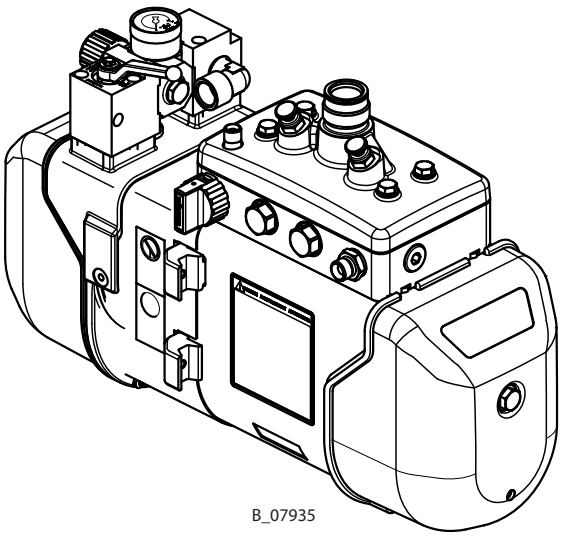

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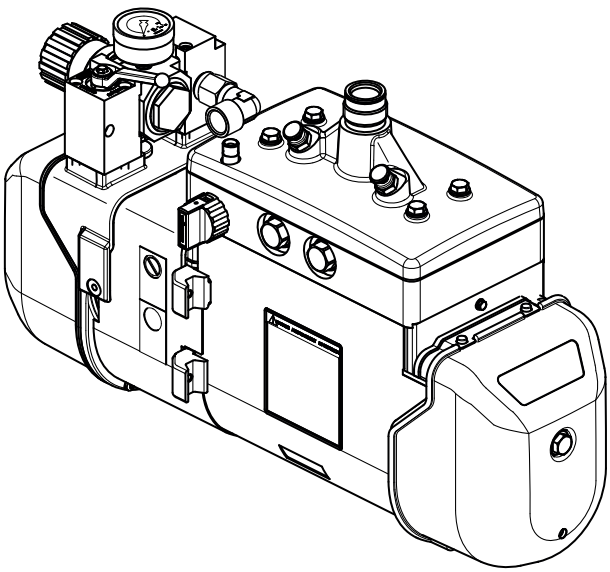


High-pressure double diaphragm pumps

Cobra 40-10; Cobra 40-25

Translation of the Original Operating Manual

CE Ex II 2 G Ex h IIB T6 Gb X

For professional use.
Always observe the information in this manual, particularly the safety instructions and the warning instructions. Store the manual in a safe place.

Edition: 05/2022

TABLE OF CONTENTS

1 ABOUT THESE INSTRUCTIONS

1.1 PREFACE

The operating manual contains information about safely operating, maintaining, cleaning and repairing the device. The operating manual is part of the device and must be available to the operating and service personnel.

The device may only be operated by trained personnel and in compliance with this operating manual. Operating and service personnel should be instructed according to the safety instructions.

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

1.2 WARNINGS, NOTICES AND SYMBOLS IN THESE INSTRUCTIONS

Warning instructions in this manual highlight particular dangers to users and to the device and state measures for avoiding the hazard.

These warning instructions fall into the following categories:

⚠	**DANGER**	Immediate risk of danger. Non-observance will result in death or serious injury.
⚠	**WARNING**	Potential danger. Non-observance may result in death or serious injury.
⚠	**CAUTION**	Potentially dangerous situation. Non-observance may result in minor injury.
ⓘ	**NOTICE**	Potentially dangerous situation. Non-observance may result in damage to property.
ℹ	**Info**	Provides information about particular characteristics and how to proceed.

Explanation of warning notice:

⚠ WARNING

This notice warns you of a danger!

Possible consequences of not observing the warning notice.

- The measures for preventing the hazard and its consequences.

1.3 GENERAL CHARACTERS AND SYMBOLS

The characters and symbols in this operating manual indicate the following:

✓ Requirement that must be fulfilled before an action can be performed.

1. Step 1 of an action to be performed with several action steps.
   - Second level action step
2. Step 2
   ⇨ Intermediate result of an action

⇨ Result of a complete action

- Action to be performed with an action step

1. Numbered list, first level
   – Numbered list, second level

- Non-numbered list, first level
  - Non-numbered list, second level

[⏩ 8] = cross-reference on page

♦ = wearing parts

⋆ = included in service set

● = not part of the standard equipment but available as a special accessory

1.4 LANGUAGES

The operating manual is available in the following languages:

Original operating manual

Language	Order no.
German	2340850

Translation of the original operating manual

Language	Order no.	Language	Order no.
English	2340851	Japanese	2346196
French	2340852	Czech	2401681
Spanish	2340854	Hungarian	2352542
Italian	2340853	Dutch	2367400
Russian	2345830	Portuguese	2424769
Chinese	2429146	Polish	2439396

Additional languages upon request or at: www.wagner-group.com

1.5 ABBREVIATIONS

Order no.	Order number
ET	Spare part
K	Marking in the spare parts lists
Pos	Position
Stk	Number of pieces
DH	Double stroke
2K	Two components
SSt	Stainless steel

1.6 TERMINOLOGY FOR THE PURPOSE OF THIS MANUAL

Cleaning

Cleaning	Manual cleaning of devices and device parts with cleaning agent.
Flushing	Internal flushing of paint-wetted parts with flushing agent.
Product pressure generator	Pump or pressure tank.

Personnel qualifications

Trained person	Is instructed in the tasks assigned to him/her, the potential risks associated with improper behavior as well as the necessary protective devices and measures.
Electrically trained person	Is instructed by an electrician about the tasks assigned to him/her, the potential risks associated with improper behavior as well as the necessary protective devices and measures.
Electrician	Can assess the work assigned to him/her and detect possible hazards based on his/her technical training, knowledge and experience in relevant provisions.
Skilled person in accordance with TRBS 1203 (2010/Revision 2012)	A person, who, based on his/her technical training, experience and recent vocational experience, has sufficient technical knowledge in the areas of explosion protection, protection from pressure hazards and electric hazards (if applicable) and is familiar with the relevant and generally accepted rules of technology so that he/she can inspect and assess the status of devices and coating systems based on workplace safety.

2 USING IN ACCORDANCE WITH THE INSTRUCTIONS

2.1 DEVICE TYPES

Double diaphragm pump and its spray packs:

Cobra 40-10

Cobra 40-25

2.2 TYPE OF USE

The device is suitable for processing liquid products like paints and lacquers:

- Non-ignitable products.
- Products in accordance with their classification in explosion class IIB.

WAGNER explicitly prohibits any other use!

The device may only be operated under the following conditions:

- Use the device only to work with the materials recommended by WAGNER.
- Do not deactivate safety fixtures.
- Use only WAGNER original spare parts and accessories.
- The operating personnel must be trained on the basis of this operating manual.
- Follow the instructions in the operating manual.

2.3 FOR USE IN POTENTIALLY EXPLOSIVE AREAS

The device can be employed in explosion hazard zones (Zone 1) (see Chapter Identification [▸▸ 11]).

2.4 PROCESSIBLE WORKING MATERIALS

Fluid products like paints and lacquers.

Application	Cobra 40-10	Cobra 40-25
Water-dilutable products	↗	↗
Solvent-based lacquers and paints	↗	↗
Two-component coating products	↗	↗
Emulsions	↗	↗
UV lacquers	↗	↗
Primers	→	↗
Epoxy and polyurethane lacquers, phenolic lacquers	↗	↗
Liquid plastics	→	→
Wax-based underside protection	↗	↗
Shear-sensitive lacquers	↗	↗

Signs and definitions:
↗ recommended
→ limited suitability
↘ not suitable

NOTICE

Abrasive working materials and pigments!

Greater wear of product-wetted parts.

- Use the application-oriented model (flow rate/cycle, product, valves, etc.) as indicated in the Chapter Technical Data.
- Check if the fluids and solvents being used are compatible with the pump construction materials as indicated in the Chapter Materials of Paint-wetted Parts.

Wear caused by abrasive working materials is not covered by the warranty.

Info

Contact your local WAGNER dealer and the lacquer manufacturer if you encounter application problems.

Typical applications

Application	Cobra 40-10	Cobra 40-25
Furniture industry	↗	↗
Kitchen manufacturers	↗	↗
Joinery	↗	↗
Window factories	→	↗
Steel-processing industry	→	→
Construction of vehicles	↗	↗
Shipbuilding	↘	↘

Signs and definitions:
↗ recommended
→ limited suitability
↘ not suitable

2.5 MISUSE

Misuse can lead to physical injury and/or property damage! Special attention must be paid that:

- No dry coating products, e.g., powder are processed.
- No food, medicine or cosmetics are processed. It is important to note that the device's materials are not food-safe.

3 IDENTIFICATION

3.1 EXPLOSION PROTECTION IDENTIFICATION

As defined in Directive 2014/34/EU (ATEX), the device is suitable for use in potentially explosive areas.

Device type	**Double diaphragm pumps** Cobra 40-10 and Cobra 40-25
Manufacturer	Wagner International AG 9450 Altstätten Switzerland

CE Ex II 2 G Ex h IIB T6 Gb X

CE	European Communities
Ex	Symbol for explosion protection
II	Device class II
2	Category 2 (zone 1)
G	Ex-atmosphere gas
Ex	Ignition protection
h	Ignition protection for non-electrical devices
IIB	Explosion group
T6	Maximum surface temperature < 85 °C; 185 °F
Gb	Zone 1 high safety level
X	Special notices (see chapter Identification "X")

3.2 IDENTIFICATION "X"

The maximum surface temperature corresponds to the permissible product temperature. This and the permissible ambient temperature can be found in Chapter Data [▸▸ 22].

Safe Handling of WAGNER Spray Devices

Mechanical sparks can form if the device comes into contact with metal.
In an explosive atmosphere:

- Knocking or pushing metal against metal is to be avoided.
- Do not drop the device.

Maximum surface temperature

The maximum surface temperature of the pump depends on the operating conditions (heated product) and not on the device (frictional heat).

Ignition temperature of the coating product

- Ensure that the ignition temperature of the surrounding gases (pumping product, cleaning agents) is higher than the maximum permitted surface temperature of the device.

Ambient temperature

The permissible ambient temperature range is: 10 °C to 60 °C; 50 °F to 140 °F.

Medium supporting atomizing

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

Electrostatic surface spraying

- Do not spray device parts using electrostatic equipment.

Cleaning

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

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

Air in the pump fluid

Ignitable gas mixtures can form if air enters the pump fluid.

- Prevent the pump from taking in air and running dry.
- If air has been taken in, fix the leak. Then, fill slowly and in a controlled manner until the air has escaped.

Air in the pumped liquid can be caused by damaged diaphragms.

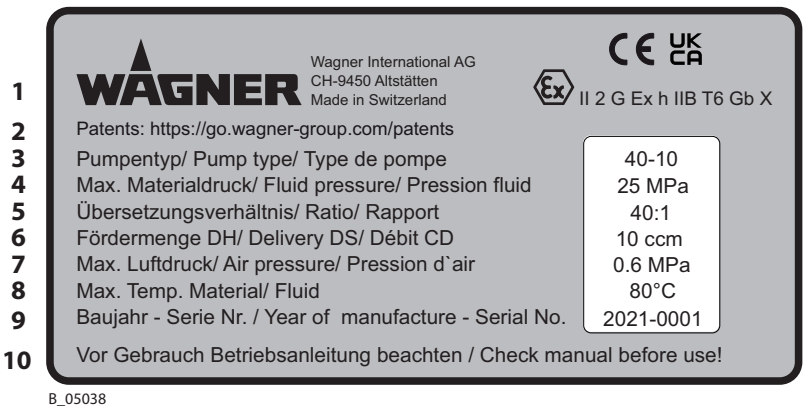
- Avoid operating the pump with damaged diaphragms.
- Periodically check that the pump is working smoothly, paying special attention to the presence of air in the pumped fluid.

Filling and emptying

Ignitable gas mixtures can form in the fluid section or product hoses if the pump must be emptied for maintenance and/or repair purposes.

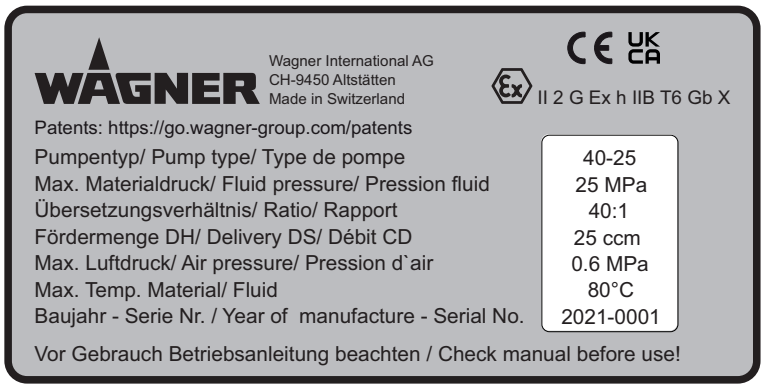
- Empty and fill the device slowly and in a controlled manner.
- Avoid potentially explosive atmosphere in the surroundings.

3.3 TYPE PLATES



Example type plate Cobra 40-10

1	Manufacturer and identification	6	Flow rate per double stroke
2	Link to the list of patents	7	Maximum air inlet pressure
3	Pump type	8	Maximum product temperature
4	Maximum product pressure	9	Model year - serial number
5	Pump ratio	10	Read operating manual before use!



Example type plate Cobra 40-25

4 BASIC SAFETY INSTRUCTIONS

4.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

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

4.1.1 Electrical Devices and Equipment

Danger of electric shock!

Danger to life from electric shock:

- Place and operate device in accordance with the existing safety requirements with regard to the operating mode and ambient influences.
- May only be maintained by skilled electricians or under their supervision. With open housings, the mains voltage poses a danger.
- Operate device in accordance with the safety regulations and electrotechnical regulations.
- Do not disconnect any plug connections during operation.
- Label plug connections with the warning "Do not disconnect when energized".
- Must be repaired immediately in the event of problems.
- Decommission if device poses a danger or is damaged.
- Must be de-energized before work is commenced.
  - Secure the device against being switched back on without authorization.
  - Inform personnel about planned work.
  - Observe electrical safety regulations.
- Ground all devices to a common grounding point.
- Only operate the device with a properly installed socket with a protective ground wire connection.
- Keep liquids away from electrical devices.

4.1.2 A Safe Work Environment

Danger due to dangerous fluids or vapors!

Severe or fatal injuries due to explosion danger or inhalation, swallowing or contact with the skin or eyes.

- Ensure that the floor in the working area is static dissipative in accordance with EN 1081:2018+A1:2020 or EN 61340-4-1:2004+A1:2015 (resistance must not exceed 100 MΩ).
- Paint mist extraction systems/ventilation systems must be fitted on site according to local regulations.
- Make sure that the ground connection and potential equalization of all system parts are reliable and continuous and can withstand the expected stress (e.g., mechanical stress, corrosion).
- Ensure that product hoses/air hoses adapted to the working pressure are used.
- Ensure that personal protective equipment is available and is used.

- Make sure that all people within the work area wear static dissipative shoes. Footwear must comply with EN 20344. The measured insulation resistance must not exceed 100 MΩ.
- Ensure that during spraying, persons wear static dissipative gloves. The grounding takes place via the spray gun's handle or its trigger.
- Protective clothing, including gloves, must comply with EN 1149-5. The measured insulation resistance must not exceed 100 MΩ.
- Ensure that there are no ignition sources such as naked flames, sparks, glowing wires, or hot surfaces in the vicinity. Do not smoke.
- Ensure that the pipe joints, hoses, equipment parts and connections are permanently, technically leak-proof:
  - Periodic preventative maintenance and service (replacing hoses, checking tightness strength of connections, etc.)
  - Regular monitoring of leaks and defects via visual inspection and odor testing, e.g., daily before commissioning, at the end of work or weekly.
- Ensure that maintenance and safety checks are performed regularly.
- In the event of defects, immediately bring the device or system to a stop and arrange to have repairs carried out immediately.

4.1.3 Personnel Qualifications

Danger due to incorrect use of device!

Risk of death due to untrained personnel.

- Ensure that the operating personnel has been instructed by the operator in accordance with the operating manual and the operating instructions. The device must only be operated, maintained and repaired by trained personnel. Refer to the operating instructions for information about the required personnel qualifications.

4.2 SAFETY INSTRUCTIONS FOR THE PERSONNEL

- Always observe the information in this manual, particularly the safety instructions and the warning instructions.
- Always follow existing regulations concerning occupational safety and accident prevention regulations.

Danger due to high-voltage field!

Danger to life from malfunction of active implants.

- Persons belonging to a risk group according to EMF guideline 2013/35/EU (e.g., carriers of active implants), must not enter the high-voltage area.

4.2.1 Personal Safety Equipment

Danger due to dangerous fluids or vapors!

Serious or fatal injuries due to inhalation, swallowing or contact with the skin or eyes.

- When preparing or working with lacquer and when cleaning the device, follow the working instructions of the manufacturer of the lacquers, solvents and cleaning agents being used.
- Implement the prescribed safety measures, in particular the wearing of safety glasses, safety clothing and protective gloves as well as the use of protective hand cream.
- Use a mask or breathing apparatus if necessary.

- For sufficient health and environmental safety: Operate the device in a spray booth or on a spraying wall with the ventilation (extraction) switched on.
- Wear suitable protective clothing when working with hot products.

4.2.2 Safe Handling of WAGNER Spray Devices

Danger due to injection of lacquer or flushing agent into the skin!

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

Avoid injection of lacquer or flushing agents:

- Never point the spray gun at people.
- Never reach into the spray jet.
- Perform the following measures before any work on the device, in the event of work interruptions and malfunctions:
  - Switch off the energy/compressed air supply
  - Relieve the pressure from the spray gun and device
  - Securing the Spray Gun Against Actuation
  - Disconnect the control unit from the mains
  - In the event of functional faults, remedy the fault as described in the chapter on troubleshooting and rectification.
- If needed, the liquid ejection devices must be checked by experts (e.g., WAGNER service technician) at least every 12 months for their work-safe condition in accordance with DGUV regulation 100-500 Chapter 2.29 and Chapter 2.36.
  - For shut down devices, the examination can be suspended until the next start-up.

In the event of skin injuries caused by lacquer or flushing agents:

- Note the lacquer or flushing agent that you have been using.
- Consult a doctor immediately.

Danger due to recoil forces!

Actuating the trigger can causes strong recoil forces. Thereby, the user can lose his balance and injure himself when falling.

Avoid risk of injury from recoil forces:

- Ensure that you have firm footing when operating the spray gun.

4.2.3 Grounding the Device

Danger due to electrostatic charge!

Risk of injury, explosion hazard and damage to the device.

Friction, flowing liquids and air or electrostatic coating processes create charges. Flames or sparks can form during discharge. Correct grounding of the entire spraying system prevents electrostatic charges.

- Ensure that all devices and tanks are grounded before each spraying process.
- Make sure that the ground and potential equalization of all system parts are performed reliably and continuously and can withstand the expected stress (e.g., mechanical stress, corrosion).
- Earth the workpieces being painted.
- Ensure that all persons inside the working area are grounded, e.g., that they are wearing static dissipative shoes.

- Wear static dissipative gloves when spraying. The grounding takes place via the spray gun's handle or its trigger.

4.2.4 Product Hoses

Danger due to bursting of product hose!

The product hose is under pressure and may cause dangerous injuries.

- Ensure that the hose material is chemically resistant to the sprayed products and the flushing agents used.
- Ensure that the product hoses and the fittings are suitable for the pressure generated.
- Ensure that the following information can be seen on the high-pressure hose:
  - Manufacturer
  - permissible operating pressure
  - Date of manufacture
- Make sure that the hoses are laid only in suitable places. Hoses should not be laid in the following places under any circumstances:
  - in high traffic areas
  - on sharp edges
  - on moving parts
  - on hot surfaces
- Ensure that the hoses are never run over by vehicles (e.g., fork lifts), or that the hoses are never put under pressure from the outside in any other way.
- Ensure that the hoses are never kinked. Observe maximum bending radii.
- Ensure that no work is ever performed with a damaged hose.
- Make sure that the hoses are never used to pull or move the device.
- The electrical resistance of the product hose, measured at both valves, must be less than 1 MΩ.
- Suction hoses may not be subjected to pressure.

4.2.5 Cleaning and Flushing

Danger due to cleaning and flushing!

Explosion hazard and damage to the device.

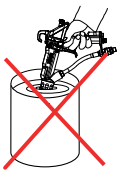
- Non-ignitable cleaning agents and flushing agents should preferably be used.
- When carrying out cleaning work with flammable cleaning agents, make sure that all equipment and resources (e.g., collection tank, funnel, transport cart) are conductive or static dissipative and grounded.
- Observe the specifications of the lacquer manufacturer.
- Ensure that the flash point of the cleaning agent is at least 15 K above the ambient temperature or that cleaning is undertaken at a cleaning station with technical ventilation.
- Never use chloride or halogenated solvents (such as trichloroethane and methylene chloride) with devices containing aluminium or galvanized/zinc-plated parts. They may react chemically thus producing an explosion danger.
- Take measures for workplace safety.

- It should be noted that when the device is put into operation or emptied: depending on the coating product used, depending on the rinsing agent (solvent) used, there may briefly be a mixture inside the pipes and equipment which can ignite.
- Only use electrically conductive tanks for cleaning and flushing agents.
- The tanks must be grounded.

An explosive gas/air mixture forms in closed tanks.

- Never spray into a closed tank when using solvents for flushing.

External Cleaning



When cleaning the exterior of the device or its parts, also observe the following:

- Relieve the pressure from the device.
- De-energize the device electrically.
- Disconnect the pneumatic supply line.
- Use only moistened cloths and brushes. Never use abrasive agents or hard objects and never spray cleaning agents with a gun. Cleaning the device must not damage it in any way.
- Ensure that no electric component is cleaned with or immersed into solvent.

4.2.6 Touching Hot Surfaces

Danger due to hot surfaces because of hot coating products!

Risk of burn injuries

- Only touch hot surfaces if you are wearing protective gloves.
- When operating the device with a coating product with a temperature of > 43 °C; 109 °F, apply a warning label to the device that says "Warning - Hot Surface."

Instruction label: Order no. 9998910

Protection label: Order no. 9998911

Info

Order the two labels together.

4.2.7 Maintenance and Repair

Danger due to improper maintenance and repair!

Danger to life and equipment damage.

- Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts.
- Repair or replacement of devices or parts of devices are only allowed to be performed outside the hazard area by qualified personnel.
- Use only WAGNER original spare parts and accessories.
- Do not change or modify the device; if change is necessary, contact WAGNER.
- Only repair and replace parts that are listed in Chapters Accessories [▸▸ 60] and Spare Parts [▸▸ 65] and that are assigned to the device.
- Do not use any defective components.
- Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, product hoses and all devices.
  - Secure the spray gun against actuation.

- Switch off the energy and compressed air supply.
- Disconnect the control unit from the mains.

- Observe the operating and service manual for all work.

4.2.8 Protective and Monitoring Equipment

Danger due to removal of protective and monitoring equipment!

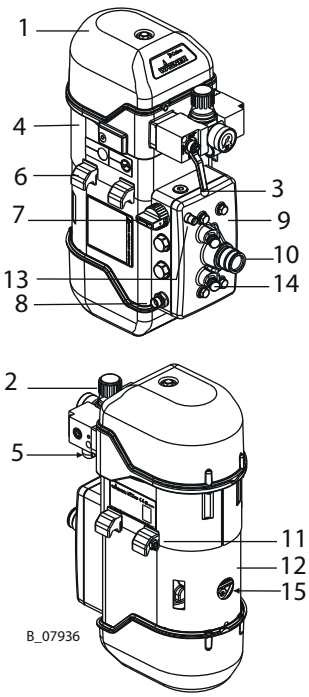
Danger to life and equipment damage.

- Protective and monitoring equipment must not be removed, modified or rendered unusable.
- Regularly check for perfect functioning.
- If defects are detected on protective and monitoring equipment, the system must not be operated until these defects are remedied.

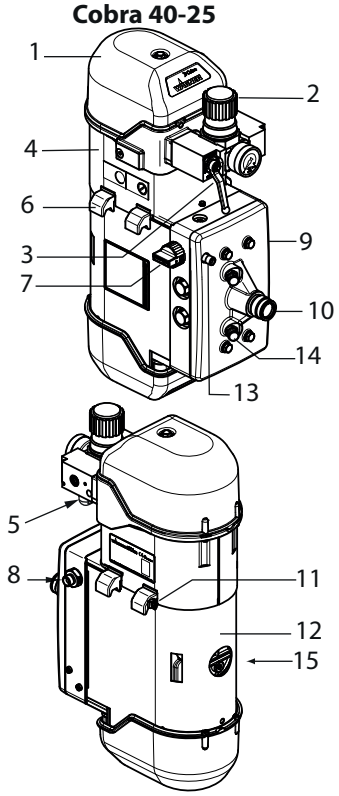
5 DESCRIPTION

5.1 COMPONENTS

Cobra 40-10



Cobra 40-25



1	Control housing with integrated silencer	9	Fluid section
2	Air pressure regulator	10	Product input
3	Ball valve	11	Grounding connection
4	Air motor	12	Pressure stage casing
5	Compressed air input	13	Return socket
6	Mounting flange	14	Valve depressor
7	Relief valve	15	Exhaust air opening
8	Product output		

5.2 FUNCTIONING

The double diaphragm pump is driven with compressed air. This compressed air moves the air piston in the air motor (4), and consequently the piston rod in the pressure stage (9), up and down. At the end of each stroke, the compressed air is redirected by a reversing valve and the control piston. The up-and-down movement of both diaphragms within the fluid section is produced by hydraulic oil, which is moved by the piston in the pressure stage. With every stroke of the piston rod, working product is sucked in and delivered to the spray gun at the same time.

5.2.1 Air Motor

The air motor with its pneumatic reverse (1) does not require pneumatic oil. The compressed air is fed to the motor via the air pressure regulator (2) and the ball valve (3).

5.2.2 Fluid Section

The fluid section (9) has been designed as a double diaphragm pump with exchangeable inlet and outlet valves. Change between spraying mode and product circulation mode using the relief valve (7).

5.3 PROTECTIVE AND MONITORING EQUIPMENT

⚠ WARNING

Overpressure!

Danger to life from bursting device components.

- Never change the safety valve setting.

The air motor is fitted with a safety valve. The safety valve has been set and sealed at the factory. In case of pressures over and above the permissible operating pressure, the valve, which is held with a spring, automatically opens and releases the excess pressure.

The control housing is equipped with noise insulation. Never operate the device without noise insulation.

5.4 EXTENT OF DELIVERY

Stk	Order no.	Designation
1	2329519	Diaphragm pump Cobra 40-10 consisting of: Fluid section, air motor, connection elements
1	2329521	Frame-mounted diaphragm pump Cobra 40-10 consisting of: Fluid section, air motor, connection elements
1	2329523	Diaphragm pump Cobra 40-25 consisting of: Fluid section, air motor, connection elements
1	2329525	Frame-mounted diaphragm pump Cobra 40-25 consisting of: Fluid section, air motor, connection elements

The standard equipment includes:

Stk	Order no.	Designation
1	322981	Sign
1	236219	Grounding cable, complete
1	341434	Double open-end wrench
1	See Chapter Declaration of Conformity [▸▸ 95]	Declaration of Conformity
1	2340850	Operating manual, in German
1	See Chapter Languages [▸▸ 7]	Operating manual in the local language

The delivery note shows the exact scope of delivery. Accessories: see Chapter Accessories [▸▸ 60].

5.5 DATA

5.5.1 Materials of the Parts Transporting Paint

Paint-wetted part	Material
Inlet housing	Consital (aluminum alloy)
Fluid Section	Consital (aluminum alloy)
Valves balls	Stainless steel
Valve seats/valve cone	Carbide
Diaphragms	PA-resistant
Valve fitting	1.4104

PA = polyamide

Positions of the individual parts: see Chapter Spare Parts [▸▸ 65].

5.5.2 Technical Data

Description	Units	Cobra 40-10	Cobra 40-25
Pump ratio		40:1	
Flow volume per double stroke (DH)	cm^3 / cc	10	25
	cu inch	0.6	1.5
Maximum operating pressure	MPa	25	
	bar	250	
	psi	3626	
Maximum possible strokes in operation	DH/min	200	
Minimum/maximum air inlet pressure	MPa	0.25 – 0.6	
	bar	2.5 – 6	
	psi	36.3 – 87	
Compressed air quality: free from oil and water	Quality standard 7.5.4 according to ISO 8573.1, 2010		
	7: Particle concentration 5–10 mg/m^3		
	5: Humidity: pressure dew point ≤ 7 °C		
	4: Oil content ≤ 5 mg/m^3		
Ø air inlet (inside thread)	inch	G 1/2"	
Minimum Ø of the compressed air supply line	mm	13	19
	inch	0.51	0.75
Air consumption at 0.6 MPa; 6 bar; 87 psi per double stroke	NL	3.5	8.3
Sound pressure level at maximum permissible air pressure*	dB(A)	74	76
Sound pressure level at 0.45 MPa; 4.5 bar; 65.27 psi air pressure*	dB(A)	72	74
Sound pressure level at 0.3 MPa; 3 bar; 43.5 psi air pressure*	dB(A)	69	71
Air motor piston diameter	mm	80	100
	inch	3.15	4
Product input (outside thread)	mm	M36×2	
Product output (inside thread)	inch	G 3/8"	
Product output (outside thread)	inch	G 3/8"	

Description	Units	Cobra 40-10	Cobra 40-25
Weight	kg; lb	19; 41.9	33; 72.8
Product pH value	pH	3.5 – 9	
Maximum product pressure at pump inlet	MPa bar psi	2 20 290	
Product temperature	°C °F	10 – 80 50 – 176	
Ambient temperature - Assembly and operation	°C °F	10 – 60 50 – 140	
Ambient temperature - Storage	°C °F	-20 – 60 -4 – 140	
Relative humidity	%	10–95 (without condensation)	
Allowable inclination for operation	∠°	± 10	
Hydraulic oil filling amount (approximate)	L cu inch	0.110 6.71	0.130 7.93

* Measured A-rated emission sound pressure level at distance of 1 m, LpA1m in accordance with DIN EN 14462: 2015. Reference measurements have been made by Suva (Swiss National Accident Insurance Fund).

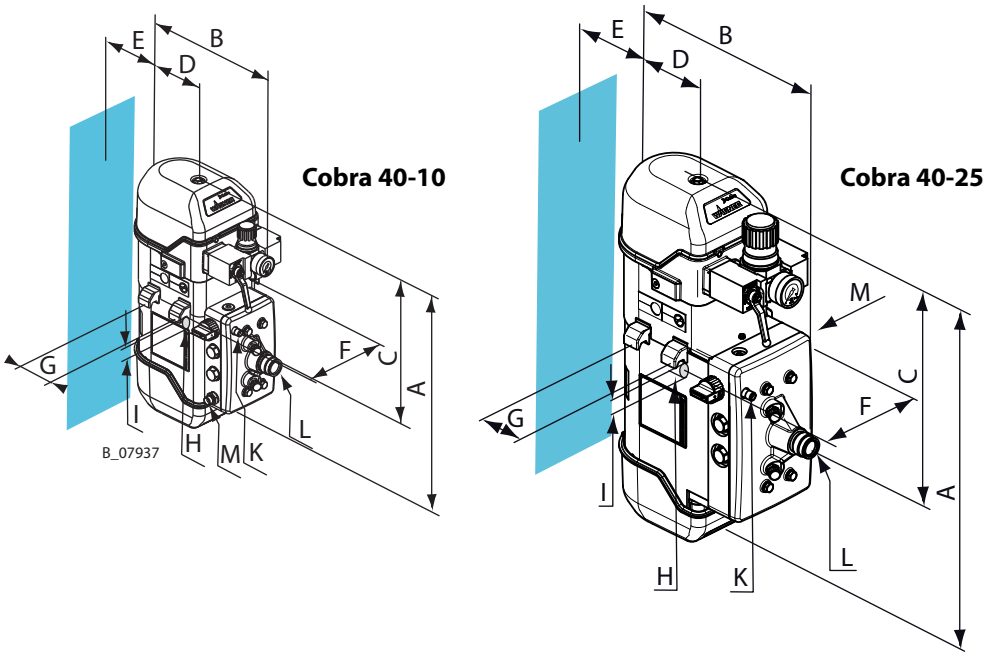
⚠ WARNING

Exhaust air containing oil!

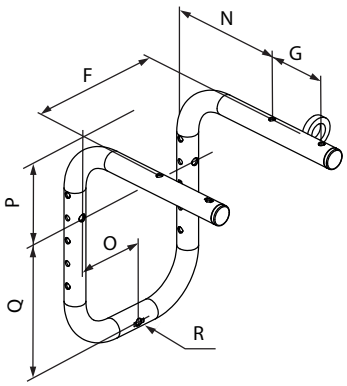
Risk of poisoning if inhaled.

- Provide compressed air free from oil and water.

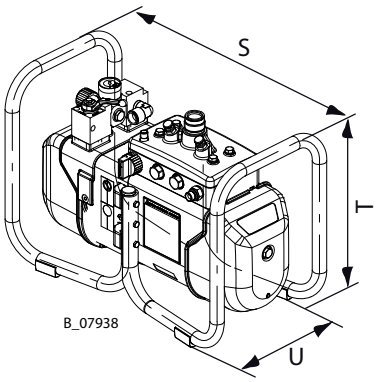
5.5.3 Dimensions and Connections



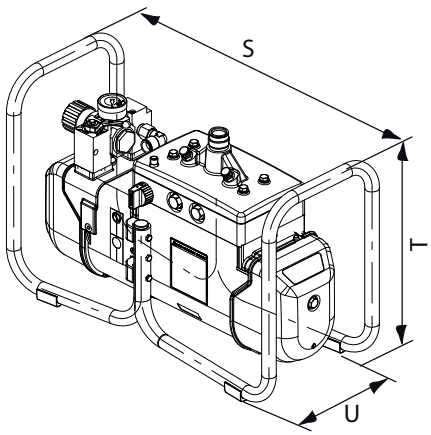
Pos	Cobra 40-10 mm; inch	Cobra 40-25 mm; inch
A	505; 19.88	605; 23.82
B	313; 12.32	379; 14.92
C	322; 12.68	373; 14.69
D	134; 5.28	
E	55; 2.16	
F	182; 7.16	
G	80; 3.15	
H	M6	
I	⌀ 25; ⌀ 0.98	
K	G1/4"	
L	M36×2	
M	G 3/8"A	
N	149; 5.87	
O	91; 3.58	
P	107; 4.21	
Q	175; 6.89	
R	⌀ 7; ⌀ 0.28	
S	525; 20.67	644; 25.35
T	367; 14.45	417; 16.42
U	275; 10.83	



Cobra 40-10



Cobra 40-25



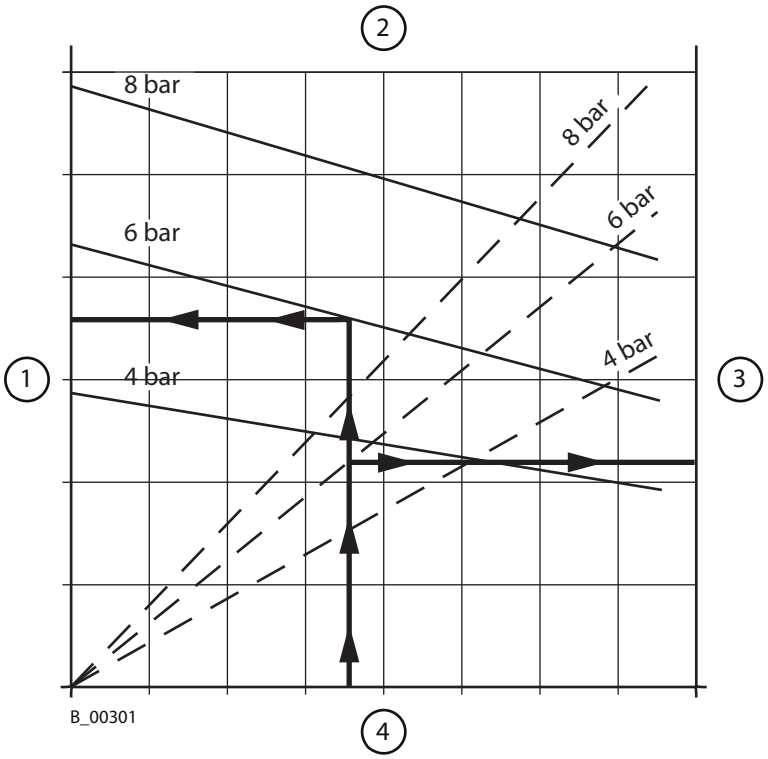
5.5.4 Volume Flow

WAGNER AL nozzles			Volume flow* in l/min			
Ø inch	**Ø mm**	**Spray angle**	**7 MPa 70 bar 1015 psi**	**10 MPa 100 bar 1450 psi**	**15 MPa 150 bar 2175 psi**	**Maximum ranges for continuous operation at 200 DH/ min.**
0.007	0.18	40°	0.17	0.20	0.24	Cobra 40-10
0.009	0.23	20-30-40-50-60°	0.21	0.25	0.30	
0.011	0.28	10-20-30-40-50-60°	0.30	0.35	0.43	
0.013	0.33	10-20-30-40-50-60-80°	0.45	0.53	0.66	
0.015	0.38	10-20-30-40-50-60-80°	0.58	0.67	0.81	
0.017	0.43	20-30-40-50-60-70°	0.73	0.79	1.06	
0.019	0.48	20-30-40-50-60-70-80°	0.93	1.09	1.37	
0.021	0.53	20-40-50-60-80°	1.14	1.36	1.69	
0.023	0.58	20-40-50-60-70-80°	1.37	1.59	2.01	
0.025	0.64	20-40-50-60-80°	1.62	1.91	2.40	Cobra 40-25
0.027	0.69	20-40-50-60-80°	1.83	2.13	2.68	
0.029	0.75	60°	2.19	2.51	3.17	
0.031	0.79	20-40-50-60°	2.40	2.77	3.49	
0.035	0.90	20-40-50-60°	3.22	3.74	4.69	
0.043	1.10	20-50°	5.07	6.04	7.46	
0.052	1.30	50°	5.12	6.10	7.52	

* Volume flow refers to water.

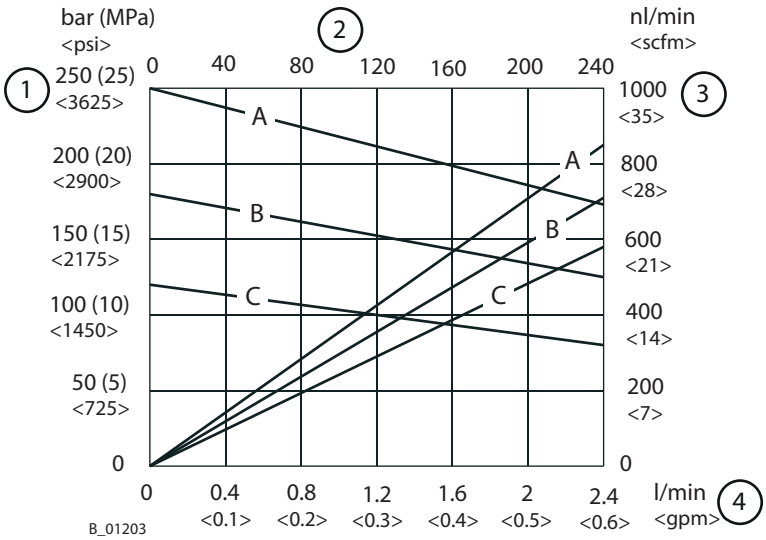
5.5.5 Performance Diagrams

Example



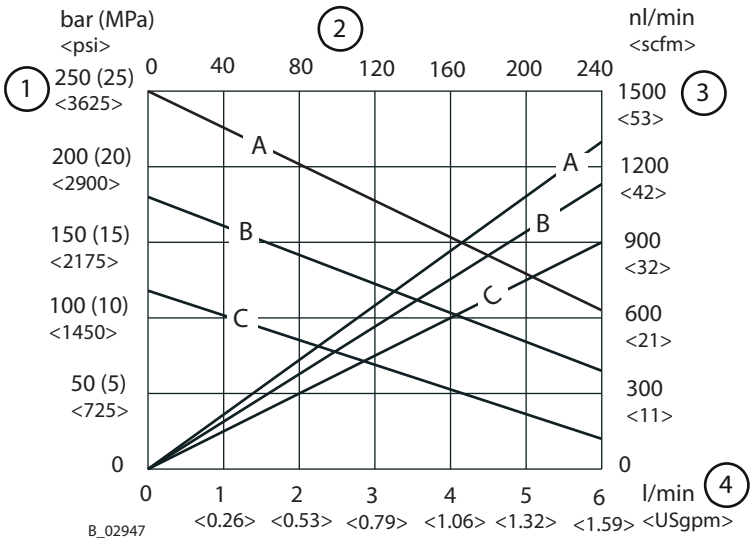
1	Product pressure in bar; (MPa); <psi>	3	Air consumption in nl/min.; <scfm>
2	Stroke frequency in DH/min.	4	Flow rate of water in l/min.; <gpm>

Cobra 40-10



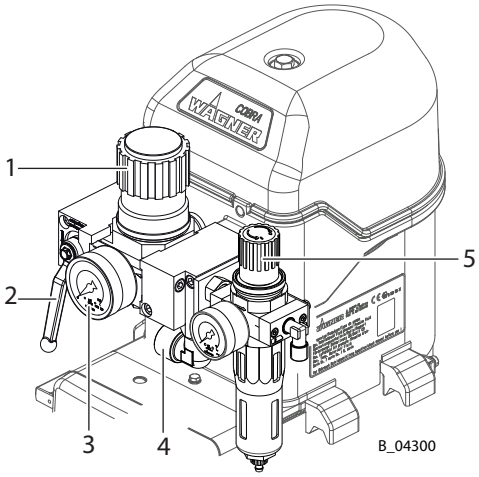
1	Product pressure in bar; (MPa); <psi>	A	Characteristic curve for air pressure 6 bar; 0.6 MPa; 87 psi
2	Stroke frequency in DH/min.	--	--
3	Air consumption in nl/min.; <scfm>	B	Characteristic curve for air pressure 4.5 bar; 0.45 MPa; 65 psi
4	Flow rate of water in l/min.; <gpm>	C	Characteristic curve for air pressure 3 bar; 0.3 MPa; 44 psi

Cobra 40-25



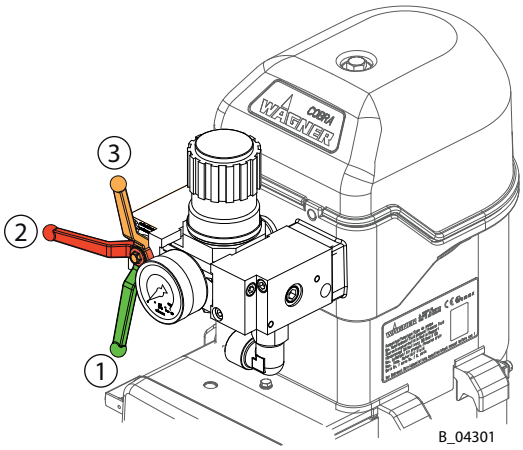
1	Product pressure in bar; (MPa); <psi>	A	Characteristic curve for air pressure 6 bar; 0.6 MPa; 87 psi
2	Stroke frequency in DH/min.	--	--
3	Air consumption in nl/min.; <scfm>	B	Characteristic curve for air pressure 4.5 bar; 0.45 MPa; 65 psi
4	Flow rate of water in l/min.; <gpm>	C	Characteristic curve for air pressure 3 bar; 0.3 MPa; 44 psi

5.6 PRESSURE REGULATOR UNIT



1	Pressure regulator	4	Compressed air input
2	Ball valve	5	AirCoat filter regulator Cobra (accessories)
3	Pressure gauge		

The AirCoat regulator must mounted in all mounting variants of diaphragm pump in vertical position (see assembly manual for Filter Regulator, order number 2328614).



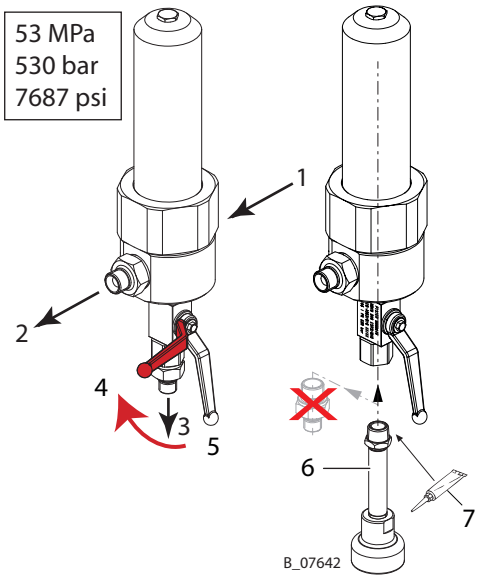
Pos	Positions of the ball valve
1	**Open:** working position.
2	**Closed:** The air motor may still be under pressure.
3	**Vent:** Operating pressure in the air motor is vented (control pressure is still present).

5.7 HIGH-PRESSURE FILTER (OPTION)

To ensure problem-free operation it is recommended that a WAGNER high-pressure filter be used. These have been developed especially for WAGNER pneumatic pumps.

The filter inserts can be exchanged depending on the product to be used.

The high-pressure filter, which corresponds to the device, can be found in Chapter Accessories [▸▸ 60]. The compatible filter inserts can be found in Chapter Spare Parts [▸▸ 65].



1	Fluid section connection	5	Open
2	Product output	6	Pressure relief (Relex)
3	Return line	7	Loctite® 542
4	Closed		

6 ASSEMBLY AND COMMISSIONING

6.1 TRAINING OF ASSEMBLY/COMMISSIONING PERSONNEL

- The assembly and commissioning personnel must have the technical skills to safely commission the device.
- When assembling, commissioning and carrying out all work, read and follow the operating manuals and safety regulations for the additionally required system components.

A skilled person must check to ensure that the device is in a reliable state after it is assembled and commissioned.

6.2 STORAGE CONDITIONS

Until the point of assembly, the device must be stored in a dry location, free from vibrations and with a minimum of dust. The device must be stored in closed rooms.

The air temperature at the storage location must be between -20 °C and +60 °C (-4 °F and +140 °F).

The relative air humidity at the storage location must be between 10 and 95% (without condensation).

6.3 INSTALLATION CONDITIONS

The air temperature at the installation site must be in a range between 10 °C and 60 °C; 50 °F and 140 °F.

The relative air humidity at the installation site must be between 10 and 95% (without condensation).

6.4 TRANSPORTATION

The pump can be moved on a trolley or manually without lifting equipment or a crane.

6.5 ASSEMBLY AND INSTALLATION

⚠ WARNING

Inclined ground!

Risk of accidents if the device rolls away/falls.

- Position the trolley with the double diaphragm pump horizontally.
- If the floor is inclined, position the feet of the trolley towards the gradient.
- Secure the trolley.

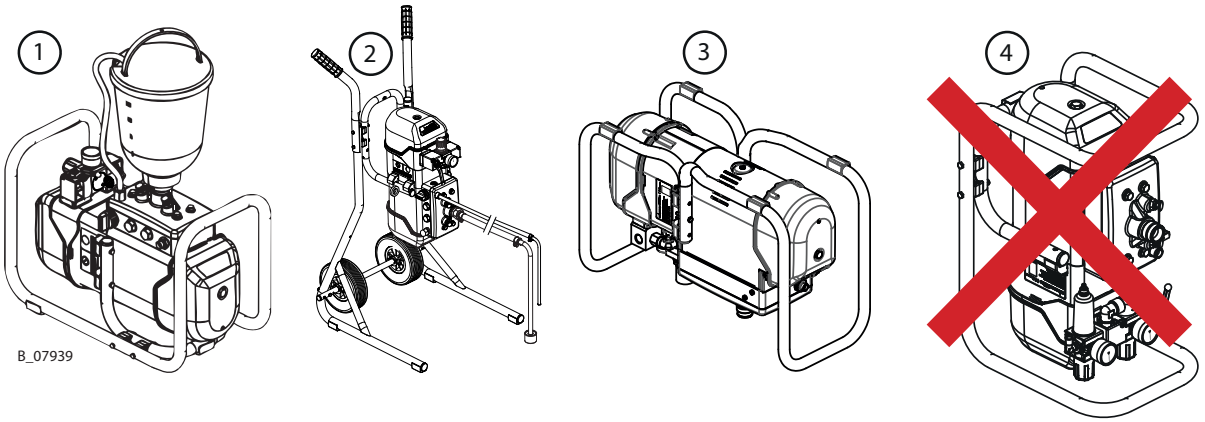
Info

Ensure that the national explosion prevention rules and regulations are observed when setting up the device.

Positioning

The Cobra pump may only be operated in a horizontal or vertical position as shown in the diagrams.

Overhead operation and storage is not allowed (Air could get into the hydraulic circuit, causing a malfunction)!



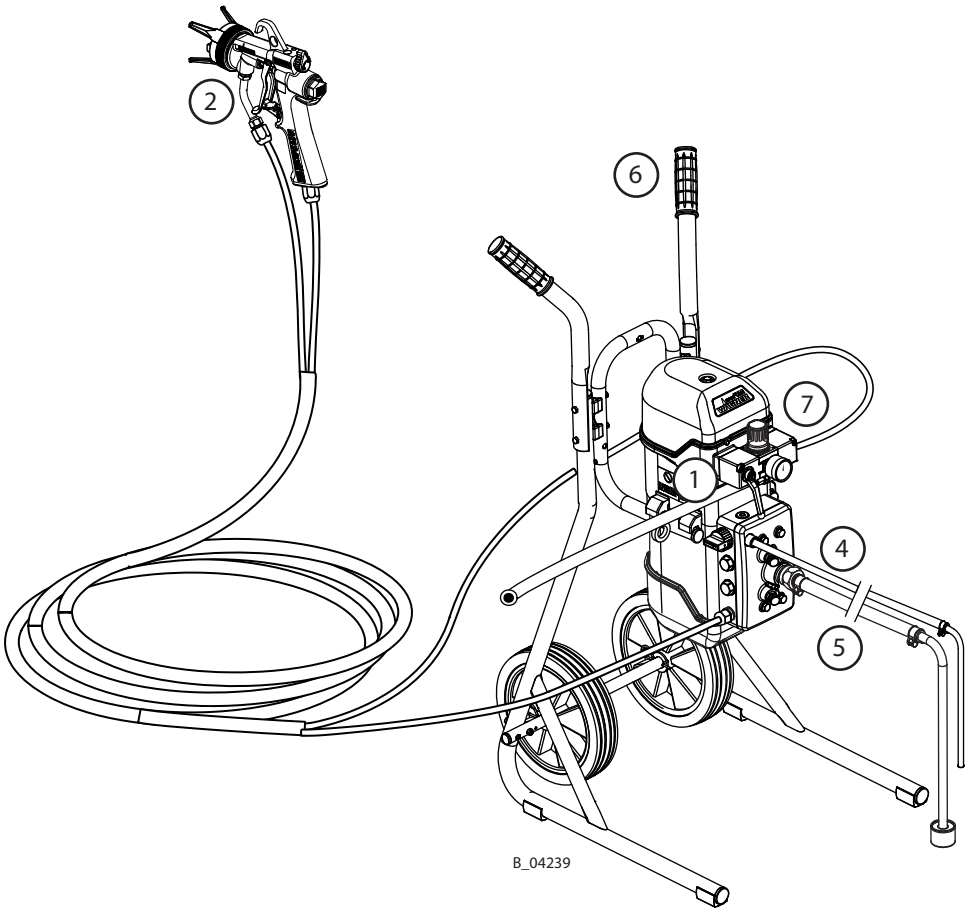
1	Horizontal position, product input at top - **preferred**	3	Horizontal position, product input at bottom - **conditionally**
2	Vertical position - **preferred**	4	Overhead position - **forbidden**

Requirements and restrictions for operation with horizontal position, product input at the bottom (Pos. 3) - **conditionally** recommended:

- The oil level must be monitored monthly.
- Oil leaks must be expected at the oil valve screw (item 67 in item 46), and at the pressure relief valve (item 42 (Cobra 40-10) or item 28 (Cobra 40-25) (see chapters Cobra 40-10 Fluid Section [▸▸ 70] and Cobra 40-25 Fluid Section [▸▸ 78]).
- Difficult access to the pump control (pressure regulator unit) and difficult reading of the air pressure!

Assembly

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 spray pack. The nozzles must be selected according to the spray gun instructions.



1. Mount the pump on a frame, mobile base (6), or wall mount.
2. For AirCoat systems: Mount the additional pressure regulator with filter (7) (option).
3. Fit suction system (5).
4. Mount return hose (4) (option).
5. Connect high-pressure hose and spray gun (2) according to the operating manual.

6.5.1 Ventilation of the Spray Booth

– Operate the device in a spray booth approved for the respective working materials.
- or -
– Operate the device on an appropriate spraying wall with the ventilation (extraction) switched on.
– Observe national and local regulations for the exhaust air speed.

6.5.2 Air Supply Lines

⚠ WARNING

Hose connections!

Risk of injury and damage to the device.

▸ Do not mix up hose connections of product hose and air hose.

▸ Ensure that only dry, clean atomizing air is used in the spray gun! Dirt and moisture in the atomizing air worsens the spraying quality and spray pattern.

6.5.3 Product Supply Lines

⚠ DANGER

Bursting hose, bursting threaded joints!

Danger to life from injection of product.

- Ensure that the hose material is chemically resistant to the sprayed products.
- Ensure that the spray gun, fittings and product hose between the device and the spray gun are suitable for the pressure generated in the device.
- Ensure that the following information can be seen on the high-pressure hose:
  - Manufacturer
  - Permissible operating pressure
  - Date of manufacture.

6.6 GROUNDING

⚠ WARNING

Discharge of electrostatically charged components in atmospheres containing solvents!

Explosion hazard from electrostatic sparks.

- Clean the pump only with a damp cloth.

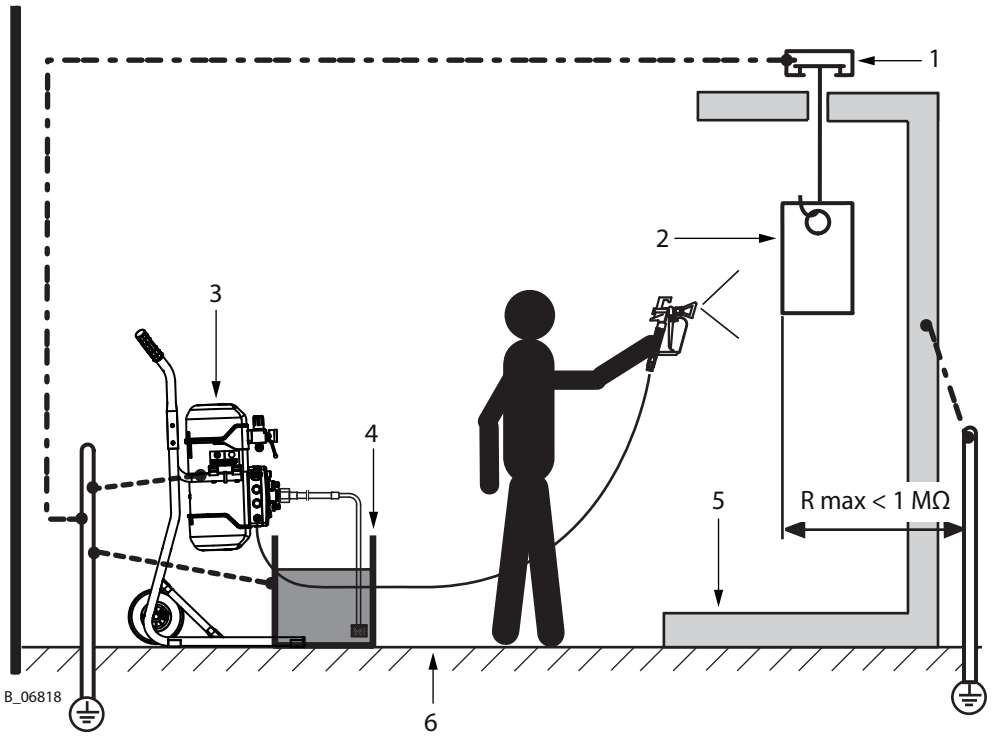
⚠ WARNING

Heavy paint mist if grounding is insufficient!

Risk of poisoning.

Insufficient paint application quality

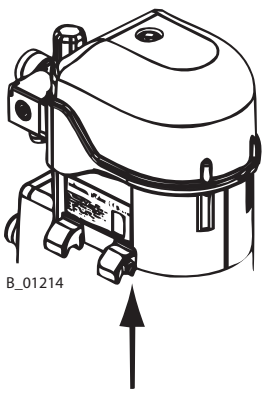
- Ground all device components.
- Ground the work pieces to be coated.



Earthing schema (example)

Pos	Part / workstation	Cable cross section
1	Conveyor	16 mm²; AWG6
2	Work piece	--
3	Pump	4 mm²; AWG12
4	Product tank	6 mm²; AWG10
5	Spraying stand Alternative: Spray booth	16 mm²; AWG6
6	Floor, static dissipative	--

Safe operation of the pump is only guaranteed with a grounding connection. connect all grounding cables using a short and direct route,



1. Screw on grounding cable with eyelet.
2. Clamp the grounding cable clip to a grounding connection on site.
3. Ground the product tank to an on-site grounding connection.

4. Ground the other parts of the system to an on-site grounding connection (16 mm2; AWG 6).

Ex zone

All devices and equipment must be suitable for use in potentially explosive areas.

– All paints, flushing agents and waste tanks have to be electrically conductive.
– All tanks must be grounded.

6.7 START UP

⚠ WARNING

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

Danger to life from flying parts.

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

ⓘ NOTICE

Impurities in the spraying system

Spray gun blockage, products harden in the spraying system.

- Flush the spray gun and paint supply with a suitable flushing agent before commissioning.

Emergency stop, see Chapter Emergency Stop [▸▸ 37].

6.7.1 Preparation

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

1. Secure spray gun with safety lever.
2. Check the permissible pressures.
3. Check all connections for leaks.
4. Check hoses for damage in accordance with chapter Safety Checks and Maintenance Intervals [▸▸ 42].

6.7.2 Fill the Pump with Flushing Agent

The devices are tested during manufacturing with emulsifying oil, pure oil or solvent.

Possible residues must be flushed out of the circuits with a solvent (flushing agent) before commissioning.

- Fill the empty device with flushing agent in accordance with Chapter Filling the Empty Pump [▸▸ 45].

6.7.3 Pressure Tightness Test

⚠ WARNING

Overpressure!

Risk of injury from bursting components.

- The operating pressure must not exceed the value shown on the type plate.

1. Gradually increase the pressure in pump with the pressure regulator until maximum pressure is reached. Maintain the pressure for 3 minutes and check all connection points for leaks.
2. Carry out pressure relief in accordance with Chapter Pressure Relief / Work Interruption [▸▸ 38].

6.7.4 Verifying a Safe Operational Condition

A skilled person must check to ensure that the device is in a reliable state after it is assembled and commissioned. This includes:

- Carry out safety checks in accordance with Chapter Safety Checks and Maintenance Intervals [▸▸ 42].

6.7.5 Filling with Working Product

- Proceed in accordance with Chapter Filling the Empty Pump [▸▸ 45].

7 OPERATION

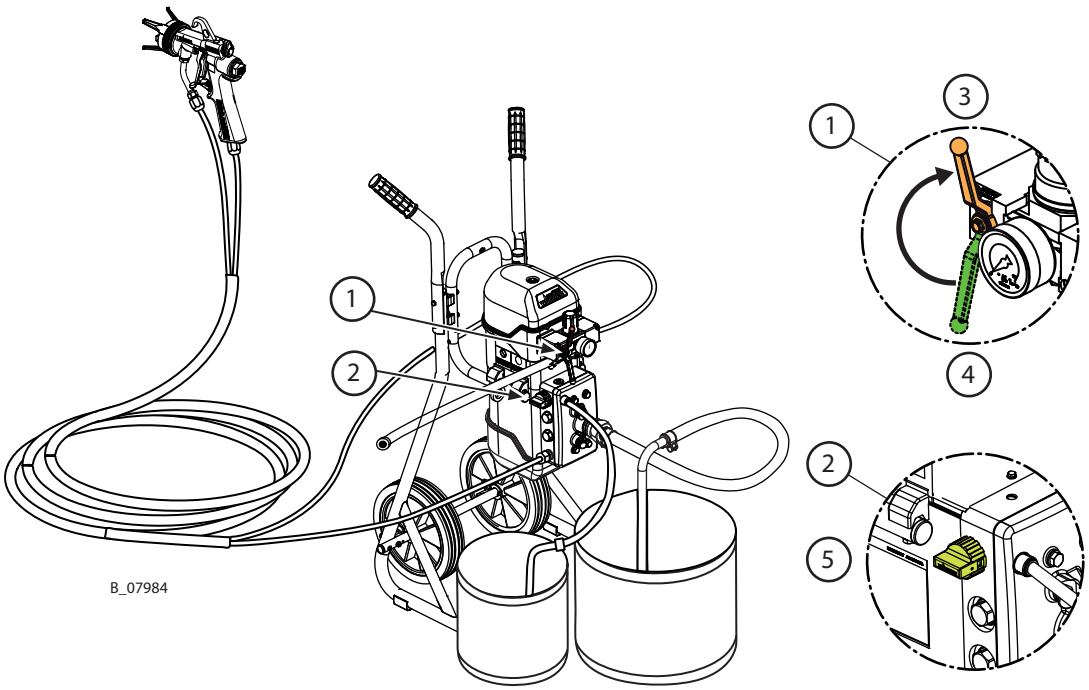
7.1 TRAINING THE OPERATING PERSONNEL

- The operating personnel must be qualified to operate the entire system.
- The operating staff must be familiar with the potential risks associated with improper behavior as well as the necessary protective devices and measures.
- Before work commences, the operating personnel must receive appropriate system training.

7.2 EMERGENCY STOP

In the case of unforeseen occurrences immediately:

1. Set ball valve (1) to vent.
2. Open the relief valve (2).

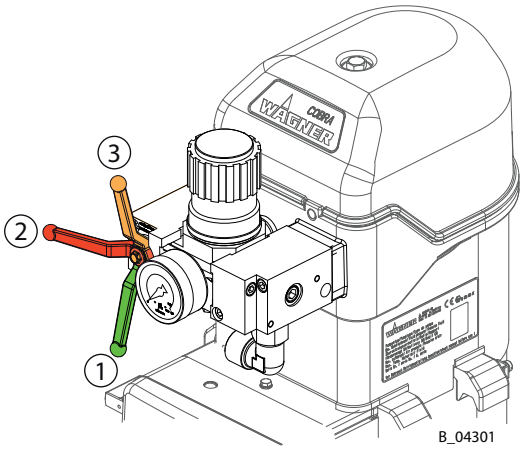


1	Ball valve	4	Open
2	Relief valve	5	Switch position Circulation (2)
3	Vent (1)		

7.3 TASKS

Ensure that:

commissioning is carried out in accordance with Chapter Start up [▸▸ 35].



Pos	Positions of the ball valve
1	**Open:** working position.
2	**Closed:** The air motor may still be under pressure.
3	**Vent:** Operating pressure in the air motor is vented (control pressure is still present).

1. Carry out a visual inspection: Personal protective equipment, grounding and all devices ready for use.
2. Secure spray gun and insert nozzle into the spray gun.
3. Slowly open the ball valve.
4. Set the required working pressure on the pressure regulator.
5. Optimize spray pattern in accordance with the spray gun's operating manual.
6. Start work process.

Note: Depending on the function, the pump may continue running at 1 - 6 DH/min. after the spray gun is closed.

7.4 PRESSURE RELIEF / WORK INTERRUPTION

The pressure must always be relieved:
- after the spraying tasks are finished,
- before servicing or repairing the system,
- before carrying out cleaning tasks on the system,
- before moving the system to another location,
- before something needs to be checked on the system,
- before the nozzle or the filter is removed from the spray gun.

Process for relieving pressure

1. Close the spray gun.
2. Close the ball valve and vent the air motor.
3. Release the system of pressure by opening the spray gun.
   ⇨ Attention: If a blocked nozzle is preventing relief, first carry out the additional steps 4 and 5, then clean the nozzle.
4. Close and secure the spray gun.
5. Open and close the relief valve slowly to completely depressurize the system.

Note: Control air pressure is still present.

NOTICE

Hardened working product in the spraying system when 2K product is processed!

Using 2K materials can destroy the pump and spraying system.

- Observe the manufacturer's processing rules, particularly in regards to the pot life.
- Flush thoroughly before the end of the pot life.
- The pot life is decreased by warmth.

7.5 BASIC FLUSHING

Regular flushing

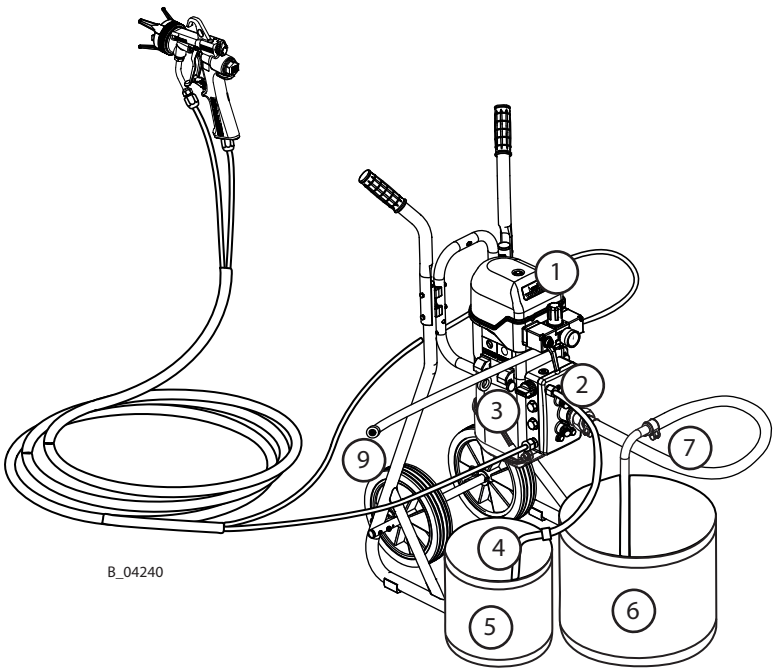
– Regular flushing, cleaning and maintenance ensures the pump's high conveying and suction capacity.
– The cleaning and flushing agents used must be compatible with the working material.

WARNING

Incompatibility of cleaning/flushing agent and working medium!

Risk of explosion and danger of poisoning by toxic gases.

- Examine the compatibility of the flushing and cleaning agents and working media on the basis of the safety data sheets.



Before each basic flushing, the nozzle must be removed from the spray gun. Here, the specifications in the spray gun operating manual must be followed. With AirSpray systems, carry out the basic flushing of the system without atomizing air.

Preparation

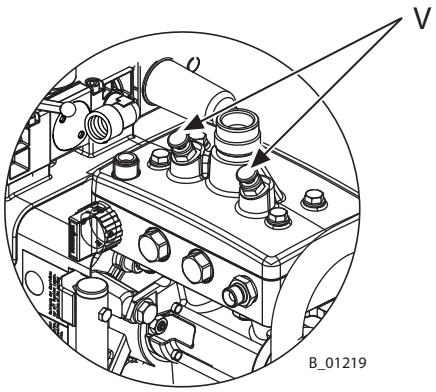
1. Visual check: personal safety equipment, grounding and all devices ready to use.
2. Relieve the pump's pressure according to Chapter Pressure Relief / Work Interruption [▸▸ 38].
3. Place an empty, grounded collection tank (5) under the return tube (4).

4. Place the suction hose (7) in the grounded tank with flushing agent (6).
5. Adjust the pressure regulator (1) to approx. 0.05 MPa; 0.5 bar; 7.25 psi.

Flushing via the return valve

1. Open the relief valve (3).
2. Slowly open the ball valve (2).
3. Adjust the air pressure on the pressure regulator (1) so that the pump runs smoothly.
4. Flush the system until clean flushing agent flows into the tank (5).
5. Close ball valve (2).
6. As soon as there is no pressure remaining in the system, close the relief valve (3).

Note: During the flushing procedure, briefly press both valve depressors (V).



Flushing via spray gun

1. In case of AirCoat systems, carry out the basic flushing without atomizing air.
2. Point the spray gun (3), without nozzle, into the tank (5) and pull the trigger.
3. Slowly open the ball valve (2).
4. Rinse until clean flushing agent flows from the spray gun.
5. Close ball valve (2).
6. As soon as there is no pressure remaining in the system, close the spray gun. Secure the spray gun.

External Cleaning

1. Clean the outside of the system.
2. Fully assemble the system.
3. Relieve the pump's pressure according to Chapter Pressure Relief / Work Interruption [▸▸ 38].
4. Dispose of the contents of the tanks according to the local regulations.

7.6 FILLING WITH WORKING PRODUCT

After basic flushing, the pump can be filled with working product.

- Proceed according to Chapter Filling the Empty Pump [▸▸ 45], but use working product instead of flushing agent.

8 CLEANING AND MAINTENANCE

8.1 CLEANING

8.1.1 Cleaning Personnel

Cleaning work should be undertaken regularly and carefully by qualified and trained personnel. They should be informed of specific hazards during their training.

The following hazards may arise during cleaning work:

- risk to health from inhaling solvent vapors,
- use of unsuitable cleaning tools and aids.

8.1.2 Decommissioning and Cleaning

The device must be cleaned to change products and for maintenance purposes. Ensure that no remaining product dries on and sticks to the device.

⚠ WARNING

Brittle pressure regulator with filter!

The tank on the pressure regulator with filter becomes brittle through contact with solvents and can burst. Flying parts can cause injury.

▸ Do not clean the tank on the pressure regulator with filter using solvent.

1. Interrupt the work sequence in accordance with Chapter Pressure Relief / Work Interruption [▸▸ 38].
2. Carry out basic flushing in accordance with Chapter Basic Flushing [▸▸ 39].
3. Empty system in a controlled manner according to Chapter Emptying Pump [▸▸ 44].
4. Service spray gun in accordance to its operating manual.
5. Clean and check the suction system and the suction filter.
6. Remove product filter (option): check and clean or replace filter insert and filter housing in accordance with chapter Cleaning and Replacing the Filter [▸▸ 46].
7. Clean the outside of the system.
8. Fully assemble the system.
9. Fill the system with flushing agent in accordance with Chapter Filling the Empty Pump [▸▸ 45].

8.1.3 Storing for Longer Periods of Time

If storing the system for a prolonged period of time, thorough cleaning and corrosion protection are necessary. Replace the water or respective solvent in the product pump with a suitable preserving agent.

1. Carry out decommissioning and cleaning (first until second to last step) in accordance with Chapter Decommissioning and Cleaning [▸▸ 41].
2. Fill the system with preservation agent in accordance with Chapter Filling the Empty Pump [▸▸ 45].
3. Empty the system in a controlled manner in accordance with Chapter Emptying Pump [▸▸ 44] and seal the openings.

8.2 MAINTENANCE

8.2.1 Maintenance Personnel

Maintenance work should be undertaken regularly and carefully by qualified and trained personnel. They should be informed of specific hazards during their training.

The following hazards may arise during maintenance work:

- risk to health from inhaling solvent vapors,
- use of unsuitable tools and aids.

A skilled person must ensure that the device is checked for being in a reliable state after maintenance work is completed.

8.2.2 Maintenance Instructions

⚠ DANGER

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.
- Use only WAGNER original spare parts and accessories.
- Only repair and replace parts that are listed in the spare parts chapter and that are assigned to the device.
- Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, product hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the energy and compressed air supply.
  - Disconnect the control unit from the mains.
- Observe the operating and service manual for all work.

Prior to maintenance

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

- Flush and clean the system according to Chapter Decommissioning and Cleaning [▸▸ 41].
- Interrupt the air supply.

After maintenance

- Carry out safety checks in accordance with Chapter Safety Checks and Maintenance Intervals [▸▸ 42].
- Put the system into operation and check for leaks as described in Chapter Start up [▸▸ 35].
- Have the system checked for safe condition by a skilled person.
- Carry out functional check in accordance with Chapter Function Test after Repair Work [▸▸ 58].

8.2.3 Safety Checks and Maintenance Intervals

Every day

1. Check grounding: see Chapter Grounding [▸▸ 33].

2. Check hoses, tubes and couplings: see Chapter Product Hoses, Pipes and Couplings [▸▸ 43]
3. For each decommissioning, the process according to Chapter Decommissioning and Cleaning [▸▸ 41] must be followed.
4. If the pump has to be emptied for maintenance work, proceed according to Chapter Basic Flushing [▸▸ 39] and Chapter Emptying Pump [▸▸ 44].

Weekly

1. Check system for damage.
2. Check that the safety fixtures function properly (see Chapter Protective and Monitoring Equipment [▸▸ 21]).

Monthly

- Check the oil level (see chapter Checking the Oil Level [▸▸ 50]).

Yearly or as required

1. Perform oil change after 500 operating hours or once a year, in accordance with chapter Oil Change [▸▸ 51].
2. In accordance with DGUV regulation 100-500, Chapters 2.29 and 2.36:
   - Have the liquid ejection devices checked by an expert (e.g., WAGNER service technician) as required, but no later than every 12 months to ensure that they are in safe working order.
   - For shut down devices, the examination can be suspended until the next start-up.

8.2.4 Condensate Drain from the AirCoat Filter Regulator

1. Frequently drain the condensate that may accumulate in the pneumatic filter.
   - Make sure the water level in the filter cup never reaches the max. level marked on the cup.

8.2.5 Product Hoses, Pipes and Couplings

The service life of the complete hoses between product pressure generator and application device is reduced due to environmental influences even when handled correctly.

1. Check hoses, pipes, and couplings every day and replace if necessary.
2. Before every commissioning, check all connections for leaks.
3. Additionally, the operator must regularly check the complete hoses for wear and tear as well as for damage at intervals that he/she has set. Records of these checks must be kept.
4. Replace the complete hose if one of the following two periods is exceeded:
   - 6 years from the date of the hose crimping (see fitting embossing).
   - 10 years from the date of the hose imprinting.

Fitting embossing (if present)	Meaning
xxx bar	Pressure
yymm	Crimping date (year/month)
XX	Internal code

Hose imprinting	Meaning
WAGNER	Name / manufacturer
yymm	Date of manufacture (year/month)
xxx bar (xx MPa) e.g. 270 bar (27MPa)	Pressure
XX	Internal code
DNxx (e.g., DN10)	Nominal diameter

8.2.6 Emptying Pump

⚠ WARNING

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

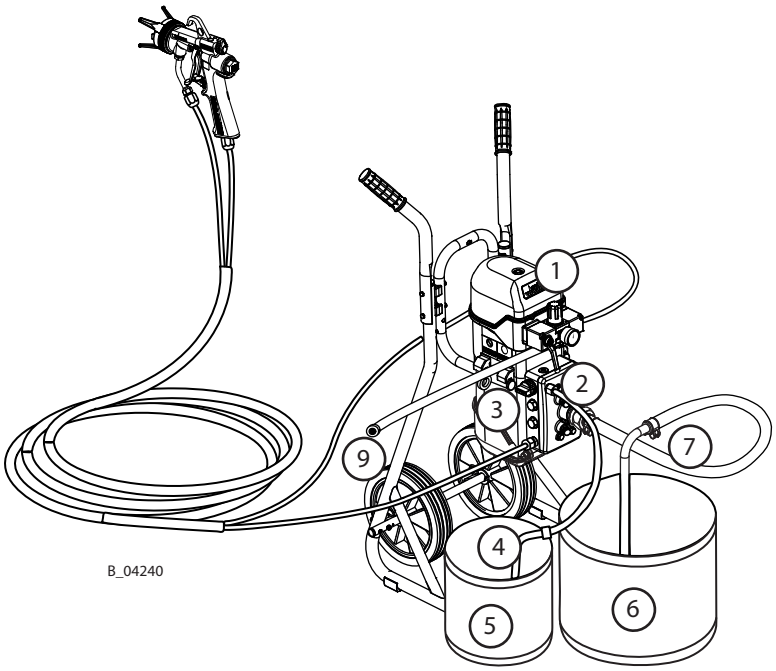
Danger to life from flying parts.

Ignition of potentially explosive surrounding atmosphere.

- Empty and fill the device slowly and in a controlled manner.
- Avoid potentially explosive atmosphere in the surroundings.

Info

If the pumping product becomes heated, switch off all heaters and let the product cool off.



1. Visual check: personal safety equipment, grounding and all devices ready to use.
2. Place an empty, grounded collection tank (5) under the return tube (4).
3. Place the suction hose (7) in an empty, grounded tank (6).
4. Close pressure regulator (1) (0 MPa; 0 bar; 0 psi).

Emptying via return line

1. Open the relief valve (3).

2. Slowly open the ball valve (2).
3. Slowly dial up the air pressure at the pressure regulator (1) until the pump operates smoothly (approx. 0.05 MPa; 0.5 bar; 7.25 psi).
4. Be ready for the switch from working product to air. Turn down pressure regulator (1) far enough that the pump is still running normally (approx. 0–0.05 MPa; 0–0.5 bar; 0–7.25 psi).
5. As soon as working product is no longer flowing from the return tube (4), close the ball valve (2).
6. Close the relief valve (3).

Emptying via the spray gun

1. Point the spray gun (3), without nozzle, into the tank (5) and pull the trigger.
2. Slowly open the ball valve (2). Be ready for the switch from working product to air.
3. As soon as no more working product is flowing, close the ball valve (2).
4. Close and secure the spray gun.
5. Carry out pressure relief in accordance with Chapter Pressure Relief / Work Interruption [▸▸ 38].
6. Dispose of the contents of the tanks according to the local regulations.

8.2.7 Filling the Empty Pump

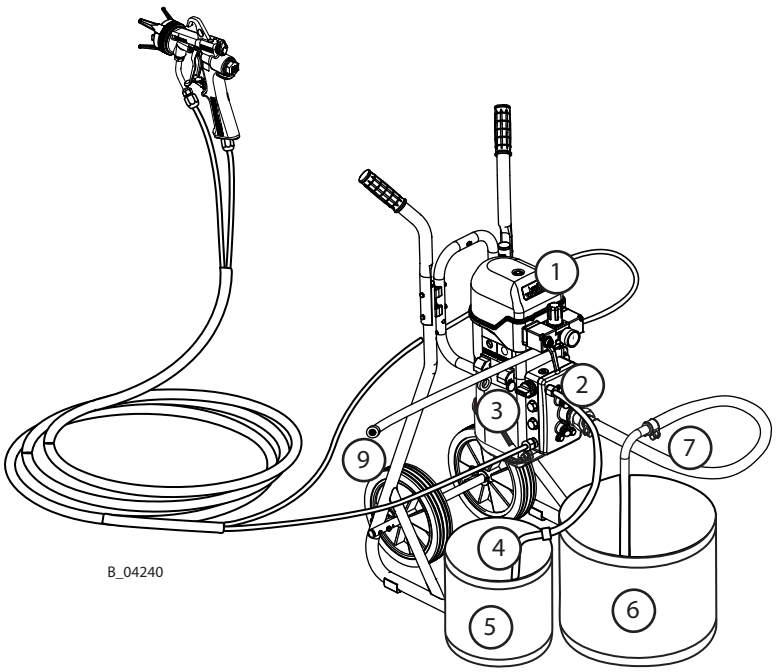
⚠ WARNING

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

Danger to life from flying parts.

Ignition of potentially explosive surrounding atmosphere.

- Empty and fill the device slowly and in a controlled manner.
- Avoid potentially explosive atmosphere in the surroundings.

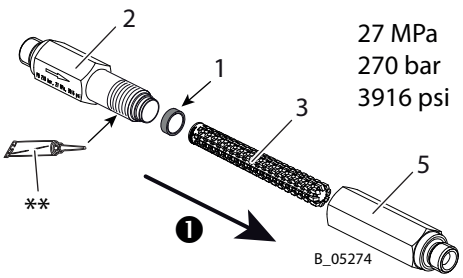


Before each filling, the nozzle must be removed from the spray gun. Here, the specifications in the spray gun operating manual must be followed. In case of AirCoat systems, carry out the filling of the system without atomizing air (8).

1. Carry out a visual inspection: Personal protective equipment, grounding and all devices ready for use.
2. Place an empty, grounded collection tank (5) under the return tube (4).
3. Place the suction hose (7) in a grounded tank with working product (6).
4. Close the pressure regulator (1) (0 MPa; 0 bar; 0 psi)
5. Open the relief valve (3).
6. Slowly open the ball valve (2).
7. Slowly turn the air pressure up on the pressure regulator (1) and only until the pump is running normally (approx. 0–0.05 MPa; 0–0.5 bar; 0–7.25 psi).
   Be prepared for the switch from air to working product and avoid backspray.
8. Close ball valve (2) as soon as pure working product starts coming from the return tube (4).
9. Close the relief valve (3).
10. Point the spray gun, without nozzle, into the tank (5) and open it.
11. Slowly open the ball valve (2).
    Be prepared for the switch from air to working product and avoid backspray.
12. As soon as pure working product without air bubbles is flowing, close the ball valve (2).
13. Close and secure the spray gun.
14. Carry out pressure relief in accordance with Chapter Pressure Relief / Work Interruption [▸▸ 38].
15. Dispose of the contents of the tank (5) according to the local regulations.

8.2.8 Cleaning and Replacing the Filter

8.2.8.1 Straight Inline Filter



1	Flow direction

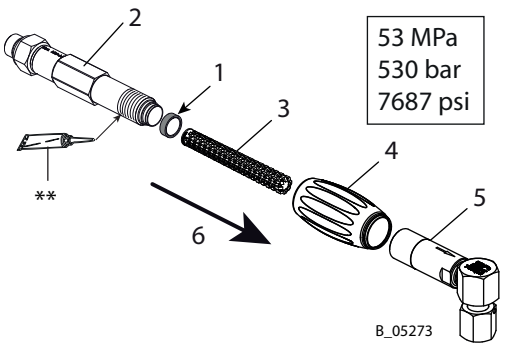
1. Flush the pump and inline filter in accordance with Chapter Basic Flushing [▸▸ 39].
   Flush using the spray gun so that the flushing agent flows through the inline filter.
   Maximize the flow (remove the nozzle, open the dosing valve if necessary).
2. Empty the pump in a controlled manner in accordance with Chapter Emptying Pump [▸▸ 44].
3. Place the grounded collection tank under the inline filter.
4. If no swivel joint is mounted, remove the hose.
5. Unscrew the inlet housing (2) and outlet housing (5) with two size 19 wrenches.

6. Remove the filter insert (3).
7. If the inline filter has any leaks, replace the seal* (1).
8. Insert the new filter insert* (3). Note the installation position: closed end in direction of flow.
9. If necessary, coat the thread with anti-seize paste**.
10. Screw together the inlet housing (2) and outlet housing (5) with two size 19 wrenches.
11. If necessary, screw the hose back on.
12. Fill the pump in accordance with Chapter Filling the Empty Pump [▸▸ 45].

* Order no., see Chapter Accessories [▸▸ 60].

** Order no., see Chapter Assembly of the Device [▸▸ 57].

8.2.8.2 Angled Inline Filter



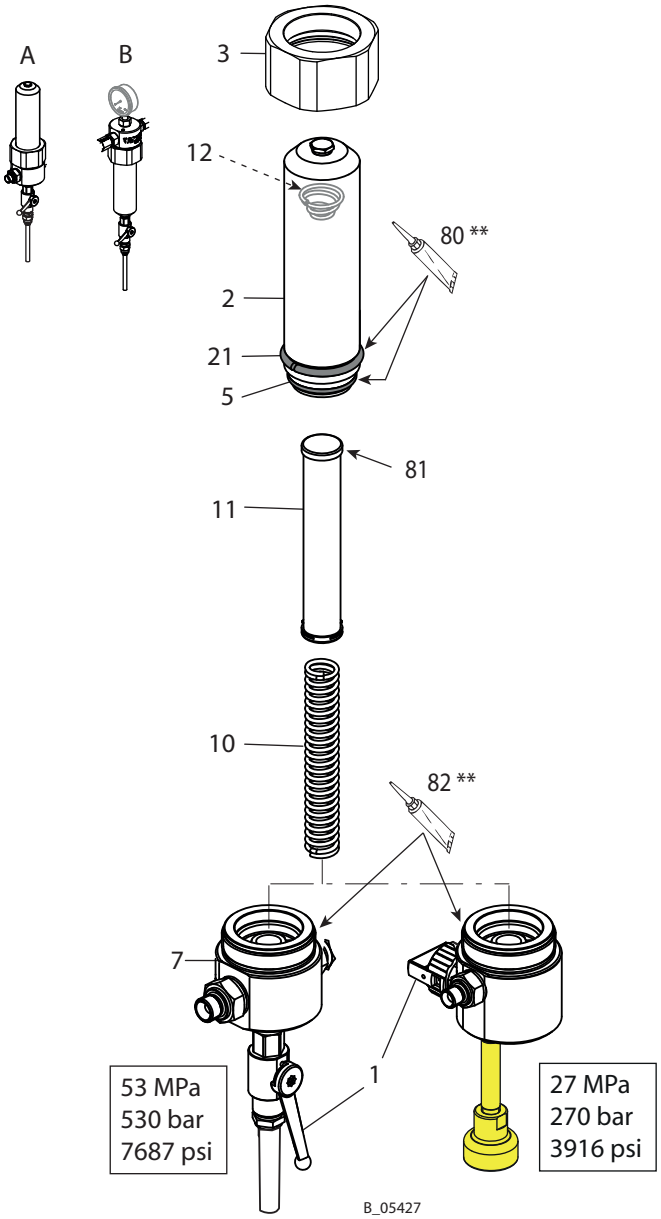
6	Flow direction

1. Flush the pump and inline filter in accordance with Chapter Basic Flushing [▸▸ 39]. Flush using the spray gun so that the flushing agent flows through the inline filter. Maximize the flow (remove the nozzle, open the dosing valve if necessary).
2. Empty the pump in a controlled manner in accordance with Chapter Emptying Pump [▸▸ 44].
3. Place the grounded collection tank under the inline filter.
4. Unscrew the filter by turning the handle (4).
5. Remove the filter insert (3).
6. If the inline filter has any leaks, replace the seal* (1).
7. Insert the new filter insert* (3). Note the installation position: closed end in direction of flow.
8. If necessary, coat the thread with anti-seize paste**.
9. Assemble the turning handle (4), inlet housing (2) and outlet housing (5) and tighten by turning the handle.
10. If necessary, screw the hose back on.
11. Fill the pump in accordance with Chapter Filling the Empty Pump [▸▸ 45].

* Order no., see Chapter Accessories [▸▸ 60].

** Order number, see Chapter Assembly of the Device [▸▸ 57].

8.2.8.3 High-pressure filter



A	Preferred filter installation position	B	Reversed filter installation position
80	Mobilux EP2**	82	Anti-seize paste**
81	Filter identification		

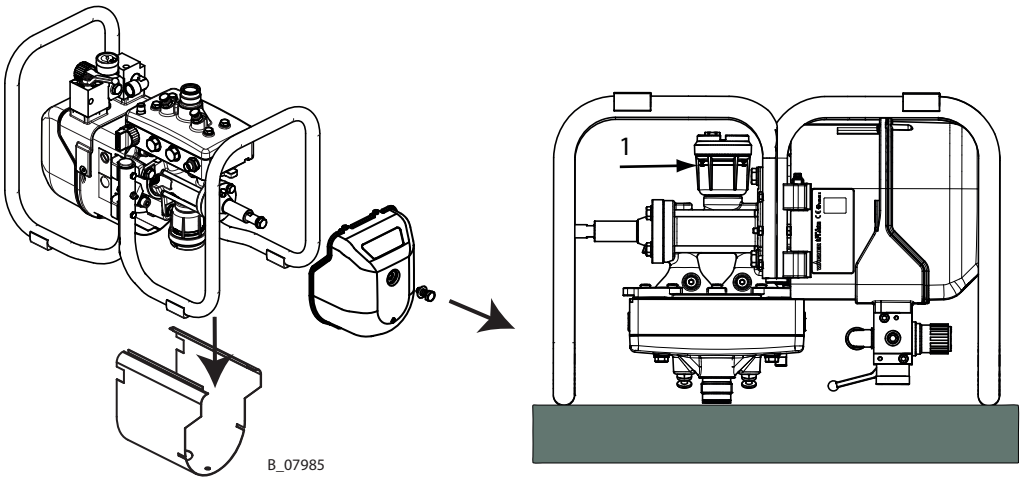
1. Flush the pump and HP filter in accordance with Chapter Basic Flushing [▸▸ 39], and while doing so:
   - At the preferred filter installation position: Flush via the return valve (1). This produces a large flow. As a result, the flushing agent also flows through the upper part of the filter cartridge (11). Pressure regulator approx. 0.15 MPa; 1.5 bar; 22 psi.
   - With a reversed filter installation position: Flush using the spray gun. This is required in the case of a reversed installation position so that the flushing agent flows through the filter cartridge (11). Maximize the flow (remove the nozzle, open the dosing valve if necessary).

2. Empty the pump in a controlled manner in accordance with Chapter Emptying Pump [▸▸ 44].
3. Place the grounded collection tank under the high-pressure filter.
4. Open ball valve (1).
5. Loosen union nut (3) with a size 70 wrench.
6. Unscrew the union nut (3) and lift slightly so that it does not get dirty in the next step.
7. Remove the filter housing (2) with the union nut (3). The cone spring (12) remains in the filter housing (2). If the O-ring (5) is not damaged, it remains on the filter housing (2).
8. Remove the filter cartridge (11) and filter socket (10) from the filter housing (2).
9. Clean all parts:
   - Place the filter cartridge (11) and filter support (10) in solvent. Clean using brush.
   - Fill the filter housing (2) approx. 1/3 full with solvent. Close, wearing a glove, and shake well.
   - Clean the distribution housing (7) using a brush.
10. If necessary, replace the O-ring (5) and/or filter cartridge (11). Order no., see Chapter High-pressure Filter, 530 Bar [▸▸ 85].
11. Assemble all parts in reverse order.
    While doing so:
    - Coat the thread of the distribution housing (7) with anti-seize paste**.
    - Coat the O-ring (5) and pressure ring (21) with Mobilux® EP2**.
    - Observe the installation position of the filter cartridge (11): Push the closed end with the filter identification ahead into the filter housing (2).
    - Make sure that the cone spring (12) is in the filter housing (note the installation position). Press on the cone spring after inserting the filter cartridge (11) and filter support (10); the spring action must be noticeable.
    - Tighten the union nut (3) by hand.
12. Close ball valve (1).
13. Fill the pump in accordance with Chapter Filling the Empty Pump [▸▸ 45].

** Order no., see Chapter Assembly of the Device [▸▸ 57]

8.2.9 Hydraulic Stage Maintenance

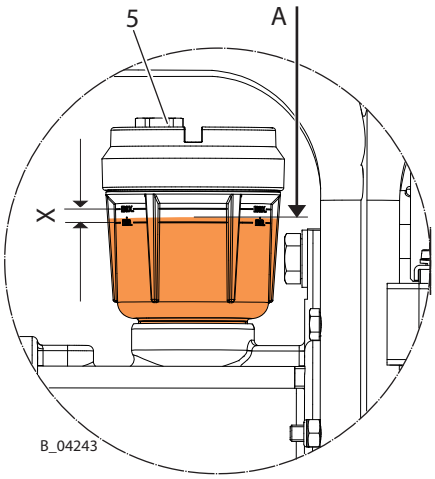
Partially disassemble the device on the frame, as shown in the figure, and turn it upside down. Observe the fill level marking X on the oil tank.



8.2.10 Checking the Oil Level

1. Start up the pump for a short time without any product.
2. Then read oil level A.

Dismount the pump and place it upside down on a suitable underlay and position it horizontally.



Observe the fill level marking X on the oil tank. Oil level A in the oil tank has to be within the specified markings (X).

If the level deviates from these markings, the hydraulic oil must be topped up.

1. Unscrew and remove threaded plug (5).
2. Top up oil to level A (middle of marking X).
3. Start up the pump for a short time without any product and check for air bubbles.
4. Screw in threaded plug (5) and tighten with 2 Nm; 1.5 lbft.

NOTICE

Using hydraulic oil

Using the wrong hydraulic oil can cause a malfunction.

- Use only original hydraulic oil - Wagner order no. 322912 (250 ml or 15 cu inch).

8.2.11 Oil Change

Perform oil change after 500 service hours or once a year.

Necessary accessories:

Order no. 322911 - Oil filling set

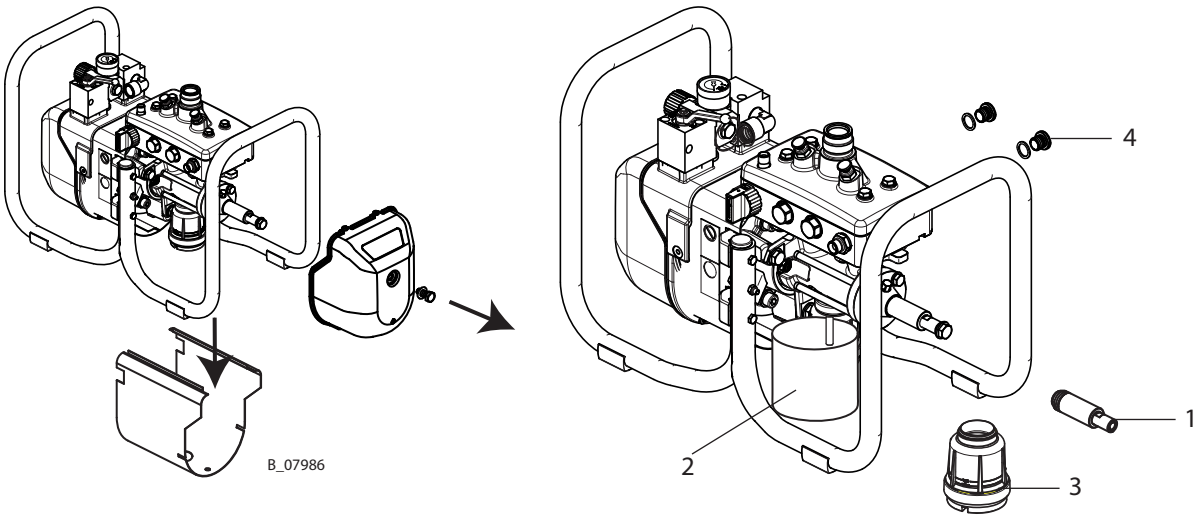
NOTICE

Using hydraulic oil

Using the wrong hydraulic oil can cause a malfunction.

- Use only original hydraulic oil - Wagner order no. 322912 (250 ml or 15 cu inch).

8.2.11.1 Draining Oil



1. Decommission and clean, chapter Decommissioning and Cleaning [▸▸ 41] up to and including point 6.
2. Position device as shown in the picture and dismount the hood and casing.
3. Unscrew piston cover (1).
4. Place oil collector (2) under the oil tank.
5. Unscrew oil tank (3) and drain contents.
6. Unscrew and remove locking screws (4) and seals.
7. Slowly start up the pump until no more oil flows out of the oil suction tube.
8. Screw in clean oil tank (3) together with seal.

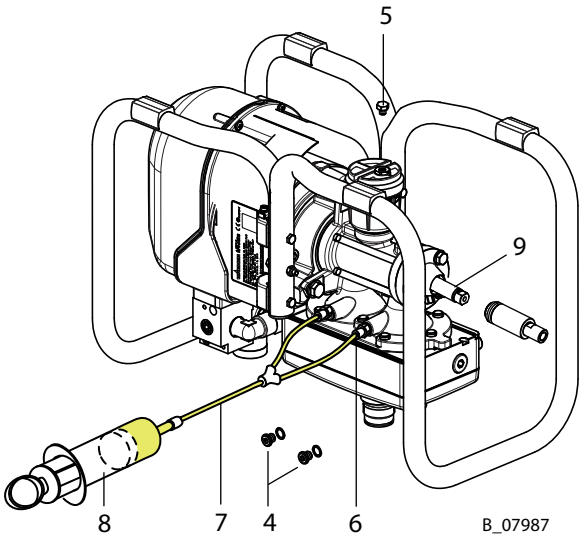
8.2.11.2 Filling Hydraulic Stage with Oil

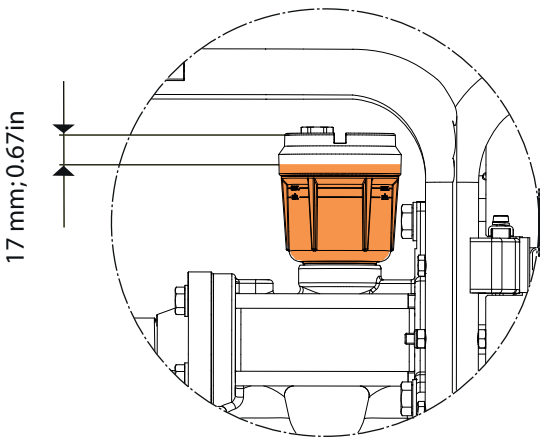
⚠ CAUTION

Environmental pollution caused by waste oil!

Waste oil in the sewage network or spilled on the ground causes severe environmental damage.
Groundwater pollution is liable to prosecution.

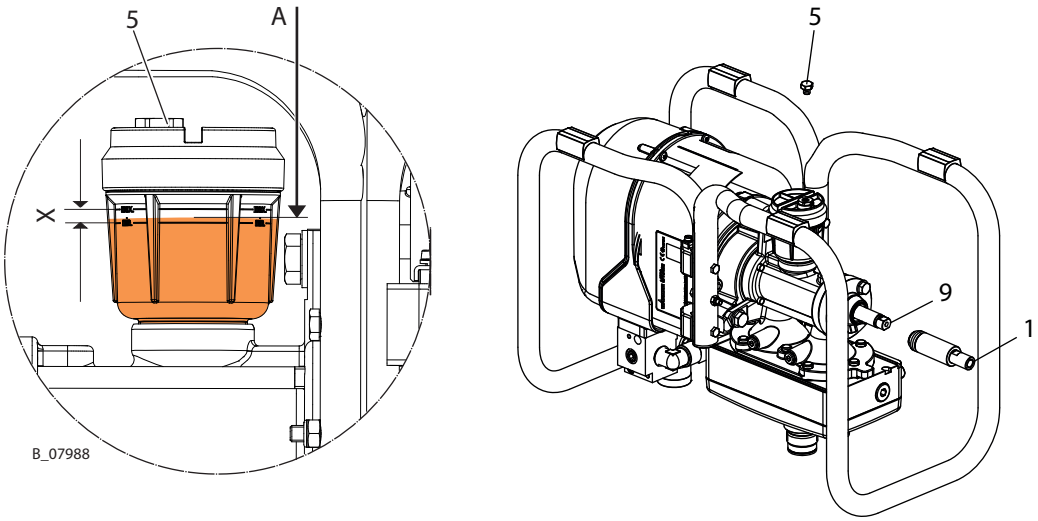
- Collect waste oil and bring it to a collection point.
- Waste oil is taken back by the seller at the time of purchasing hydraulic oil.





1. Dismount the pump and place it upside down on a suitable underlay and position it horizontally.
2. Unscrew and remove threaded plug (5).
3. Unscrew 2 locking screws (4) and replace with 2 threaded fittings (6) from the oil filling set.
4. Connect hoses with Y-pieces (7).
5. Fill syringe (8) with hydraulic oil and insert into hose.
6. Move piston (9) into the first end position. Use the syringe to fill the oil, until the oil flows out of the suction tube into the oil tank with no air bubbles.
7. Move piston (9) into the second end position. Use the syringe to fill the oil, until the oil flows out of the suction tube into the oil tank with no air bubbles.
8. Continue to top up the oil until the level before venting is approx. 17 mm; 0.67 inches below the upper edge of the oil tank.
9. Screw in threaded plug (5) and tighten gently. Put pump on its side and dismount oil filling set. Seal the filler openings tightly with 2 locking screws (4).

8.2.11.3 Vent



1. The dismounted pump is to be place upside down on a suitable underlay and positioned horizontally. Remove the threaded plug (5).
2. Slowly start up the pump (vent), until no more air bubbles rise from the oil suction tube.
3. Oil level A in the oil tank has to be within the specified markings X.
4. Screw in threaded plug (5) and tighten with 2 Nm; 1.5 lbft.
5. Mount piston cover (1) and hood with casing.
6. Return pump to correct setup position.
7. Pump is ready for use again.

9 TROUBLE SHOOTING AND SOLUTION

Malfunction	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 briefly disconnect compressed air supply.
	No pressure indication on the pressure gauge (air pressure regulator defective).	Disconnect compressed air supply briefly or repair or change pressure regulator.
	Spray nozzle is clogged.	Clean the nozzle according to 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 suitable product.
	Fluid section or high-pressure hose is blocked (e.g., 2K product hardened).	Dismount and clean fluid section, replace high-pressure hose.
	Grease in spool and sleeve assembly.	Degrease spool and sleeve assembly.
	Occasionally, the pump stops at the reversal point.	Check detent body.
Poor spray pattern	Please refer to the gun manual.	
Irregular pump operation: spray jet collapses (pulsation).	Viscosity is too high.	Thin product.
	Spraying pressure is too low.	Increase incoming air pressure. Use a smaller nozzle.
	Valves are clogged.	Press valve depressor.
		Clean pump. If necessary, leave it to soak in cleaning agent.
	Foreign body in suction valve.	Dismantle suction valve housing, clean and check valve seat.
	Diameter of compressed air line too small.	Assemble a larger supply line -> Chapter Data [▸▸ 22]
	Valves, packings, or pistons are worn out.	Replace the parts.
	Control air filter or work air filter is clogged.	Check and clean it if necessary.
Highly irregular operation of the pump.	Diaphragm blocked because suctioning is too fast.	Operate pump temporarily with ball valve opened a minimal amount.
The pump runs evenly, but does not suck up any product.	The suction system's union nut is loose; the pump is taking in air.	Tighten union nut.
	Suction filter is clogged.	Clean the filter.
	Valves are clogged.	Press valve depressor.
		Clean pump. If necessary, leave it to soak in cleaning agent.
Pump runs fast when the spray gun is closed.	Valves worn.	Replace the parts.
Loss of power due to severe icing in the air motor	There is 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.

10 REPAIRS

10.1 REPAIR PERSONNEL

Repair work should be undertaken carefully by qualified and trained personnel. They should be informed of specific hazards during their training.

The following hazards may arise during repair work:

- risk to health from inhaling solvent vapors,
- use of unsuitable tools and aids.

A skilled person must check to ensure that the device is in a reliable state after it is repaired. A function test should be performed.

10.2 REPAIR NOTES

⚠ DANGER

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.
- Use only WAGNER original spare parts and accessories.
- Only repair and replace parts that are listed in the spare parts chapter and that are assigned to the device.
- Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, product hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the energy and compressed air supply.
  - Disconnect the control unit from the mains.
- Observe the operating and service manual for all work.

Before Repair Work

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

1. Flush and clean the system according to Chapter Decommissioning and Cleaning [▸▸ 41].
2. Interrupt the air supply.

After Repair Work

1. Carry out safety checks in accordance with Chapter Safety Checks and Maintenance Intervals [▸▸ 42].
2. Put the system into operation in accordance with Chapter Start up [▸▸ 35] and check for leaks in accordance with Chapter Function Test after Repair Work [▸▸ 58].
3. Have the system checked for safe condition by a skilled person.
4. Carry out functional check in accordance with Chapter Function Test after Repair Work [▸▸ 58].

10.3 TOOLS

The following tools are required for assembling and disassembling the device (if possible, always bring entire tool sets with you):

- Torque wrench 40 Nm; 30 lbft
- Open-end wrenches, sizes 3; 5; 7; 8; 10; 12; 13; 14; 15; 16; 17; 18; 19; 22; 24; 27; 36; 50
- Allen wrench, size 10
- Screwdriver, size 3

10.4 CLEANING THE PARTS AFTER DISASSEMBLY

⚠ WARNING

Incompatibility of cleaning agent and working medium!

Risk of explosion and danger of poisoning by toxic gases.

- Examine the compatibility of the cleaning agents and working media on the basis of the safety data sheets.

Please note:

1. Thoroughly clean all reusable parts with a suitable cleaning agent.
2. All dismantled parts have to be clean and dry after cleaning. Care should be taken that these parts remain free of solvents, grease or sweat from the hands (salt water). Perform cleaning and mounting tasks wearing gloves.

10.5 ASSEMBLY OF THE DEVICE

In Chapter Spare Parts [▸▸ 65] the order numbers for device spare parts can be found, as well as for wearing parts such as seals.

1. Defective parts, O-rings and seal sets must always be replaced.
2. Use greases and glues in accordance with Chapter Spare Parts [▸▸ 65].
3. Observe torque specifications in Chapter Spare Parts [▸▸ 65].

Assembly Aids

Order no.	Quantity	Designation	Smaller tanks
9992590	1 pc ≙ 50 ml	Loctite® 222	
9992511	1 pc ≙ 50 ml	Loctite® 243	
9992528	1 pc ≙ 150 ml	Loctite® 270	
9992831	1 pc ≙ 50 ml	Loctite® 542	
9998808	1 pc ≙ 18 kg!	Mobilux® EP 2 grease	400 g tube ≙ order no. 2355418
9992616	1 pc ≙ 1 kg can	Molykote® DX grease	50 g tube ≙ order no. 2355419
322912	1 pc ≙ 250 ml	Hydraulic oil - Wagner	

Brand notice

The brands specified in this document are property of the respective owners. Loctite ® for example, is a registered brand of Henkel.

11 FUNCTION TEST AFTER REPAIR WORK

After all repairs, the device must be checked for safe condition before recommissioning. The necessary scope of inspection and testing depends on the repair carried out and must be documented by the repair personnel.

Activity	Aid tools
1. Piston travel	
▸ It must be possible to move the piston rod on both sides up to stop with a pre-assembled pressure stage. Balancing bore must be completely open in the respective end position (visual inspection).	Manual inspection
2. Oil filling	
▸ Mount pressure and fluid section on frame. Push piston into air motor-side end position. Fill pre-assembled pump with oil via filling port until oil is visible in the oil tank. Push piston into the opposite end position. Fill pump further with oil until just below end of oil tank inspection window (see Chapter Filling Hydraulic Stage with Oil [▸▸ 52]).	Oil filling unit
3. EX-relevant tests	
1. Check the ground connection between the corresponding ground connection of the pump and the frame/mobile base, and between the individual parts of the frame/mobile base: <100 kΩ 2. Check conductivity between the piston and the grounding connection: <100 kΩ **These tests are Ex-relevant!**	Ohmmeter (Measurement voltage 500...1000 VDC)
4. Leaktightness check	
1. Connect the air motor to the air supply (6 bar). 2. To perform a tightness check on the device, the product pressure with the flushing agent is slowly increased in increments until the maximum pressure indicated on the type plate is reached. 3. Close pump outlet. 4. In each position (with upstroke and downstroke), let sit for 0.5-1 minute(s) and listen for audible blowing off. 5. When the air supply is turned off, a drop in pressure must be watched for. 6. Check leak tightness of the following components: – flange seal – ball valve (in all positions) – pressure stage – fluid section	Air motor: Test medium: Compressed air Leak spray Fluid section: Test medium: Suitable flushing agent
5. General checks	
1. Check tightening torque of various screws. Tighten hexagon screws M12x65 (40-10) or M16x80 (40-25) and input valve housing with the prescribed torque (see Chapter Spare Parts [▸▸ 65]). 2. Check all fittings. 3. Empty device in a controlled manner (Chapter Emptying Pump [▸▸ 44]) and depressurize (Chapter Pressure Relief / Work Interruption [▸▸ 38]). 4. Check the functionality of the frame or transport mobile base. Check whether the pump is mounted horizontally on the frame.	Torque wrench Visual check

12 DISPOSAL

12.1 DEVICE

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

The following materials have been used:

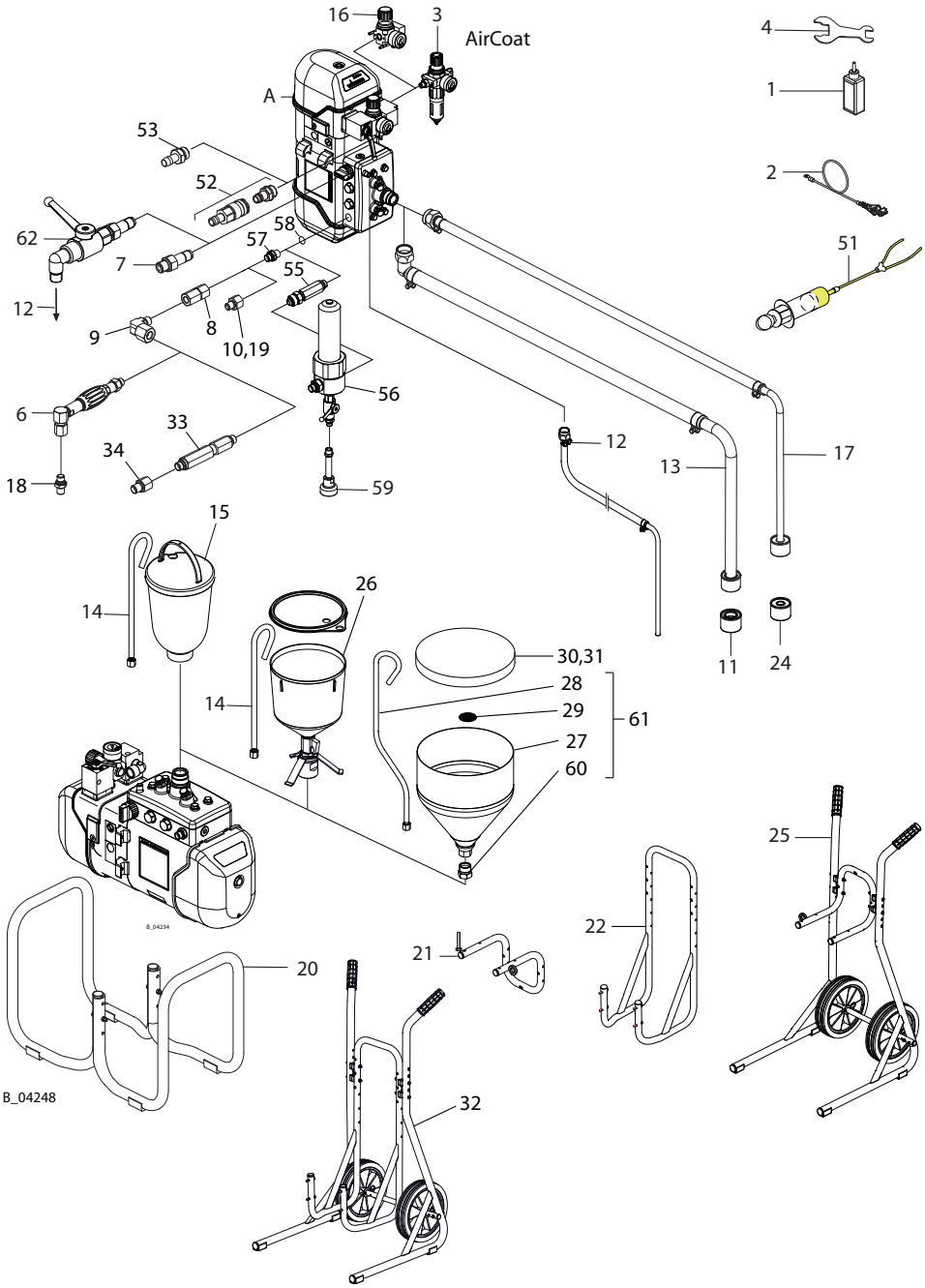
- Stainless steel
- Aluminum
- Elastomers
- Plastics
- Carbide

12.2 CONSUMABLE PRODUCTS

Consumable products (lacquers, adhesives, flushing and cleaning agents) must be disposed of in accordance with all applicable legal requirements.

13 ACCESSORIES

13.1 COBRA 40-10 ACCESSORIES



Regarding item 7: Fitting (7) can be screwed in instead of the relief valve. In this case, the required ball valve must be provided by the customer. The return hose can no longer be connected to the [return socket] output. Alternative: Item 62 includes a ball valve.

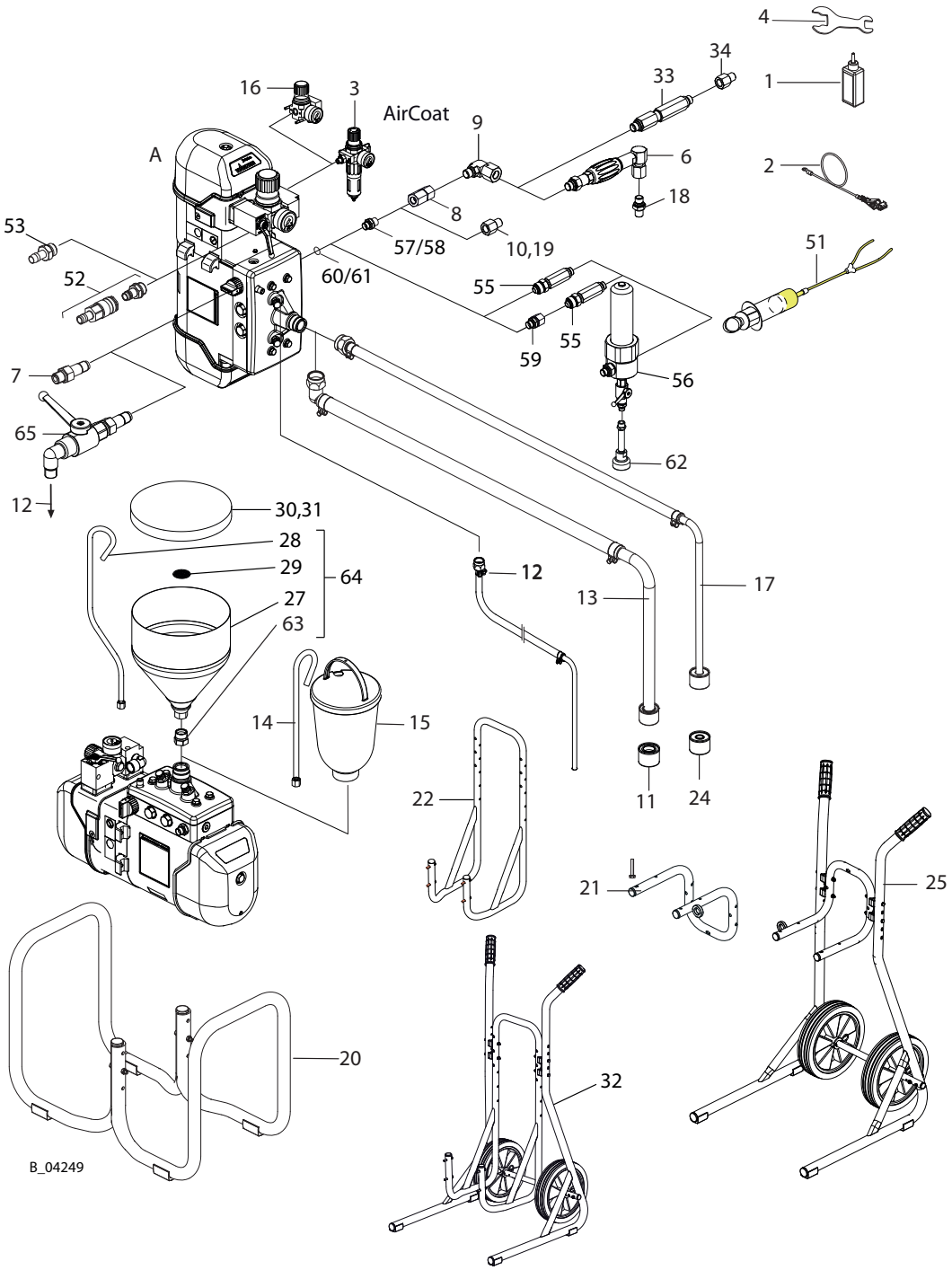
Regarding item 55/57: When the fitting at the product output is replaced (item 55/57), a new sealing ring (item 58) must also be installed.

Pos	K	Order no.	Designation
A		2329519	Diaphragm pump Cobra 40-10
1	♦	322912	Hydraulic oil (for pressure stage) 250 ml; 250 cc
2	♦	236219	Grounding cable 3 m; 9.8 ft
3		2382997	AirCoat filter pressure regulator
4		341434	Double open-end wrench
6		2329026	Inline filter HL DN6-PN270-G1/4"-SSt
7		2325343	Fitting, DF-MM-R1/4"-M12-PN270-SSt
8		2341068	Fitting, SF-FF-G3/8-G1/4-530bar-SSt
9		2331273	Fitting, EF-FM-G1/4-G1/4-530bar-SSt
10		2332621	Fitting, RF-FM-G3/8-1/4NPSM-530bar-SSt
11		2323325	Air suction filter DN25
12		2329046	Return hose DN6-PN310-G1/4"-PA
13		2324116	DN25 Suction Hose
14		2333163	Return tube for item 15
15		2344505	5-liter hopper set for Cobra
16		2328611	AirCoat regulator set
17		2324110	DN16 Suction Hose
18		2330774	Fitting, DF-MM-G1/4-1/4NPSM-530bar-SSt
19		2332620	Fitting, RF-FM-G3/8-3/8NPSM-530bar-SSt
20		322052	Complete Frame
21		2332143	Wall mount 4“, complete
22		2349756	Wall mounting, long
24		2323396	Air suction filter DN16
25		2325901	Mobile base 4", complete
26		2344741	2 L tank for Cobra
27		2341278	20 L tank for Cobra
28		2345266	Exhaust pipe 20L
29	♦	3767	Filter disk D51, 400 µm
	♦	3768	Filter disk D51, 800 µm
30		2304620	Cover 365-B
31		2304439	Drumcover 365-E
32		2341375	Cobra mobile base, complete
33		2324558	Inline filter DN6-PN270-G1/4"-SSt
34		2332619	Fitting, RF-FM-G1/4-1/4NPSM-530bar-SSt
51	♦	322911	Oil filling set with 100 ml; 100 cc syringe
52		322916	Air coupling set DN 10 mm; 0.39 inch
53		9985619	Hose fitting with sealing ring
55		2329922	Fitting, SF-MM-G3/8"-M24-PN530-SSt
56		2335334	HP filter DN12-PN530-CS, complete
57		2330775	Fitting, DF-MM-G3/8-G3/8-530bar-SSt
58		9974112	Sealing ring for G3/8 thread

Pos	K	Order no.	Designation
59		--	Pressure relief Relex (see supplement, order no. 2409685)
60		2401807	Fitting, RF-FM-M36-G1 1/4-PN20-SSt
61		2401849	20-liter hopper set for Cobra
62		2356467	Ball valve set

♦ = wearing parts

13.2 COBRA 40-25 ACCESSORIES



Regarding item 7: Fitting (7) can be screwed in instead of the relief valve. In this case, the required ball valve must be provided by the customer. The return hose can no longer be connected to the [return socket] output. Alternative: Item 65 includes a ball valve.

Regarding item 56: When using the HP filter (item 56), the respective appropriate fitting must be used (for product output fluid sections 1/2", the two fittings items 55 and 59 are required; for product output fluid sections 3/8", only fitting item 55 is required). The suitable sealing ring (item 60/61) must also be used.

Regarding items 55/57/58/59: When the fitting is replaced at the product output (items 55/57/58/59), a new sealing ring (item 60/61) must also be installed.

Pos	K	Order no.	Designation
A		2329523	Diaphragm pump Cobra 40-25
1	♦	322912	Hydraulic oil (for pressure stage) 250 ml; 250 cc
2	♦	236219	Grounding cable 3 m; 9.8 ft
3		2382997	AirCoat filter pressure regulator
4		341434	Double open-end wrench
6		2329026	Inline filter HL DN6-PN270-G1/4"-SSt
7		2325343	Fitting, DF-MM-R1/4"-M12-PN270-SSt
8		2341068	Fitting, SF-FF-G3/8-G1/4-530bar-SSt
9		2331273	Fitting, EF-FM-G1/4-G1/4-530bar-SSt
10		2332621	Fitting, RF-FM-G3/8-1/4NPSM-530bar-SSt
11		2323325	Air suction filter DN25
12		2329046	Return hose DN6-PN310-G1/4"-PA
13		2324116	DN25 Suction Hose
14		2333163	Return tube for item 15
15		2344505	5-liter hopper set for Cobra
16		2328611	AirCoat regulator set
17		2324110	DN16 Suction Hose
18		2330774	Fitting, DF-MM-G1/4-1/4NPSM-530bar-SSt
19		2332620	Fitting, RF-FM-G3/8-3/8NPSM-530bar-SSt
20		2308732	Cobra 40-25 frame
21		2332143	Wall mount 4", complete
22		2349756	Wall mounting, long
24		2323396	Air suction filter DN16
25		2325901	Mobile base 4", complete
27		2341278	20 liter tank
28		2345266	Exhaust pipe 20L
29	♦	3767	Filter disk D51, 400 µm
	♦	3768	Filter disk D51, 800 µm
30		2304620	Drum cover 365 B
31		2304439	Drumcover 365-E
32		2341375	Cobra mobile base, complete
33		2324558	Inline filter DN6-PN270-G1/4"-SSt
34		2332619	Fitting, RF-FM-G1/4-1/4NPSM-530bar-SSt
51	♦	322911	Oil filling set with 100 ml; 100 cc syringe

Pos	K	Order no.	Designation
52		322916	Air coupling set DN 10 mm; 0.39 inch
53		9985619	Hose fitting with sealing ring
55		2329922	Fitting, SF-MM-G3/8"-M24-PN530-SSt
56		2335334	HP filter DN12-PN530-CS, complete
57		2330775	Fitting, DF-MM-G3/8-G3/8-530bar-SSt
58		2330780	Fitting, DF-MM-G1/2-G3/8-530bar-SSt
59		2333058	Fitting, SF-FM-G3/8-G1/2-530bar-SSt
60	♦	9974112	Sealing ring for G3/8 thread
61	♦	3051041	Sealing ring for G1/2 thread
62		--	Pressure relief Relex (see supplement, order no. 2409685)
63		2401807	Fitting, RF-FM-M36-G1 1/4-PN20-SSt
64		2401849	20-liter hopper set for Cobra
65		2356467	Ball valve set

♦ = wearing parts

14 SPARE PARTS

14.1 HOW TO ORDER SPARE PARTS

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

Order number, designation and quantity

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

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

- billing address
- delivery address
- name of the person to be contacted in the event of any queries
- type of delivery (normal mail, express delivery, air freight, courier etc.)

Identification in spare parts lists

Explanation of column „K“ (marking) in the following spare parts lists:

♦ Wearing parts. Wearing parts are not included in the warranty.

⋆ = included in service set

● not part of the standard equipment but available as a special accessory

Explanation of order no. column:

-- Item not available as spare part.

/ Position does not exist.

14.2 NOTES ON USING SPARE PARTS

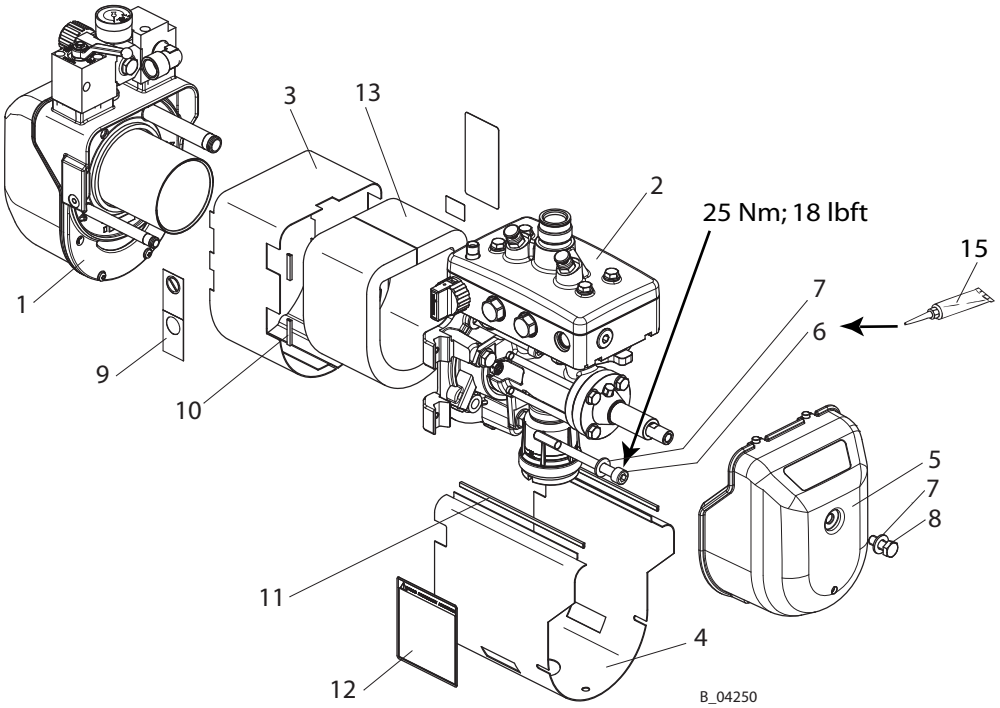
⚠ DANGER

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.
- Use only WAGNER original spare parts and accessories.
- Only repair and replace parts that are listed in the spare parts chapter and that are assigned to the device.
- Before all work on the device and in the event of work interruptions:
  - Relieve the pressure from the spray gun, product hoses and all devices.
  - Secure the spray gun against actuation.
  - Switch off the energy and compressed air supply.
  - Disconnect the control unit from the mains.
- Observe the operating and service manual for all work.

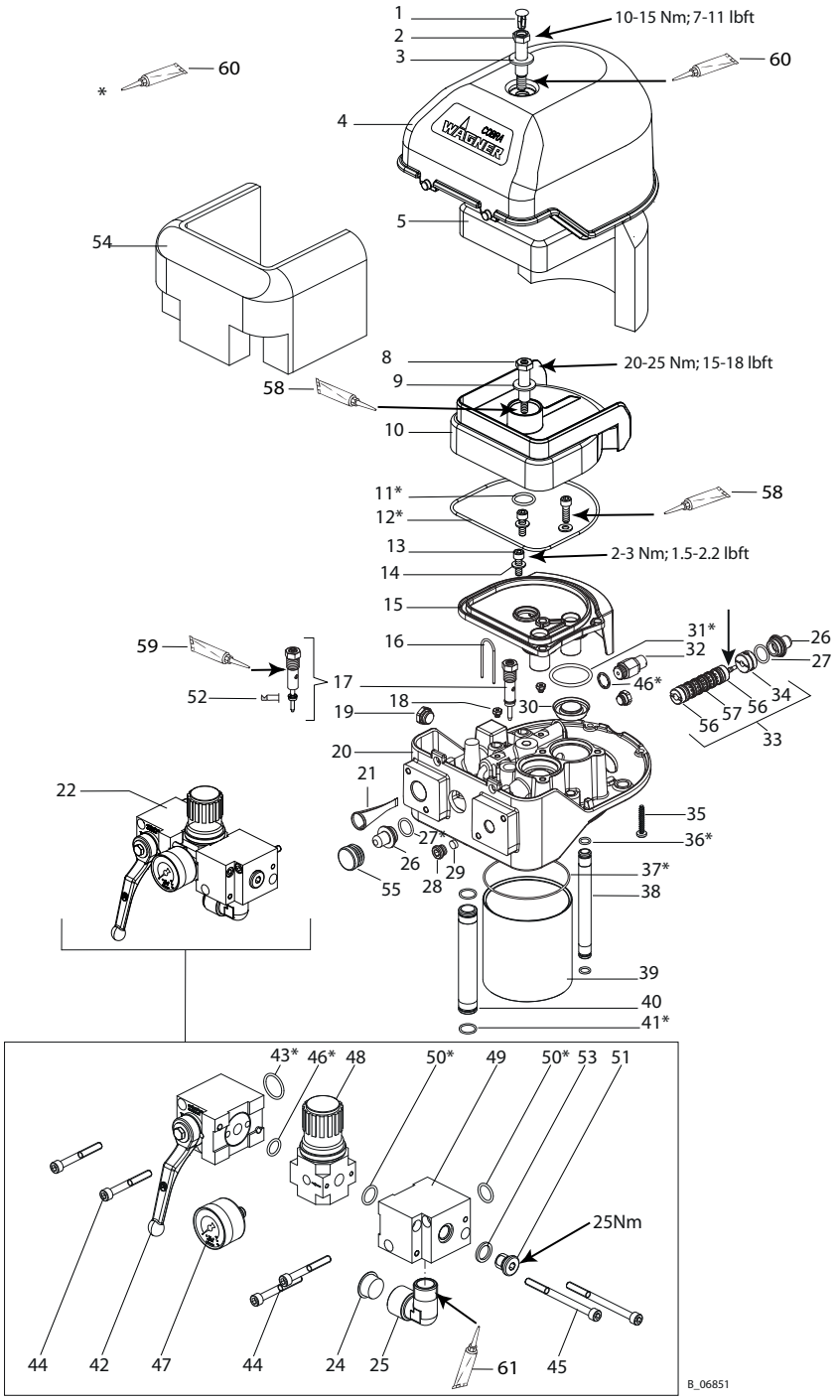
14.3 OVERVIEW OF THE COBRA 40-10 COMPONENTS



Pos	K	Stk	Order no.	Designation
1		1	--	Air motor 3/53
2		1	--	Cobra 40-10 fluid section, preassembled
3		1	322436	Air motor casing
4		1	322437	Pressure stage casing
5		1	322235	Hood 4 with air outlet
6		3	9907224	Hexagon socket head cap screw
7		4	9920106	Washer
8		1	9900107	Hexagon screw
9		1	2332077	Warning label
10		4	9999211	Edge protection profile 30 mm; 1.18 inch
11		2	9999211	Edge protection profile 164 mm; 6.46 inch
12		1	2332082	Fluid warning label
13		1	322438	Cylinder noise insulation
14	♦	1	9974112	Sealing ring
15		1	9992616	Molykote ® DX grease

♦ = wearing parts

14.4 COBRA 40-10 AIR MOTOR



Regarding item 33: Do not dismount the piston!

Pos	K	Stk	Order no.	Designation
1		1	9998718	Drive fastener
2		1	367318	Shoulder screw 4
3		1	9925033	Washer
4		1	367311	Hood 4
5	♦	1	367319	Sound absorbing mat 4

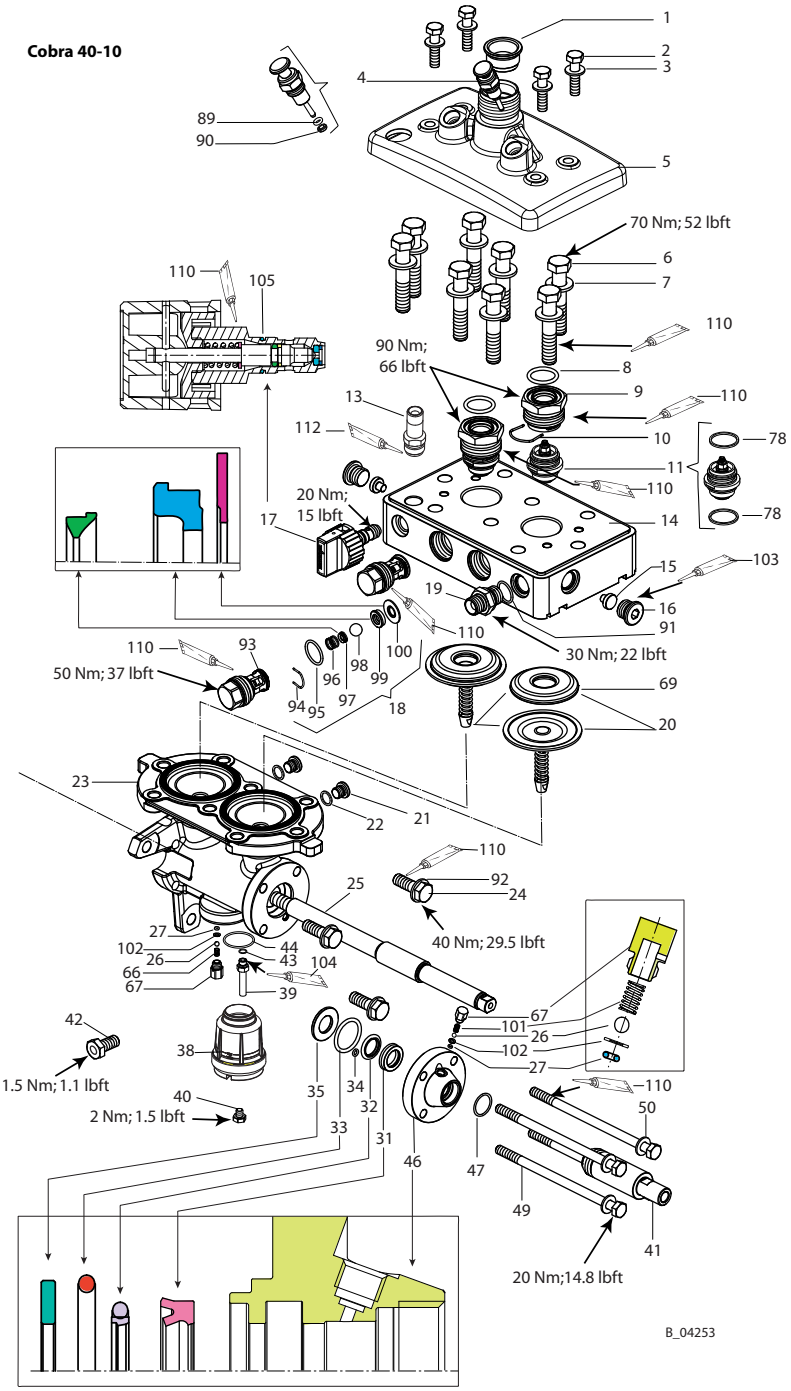
Pos	K	Stk	Order no.	Designation
8		1	367318	Shoulder screw 4
9		1	9925033	Washer
10		1	367310	Silencer 4
11	♦ ⋆	1	9974098	O-ring
12	♦ ⋆	1	9974097	O-ring
13		3	9900325	Socket cap screw
14		3	9920103	Washer, A6.4
15		1	367309	Connecting part 4
16		2	367320	Cotter pin
17	♦	1	369290	Pilot valve
18		2	9998674	Threaded plug
19		1	9998274	Threaded plug
20		1	2359165	Control housing 4
21	♦ ⋆	1	367313	Compressed air filter 4/6
22		1	2328606	Cobra pressure regulator unit, complete
24		1	9990506	Cone plug, GPN 600
25		1	9999228	Fitting L
26		2	367307	Sealing plug 4/6
27	♦ ⋆	2	9974085	O-ring
28		1	367324	Filter holder
29	♦ ⋆	1	367314	Control air filter
30	♦ ⋆	1	322910	Cobra outlet seal set (consisting of 2 seals)
31	♦ ⋆	2	9974095	O-ring
32		1	368285	Safety valve 0.63 MPa; 6.3 bar; 91 psi
33	♦	1	9943080	Spool and sleeve assembly, complete
34	♦	1	368038	Detent body, complete, ISO 1/2
35		2	9907126	Screw SFS Plastite 45
36	♦ ⋆	2	9974089	O-ring
37	♦ ⋆	2	9974115	O-ring
38		1	322432	Control air pipe
39		1	322430	Cylinder pipe
40		1	322431	Compressed air pipe
41	♦ ⋆	2	9971448	O-ring
42	♦	1	2360756	Angled ball valve 4, complete
43	♦ ⋆	1	9971137	O-ring
44		4	9900316	Hexagon socket head cap screw, M6x50
45		2	9907039	Hexagon socket head cap screw, M6x80
46	♦ ⋆	1	9971313	O-ring
47	♦	1	2341175	Pressure gauge with air regulator 0-10 bar, G1/8"
48	♦	1	2309972	Pressure regulator
49		1	2309744	Distributor piece LR-D-I Mini 4

Pos	K	Stk	Order no.	Designation
50	♦ ⋆	2	9974166	O-ring
51		1	9904307	Locking screw with collar/hexagon socket
52	♦	1	9974217	Rod seal
53		1	9970154	Sealing ring
54	♦	1	322439	Air motor noise insulation
55		1	9990861	Ribbed plug
56	♦	2	368313	Damper ISO1 and ISO2
57	♦	6	9971123	O-ring
58		1	9992590	Loctite ® 222 50 ml; 50 cc
59		1	9992831	Loctite ® 542 50 ml; 50 cc
60		1	9992616	Molykote ® DX grease
61		1	9992528	Loctite ® 270 50 ml; 50 cc
			2341627	Cobra 40-10 air motor service set

♦ = wearing parts

⋆ = Included in service set

14.5 COBRA 40-10 FLUID SECTION



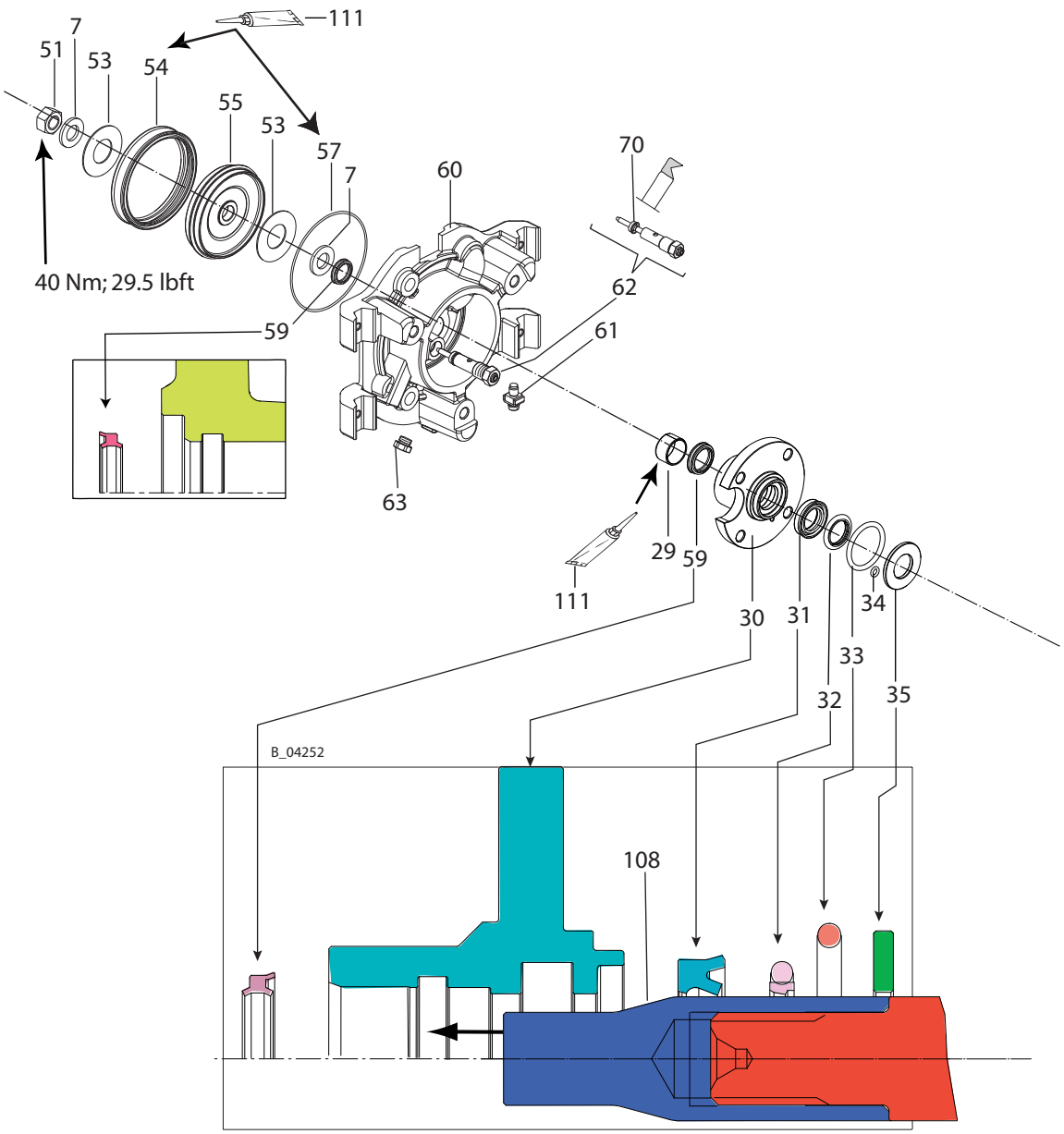
Pos	K	Stk	Order no.	Designation
1		1	2329898	Sealing sleeve
2		4	9900204	Hexagon screw
3		4	9920102	Washer
4		2	341241	Inlet valve depressor, complete, see Chapter Inlet Valve Depressor [▶▶ 82]
5		1	2344084	Inlet housing

Pos	K	Stk	Order no.	Designation
6		8	9907234	Hexagon screw
7		10	9920107	Washer
8	♦ ⋆	2	9974184	O-ring
9		2	322411	Valve fitting
10		2	341336	Clasp
11	♦ ⋆	1	322914	Inlet valve set, complete (comprising 2 valves), see Chapter Cobra 40-10 Inlet Valve [⏩ 82]
13		1	2330810	Connection piece
14		1	322410	Fluid section
15		2	322412	Plug
16		2	9904311	Screw plug
17	♦	1	169248	Relief valve, complete, see Chapter Relief Valve [⏩ 84]
18	♦ ⋆	1	322915	Outlet valve set, complete (spare parts for 2 valves)
19		1	2330775	Fitting, DF-MM-G3/8-G3/8-530 bar-SSt
20	♦ ⋆	1	322913	Complete diaphragm set with insert (comprising 2 diaphragms)
21		2	9904306	Screw plug
22	♦	2	9970127	Sealing ring
23		1	2338520	Pressure stage D19/53
24		3	9907041	Hexagon screw
25		1	322402	Piston rod D19/53
26		2	9941502	Ball
27	♦	2	9971189	O-ring
29		1	9962028	Permaglide bushing
30		1	322403	Pressure stage flange
31	♦	2	9974182	Rod sealing profile BS
32	♦	2	9974183	Rod sealing set
33	♦	2	9974186	O-ring
34	♦	2	9971446	O-ring
35		2	322405	Pressure disk
37	♦	1	115944	O-ring
38		1	2352719	Oil tank set
39		1	2339250	Oil suction fitting L=42
40		1	9998274	Threaded plug, G1/4
41		1	322435	Piston cover
42		1	2334842	Pressure relief valve
43	♦	1	9971162	O-ring
44	♦	1	115944	O-ring
46		1	322404	Pressure stage cover disk
47	♦	1	9974074	O-ring
49		4	9907233	Hexagon screw
50		4	9920102	Washer
51		1	2386160	Self-locking hexagon nut (new)

Pos	K	Stk	Order no.	Designation
		1	9910101	Hexagon nut, secured with Loctite ® 243 (old version!)
53	♦	2	322427	Damping washer
54	♦	1	9974181	Piston sealing profile Z5
55		1	322426	Piston air motor 3
57	♦	1	9974115	O-ring
59	♦	2	9974185	Seal wiper ring, profile EM
60		1	2344068	Air motor flange
61		1	367258	Grounding, complete
62	♦	1	369290	Pilot valve
63		1	9998675	Threaded plug
66		1	9998780	Pressure spring
67		2	322407	Oil valve screw
68	♦	3	9971162	O-ring
69		2	322415	Insert
70	♦	1	9974217	Rod seal
78	♦	4	341331	Sealing ring
89	♦ ⋆	2	9971486	O-ring (solvent-resistant)
90	♦	2	341316	Scraper
91	♦	1	9974112	Sealing ring for G3/8 thread
92		3	9920106	Washer
93		2	341325	Valve guide
94		2	341328	Clasp
95	♦	2	9971470	O-ring
96		2	341326	Pressure spring
97		2	253405	Spring support ring
98	♦	2	9941501	Ball 11 HM
99	♦	2	341327	Outlet valve seat
100	♦	2	341347	Sealing ring
101		1	9994237	Pressure spring
102	♦	2	322408	Oil valve pressure ring
103		1	9992590	Loctite ® 222 50 ml; 50 cc
104		1	9992831	Loctite ® 542 50 ml; 50 cc
105	♦ ⋆	1	9971395	O-ring, 10x1.25
106		1	2312288	Service set for Cobra 40-10 fluid section
107		1	322917	Service set for Cobra 40-10 piston (incl. items 25, 31, 32, 33, 59, and 108)
108		1	322930	Piston rod assembly pin
110		1	9992616	Molykote ® DX grease
111		1	9998808	Mobilux ® EP 2 grease
112		1	9992528	Loctite ® 270 50 ml; 50 cc

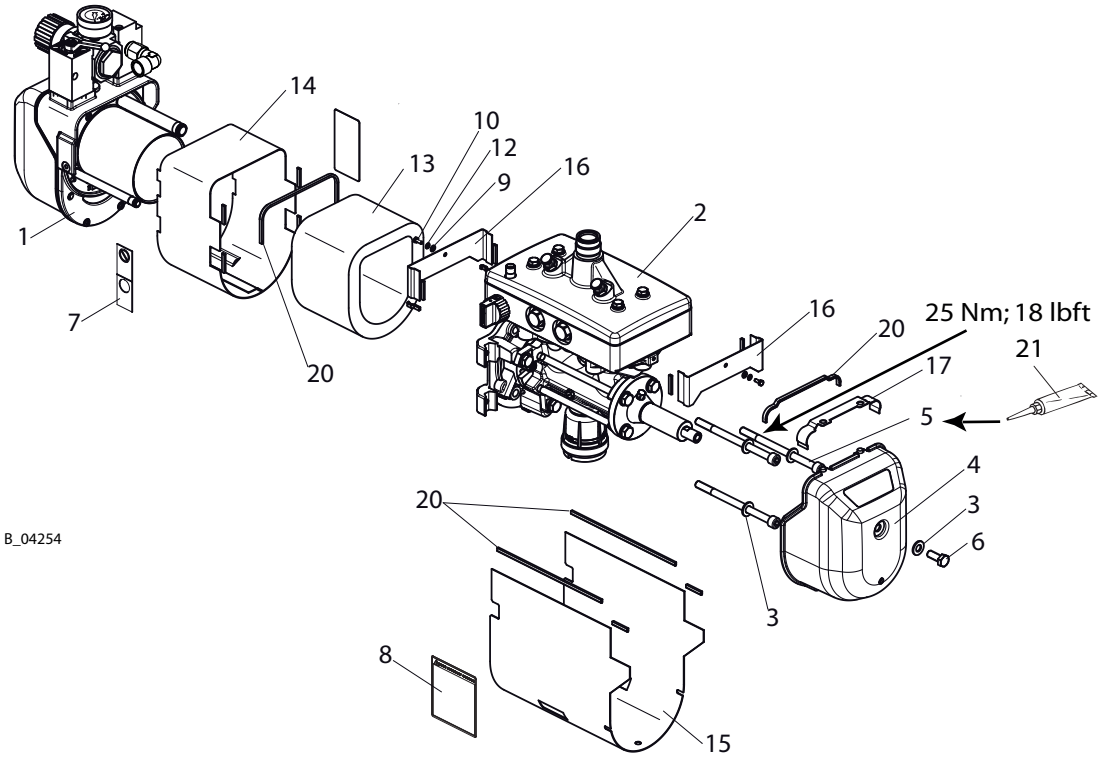
♦ = wearing parts

⋆ = Included in service set



Note: The piston rod (25) may only be mounted with the screwed-on assembly pin (108).
Grease all O-rings and seals lightly with grease (111) before mounting them.

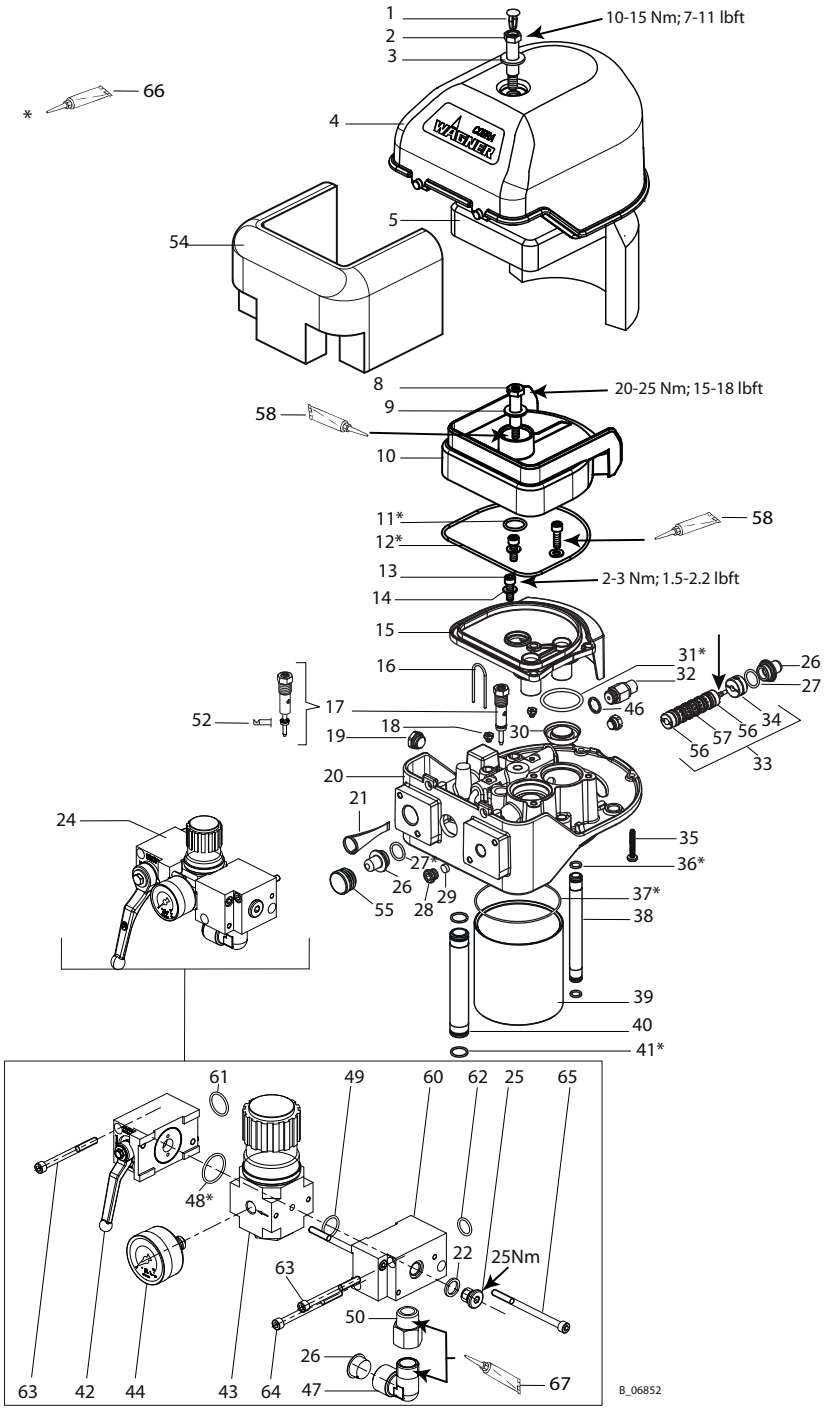
14.6 OVERVIEW OF THE COBRA 40-25 COMPONENTS



Pos	K	Stk	Order no.	Designation
1		1	--	Cobra 40-25 air motor
2		1	--	Cobra 40-25 fluid section, preassembled
3		4	9920106	Washer
4		1	322235	Hood 4 with air outlet
5		3	2308693	Hexagon socket head cap screw
6		1	9900107	Hexagon screw without shaft
7		1	2332077	Warning label
8		1	2332082	Fluid warning label
9		2	9920104	Washer
10		2	9900152	Hexagon screw
12		2	9922107	Lock washer with internal teeth
13		1	2308646	Cylinder noise insulation
14		1	2306110	Air motor casing
15		1	2306111	Pressure stage casing
16		2	2306114	Fluid section bulkhead
17		1	2308620	Pressure stage casing
20		1	9999211	Edge protection profile (total length: 0.80 m; 2.62 ft)
21		1	9992616	Molykote ® DX grease

♦ = wearing parts

14.7 COBRA 40-25 AIR MOTOR



Regarding item 33: Do not dismount the piston!

Pos	K	Stk	Order no.	Designation
1		1	9998718	Drive fastener
2		1	367318	Shoulder screw 4
3		1	9925033	Washer
4		1	367311	Hood 4
5	♦	1	367319	Sound absorbing mat 4

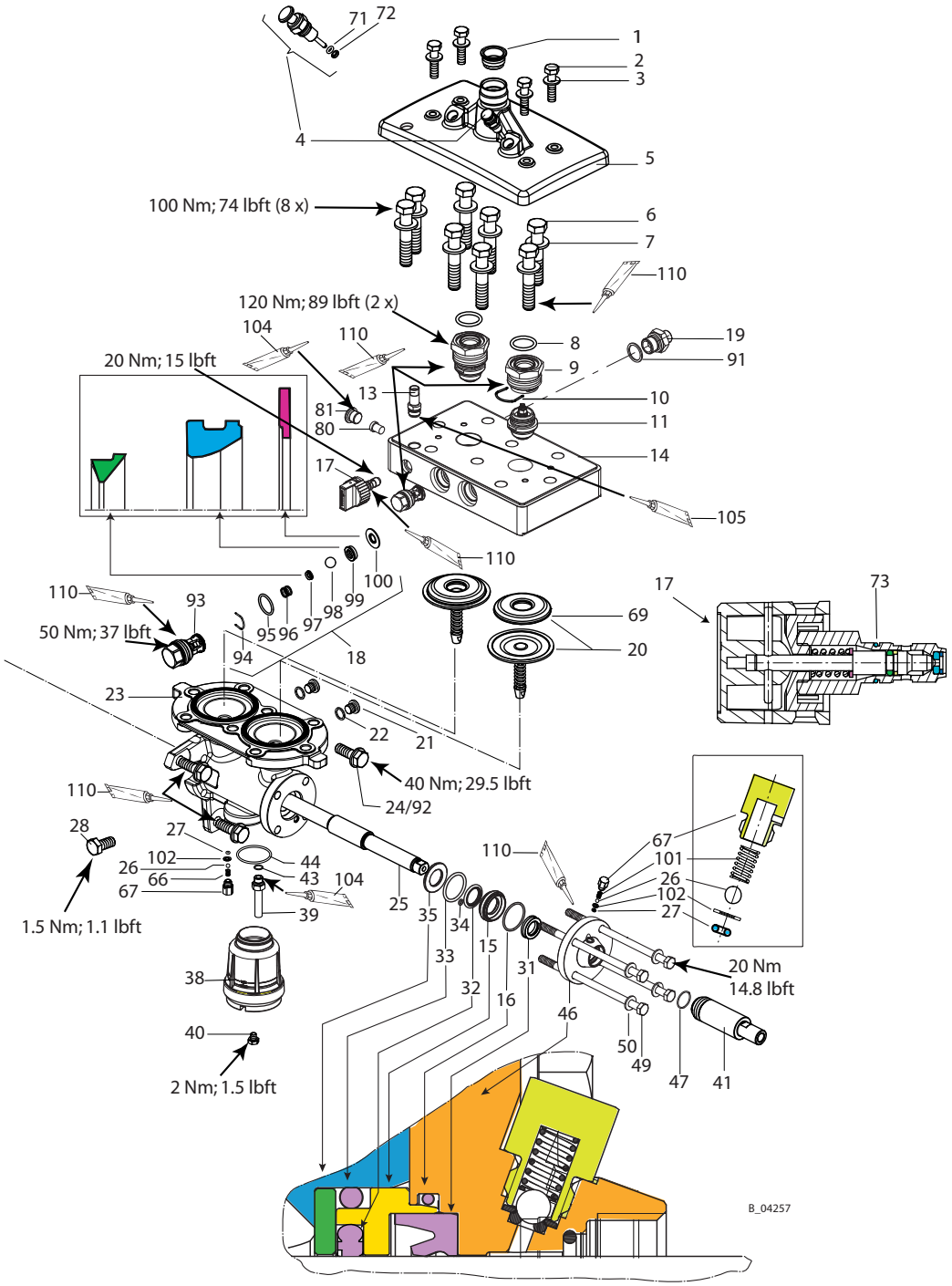
Pos	K	Stk	Order no.	Designation
8		1	367318	Shoulder screw 4
9		1	9925033	Washer
10		1	367310	Silencer 4
11	♦ ⋆	1	9974098	O-ring
12	♦ ⋆	1	9974097	O-ring
13		3	9900325	Socket cap screw
14		3	9920103	Washer, A6.4
15		1	367309	Connecting part 4
16		2	367320	Cotter pin
17		1	369290	Pilot valve
18		2	9998674	Threaded plug
19		1	9998274	Threaded plug
20		1	2359165	Control housing 4
21	♦ ⋆	1	367313	Compressed air filter 4/6
22		1	9970154	Sealing ring
24		1	2328608	Cobra 6 pressure regulator unit, complete
25		1	9904307	Locking screw with collar/hexagon socket
26		2	9990506	Cone plug, GPN 600
27	♦ ⋆	2	9974085	O-ring
28		1	367324	Filter holder
29	♦ ⋆	1	367314	Control air filter
30	♦ ⋆	1	322910	Cobra outlet seal set (consisting of 2 seals)
31	♦ ⋆	2	9974095	O-ring
32		1	368285	Safety valve 0.63 MPa; 6.3 bar; 91 psi
33	♦	1	9943080	Spool and sleeve assembly, complete
34	♦	1	368038	Detent body, complete, ISO 1/2
35		2	9907126	Screw SFS Plastite 45
36	♦ ⋆	2	9974089	O-ring
37	♦ ⋆	2	9974084	O-ring
38		1	367305	Control air pipe
39		1	2306127	Cylinder pipe
40		1	367304	Compressed air pipe
41	♦ ⋆	2	9971448	O-ring
42	♦	1	2391704	Edge ball valve midi to size 4
43	♦	1	2309973	Pressure regulator valve LR-1/2-D-O-Midi
44	♦	1	2341176	Pressure gauge with air regulator 0-10 bar, G1/4"
47		1	9999228	Elbow screw-in connection R1/2 - G1/2
48	♦ ⋆	1	3105540	O-ring
49	♦ ⋆	1	9971018	O-ring
50		1	M396.00	Reducing fitting
52	♦	1	9974217	Rod seal

Pos	K	Stk	Order no.	Designation
54	♦	1	322439	Air motor noise insulation
55		1	9990861	Ribbed plug
56	♦	2	368313	Damper ISO1 and ISO2
57	♦	6	9971123	O-ring
58		1	9992590	Loctite ® 222 50 ml; 50 cc
60		1	2311012	Distribution piece, midi to size 4
61	♦ ⋆	1	9971137	O-ring
62	♦ ⋆	1	9974166	O-ring
63		3	9906020	Hexagon socket head cap screw, M6x70
64		1	9907039	Hexagon socket head cap screw, M6x80
65		2	9907014	Hexagon socket head cap screw, M6x90
66		1	9992616	Molykote ® DX grease
67		1	9992528	Loctite ® 270 50 ml; 50 cc
			2341628	Cobra 40-25 air motor service set

♦ = wearing parts

⋆ = Included in service set

14.8 COBRA 40-25 FLUID SECTION



Pos	K	Stk	Order no.	Designation
1		1	2329898	Sealing sleeve
2		4	9900204	Hexagon screw
3		4	9920102	Washer
4		2	341241	Inlet valve depressor, complete, see Chapter Inlet valve depressor [▸▸ 82]
5		1	2344087	Inlet housing

Pos	K	Stk	Order no.	Designation
6		8	2306195	Hexagon screw
7		8	9925011	Washer
8	♦ ⋆	2	2306183	O-ring
9		2	2306164	Valve fitting
10		2	341336	Clasp
11	♦ ⋆	1	2308753	Inlet valve set, complete (comprising 2 valves), see Chapter Cobra 40-25 Inlet Valve [▸▸ 83]
13		1	2330810	Connection piece
14		1	2337668	Fluid section
15		2	2308868	Flange connection
16		2	2308886	O-ring
17	♦	1	169248	Relief valve, complete, see Chapter Relief valve [▸▸ 84]
18	♦ ⋆	1	2308760	Outlet valve set, complete (spare parts for 2 valves)
19*		1	2330775	Fitting, DF-MM-G3/8-G3/8-530bar-SSt
19*		1	2330780	Fitting, DF-MM-G1/2-G3/8-530bar-SSt
20	♦ ⋆	1	2308754	Complete Cobra 40-25 diaphragm kit set with insert (comprising 2 diaphragms)
21		2	9904306	Screw plug
22	♦	2	9970127	Sealing ring
23		1	2337746	Pressure stage
24		3	9907041	Hexagon screw
25		1	2306251	Piston rod D25/70
26		2	9941502	Ball
27	♦	2	9971189	O-ring
28		1	2334842	Pressure relief valve
29		1	2306146	Permaglide bushing
30		1	2308870	Pressure stage flange
31	♦	2	2306143	Rod sealing profile BS
32	♦	2	2306144	Rod sealing set
33	♦	2	2306145	O-ring
34	♦	2	9971446	O-ring
35		2	2306139	Pressure disk
37	♦	1	115944	O-ring
38		1	2352719	Oil tank set
39		1	2339250	Oil suction fitting L=42
40		1	9998274	Threaded plug, G1/4
41		1	2306196	Piston cover
43	♦	1	9971162	O-ring
44	♦	1	115944	O-ring
46		1	2308869	Pressure stage cover disk
47	♦	1	2306142	O-ring
49		4	9907124	Hexagon screw

Pos	K	Stk	Order no.	Designation
50		4	9920106	Washer
51		1	2386160	Self-locking hexagon nut (new)
		1	9910101	Hexagon nut, secured with Loctite ® 243 (old version!)
53	♦	2	322427	Damping washer
54	♦	1	2306204	Piston sealing profile Z5
55		1	2306205	Piston air motor 4
57	♦	1	9974084	O-ring
58		2	9920107	Washer
59	♦	1	9974090	Seal wiper ring, profile EM
60		1	2344073	Air motor flange
61		1	367258	Grounding, complete
62	♦	1	369290	Pilot valve
63		2	9998675	Threaded plug
66		1	9998780	Pressure spring
67		2	322407	Oil valve screw
68	♦	1	9971162	O-ring
69		2	2306179	Insert
70	♦	1	9974217	Rod seal
71	♦ ⋆	2	9971486	O-ring (solvent-resistant)
72	♦	2	341316	Scraper
73	♦ ⋆	1	9971395	O-ring, 10x1.25
80		1	2339251	Plug
81		1	9904311	Locking screws with collar/hexagon socket
91*	♦	1	9974111	Sealing ring for G3/8 thread
91*	♦	1	3051041	Sealing ring for G1/2 thread
92		3	9920106	Washer
93		2	341325	Valve guide
94		2	341328	Clasp
95	♦	2	9971470	O-ring
96		2	341326	Pressure spring
97		2	253405	Spring support ring
98	♦	2	9941501	Ball 11 HM
99	♦	2	2306166	Outlet valve seat
100	♦	2	2306167	Sealing ring
101		1	9994237	Pressure spring
102	♦	2	322408	Oil valve pressure ring
104		1	9992831	Loctite ® 542 50 ml; 50 cc
105		1	9992528	Loctite ® 270 50 ml; 50 cc
107		1	2312289	Service set for Cobra 40-25 fluid section
108		1	2314671	Service set for Cobra 40-25 piston (incl. items 16, 25, 31, 32, 33, 59, and 109)

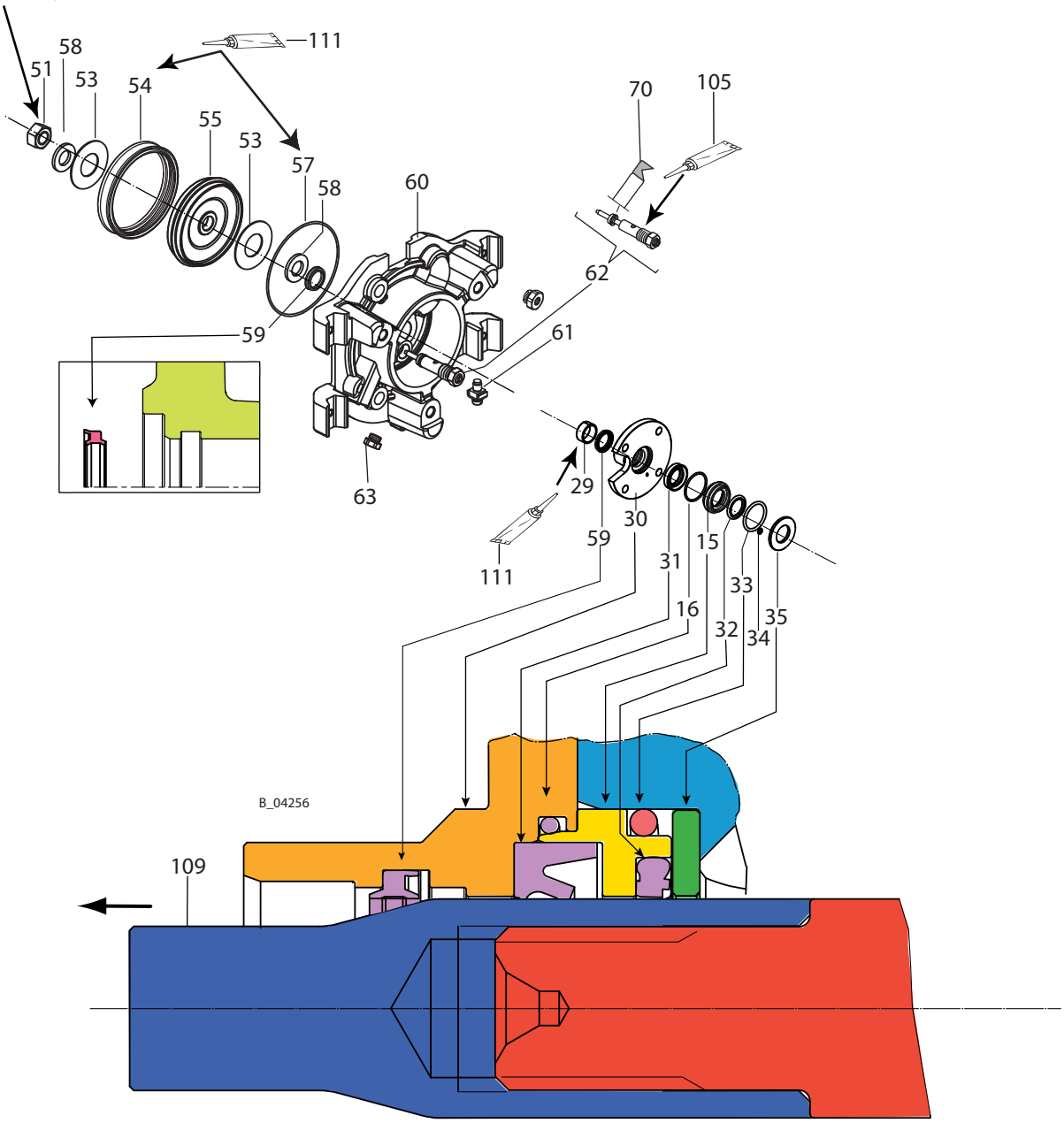
Pos	K	Stk	Order no.	Designation
109		1	2314670	Piston rod assembly pin
110		1	9992616	Molykote ® DX grease
111		1	9998808	Mobilux ® EP 2 grease

♦ = wearing parts

⋆ = Included in service set

* The internal thread at the product output of the fluid section (item 14) will be converted as of 2014 from G1/2" to G3/8", please use the corresponding fitting and sealing ring (see chapter Accessories [▸▸ 60]).

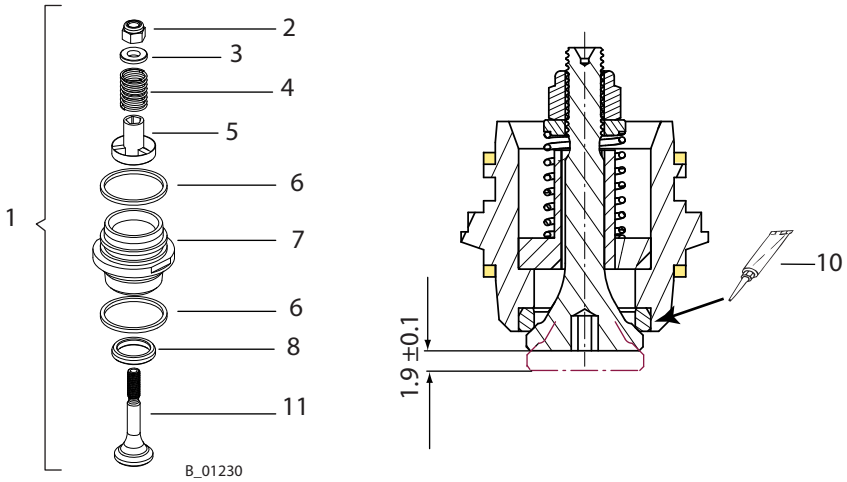
40 Nm; 29.5 lbft



Note: The piston rod (25) may only be mounted with the screwed-on assembly pin (109).

Grease all O-rings and seals lightly with grease (111) before mounting them.

14.9 COBRA 40-10 INLET VALVE

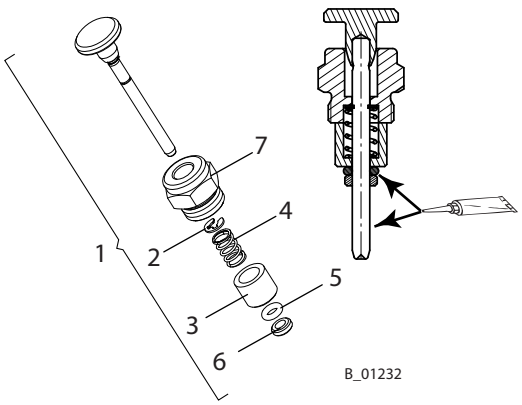


Regarding items 8 and 10: Adhesive surface: Pretreated with fast cleaner Loctite ® type 7063.

Pos	K	Stk	Order no.	Designation
1	♦	1	322914	Complete Cobra 40-10 inlet valve set
2		2	9912100	Hexagon nut with clamp
3		2	344334	Spring guide
4		2	190304	Pressure spring
5		2	158333	Guide
6	♦	4	341331	Sealing ring
7		2	344322	Valve housing
8	♦	2	340346	Valve seat
10	♦	1	9992528	Loctite ® 270 50 ml; 50 cc
11		2	340342	Valve cone

♦ = wearing parts

14.10 INLET VALVE DEPRESSOR

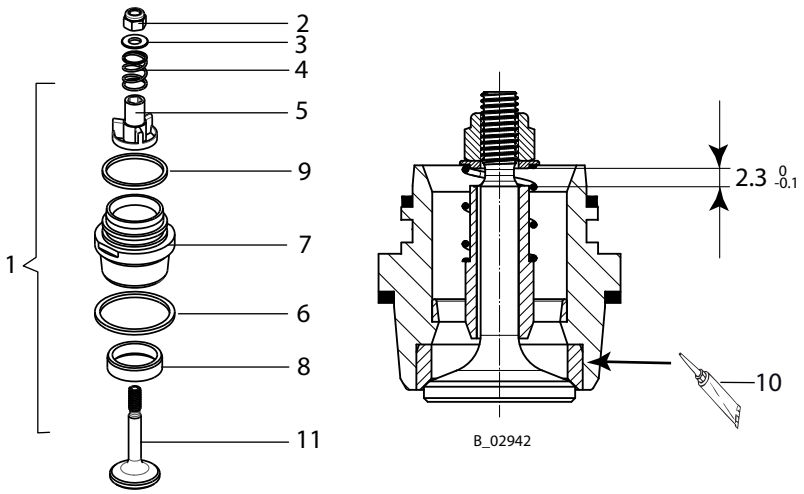


Regarding items 1 and 5: Grease with Vaseline.

Pos	K	Stk	Order no.	Designation
1		1	341241	Inlet valve depressor, complete
2		1	9922724	Lock washer 3.2
3		1	341377	Sleeve
4		1	9994275	Pressure spring
5	♦	1	9971486	O-ring, 4x2
6	♦	1	341316	Scraper
7		1	341375	Screw plug

♦ = wearing parts

14.11 COBRA 40-25 INLET VALVE

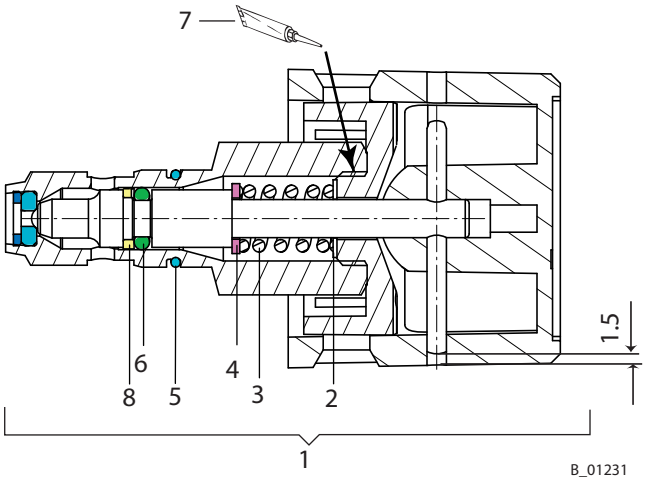


Regarding items 8 and 10: Adhesive surface: Pretreated with fast cleaner Loctite ® type 7063.

Pos	K	Stk	Order no.	Designation
1	♦	1	2308753	Complete Cobra 40-25 inlet valve set
2		2	9912100	Hexagon nut with clamp
3		2	253324	Spring guide
4		2	9994304	Pressure spring
5		2	341344	Valve guide
6	♦	2	341330	Sealing ring
7		2	--	Valve housing
8	♦	2	341385	Valve seat
9	♦	2	341331	Sealing ring
10		1	9992528	Loctite ® 270 50 ml; 50 cc
11	♦	2	341395	Valve cone

♦ = wearing parts

14.12 RELIEF VALVE

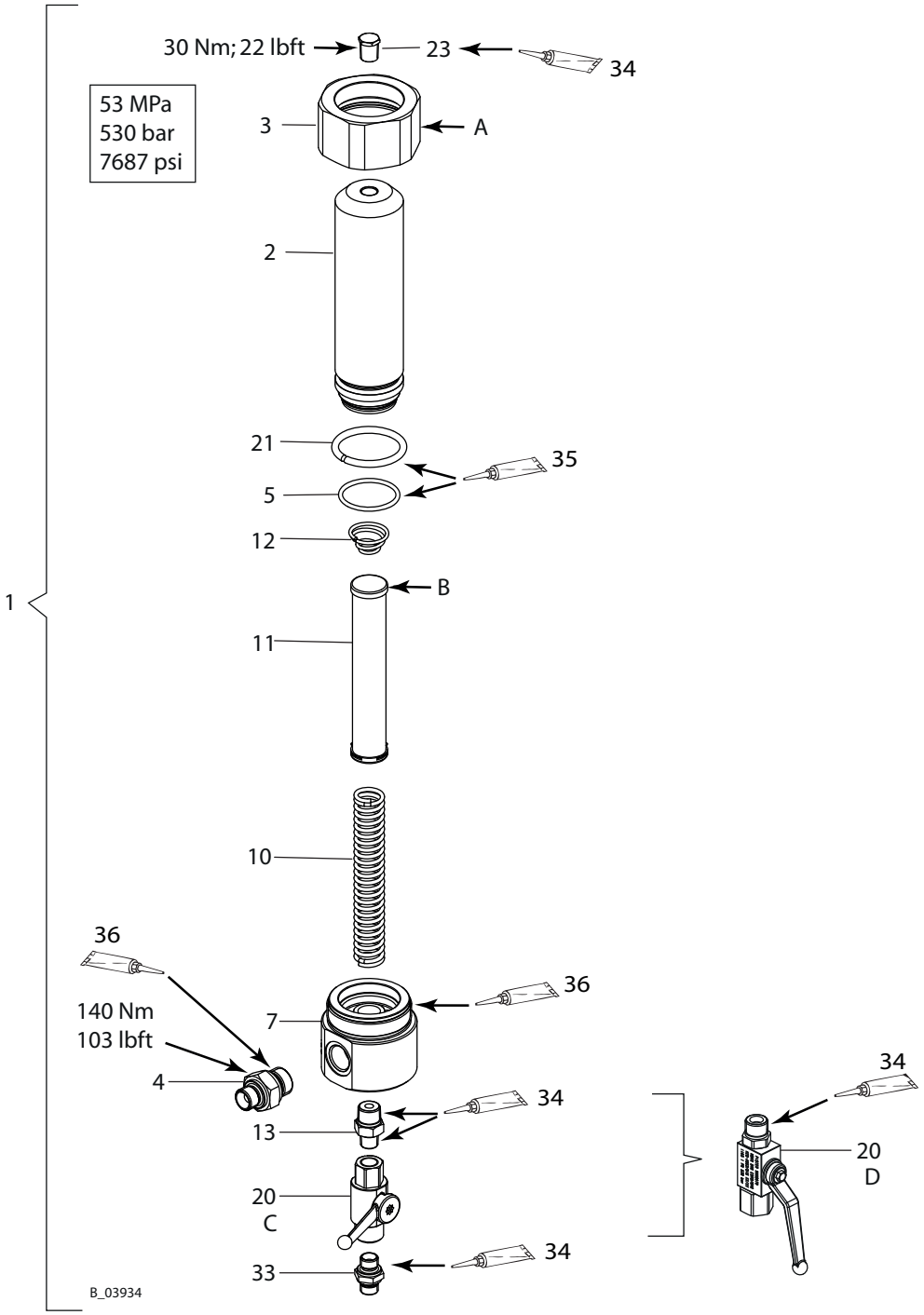


Regarding position 7: Adhesive surface: Pretreated with fast cleaner Loctite ® type 7063.

Pos	K	Stk	Order no.	Designation
1	♦	1	169248	Relief valve, complete
2		1	9920602	Adjusting washer
3		1	169346	Pressure spring
4		1	9920202	Washer
5	♦	1	9971395	O-ring, 10x1.25
6	♦	1	9971486	O-ring, 4x2
7		1	9992528	Loctite ® 270, 50 ml; 50 cc
8	♦	1	9971367	Spiral baking ring 4.78x1.78

♦ = wearing parts

14.13 HIGH-PRESSURE FILTER, 530 BAR



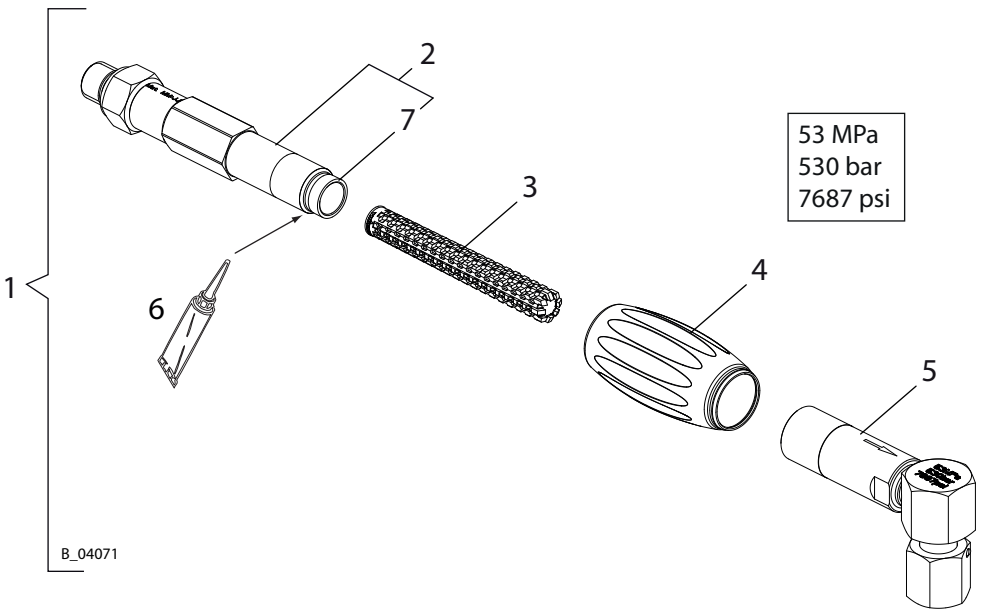
A	Tighten pos. 3 by hand	C	Stainless steel
B	Identification of the filter	D	Carbon steel

Pos	K	Stk	Order no.		Designation
			Stainless steel	Carbon steel	
1		1	2329025	2335334	HP filter DN12-PN530, complete
2		1	2324542		Filter housing
3		1	2324543		Union nut
4		1	2330780		Fitting, DF-MM-G1/2-G3/8-PN530-SSt
5	♦	1	9955863		O-ring
7		1	2324670		Distribution housing for ball valve
10		1	9894245		Filter support
11		1	--		Filter cartridge *
	♦ ●		295721		* Filter sieve, 200 mesh per inch (fine)
	♦		14068		* Filter sieve, 100 mesh per inch (medium), mesh width 0.16 mm
	♦ ●		3514069		* Filter sieve, 50 mesh per inch (rough)
	♦ ●		291564		* Filter sieve, 20 mesh per inch (rough)
12	♦	1	3514058		Cone spring
13		1	2328291	/	Fitting, DF-MM-R3/8-R1/4-PN530-SSt
20	♦	1	2330156	9998679	Ball valve
21		1	2325562		Pressure ring d45
23		1	2323718		Hexagon plug
33		1	3204611	2325826	Double connector
34		1	9992831		Loctite® 542, 50 ml; 50 cc
35		1	9998808		Mobilux® EP 2 grease
36		1	9992609		Anti-seize paste tube

♦ = wearing parts

● = not part of the standard equipment but available as a special accessory

14.14 ANGLED INLINE FILTER, 530 BAR

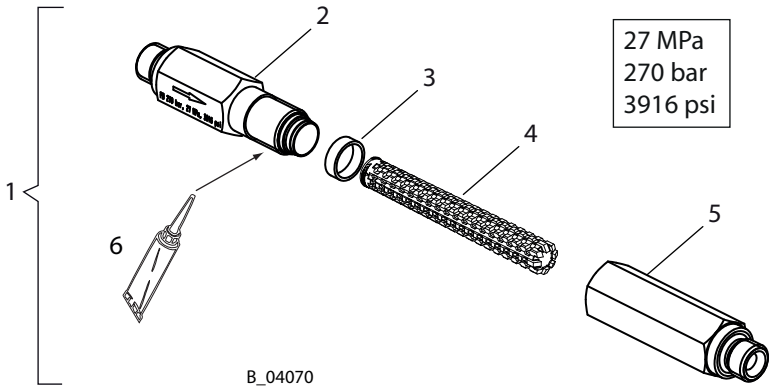


Pos	K	Stk	Order no.	Designation
1		1	2329026	Inline filter HL DN6-PN530-G1/4"-SSt
2		1	2326045	Filter inlet housing, pre-assembled
3	♦ ●	1	2315723	* Filter insert, red (fine), 200 mesh per inch – 10 pieces
	♦ ●	1	2315724	* Filter insert, blue (middle), 150 mesh per inch – 10 pieces
	♦ ●	1	2315725	* Filter insert, yellow (middle), 100 mesh per inch – 10 pieces
	♦ ●	1	2365429	* Filter insert, green (coarse), 30 mesh per inch – 10 pieces
	♦ ●	1	2315726	* Filter insert, white (coarse), 50 mesh per inch – 10 pieces
4		1	2311491	Turning handle
5		1	2325950	Filter outlet housing 90°, pre-assembled
6		1	9992609	Anti-seize paste tube
7	♦	1	128389	Gasket

♦ = wearing parts

● = not part of the standard equipment but available as a special accessory

14.15 STRAIGHT INLINE FILTER, 270 BAR

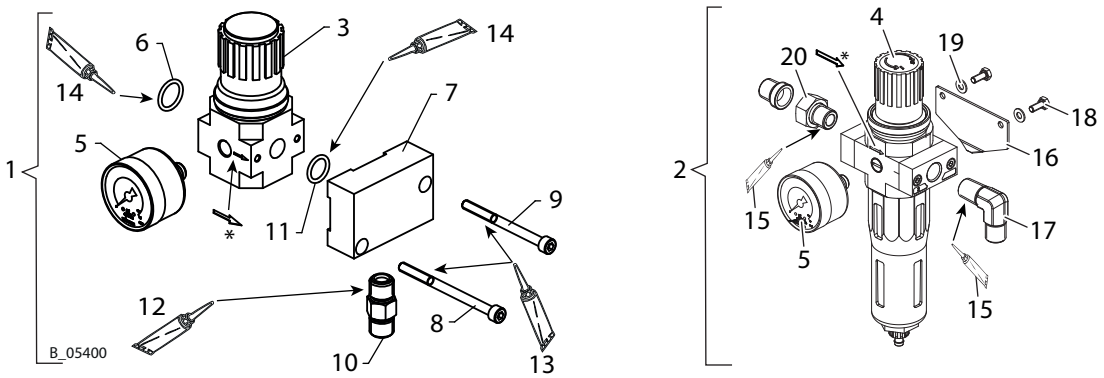


Pos	K	Stk	Order no.	Designation
1		1	2324558	Inline filter DN6-PN270-G1/4"-SSt
2		1	2324550	Filter inlet housing
3	♦	1	128389	Gasket
4	♦ ●	1	2315723	* Filter insert, red (fine), 200 mesh per inch – 10 pieces
	♦ ●	1	2315724	* Filter insert, blue (middle), 150 mesh per inch – 10 pieces
	♦ ●	1	2315725	* Filter insert, yellow (middle), 100 mesh per inch – 10 pieces
	♦ ●	1	2365429	* Filter insert, green (coarse), 30 mesh per inch – 10 pieces
	♦ ●	1	2315726	* Filter insert, white (coarse), 50 mesh per inch – 10 pieces
5		1	2324551	Filter outlet housing
6		1	9992609	Anti-seize paste tube

♦ = wearing parts

● = not part of the standard equipment but available as a special accessory

14.16 AIRCOAT REGULATOR AND AIRCOAT FILTER REGULATOR



Aircoat Regulator and Aircoat Filter Regulator

Pos. 3 and/or 4: *Observe the flow direction (direction of arrow on the housing)

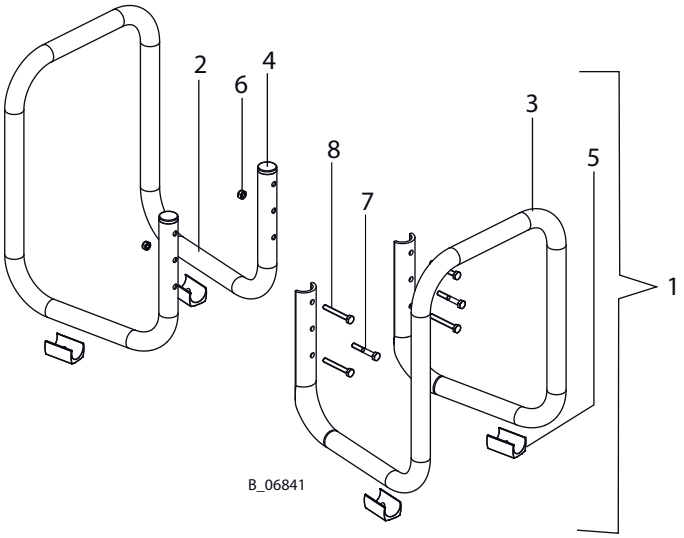
Pos 5: Screw in the pressure gauge until the white sealing ring is completely in the filter control valve. Thereafter continue turning the pressure gauge only to align the display scale.

Pos. 4: Remove protective container. Mount contact plate (pos. 16). Unscrew/screw on protective container three times (provides contact point via container coating)

Pos	K	Stk	Order no.		Designation
			AirCoat regulator	AirCoat filter regulator	
1		1	2328611	/	AirCoat regulator set
2		1	/	2382997	AirCoat filter regulator set
3	♦	1	2309972	/	Pressure regulator valve, LR-1/4-D-O-I-Mini
4	♦	1	/	2331950	Filter control valve (manual drain)
			/	2360259	Option: filter pan (automatic drain)
5	♦	1	9998677		Pressure gauge, 0-10 bar, RF40 (d40)
6	♦	1	9974166	/	O-ring
7		1	2325527	/	Holding plate
8		1	9906021	/	Hexagon socket head cap screw
9		1	9900320	/	Hexagon socket head cap screw
10		1	9994627	/	Double fitting, R1/4-R1/4
11	♦	1	9971313	/	O-ring
12		1	9992831	/	Loctite® 542
13		1	9992616	/	Molykote® DX grease
14		1	9998808	/	Mobilux® EP 2 grease
15		1	/	9992528	Loctite® 270
16		1	/	2366466	Contact plate
17		1	/	2389277	Fitting, EF-MM-G1/4-R1/4-530bar
18		2	/	9900152	Hexagon screw without shaft
19		3	/	9920104	Washer
20		1	/	9998719	Detachable double fitting

♦ = wearing parts

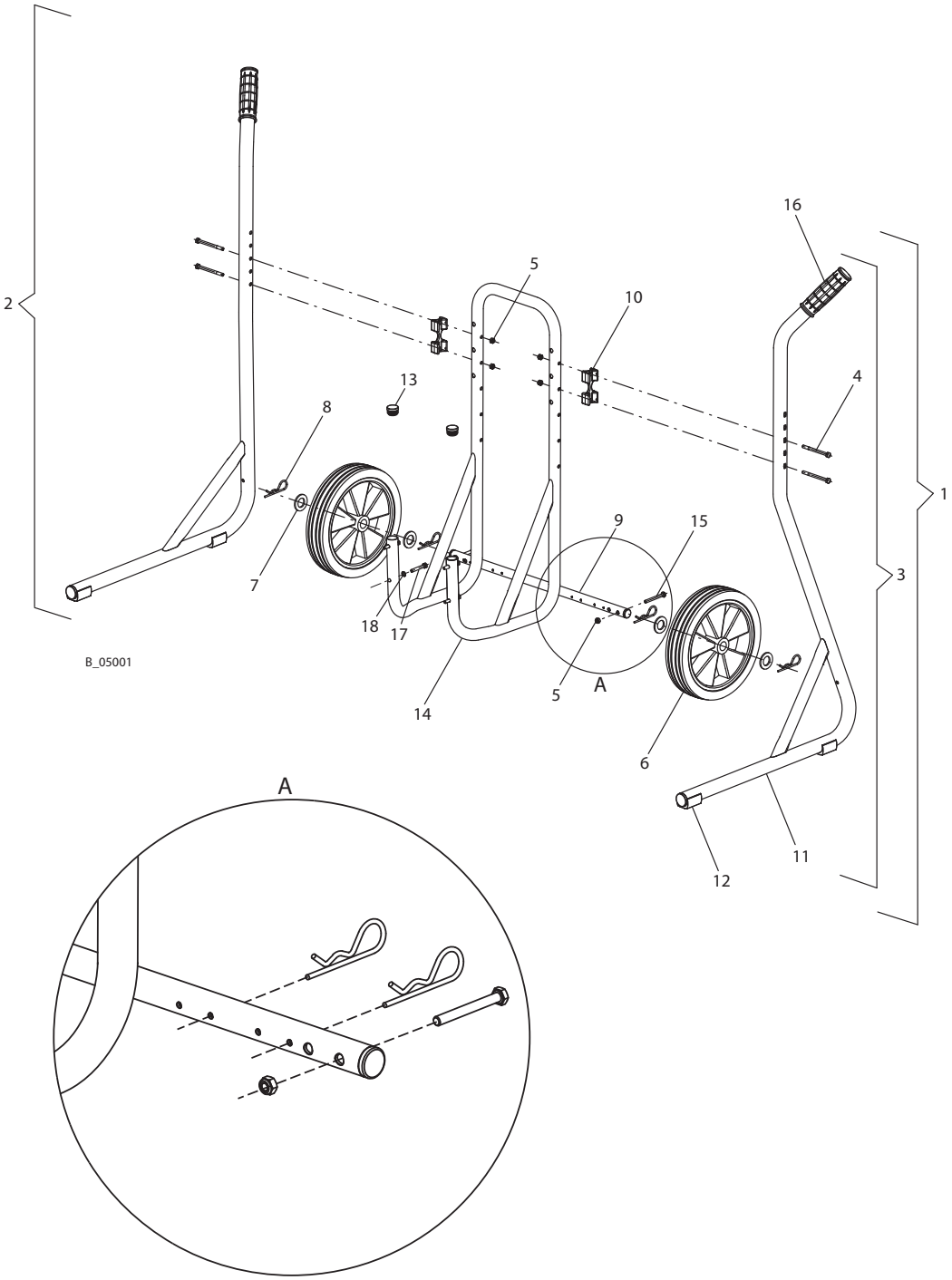
14.17 COMPLETE COBRA FRAME



Pos	K	Stk	Order no.		Designation
			40-10	40-25	
1		1	322052	2308732	Frame, Cobra
2		1	--	--	Frame, pressed
3		1	--	--	Frame pipe
4		2	9990861		Plug
5	♦	4	9999209		Saddle feet for round tubes
6		2	9910204		Self-locking hexagon nut, M6
7		2	9900202		Hexagon screw, M6x40
8		4	9900126		Hexagon screw, M6x45

♦ = wearing parts

14.18 HORIZONTAL COBRA MOBILE BASE



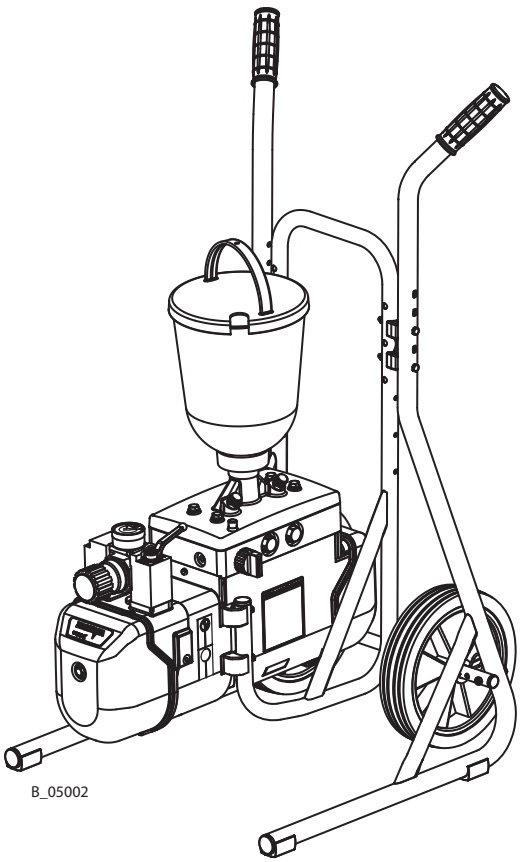
Axle setting: Cobra mobile base

Pos	K	Stk	Order no.	Designation
1		1	2341375	Cobra mobile base, complete
2		1	--	Frame, left 4"-6"
3		1	--	Frame, right 4"-6"
4		4	9907140	Hexagon screw
5		6	9910204	Self-locking hexagon nut, M6

Pos	K	Stk	Order no.	Designation
6	♦	2	2304440	Wheel, D250
7		4	340372	Washer
8		4	9995302	Cotter pin
9		1	--	Wheel axle 4"-6", complete
10	♦	2	367943	Connecting part 4"-6"
11		2	--	Tube plug, ribbed
12	♦	4	9998685	Saddle feet for round tubes
13		2	--	Plug
14		1	--	Frame pipe, long
15		2	3061695	Hexagon screw without shaft
16	♦	2	9998747	Handle
17		4	3051666	Hexagon screw, M6x40
18		4	9922017	Serrated lock washer, externally toothed
19		1	2341412	Assembly manual for Cobra horizontal mobile base

♦ = wearing parts

Mobile base and pump fitted



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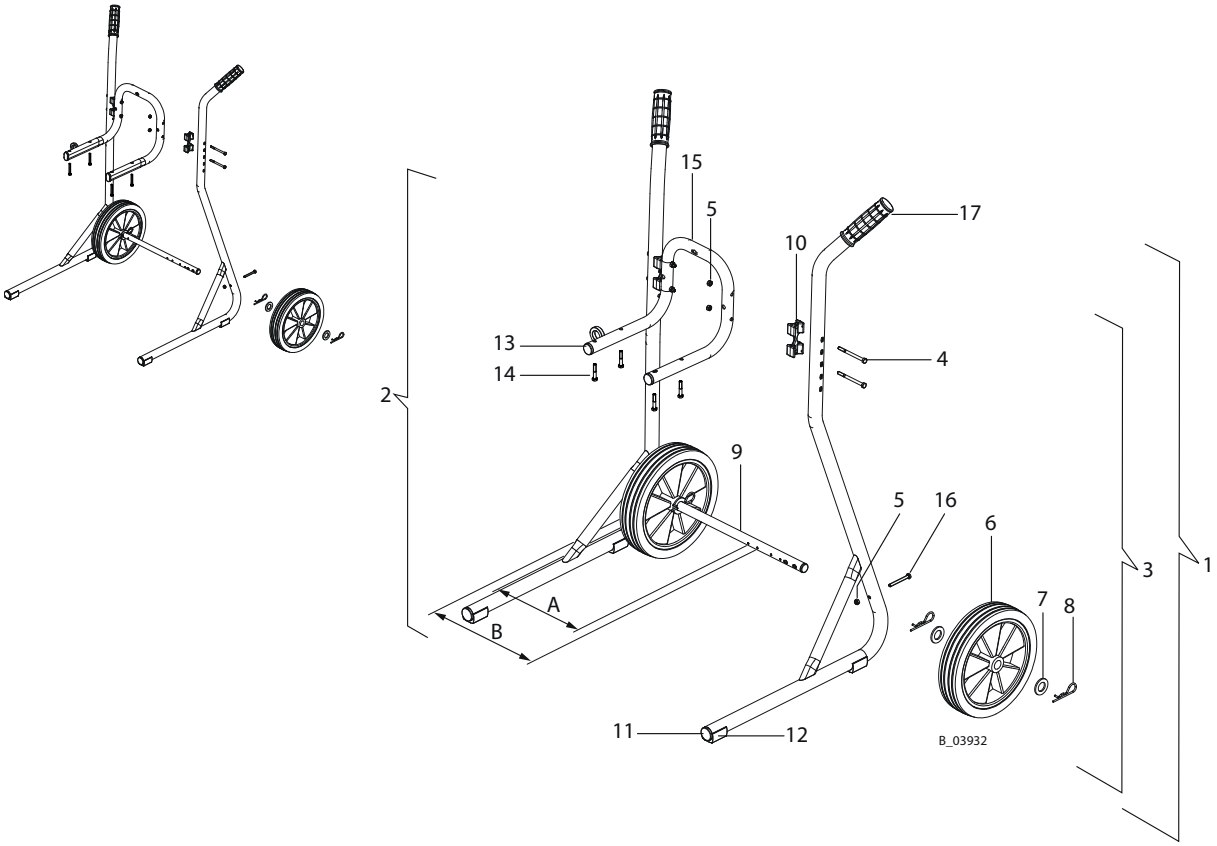
14.19 COMPLETE TROLLEY

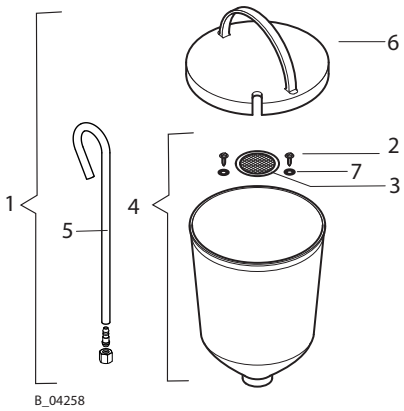


A	Distance for Cobra	B	--

Pos	K	Stk	Order no.	Designation
1		1	2325901	Mobile base, complete
2		1	--	Frame, left, 4"-6" (welded)
3		1	--	Frame, right, 4"-6" (welded)
4		4	9907140	Hexagon screw DIN931, M6x75
5		6	9910204	Self-locking hexagon nut, M6
6	♦	2	2304440	Wheel, D250
7		4	340372	Washer
8		4	9995302	Cotter pin
9		1	--	Wheel axle, 4"-6"
10	♦	2	367943	Connecting part 4"-6"
11		2	--	Tube plug, ribbed
12		2	--	Saddle feet for round tubes
13		2	--	Plug
14		4	9900218	Hexagon screw
15		1	2332143	Wall mount
16		2	3061695	Hexagon screw without shaft, M6x55
17	♦	2	9998747	Handle
		1	2329546	Assembly manual of mobile base

♦ = wearing parts

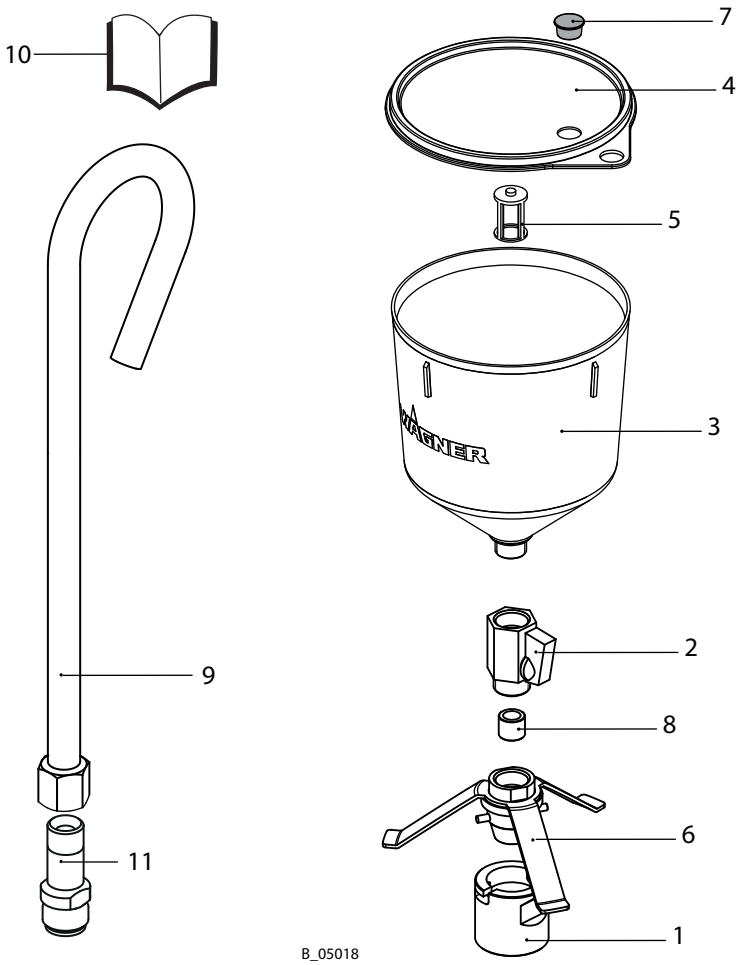
14.20 5 LITER TANK



Pos	K	Stk	Order no.	Designation
1	♦	1	2344505	Hopper set Ex, 5 L; 1.3 gal
2		2	9902313	Cylinder self-tapping screw
3	♦	1	3756	Filter disk, mesh 0.4 mm; 0.02 inch
3a	♦	1	37607	Filter disk, mesh 0.8 mm; 0.03 inch
4	♦	1	340265	Hopper Ex
5	♦	1	2333163	Relief tube 5 L, complete
6	♦	1	340429	Cover
7		2	9920314	Washer

♦ = wearing parts

14.21 2 LITER TANK



Pos	K	Stk	Order no.	Designation
		1	2344741	2L Cobra tank
1		1	2320844	Union nut with bayonet
2	♦	1	2321426	Low-pressure mini ball valve, G1/2
3		1	2341277	2 Liter Tank
4		1	2341532	Cover
5	♦	2	2321676	Sieve insert SPA easy line
6		1	2320888	Cone connector preassembled
7		1	9990623	Protection plug
8	♦	1	2320922	Sealing sleeve
9	♦	1	2333163	Relief pipe 2L/5L, complete
10		1	2347181	Assembly manual
11*		1	2330810	Connection piece

♦ = wearing parts

* Replace for the following pumps:
- Cobra 40-10 with date of product before November 2013.

15 DECLARATION OF CONFORMITY

15.1 EU DECLARATION OF CONFORMITY

We hereby declare that the supplied version of diaphragm pumps and spray packs:

Cobra 40-10

Cobra 40-25

complies with the following guidelines:

2006/42/EC
2014/34/EU

Applied standards, in particular:

DIN EN ISO 12100:2010	EN 14462:2015
EN 809: 1998+A1:2009+AC:2010	EN 12621:2006+A1:2010
EN ISO 4413:2010	EN 1127-1:2019
EN ISO 4414:2010	EN ISO 80079-36:2016
EN ISO 13732-1:2008	EN ISO 80079-37:2016

Applied national technical standards and specifications, in particular:

DGUV regulation 100-500 Chapter 2.29
DGUV regulation 100-500 Chapter 2.36
TRGS 727

Identification:

II 2 G Ex h IIB T6 Gb X

EU Declaration of Conformity

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

Order number:

2302350

Order number 2340851
Edition 05/2022

Germany
J. Wagner GmbH
Otto-Lilienthal-Strasse 18
Postfach 1120
D-88677 Markdorf
Telephone: +49 (0)7544 5050
Fax: +49 (0)7544 505200
E-mail: ts-liquid@wagner-group.com

Switzerland
Wagner International AG
Industriestrasse 22
CH-9450 Altstätten
Telephone: +41 (0)71 757 2211
Fax: +41 (0)71 757 2222

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More contact addresses on the internet at:
www.wagner-group.com