar; 87 psi air pressure*	dB(A)	69	69
Sound pressure level at 0.4 MPa; 4 bar; 58.01 psi air pressure*	dB(A)	65	65
Ø piston of air motor	mm Inch	80 3.15	80 3.15
Material inlet connection (female)	Inch	G 1/2"	G 1/2"
Material outlet connection (female) (in case of Spraypack version NPSM1/4")	Inch	G 1/4"	G 3/8"
Weight	kg lb	9,0 19,8	11 24,2
Max. material pressure at pump inlet	MPa bar psi	2 20 90	
Range of material temperature	°C; F	+5° ÷ +80°; (+41 ÷ +176)	
Range of the ambient temperature	°C; F	+5° ÷ +60°; (+41 ÷ +140)	
Allowable sloping position at work	↘ °	± 10	

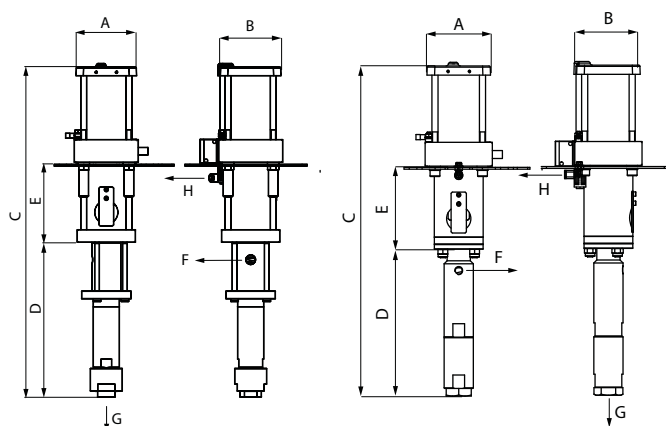
* A rated sound pressure level measured at 1m distance according to UNI EN ISO 3746-1997.

	 WARNING
	Outgoing air containing oil! Risk of poisoning if inhaled. Function problem airmotor → Provide water-free and oil-free compressed air (quality standard 5.5.4 as per ISO 8573.1) 5.5.4 = 40 µm / +7 / 5 mg/m³.

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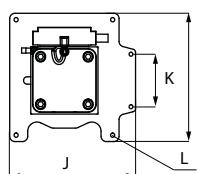
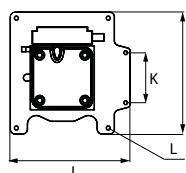
4.3.3 DIMENSIONS AND CONNECTIONS

	20-30 mm; inch	40-15 mm; inch		20-30 mm; inch	40-15 mm; inch
A	104; 4.09	104; 4.1	M	ø9; ø0.4	ø9; ø0.4
B	108.5; 4.27	108,5; 4.3	N	38.3; 1.5	38.3; 1.5
C	574; 22.59	680; 26.77	O	80; 3.2	80; 3.2
D	266.5; 10.49	335; 13.18	P	189; 7.4	189; 7.4
E	134; 5.27	160; 6.29	-	-	-
F	G 3/8"	G 1/4"	-	-	-
G	G 1/2"	G 1/2"	-	-	-
H	ø8; ø0.31	ø8; ø0.31	-	-	-
I	210; 8.3	210; 8.3	-	-	-
J	206; 8.1	206; 8.1	-	-	-
K	86; 3.4	86; 3.4	-	-	-
L	ø7; ø0.28	ø7; ø0.28	-	-	-

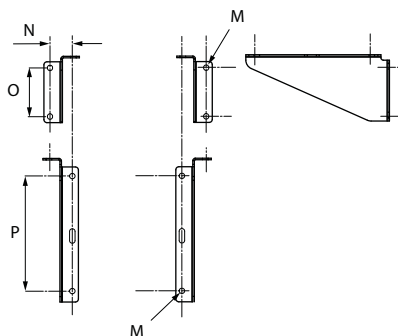


20-30

40-15



Mounting for wall for
20 - 30, 40 - 15



C_00041bis

4.3.4 FLOW VOLUME

Wagner nozzle AL			Volume flow in l/min; cc/min *		
ø inch	ø mm	Spray angle	at 7 MPa 70 bar 1015 psi	at 10 MPa 100 bar 1450 psi	at 15 MPa 150 bar 2175 psi
0.007	0.18	40°	0.1650	0.2000	0.2400
0.009	0.23	20-30-40-50-60°	0.2060	0.2500	0.3090
0.011	0.28	10-20-30-40-50-60°	0.2950	0.3450	0.4260
0.013	0.33	10-20-30-40-50-60-80°	0.4530	0.5280	0.6600
0.015	0.38	10-20-30-40-50-60-80°	0.5770	0.6720	0.8130
0.017	0.43	20-30-40-50-60-70°	0.7310	0.7860	1.0640
0.019	0.48	20-30-40-50-60-70-80°	0.9260	1.0920	1.3700
0.021	0.53	20-40-50-60-80°	1.1430	1.3600	1.6900
0.023	0.58	20-40-50-60-70-80°	1.3700	1.5900	2.0100
0.025	0.64	20-40-50-60-80°	1.6200	1.9100	2.4000
0.027	0.69	20-40-50-60-80°	1.8300	2.1300	2.6800
0.029	0.75	60°	2.1900	2.5100	3.1700
0.031	0.79	20-40-50-60°	2.4000	2.7700	3.4900
0.035	0.90	20-40-50-60°	3.2200	3.7400	4.6900
0.043	1.10	20-50°	5.0700	6.0400	7.4600
0.052	1.30	50°	5.1200	6.5000	7.5200

40 - 15

20 - 30

* Flow volume refers to water.

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Maximum ranges for continuous operation at 50 DS/min.**4.3.5 PERFORMANCE DIAGRAMS**

Example

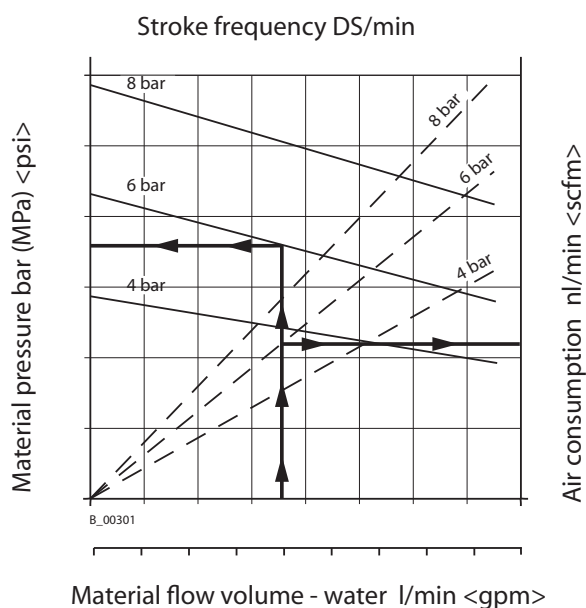
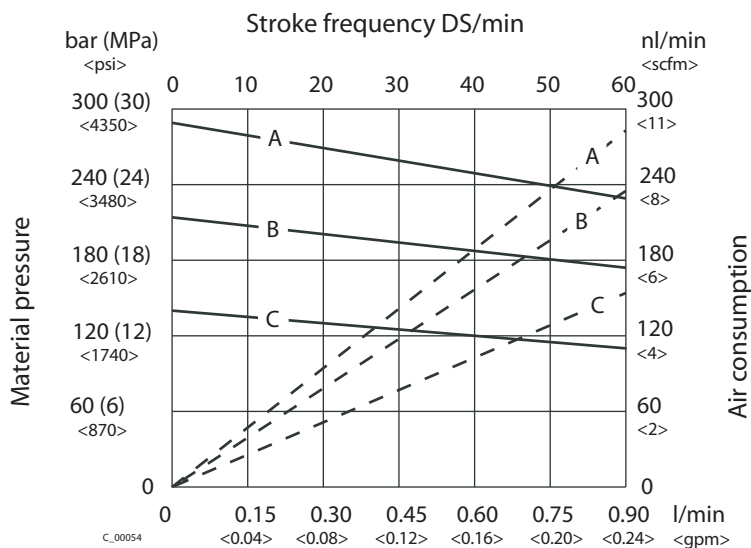


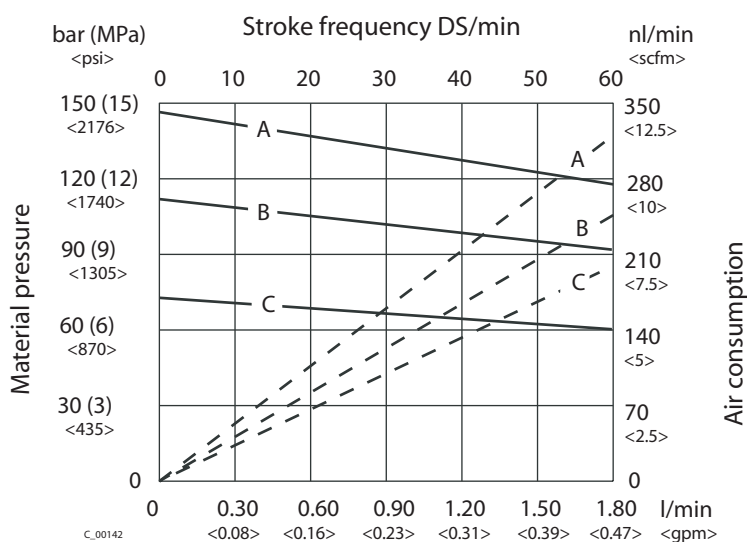
Diagram EvoMotion 40 - 15 Stainless steel

Material flow volume - water

A = 8 bar; 0.8 MPa; 116 psi air pressure

B = 6 bar; 0.6 MPa; 87 psi air pressure

C = 4 bar; 0.4 MPa; 58 psi air pressure

Diagram EvoMotion 20 - 30 Stainless steel

Material flow volume - water

A = 8 bar; 0.8 MPa; 116 psi air pressure

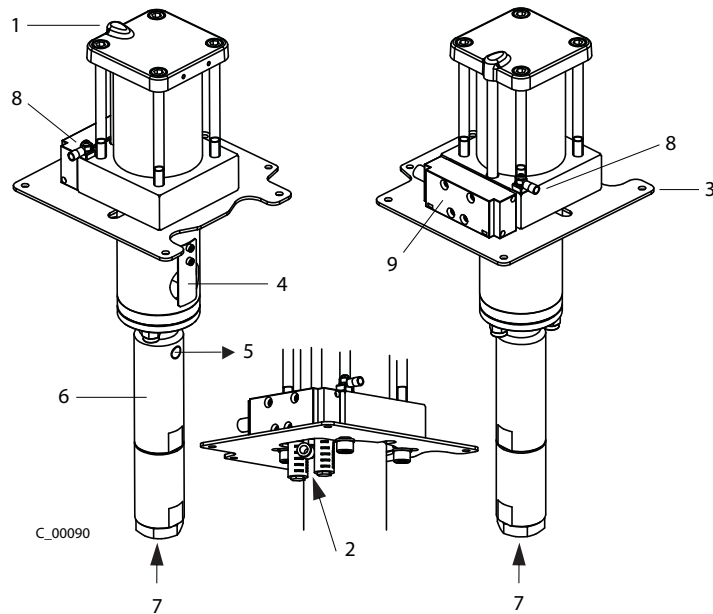
B = 6 bar; 0.6 MPa; 87 psi air pressure

C = 4 bar; 0.4 MPa; 58 psi air pressure

OPERATING MANUAL

**4.4 FUNCTIONING****4.4.1 PUMP**

- 1 Air motor
- 2 Air Inlet
- 3 Mounting flange
- 4 Separating fluid cup
- 5 Material outlet
- 6 Fluid section
- 7 Material inlet
- 8 Earthing connection
- 9 Reversing valve

**General information**

The piston pump is driven with compressed air. This compressed air moves up and down the air piston in the air motor (1) and thus also the pump piston in the fluid section (6). After each stroke, the flow of compressed air is reversed through the reversing valve (9). Working materials are sucked in on the upward stroke and simultaneously conveyed to the gun in both strokes.

Air motor (1)

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 final pressure is given on the plate both for bare pumps and for Spraypack versions.

The Spraypack version is equipped with a safety valve installed on the air supply unit with the aim to limit the max. pressure of compressed air into the pump motor.

	! WARNING Overpressure! Risk of injury from bursting components. → Never change the safety valve setting.
--	--

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Fluid section (6)

The fluid section has been designed as a piston pump with exchangeable ball valves. The pump piston runs in two packings which are self-adjusting by means of a pressure spring, thus resulting in a long life-span.

Between the air motor and fluid section there is a separating fluid cup (4) for holding the separating fluid.

4.4.2 PRESSURE REGULATOR

- 1 Pressure regulator
- 2 Ball valve
- 3 Control air gauge
- 4 Aircoat air gauge (option)
- 5 Compressed air connection
- 6 Pressure regulator Aircoat (option)
- 7 Motor safety and depressurization valve

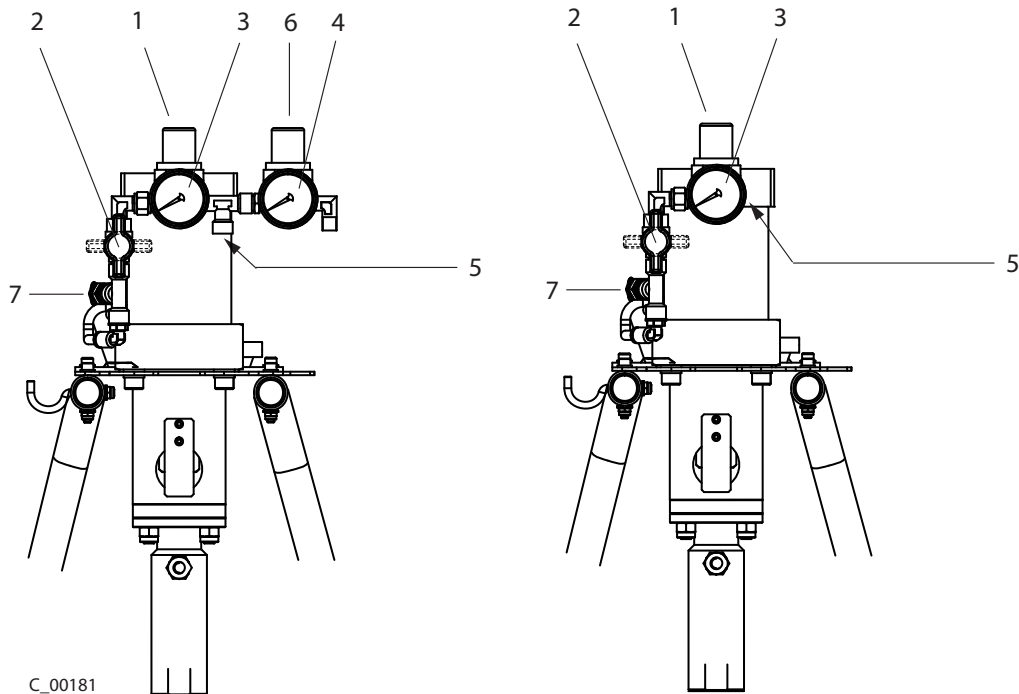
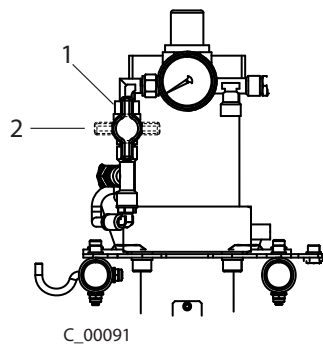


Figure: Pump 40 - 15

Settings ball valve:

- 1 Open: Work position
- 2 Closed: The air motor can still be under pressure.



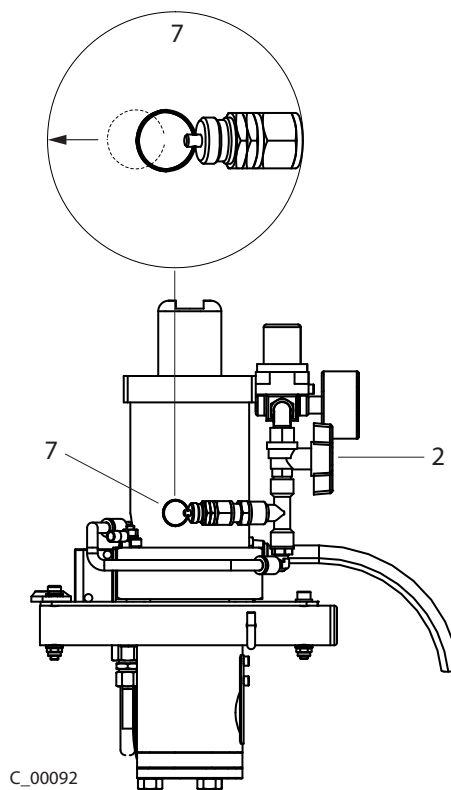
4.4.2.1 MOTOR SAFETY AND DEPRESSURIZATION VALVE**Safety valve (7)**

Besides having the aim to limit the max. inlet pressure of compressed air into the pump motor, the safety valve (7) also serves as a depressurizing valve for the motor. To depressurize the motor, just pull the dedicated exhaust ring with closed ballcock (2).

The ring on the safety valve also allows to check the good performance of the valve itself.

Use the safety valve ring to depressurize the pneumatic motor, in addition to the pressure outlet procedure on the liquid.

Depressurize the pneumatic motor before any disassembly or maintenance work.



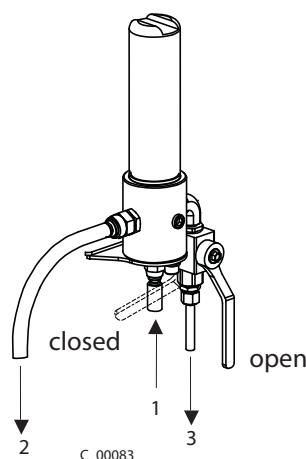
C_00092

	! WARNING Overpressure! Risk of injury from bursting components. → Frequently check the safety valve efficiency by pulling the ring.
--	---

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4.4.3 ANTI-PULSATOR TANK WITH FILTER AND RECIRCULATION VALVE (WHERE FORESEEN)

- 1 Fluid section connection
- 2 High-pressure material outlet
- 3 Return



C_00083

5 STARTING UP AND OPERATING

5.1 INSTALLATION AND CONNECTION

5.1.1 SET UP THE PUMP

a) Models without recycle kit

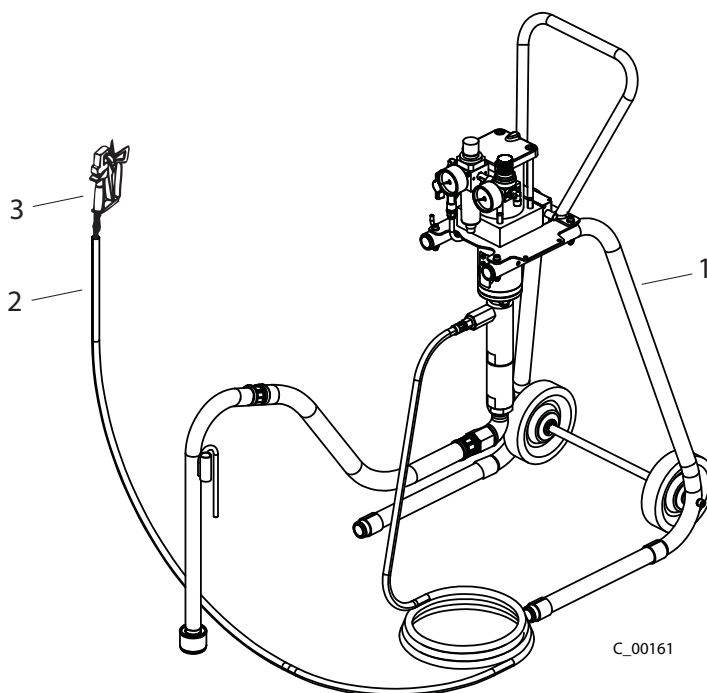
Note

This pump can be used as part of a spraying system for Airless or AirCoat applications. The components can be found in the accessories list, provided that the system was not obtained as a spraypack.

The nozzles must be selected according to the gun instructions.

Procedure:

1. Mount the pump onto a basement (1), a trolley or wall plate.
2. Connect the high-pressure flexible hose (2) to the spray gun (3) as described in the pertaining directions for use.



	 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.

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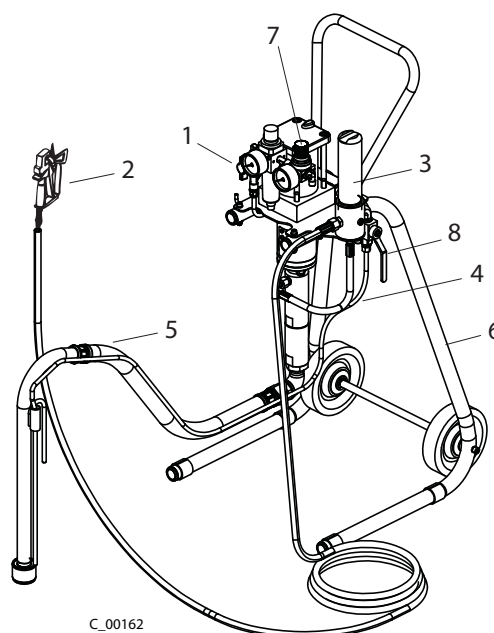
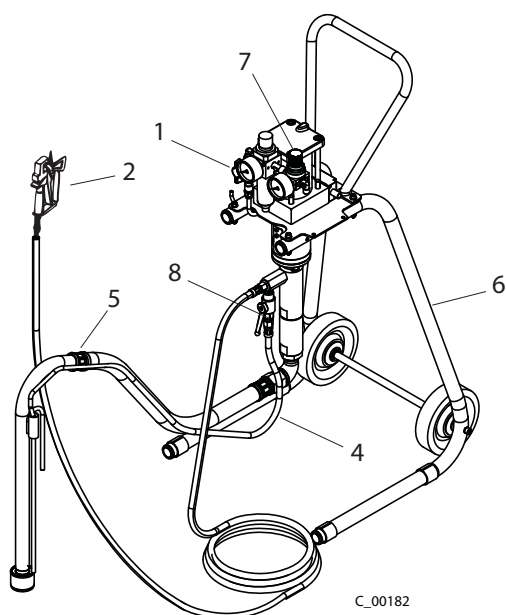
b) Models with recycle kit**Note**

This pump can be used as part of a spraying system for Airless or AirCoat applications. The components can be found in the accessories list, provided that the system was not obtained as a spraypack.

The nozzles must be selected according to the gun instructions.

Procedure:

1. Mount the pump onto a basement (6), a trolley or wall plate.
2. For Aircoat system: fit the additional pressure regulator (7) (optional).
3. Mount the high-pressure antipulsator-tank (3) (optional).
4. Mount the suction system (5).
5. Mount the return flexible hose (4).
6. Connect the high-pressure flexible hose to the spray gun (2) as described in the pertaining directions for use.

**! 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.

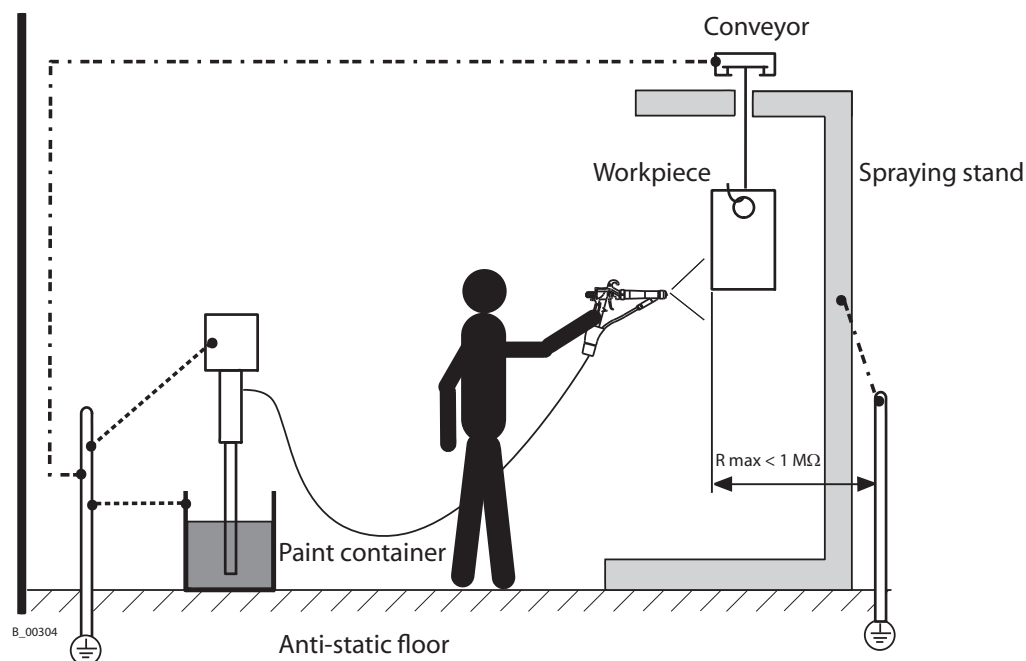
5.1.2 EARTHING

	 WARNING
	Discharge of electrostatically charged components in atmospheres containing solvents! Explosion hazard from electrostatic sparks. → Clean the piston pump only with a damp cloth.

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	 WARNING
	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)

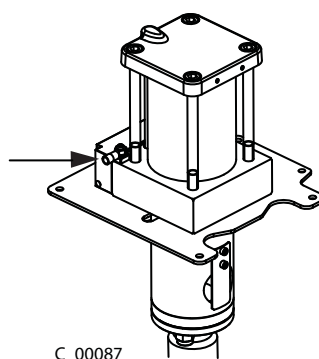
B_00304

Cable cross sections

Pump	4 mm ² ; AWG 11
Paint container	6 mm ² ; AWG 10
Conveyor	16 mm ² ; AWG 5
Spraying booth	16 mm ² ; AWG 5
Spraying stand	16 mm ² ; 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.
---	--

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	⚠ 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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	⚠ 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:

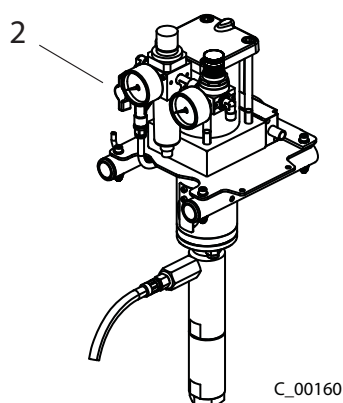
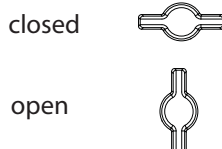
- Secure gun with safety catch
- Check the permissible pressures
- Check all connections for leaks
- Check hose for damage

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

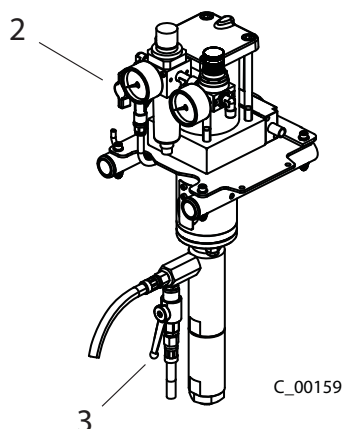
- The pressure should be released from the pump and high-pressure hose with gun.
- The gun should be secured with safety catch.
- The air supply should be interrupted

Emergency stop

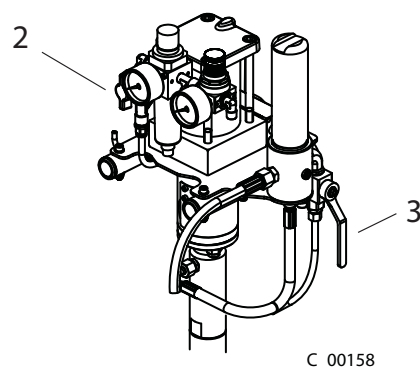
In the case of unforeseen occurrences close immediately the ball valve (2) and depressurise the pump using the gun or the recycling cock (3) (only in models with recycle kit).



Without recycle kit



With recycle kit



With antipulsator/filter and recycle kit

5.2.2 FILLING SEPARATING FLUID

CAUTION

Piston pump dry run!

High wear/damage to the packages.

Paint or solvent can escape if the seals are dry.

- Ensure that the separating agent container is filled with sufficient separating agent.
Filling level 1 cm; 0.4 in under the pot edge.

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Pour the supplied release agent into the slot dedicated to house it.

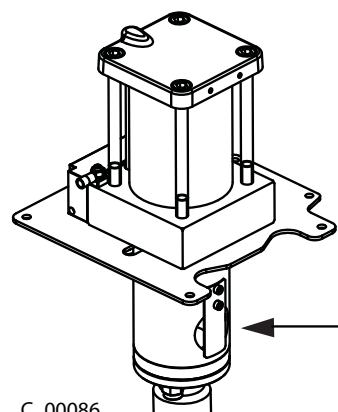
Filling level : 1 cm; 0.4 inch under the pot edge

Separating fluid: see accessories table

Note

When preparation has taken place the max. allowed leaning angle of the pompe is $\pm 30^\circ$ for moving, transport, etc.

During operation the pump must be in vertical position.

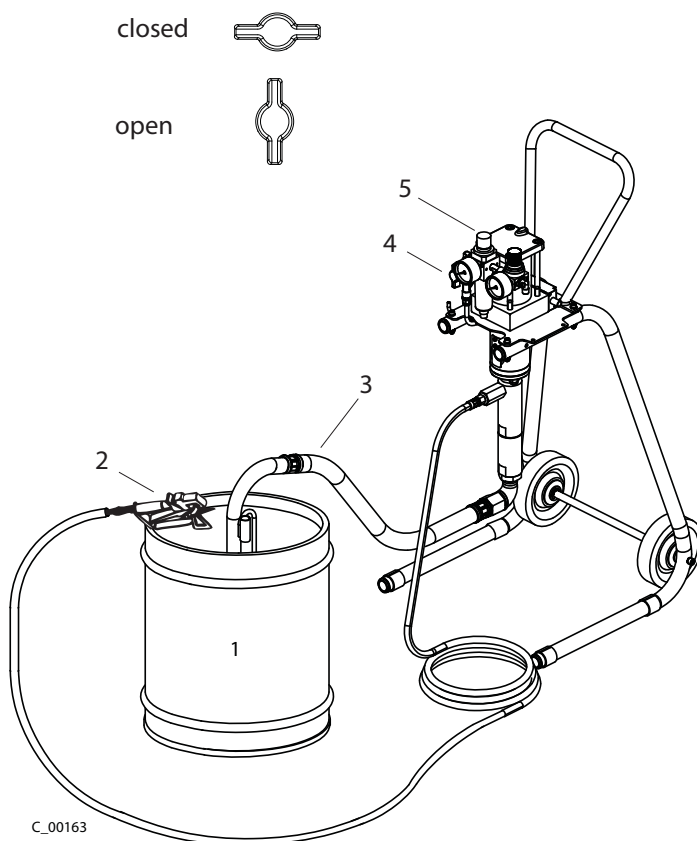


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5.2.3 BASIC WASHING

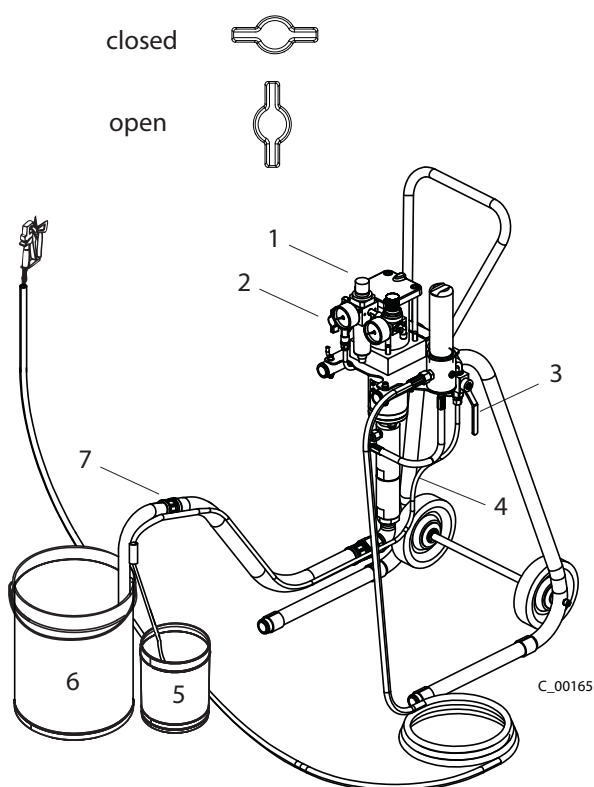
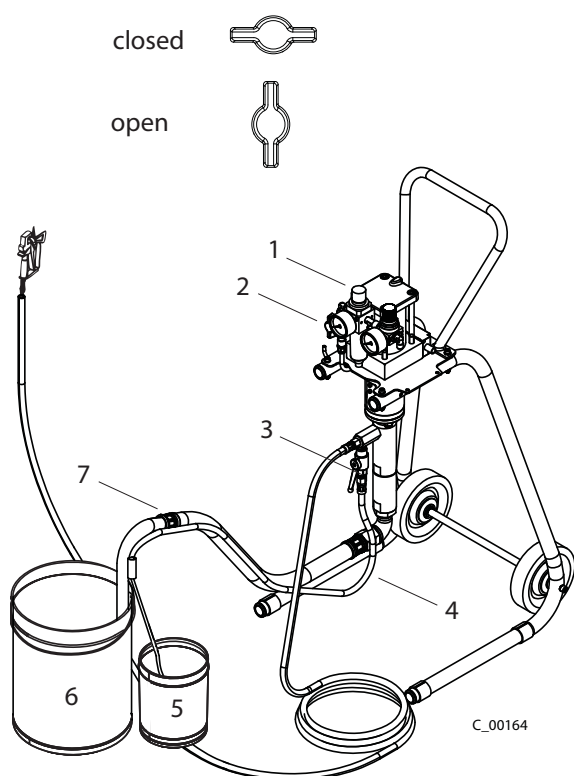
a) Models without recycle kit

1. Remove nozzle from gun. Refer to gun manual.
2. Place suction hose (3) in container of detergent (1).
3. Slowly open the ball valve (4).
4. Adjust the pressure regulator (5) until the pump starts working.
5. Direct the spray gun without nozzle towards the container (1).
Warning: risk of material's sprayback! Protect body and eyes!
Continue washing the system until gun sprays clean detergent.
6. Close the ball valve (4) and depressurize the motor by pushing the gun trigger directing it without nozzle towards the container (1).
7. When the system is depressurized, close the spray gun.
8. Secure the spray gun.
9. Dispose of the container (1) content in compliance with the local regulations.



b) Models with recycle kit

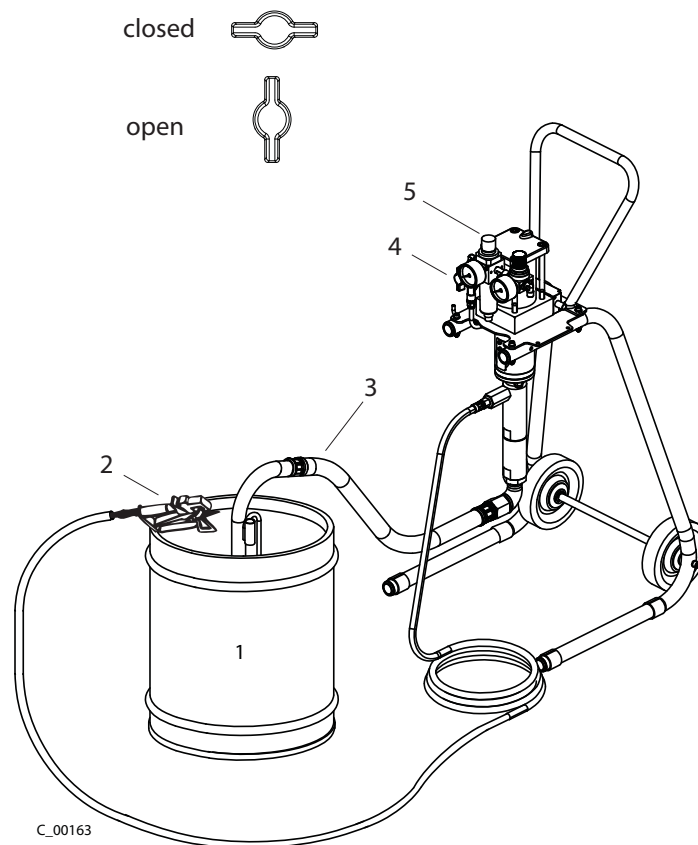
1. Place the empty container (5) under the return hose (4).
2. Place the suction flexible hose (7) inside the container with the detergent (6).
3. Open the return valve (3).
4. Slowly open the ball valve (2).
5. Adjust the pressure regulator (1) until the pump starts working.
6. Continue washing the system until the container (5) fills with clean detergent.
7. Close the ball valve (2).
8. Close the return valve (3).
9. Direct the spray gun without nozzle towards the container (5) and push the trigger.
10. Slowly open the ball valve (2).
11. Continue washing the system until gun sprays clean detergent.
12. Close the ball valve (2) and depressurize the motor either by opening the return valve (3) or by pushing the gun trigger directing it without nozzle towards the container (5).
13. When the system is depressurized, close the spray gun.
14. Secure the spray gun.
15. Dispose of the container (5) content in compliance with the local regulations.



5.2.4 FILLING WITH WORKING MATERIAL

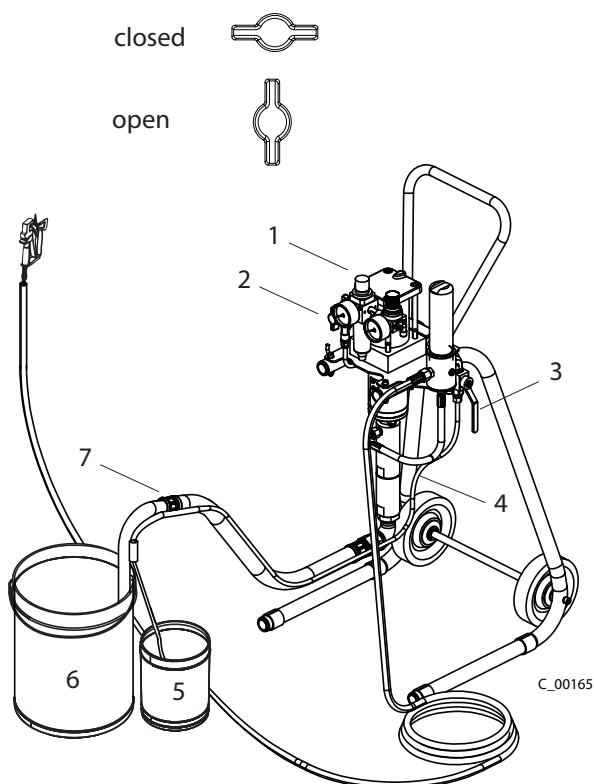
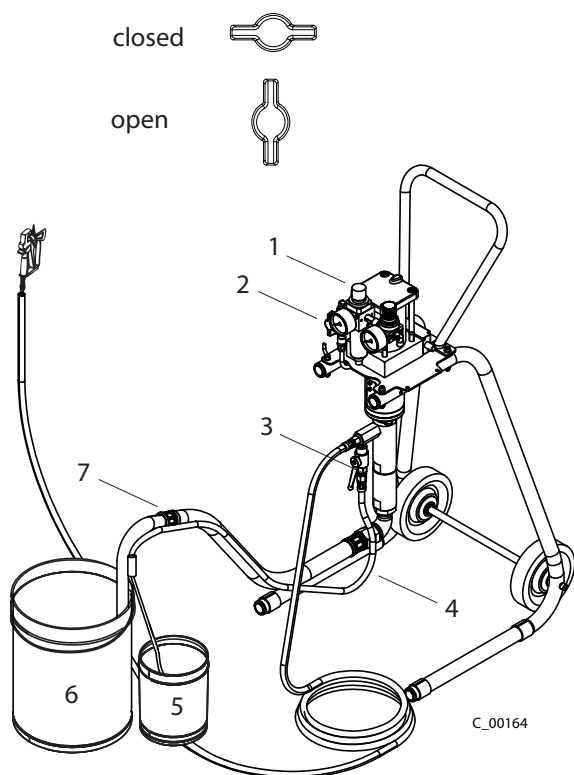
a) Models without recycle kit

1. Remove nozzle from gun. Refer to gun manual.
2. Place suction hose (3) in container of working material (1).
3. Slowly open the ball valve (4).
4. Adjust the pressure regulator (5) until the pump starts working.
5. Direct the spray gun without nozzle towards the container (1).
Warning: risk of material's sprayback! Protect body and eyes!
6. Acting on the pressure regulator (5), adjust the air pressure so that the pump can cycle regularly.
7. When pure material is delivered without air bubbles, close the ball valve (4) and depressurize the motor by pushing the gun trigger directing it without nozzle towards the container (1).
8. When the system is depressurized, close the spray gun.
9. Secure the spray gun.
10. Dispose of the container (1) content in compliance with the local regulations.



b) Models with recycle kit

1. Place the empty container (5) under the return hose (4).
2. Place the suction flexible hose (7) inside the container with working material (6).
3. Open the return valve (3).
4. Slowly open the ball valve (2).
5. Adjust the pressure regulator (1) until the pump starts working.
6. Acting on the pressure regulator (1), adjust the air pressure so that the pump can cycle regularly.
7. As soon as the return hose (4) starts delivering pure material, close the ball valve (2).
8. Close the return valve (3).
9. Direct the spray gun without nozzle towards the container (5) and push the trigger.
10. Slowly open the ball valve (2).
11. When pure material is delivered without air bubbles, close the ball valve (2) and depressurize the motor either by opening the return valve (3) or by pushing the gun trigger directing it without nozzle towards the container (5).
12. When the system is depressurized, close the spray gun.
13. Secure the spray gun.
14. Dispose of the container (5) content in compliance with the local regulations.

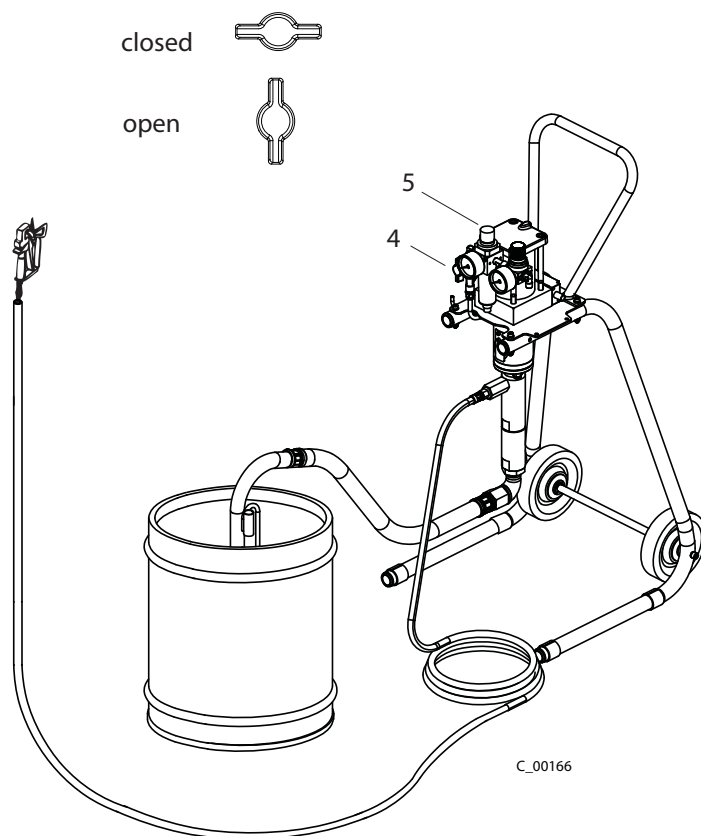


5.3 WORK

5.3.1 SPRAYING

a) Models without recycle kit

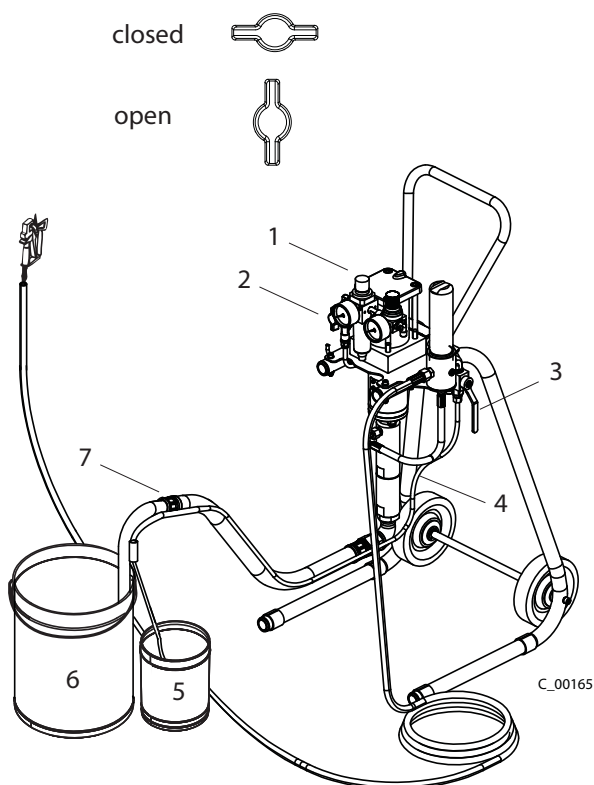
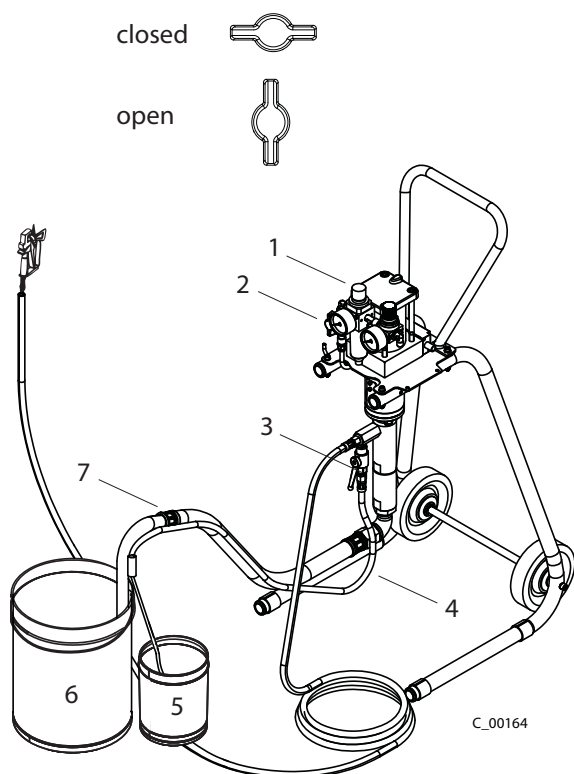
1. Insert the nozzle onto the spray gun and secure the latter.
2. Slowly open the ball valve (4).
3. By acting on the pressure regulator (5), set the desired working pressure.
4. Optimize the spraying shape as described in the spray gun directions for use.
5. Start working.



	! WARNING Overpressure! Risk of injury from bursting components. → Frequently check for blocked recirculation pipe - the pipeline must be completely free.
---	---

b) Models with recycle kit

1. Insert the nozzle onto the spray gun and secure the latter.
2. Close the valve (3).
3. Slowly open the ball valve (2).
4. By acting on the pressure regulator (1), set the desired working pressure.
5. Optimize the spraying shape as described in the spray gun directions for use.
6. Start working.



	! WARNING Overpressure! Risk of injury from bursting components. → Frequently check for blocked recirculation pipe - the pipeline must be completely free.
---	---

5.3.2 WORK STOP

1. Close spray gun.
2. Close ball valve (2 - models with recycle, 4 - models without recycle).
3. Depressurise the system opening the valve (3) or opening the gun in models without recycle kit.
4. Close and secure the gun.

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.

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5.3.3 FINISHING WORK 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.

	 WARNING
	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.

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7. Put the whole system back together.
8. Check the level of the separating fluid -> Paragraph 5.2.2.
9. Fill the system with solvent as laid down in Paragraph 5.2.4 „Filling with working material“.

	 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. Fill separating fluid cup with separating fluid.

Procedure:

1. Carry out Paragraph 5.3.3 „Shutting down and cleaning“, points 1 through 9.
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	Cause	Solution
The pump does not work	• Air motor does not work or stops	• Open and close ball valve on the pressure regulator unit or disconnect temporarily the feeding of compressed air
	• No pressure indication (pressure regulator defect)	• Disconnect temporarily the feeding of compressed air or repair or change pressure regulator
	• Spray nozzle is clogged	• Clean nozzle as laid down in the instructions
	• Insufficient supply of compressed air	• Check compressed air supply
	• Filter insert in spray gun or high-pressure filter is clogged	• Clean the parts and use a suitable working material
	• Material feed pump or high-pressure hose are blocked (e.g., two-component material hardened)	• Dismantle the paint pump and clean, replace high-pressure hose.
	• Sometimes the pump stops on one of the commutation points.	• Press the starter button on the steering valve to have the pump restart • Carefully clean and, if necessary, lubricate with light oil the sliding spool of the steering valve
Poor spray pattern	• See gun instructions	
Irregular operation of material feed pump: spray jet collapses (pulsation)	• Viscosity too high	• Dilute working material
	• Spraying pressure too low	• Increase incoming air pressure, use smaller nozzle
	• Valve stuck	• Clean material pump, if necessary leave to soak in solvent
	• Foreign body in suction valve	• Dismantle suction valve housing, clean and check valve seat
	• Diameter of the compressed air line too small	• Assemble a larger incoming line-> technical data, paragraph 4.3.2
	• Valves, packings or pistons worn out	• Replace parts
	• Filter for control air or filter for work air is clogged	• Check filter and clean it
	• In case of critical products or applications, it might be advisable to use an antipulsator/filter device	

Trouble shooting and solution

Problem	Cause	Solution
Pump runs evenly, however does not suck up material	• Union nut of the suction system is loose, pump is taking in air	• Tighten
	• Suction filter clogged	• Clean filter
	• Ball in suction or piston valve is sticking	• Clean with solvent (if necessary vent device)
Pump runs when the gun is closed	• Packings, valves or pistons worn	• Replace parts
Air motor iced up	• A lot of condensation water in the air supply	• Install a water separator

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.

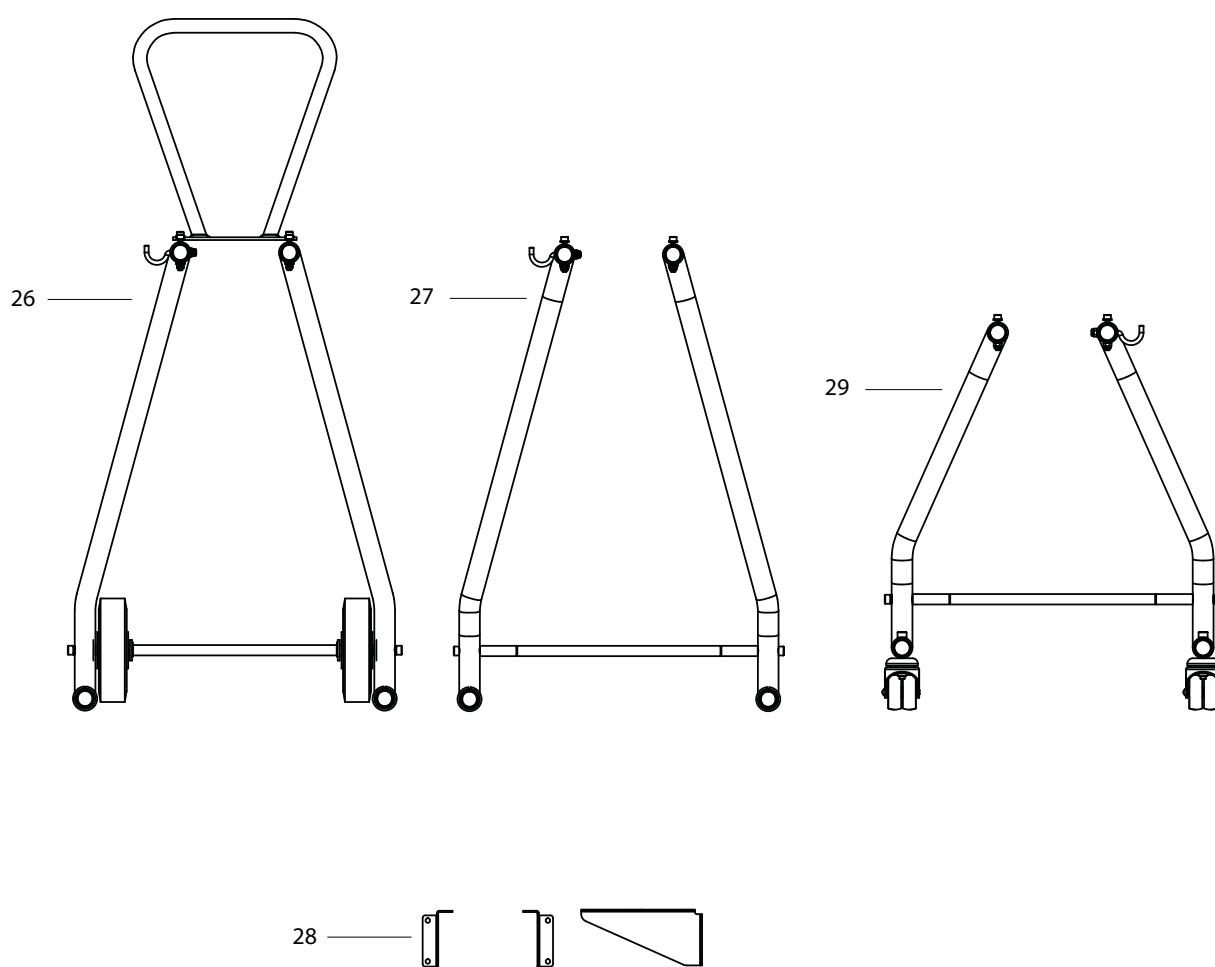
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1. Check the level of separating fluid in the separating fluid cup every day, and top up if necessary.
2. Check and clean the high-pressure filter every day or as required.
3. Every shut down should be carried out as laid down in paragraph 5.3.3 !
4. Check and replace if necessary hoses, tubes, couplings every days.

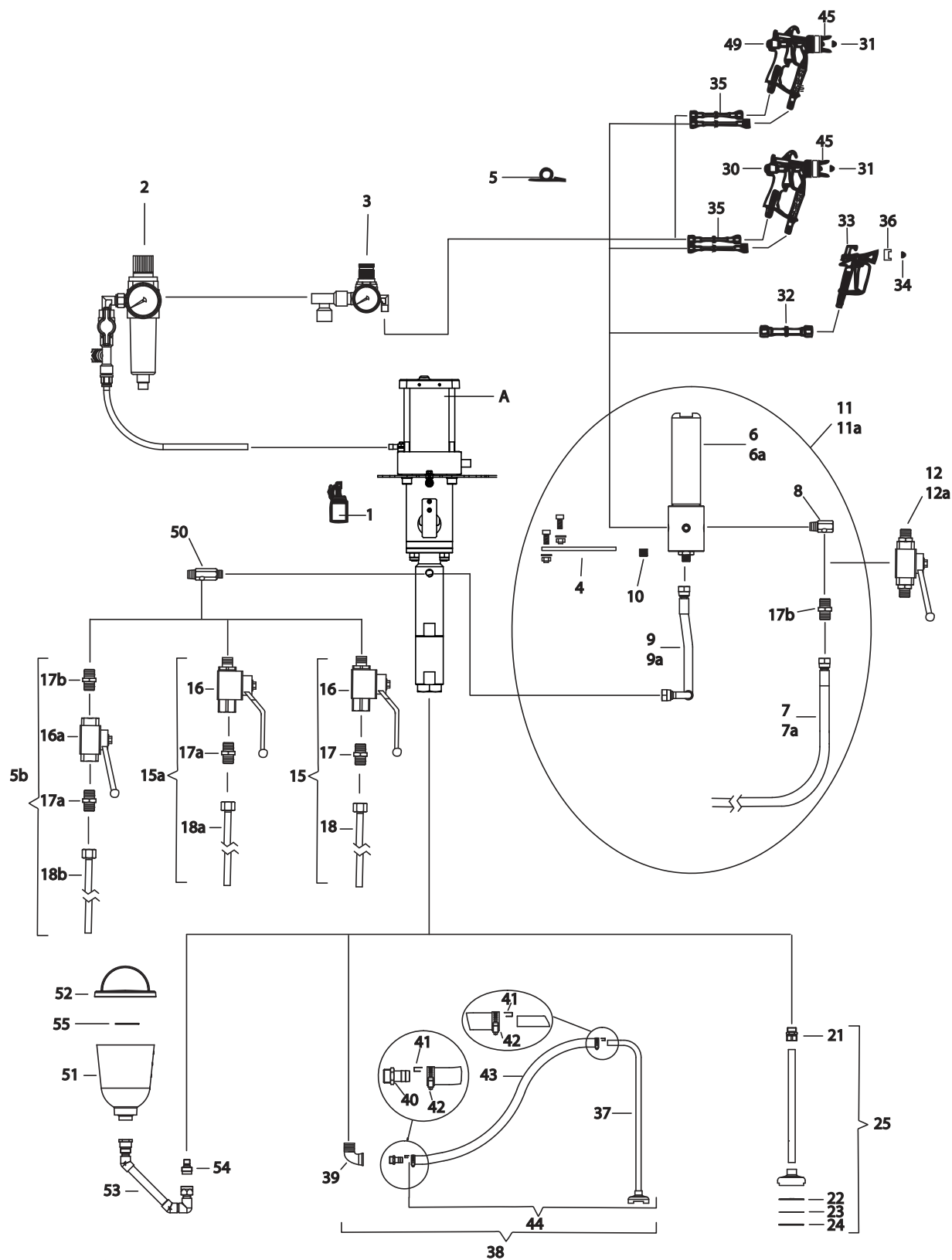
WAGNER recommends to check the whole spray system every year from a technical expert (e.g. WAGNER service technician).

7 ACCESSORIES

7.1 ACCESSORIES



C_00169



C_00171

List accessories EvoMotion		40-15	20-30
Pos K	Description	No	No
A	Piston pump (Stainless steel fluid section)	U1S40015P	U1S20030P
1	Release agent 250ml; 250cc	9992504	9992504
1	Release agent 500ml; 500cc	9992505	9992505
2	Air regulator	T6140.00A	T6140.00
3	AC pressure regulator	T6145.00A	T6145.00A
4	Filter holder	T6146.00	
5	Ground wire 3m; 9.8ft	0236219	0236219
6	Carbon steel antipulsator/filter	T405.00M	
6a	Stainless steel antipulsator/filter	T479.00M	
7	Recycle hose NPS1/4" with carbon steel fittings	S801.00B	
7a	Recycle hose NPS1/4" with SSt fittings	S801.00A	
8	Outlet fitting of the antipulsator/filter	B0462.03	
9	Pump/filter connection hose with carbon steel fittings	S802.00	
9a	Pump/filter connection hose with SSt fittings	S802.00A	
10	Cap BSP 1/4"	M826.03A	
11	Carbon steel antipulsator/filter kit	T6195.00M	
11a	Stainless steel antipulsator/filter kit	T6195.00MI	
12	Carbon steel recycle valve kit	T6165.00MB	
12a	Stainless steel recycle valve kit	T6165.00MCI	
15	Carbon steel recycle kit	T6165.00M	
15a	Stainless steel recycle kit with rigid pipe	T6165.00MI	
15b	Stainless steel recycle kit with flexible hose	T6165.00MAI	
16	Carbon steel valve M/F 1/4"	M501.00	
16a	Stainless steel valve F/F 1/4"	M534.00	
17	Carbon steel nipple BSP 1/4"	M614.62	
17a	Stainless steel nipple BSP 1/4"	M801.03B	
17b	Stainless steel nipple BSP 1/4" x NPS1/4"	M8018.03	
18	Recycle hose with brass fitting	S401.00M	
18a	Recycle hose with SSt BSP 1/4" fitting	S401.00MI	
18b	Recycle hose with SSt NPS 1/4" fitting	S801.00	
21	Fitting 1/2" x 16	M265.00	M265.00
22	Filter support disk	H401.07	H401.07
23	Suction hose filter	T453.03	T453.03
24	Suction hose spring	H206.03	H206.03
25	Straight carbon steel suction pipe	T4016.00	T4016.00M
26	Trolley	T760.00SR	T760.00SR
27	Stand	T760.00S	T760.00S
28	Wall plate kit	T760.00M	T760.00M
29	Hopper stand kit	T6196.00	

List accessories EvoMotion		40-15	20-30
Pos K	Description	No	No
30	Air Coat spray gun with filter GM4600AC NPSM1/4"	0394014	0394004
31	Nozzle ACF3000 *	0379 ...	0379 ...
32	Flex. hose NPS 1/4 , DN3, L 7,5 m	9984583	-
32	Flex. hose NPS 1/4 , DN4, L 7,5 m	9984573	-
33	Airless spray gun AG-14 NPSM1/4, 270 bar, 3920 psi	0257017	-
34	Standard nozzle *	0090 ...	-
35	Flex.hose AC, NPSM1/4",DN4, L 7,5 m - PA-T	2309706	
35	Flex.hose AC, NPSM1/4",DN3, L 7,5 m - PA-T	9984595	
36	Contact guard assy	0335209	-
37	Suction pipe ST compl. met. part	T420.00	
38	ST flex. SSt 1/2 suction hose	T4016.00EI	
39	Stainless steel L-shaped fitting	M808.03B	
40	SSt flexible pipe holder	B274.03	
41	SSt contact clip	E0107.03	
42	Hose clamp	R601.00	
43	Solvent resistant suction hose	S402.00A	
44	Stainless steel ST suction hose	T406.00	
45	Air cap *	039491.	039491.
49	Air Coat spray gun with filter GM4100AC NPSM1/4"	0394002	
50	Pump - fluid hose adaptor fitting	B0461.03A	B0461.03
51	Hopper with filter	0340265	
52	Hopper cover	0340429	
53	Hopper suction pipe	0366950	
54	Hooper adaptor fitting BSP 1/2" x M36x2	0935050	
55	Hopper filter	0003756	

* see nozzle list in gun manual

7.2 SPRAYPACKS

Type	Part-No.	Consisting of accessories items
20-30		
EvoMotion 20-30 SSt Spraypack on mounting plate, with carbon steel recycle kit	U6S20030M20	A, 3, 15, 25
EvoMotion 20-30 SSt Spraypack on mounting plate, with carbon steel recycle kit, with GM4600AC gun	U6S20030M21	A, 3, 15, 25, 30, 31 (11/40), 35, 45
EvoMotion 20-30 SSt Spraypack on mounting plate, with Stainless steel recycle kit	U6S20030M40	A, 3, 15b, 38
EvoMotion 20-30 SSt Spraypack on mounting plate, with Stainless steel recycle kit, with GM4600AC gun	U6S20030M41	A, 3, 15b, 30, 31 (11/40), 35, 38, 45
EvoMotion 20-30 SSt Spraypack on cart with hopper kit, with Stainless steel recycle kit, with GM4600AC gun	U6S20030M61	A, 3, 15a, 30, 31 (11/40), 35, 45, 51, 52, 53, 54
40-15		
EvoMotion 40-15 SSt Spraypack on mounting plate, with carbon steel recycle kit	U6S40015M10	A, 15, 25
EvoMotion 40-15 SSt Spraypack on mounting plate, with carbon steel recycle kit, with AG-14AL gun	U6S40015M12	A, 15, 25, 32, 33, 34 (11/40)
EvoMotion 40-15 SSt Spraypack on mounting plate, with carbon steel recycle kit, with GM4600AC gun	U6S40015M21	A, 3, 15, 25, 30, 31 (11/40), 35, 45
EvoMotion 40-15 SSt Spraypack on mounting plate, with Stainless steel recycle kit	U6S40015M30	A, 15b, 38
EvoMotion 40-15 SSt Spraypack on mounting plate, with Stainless steel recycle kit, with AG-14AL gun	U6S40015M32	A, 15b, 32, 33, 34 (11/40), 38
EvoMotion 40-15 SSt Spraypack on mounting plate, with Stainless steel recycle kit with GM4600AC gun	U6S40015M41	A, 3, 15b, 30, 31 (11/40), 35, 38, 45

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

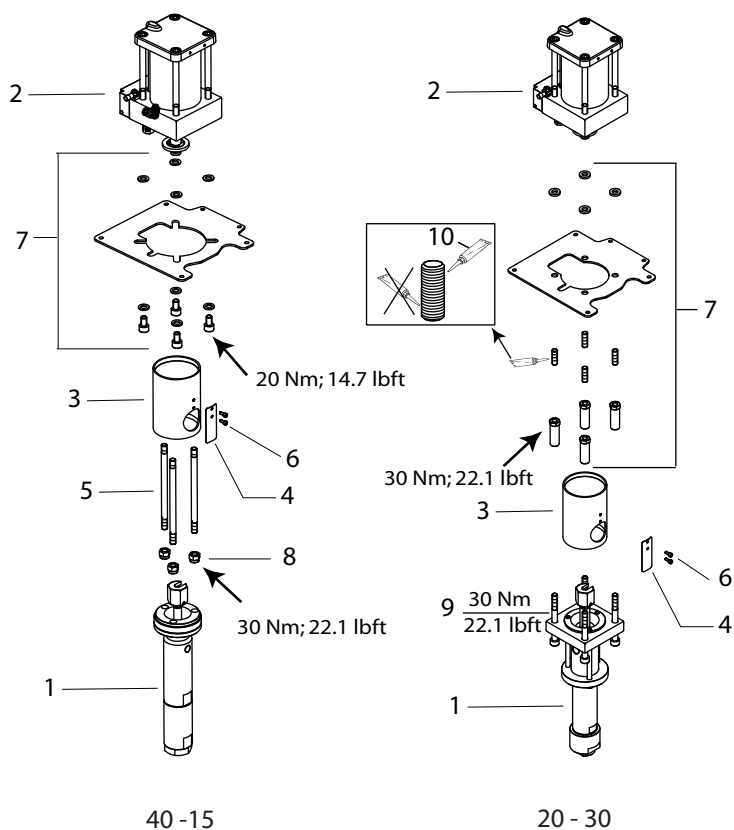
Note to column „K“ in the following spare parts lists.

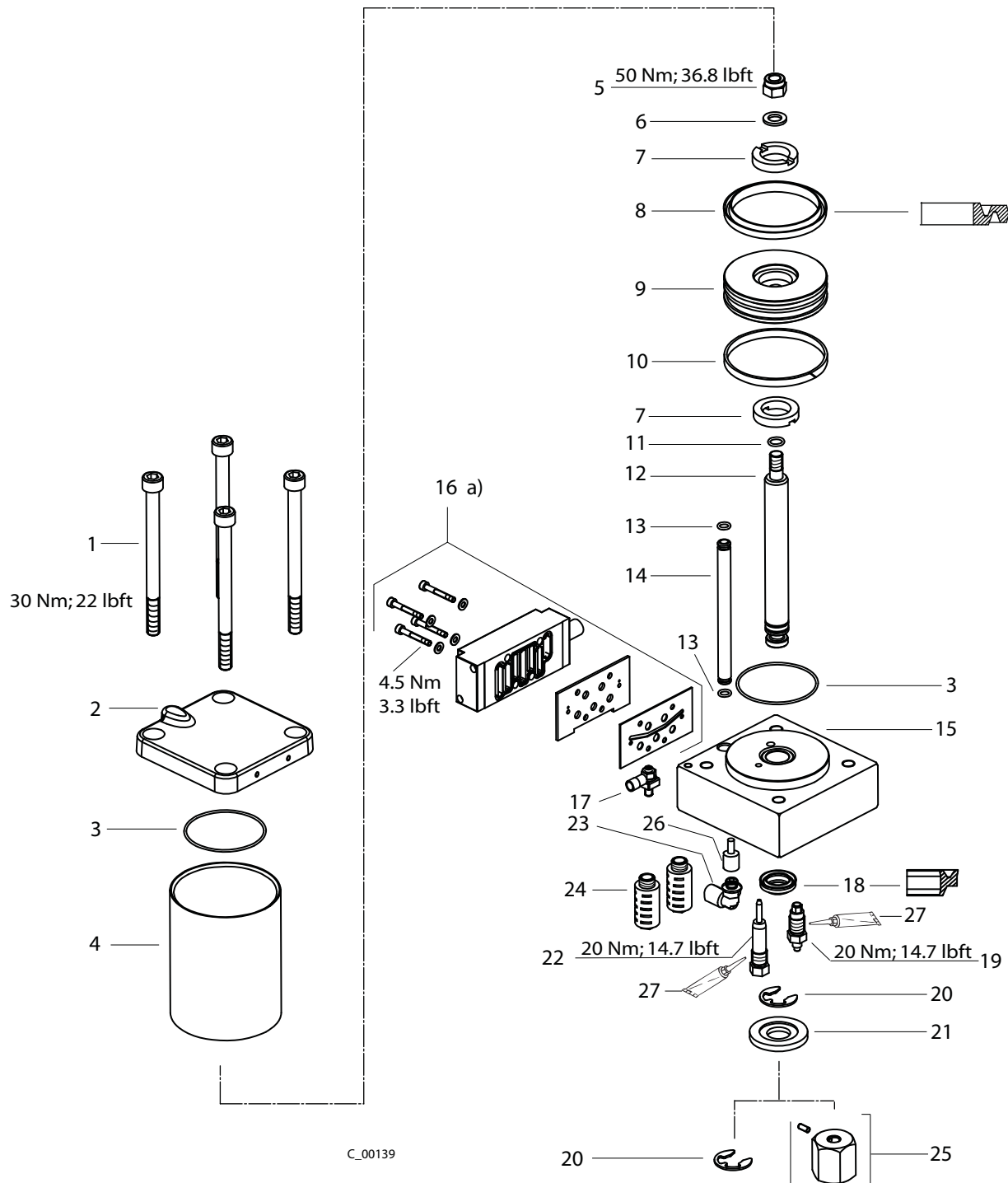
- ◆ = Wearing parts
Note: No liability is assumed for wearing parts
- = Not part of standard equipment, available, however, as additional extra.

	 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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8.2 OVERVIEW MODULES

EvoMotion		40 - 15		20 - 30	
Pos	Description	No.	Qty	No.	Qty
	Piston pump	U1S40015P	1	U1S20030P	1
1	Fluid section	U2B015AI	1	U2B030AI	1
2	Air motor	U3B08018060	1	U3B08018060	1
3	Spacer	A359.71A	1	A359.71A	1
4	Spacer/Guard	E516.71A	1	E516.71A	1
5	Tie-rod	H115.62	3	-	-
6	Socket screw	K144.62	2	K144.62	2
7	Pump mounting plate	T6147.00C	1	T6147.00A	1
8	Self-locking nut	K309.62	3	-	-
9	Socket screw	-	-	K176.62	4
10	Loctite 542	-	-	-	-



8.3 AIR MOTOR**8.3.1 AIR MOTOR EXPLODED VIEW 40 - 15, 20 - 30**

a) Reversing valve see following pages



WARNING

Incorrect maintenance/repair!

Risk of injury and damage to the equipment.

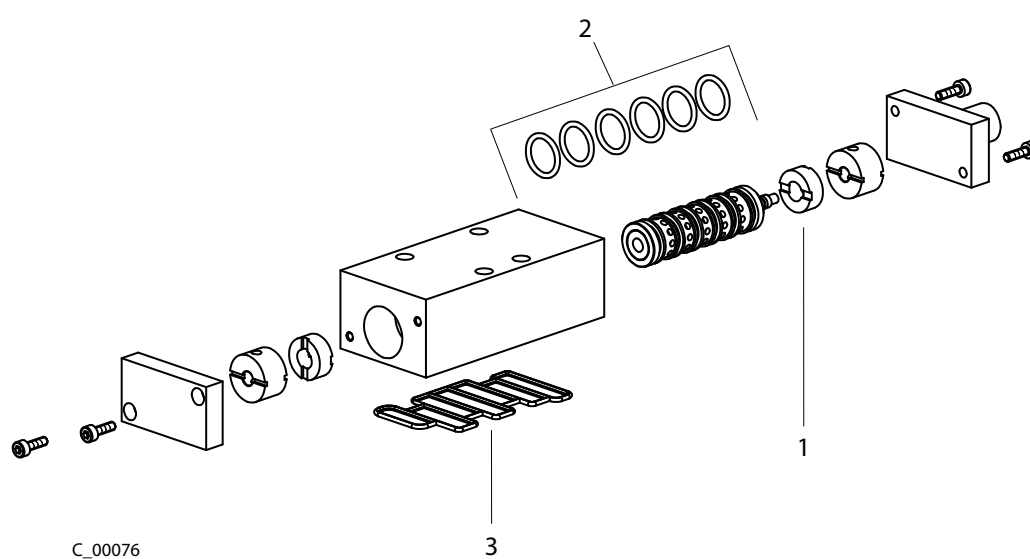
- Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center.
- Before all work on the unit and in the event of work interruptions:
 - Switch off the energy/compressed air supply.
 - Relieve the pressure from the spray gun and unit.
 - Secure the spray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

Spare parts list			40 - 15
Air motor 40 -15, 20 - 30			20 - 30
Pos	K	Description	Qty.
		Air motor	
			U3B08018060
1		Socket screw	4
2		Upper motor flange	1
3	★ ◆	O-Ring seal	2
4		Motor cylinder	1
5		Self-locking nut	1
6		Washer	1
7	★ ◆	Damper	2
8	★ ◆	Piston seal gasket	1
9		Motor piston	1
10	★ ◆	Slip band	1
11	★ ◆	O-Ring seal	1
12		Motor rod	1
13	★ ◆	O-Ring seal	2
14		Air pipe	1
15		Motor base	1
16	◆	Reversing valve	1
17		Earthing kit	1
18	★ ◆	Seal gasket	1
19	★ ◆	Lower feeler	1
20		Retaining ring	2
21		Reversing disc	1
22	★ ◆	Upper feeler	1

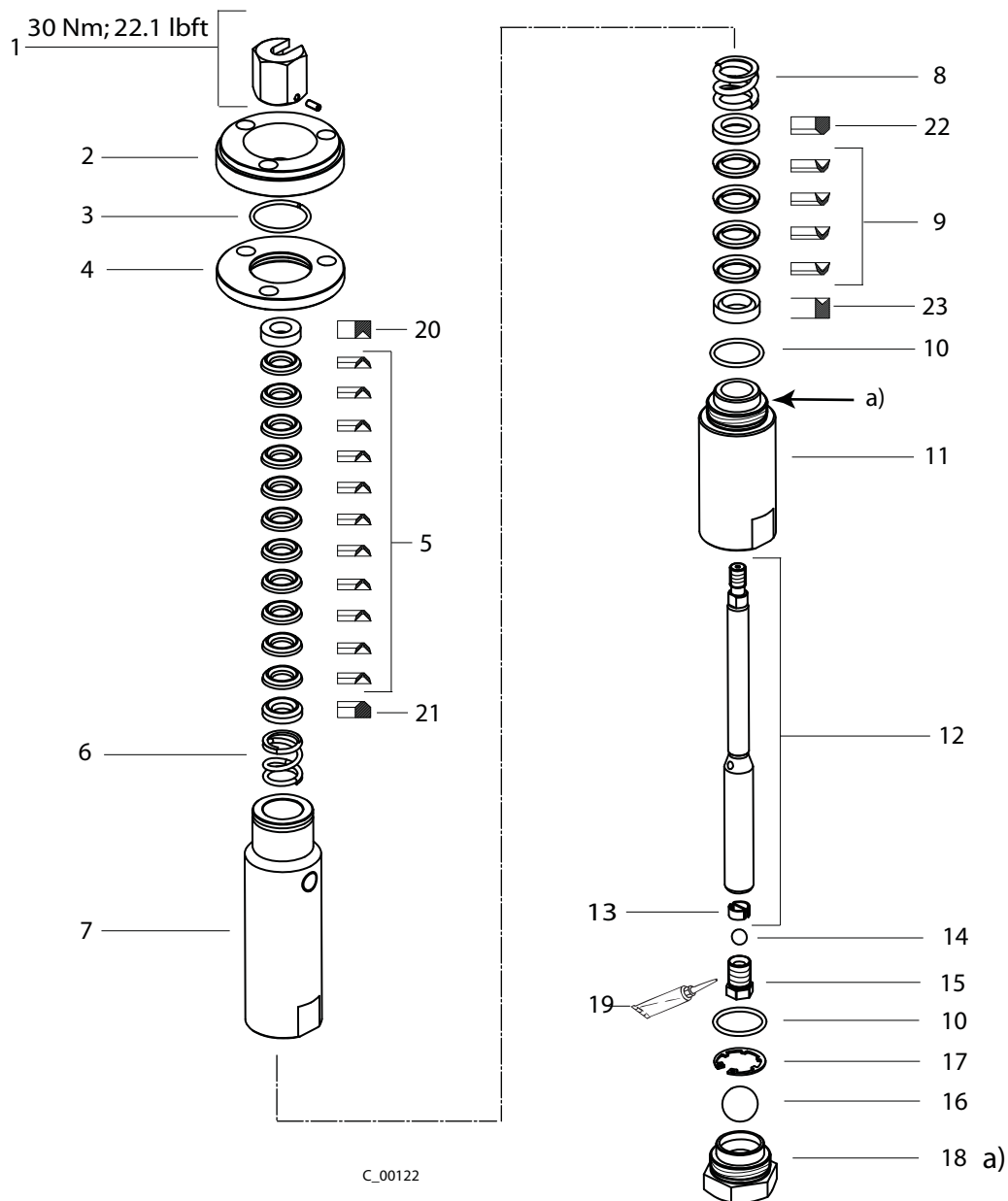
Spare parts list Air motor 40 -15, 20 - 30			40 - 15 20 - 30	
Pos	K	Description	Qty.	No.
23		Fitting	1	M339.00
24	◆	Muffler	2	H505.07
25		Connector	-	-
26		Straight fitting	1	M432.00
27		Loctite 542	-	-
		Service set	1	T910.00

◆ = Wearing parts

★ = Included in service set

8.3.2 REVERSING VALVE 40 - 15, 20 - 30

Spare parts list				40-15
Reversing valve 40 - 15, 20 - 30				20-30
Pos	K	Qty	Description	No.
			Reversing valve	P498.00
1		1	Damper	P520.00
2		6	O-Ring seal	L115.06
3		1	Valve base seal	P521.00

8.4 FLUID SECTION**8.4.1 FLUID SECTION EXPLODED VIEW 40 - 15**

a) Paint on with anti-seize paste (e.g. Loctite 8150)



! 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.

Spare parts list Fluid section 40 - 15

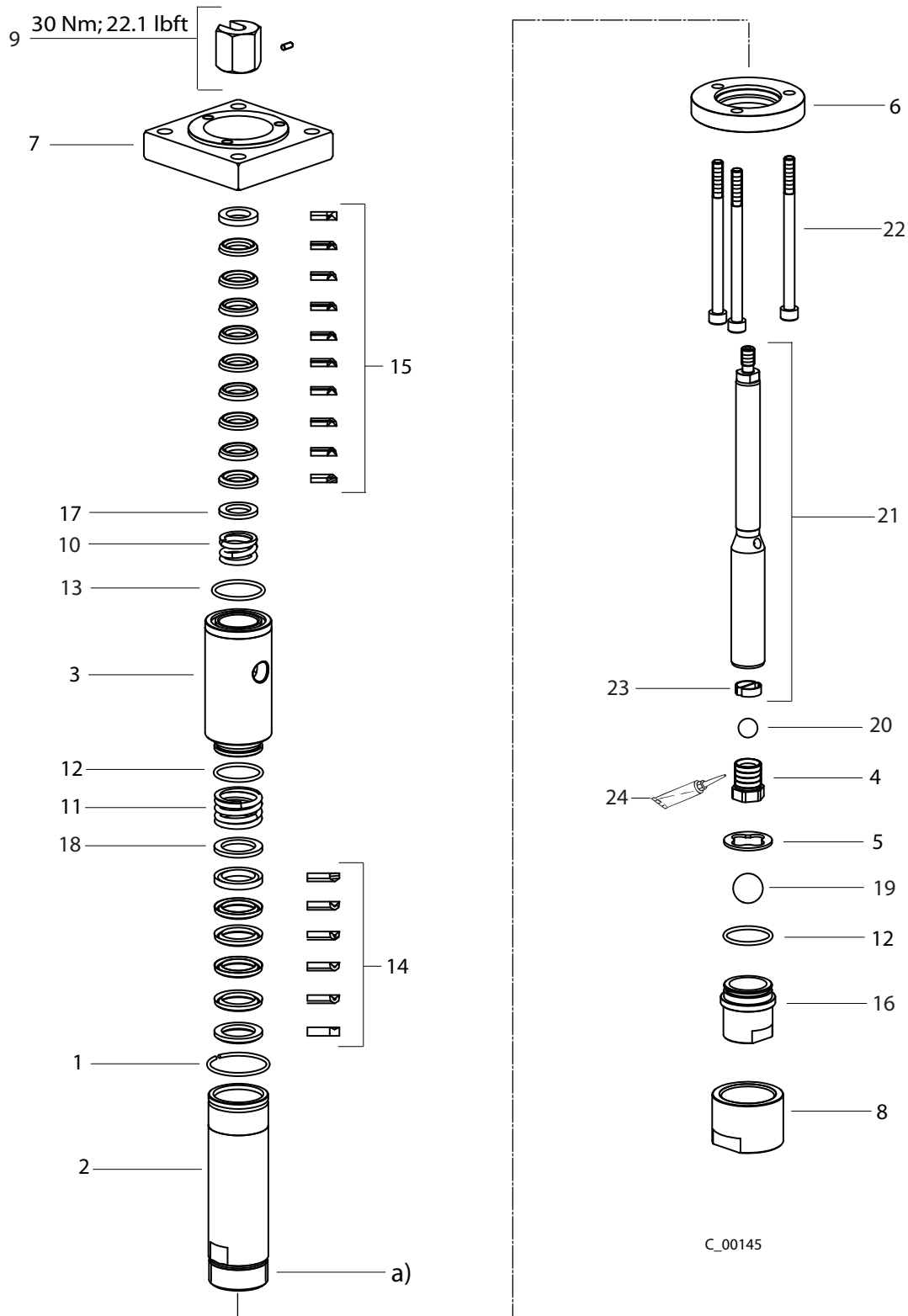
40-15

Pos	K	Qty	Description	No.
			Fluid section	U2B015AI
1		1	Connector	T6158.00
2		1	Pump flange	A661.12
3		1	Retaining ring	K617.03
4		1	Pump counterflange	A662.12
5	★◆	1	Upper packing	T9037.00E
6		1	Spring	H204.03
7		1	Pump upper body	A658.03
8		1	Spring	H203.03
9	★◆	1	Piston packing	T9038.00E
10	★◆	2	O-Ring seal (*)	L107.06
11		1	Pump lower body	B534.03
12	◆	1	Pump rod	T6157.00I
13		1	Rod valve stopper	A170.03
14	◆	1	3/8" Ball	K801.03
15	◆	1	Rod valve body	A169.03
16	◆	1	7/8" Ball	K803.03
17	◆	1	Ring	K601.03
18	◆	1	Pump foot	A660.03
19		-	Loctite 542	-
		1	Service set	T9039.00E
20		1	Female thrust bearing	A171.03
21		1	Male thrust bearing	A172.03
22		1	Male thrust bearing	A411.03
23		1	Female thrust bearing	A410.03

◆ = Wearing parts

★ = Included in service set

(*) = Elastomer parts - Always take new gaskets for reassembling

8.4.2 FLUID SECTION EXPLODED VIEW 20 - 30

a) Paint on with anti-seize paste (e.g. Loctite 8150)



! 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.

Spare parts list Fluid section 20 - 30

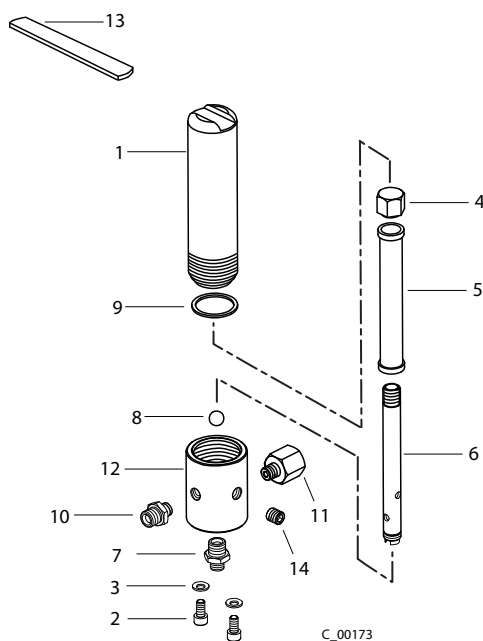
20 - 30

Pos	K	Description	Qty	No.
		Fluid section		U2B030AI
1		Ring	1	K640.02
2		Pump lower body	1	B0392.03
3		Pump upper body	1	B0391.03
4	◆	Rod valve body	1	A155.03
5		Ball stopper	1	A961.03A
6		Lower flange	1	B0387.62
7		Upper flange	1	B0388.62
8		Pump foot ring	1	B0389.03
9		M/P connector	1	T6158.00
10		Spring	1	H203.03
11		Spring	1	H222.03
12	★◆	O-Ring seal (*)	2	L170.06
13	★◆	O-Ring seal (*)	1	L112.06
14	★◆	Piston packing	1	T941.00G
15	★◆	Upper packing	1	T920.00D
16	◆	Pump foot	1	B0390.03
17		Flat thrust bearing	1	A114.03
18		Flat thrust bearing	1	B0099.03
19	◆	Ball 7/8"	1	K803.03
20	◆	Ball 9/16"	1	K802.03
21	◆	Pump rod	1	T6181.00
22		Socket screw M8x120	3	K1063.62
23		Ball stopper	1	A156.03
24		Loctite 542		
		Service set	1	T940.00G

◆ = Wearing parts

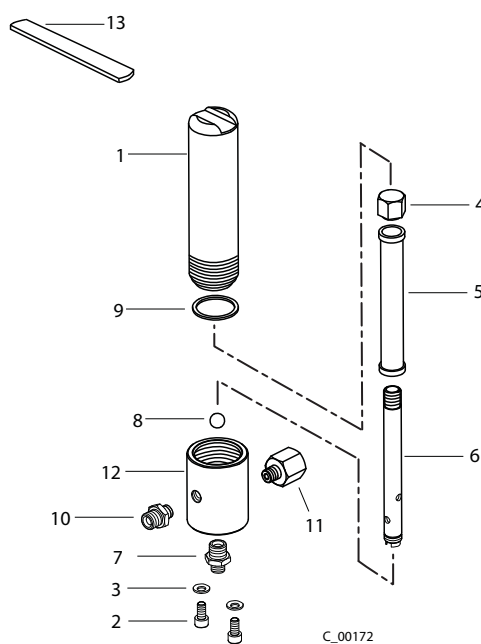
★ = Included in service set

(*) = Elastomer parts - Always take new gaskets for reassembling

8.5 ANTIPULSATOR/FILTER (OPTION)**8.5.1 CARBON STEEL ANTIPULSATOR/FILTER**

Pos	K	Description	Qty	No.
		Carbon steel antipulsator/filter		T405.00M
1		Antipulsator body	1	A291.22
2		Screw	2	K136.62
3		Contact washer	2	K572.62
4		Antipulsator cap	1	A292.71
5	◆	Antipulsator filter	1	T455.00
6	◆	Filter support	1	A364.04
7		Nipple 3/8 BSP x 1/4 NPS	1	M8022.03
8	◆	9/16" AISI 420 ball	1	K820.03
9	◆	Antipulsator seal gasket	1	G605.07
10		Nipple 1/4 BSP x 1/4 NPS	1	M8018.03
11		L-shaped fitting 1/4 BSP	1	B0462.03
12		Antipulsator base	1	A290.22
13		Antipulsator spanner	1	T803.62
14		Cap 1/4 BSP	1	M623.12

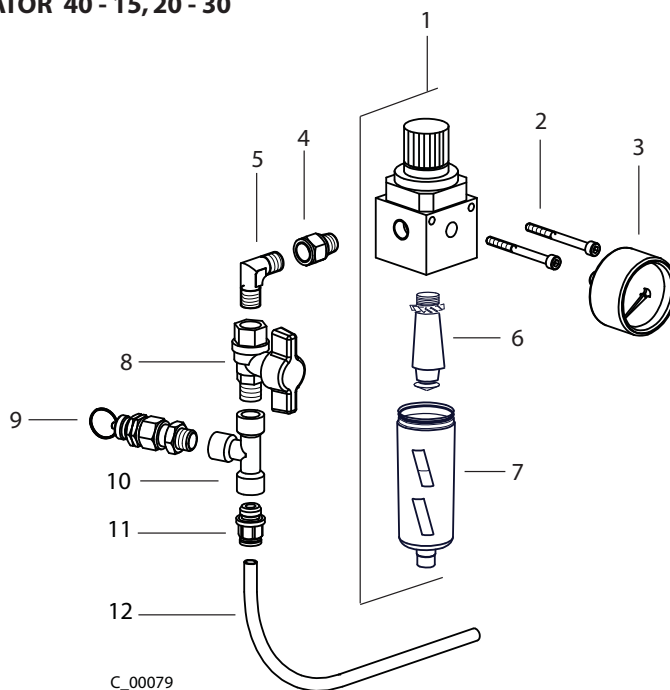
◆ = Wearing parts

8.5.2 STAINLESS STEEL ANTIPULSATOR/FILTER

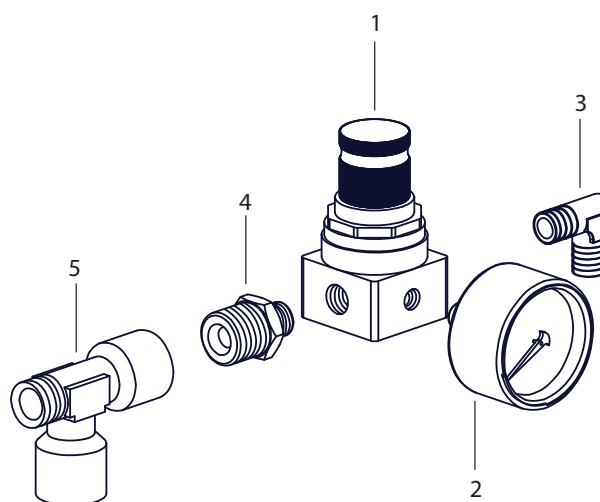
C_00172

Pos	K	Description	Qty	No.
		Stainless steel antipulsator/filter		T479.00M
1		Antipulsator body	1	B453.03
2		Screw	2	K136.62
3		Contact washer	2	K572.62
4		Antipulsator cap	1	A292.03
5	◆	Antipulsator Filter	1	T455.00
6	◆	Filter support	1	A364.03
7		Nipple 3/8 BSP x 1/4 NPS	1	M8022.03
8	◆	1/2" AISI 420 ball	1	K820.03A
9	◆	Antipulsator seal gasket	1	G605.07
10		Nipple 1/4 BSP x 1/4 NPS	1	M8018.03
11		L-shaped fitting 1/4 BSP	1	B0462.03
12		Antipulsator base	1	B271.03
13		Antipulsator spanner	1	T803.62

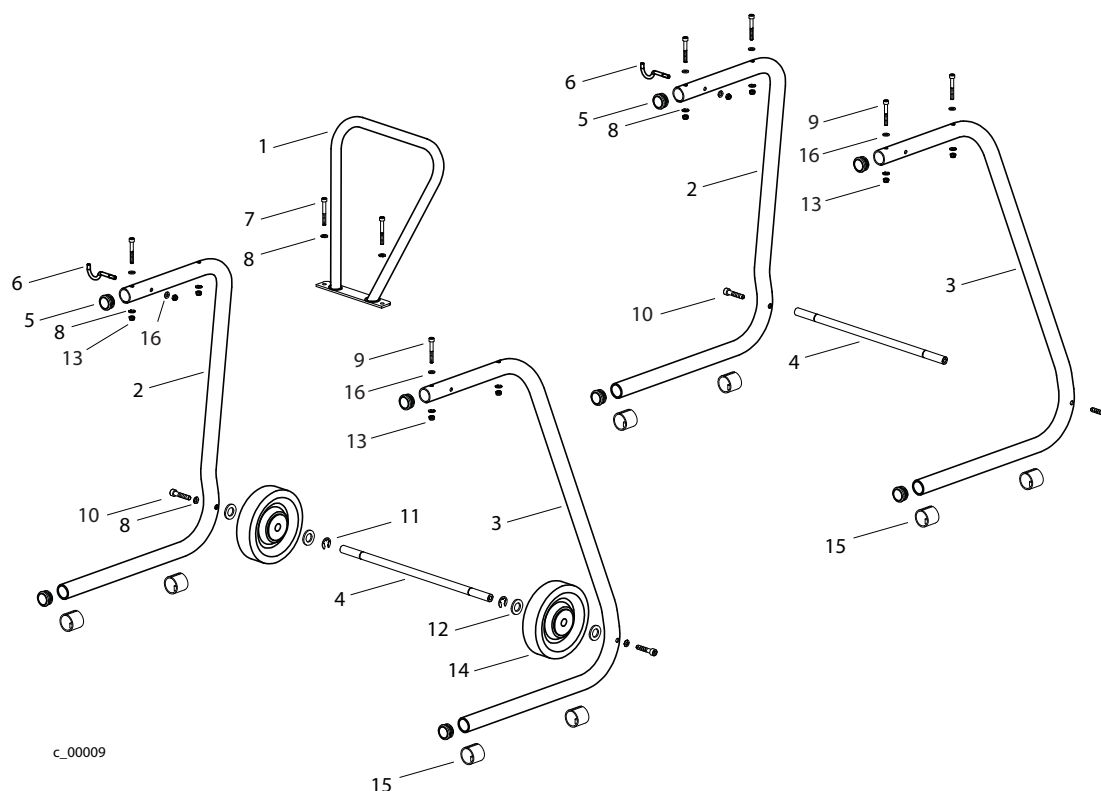
◆ = Wearing parts

8.6 AIR REGULATION UNIT KIT**8.6.1 AIR REGULATOR 40 - 15, 20 - 30**

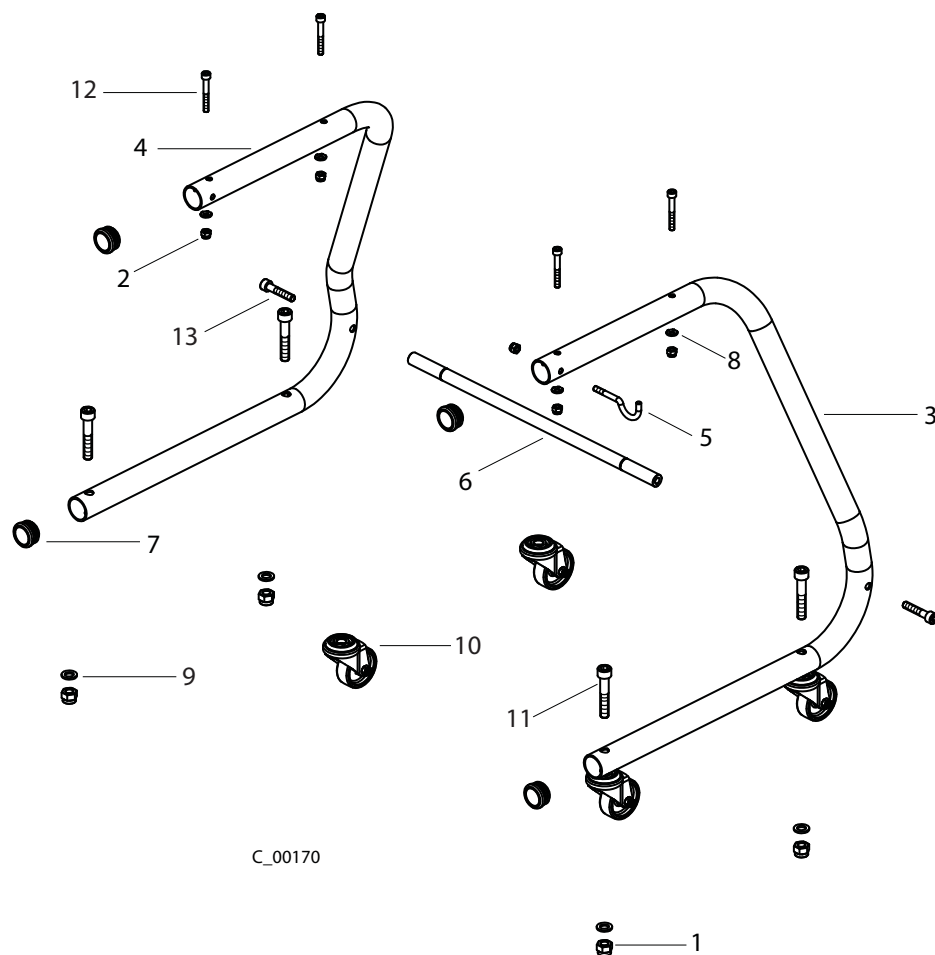
Spare parts list Air regulation unit			40 - 15	20 - 30
Pos.	Qty.	Description	No.	No.
		Air regulation unit	T6140.00A	T6140.00
1	1	Filter regulator	P124.00M	P124.00M
2	2	Screw M4x50	K166.62	K166.62
3	1	Pressure gauge	P903.00	P903.00
4	1	Fitting MF	M239.00	M239.00
5	1	L-shaped fitting MM	M215.04	M215.04
6	1	Filtering element	P247.00	P247.00
7	1	Filtering cup	P212.00A	P212.00A
8	1	Valve	M101.00	M101.00
9	1	Safety valve	P484.00C1	P484.00C0
10	1	Fitting T	M297.00	M297.00
11	1	Fast fitting	M226.04	M226.04
12	1	Motor connecting hose	S407.01	S407.01

8.7 AIR COAT REGULATION KIT

Spare parts list Air coat regulation kit			40 - 15 20 - 30
Pos.	Qty.	Description	No.
		Air coat regulation kit	T6145.00A
1	1	Air pressure regulator	P123.00
2	1	Pressure gauge	P903.00
3	1	L-shaped fitting MM 1/4"	M215.04
4	1	Conical nipple 1/4	M205.04
5	1	Fitting T FFM 1/4"	M218.04

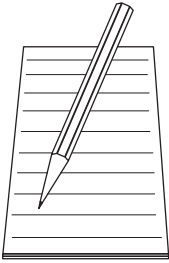
8.8 TROLLEY AND STAND KIT FOR 40 - 15, 20 - 30

Pos	K	Description	Qty.	Trolley No.	Qty.	Stand kit No.
		Trolley	1	T760.00SR	-	-
		Stand kit	-	-	1	T760.00S
1		Trolley handle Finishing	1	E3108.92	-	-
2		Left leg Finishing	1	E3107.92A	1	E3107.92A
3		Right leg Finishing	1	E3107.92	1	E3107.92
4		Support spacer Finishing	1	H1156.62	1	H1156.62
5		Plastic tip D30	4	R204.07	4	R204.07
6		Gun hook	1	H009.62	1	H009.62
7		Socket screw M6x50	2	K159.62	-	-
8		Contact washer	9	K564.72	-	-
9		Socket screw M6x45	2	K184.62	4	K184.62
10		Socket screw M8x40	2	K1015.62	2	K1015.62
11		Retaining ring 12	2	K607.02	-	-
12		Washer 16	4	K502.62	-	-
13		Low self-locking nut M6	5	K311.62A	5	K311.62A
14		Wheel diam. 150	2	R118.00	-	-
15		Plastic support	4	R244.07	4	R244.07
16		Washer 6	2	K505.62	-	-

8.9 HOPPER STAND KIT 40 - 15,20 - 30

Pos	K	Description	Qty.	No.
		Hopper stand kit	-	T6196.00
1		Self-locking nut M10	4	K309.62
2		Self-locking nut M6	5	K311.62
3		Right leg	1	E3107.92B
4		Left leg	1	E3107.92C
5		Gun hook	1	H009.62
6		Support spacer	1	H1156.62
7		Plastic tip d.30	4	R204.07
8		Contact washer 6	4	K564.72
9		Washer 10	4	K507.62
10		Steering wheel d.50	4	R120.00F
11		Socket screw M10x55	4	K123.62B
12		Socket screw M6x45	4	K184.62
13		Socket screw M8x40	2	K1015.62

OPERATING MANUAL



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OPERATING MANUAL

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Order number ZZB020ENG

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