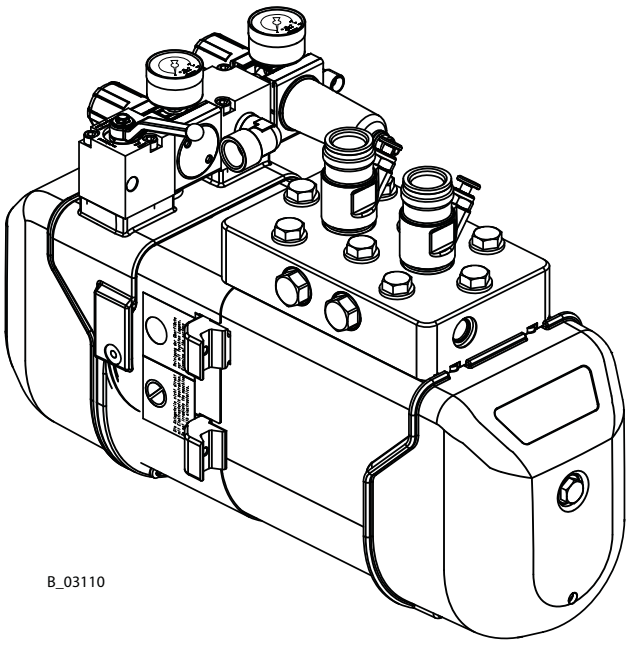
WAGNER

Translation of the original
Operating manual

Cobra 40-10/2K

High pressure Double diaphragm pump for 2 components materials with mixing ratio 1:1

Edition 10/2010



B_03110

CE Ex **II 2 G IIB X (Atex 95)**

Contents

Contents

1 ABOUT THESE INSTRUCTIONS

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

→ Always follow these instructions when operating the unit.

1.1 LANGUAGES

This operating manual is available in the following languages:

Language:	Part No.	Language:	Part No.
German	322870	English	322871
French	322872	Dutch	322873
Italian	322874	Spanish	322875
Danish	322877	Swedish	322876

1.2 WARNINGS, NOTES AND SYMBOLS IN THESE INSTRUCTIONS

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

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


SIHI_0100_GB

⚠ DANGER

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

→ The measures for preventing the hazard and its consequences.

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


SIHI_0103_GB

⚠ WARNING

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

→ The measures for preventing the hazard and its consequences.

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


SIHI_0101_GB

⚠ CAUTION

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

→ The measures for preventing the hazard and its consequences.

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

SIHI_0102_GB **CAUTION**

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

→ The measures for preventing the hazard and its consequences.

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

2 GENERAL SAFETY INSTRUCTIONS

2.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

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

2.1.1 ELECTRICAL EQUIPMENT

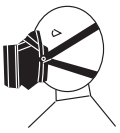
Electrical plant and unit
→ To be provided in accordance with the local safety requirements with regard to the operating mode and ambient influences.
→ May only be maintained by skilled electricians or under their supervision.
→ Must be operated in accordance with the safety regulations and electrotechnical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

2.1.2 PERSONNEL QUALIFICATIONS

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

2.1.3 A SAFE WORK ENVIRONMENT

→ Make sure that the floor in the area where you are working is derivable in accordance with EN 61340-4-1.
→ Ensure that all persons within the working area wear derivable shoes.
→ Ensure that during spraying, persons wear derivable gloves so that they are earthed via the handle of the spray gun.
→ Customer to provide paint mist extraction units conforming to local regulations.

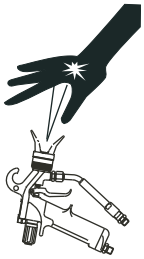


→ Ensure that the following components of a safe working environment are available:
  – Material/air hoses adapted to the working pressure
  – Personal safety equipment (breathing and skin protection)
→ Ensure that there are no ignition sources such as naked flame, glowing wires or hot surfaces in the vicinity. Do not smoke.

2.2 SAFETY INSTRUCTIONS FOR STAFF

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

2.2.1 SAFE HANDLING OF WAGNER SPRAY UNITS



The spray jet is under pressure and can cause dangerous injuries.
Avoid injection of paint or cleaning agents:
- → Never point the spray gun at people.
- → Never reach into the spray jet.
- → Before all work on the unit, in the event of work interruptions and functional faults:
  - – Switch off the energy/compressed air supply.
  - – Secure the spray gun against actuation.
  - – Relieve the pressure from the spray gun and unit.
  - – By functional faults: Identify and correct the problem, proceed as described in chapter „Trouble shooting".

In the event of skin injuries caused by paint or cleaning agents:
- → Note down the paint or cleaning agent that you have been using.
- → Consult a doctor immediately.

Avoid danger of injury through recoil forces:
- → Ensure that you have a firm footing when operating the spray gun.
- → Only hold the spray gun briefly in any one position.

2.2.2 EARTH THE UNIT

Depending on the electrostatic charge and the flow speed of the spray, an electrostatic charge may occur in the equipment. This could cause a spark or flame on discharging.
- → Ensure that the unit is earthed for every spraying operation.
- → Earth the work pieces being painted.
- → Ensure that all persons inside the working area are earthed, e.g. that they are wearing derivable shoes.
- → When spraying, wear derivable gloves to earth yourself via the spray gun handle.

2.2.3 MATERIAL HOSES

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

2.2.4 CLEANING

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

An explosive gas/air mixture forms in closed containers.
- → When cleaning units with solvents, never spray into a closed container.
- → Earth the container.

2.2.5 HANDLING HAZARDOUS LIQUIDS, VARNISHES AND PAINTS

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

2.2.6 TOUCHING HOT SURFACES

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

Order No.
9998910 Information label
9998911 Safety label

2.3 CORRECT USE

WAGNER accepts no liability for any damage arising from incorrect use.
- → Use the unit only to work with the materials recommended by WAGNER.
- → Operate the unit only as an entire unit.
- → Do not deactivate safety equipment.
- → Use only WAGNER original spare parts and accessories.

2.4 USE IN AN EXPLOSION HAZARD AREA

2.4.1 CORRECT USE

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

2.4.2 EXPLOSION PROTECTION IDENTIFICATION

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

CE Ex II 2G IIB c X

CE: Communautés Européennes
Ex: Symbol for explosion protection
II: Unit class II
2: Category 2 (Zone 1)
G: Ex-atmosphere gas
IIB: Explosion class
c: Constructional security
X: Special notes (see chap. 2.4.3).

2.4.3 IDENTIFICATION X

X: The maximum surface temperature corresponds to the permissible material temperature. This and the permissible ambient temperature can be found in the Technical Data.

Max. surface temperature

→ The maximum surface temperature of the pump hangs not of the equipment (frictional heat) separates from the opening conditions (warmed material).

Ignition temperature of coating material

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

Ambient temperature

→ The permissible ambient temperature is +10 °C to +60 °C; +50 °F to +140 °F

Medium supporting atomizing

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

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

In an explosive atmosphere:

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

Surface spraying, electrostatic

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

Cleaning

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

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

3 GUARANTEE AND CONFORMITY DECLARATIONS

3.1 IMPORTANT NOTES ON PRODUCT LIABILITY

As a result of an EC regulation, effective as from January 1, 1990, the manufacturer shall only be liable for his product if all parts come from him or are approved by him, and if the devices are properly fitted , operated and maintained.
If other makes of accessory and spare parts are used, the manufacturer's liability could be fully or partially null and void.
The usage of original WAGNER accessories and spare parts guarantees that all safety regulations are observed.

3.2 GUARANTEE CLAIM

Full guarantee is provided for this device:
We will at our discretion repair or replace free of charge all parts which within 24 months in single-shift, 12 months in 2-shift or 6 months in 3-shift operation from date of receipt by the Purchaser are found to be wholly or substantially unusable due to causes prior to the sale, in particular faulty design, defective materials or poor workmanship.
The type of guarantee provided is such that the device or individual components of the device are either replaced or repaired as we think fit. The resulting costs, in particular shipping charges, road tolls, labour and material costs will be borne by us except where these costs are increased due to the subsequent shipment of the unit to a location other than the address of the purchaser.

We do not provide guarantee for damage that has been caused or contributed to for the following reasons:
Unsuitable or improper use, faulty installation or commissioning by the purchaser or a third party, normal wear, negligent handling, defective maintenance, unsuitable coating products, substitute materials and the action of chemical, electro chemical or electrical agents, except when the damage is attributable to us.
Abrasive coating products such as red lead, emulsions, glazes, liquid abrasives, zinc dust paints and similar reduce the service life of valves, packings, spray guns, tips, cylinders, pistons etc. Signs of wear and tear due to such causes are not covered by this guarantee.

Components that have not been manufactured by WAGNER are subject to the original guarantee of the manufacturer.
Replacement of a component does not extend the period of guarantee of the device.
The unit should be inspected immediately upon receipt. To avoid losing the guarantee, we or the supplier company are to be informed in writing about obvious faults within 14 days upon receipt of the device.

We reserve the right to have the guarantee compliance met by a contracting company.
The services provided by this guarantee depend on evidence being provided in the form of an invoice or delivery note. If an examination discovers that no guarantee claim exists, the costs of repairs are charged to the purchaser.

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

J. Wagner AG

3.3 CE-CONFORMITY

Herewith we declare that the supplied version of membrane pumps and Spraypacks

Cobra 40-10/2K

CE

Complies with the following guidelines:

98/37/EG
94/9/EG (Atex-directives)

Applied standards, in particular:

DIN EN ISO 12100-1 2004-04	DIN EN ISO 13732-1 2006-12
DIN EN ISO 12100-2 2004-04	DIN EN 809 1998-10
DIN EN ISO 3746 1995-12	DIN EN 1127-1 2008-02
DIN EN ISO 14121-1 2007-09	DIN EN 12621 2006-05
DIN EN 13463-1 2002-04	DIN EN 13463-5 2004-03

Applied national technical standards and specifications, in particular:

BGR 500 Part 2 Chap. 2.29 and Chap. 2.36	BGR 104	TRBS 2153

Identification:

CE Ex **II 2G IIB X**

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

Part number:
xxxxxxx

4 DESCRIPTION

4.1 FIELDS OF APPLICATION

4.1.1 USING IN ACCORDANCE WITH THE INSTRUCTIONS

The double diaphragm pump is suitable for process liquid 2K materials according chapter 4.1.2.

4.1.2 PROCESSABLE 2 COMPONENTS MATERIALS WITH MIXING RATIO 1:1

Application	Cobra 40-10/2K
Polyester	↗
Colours and paints on water paint base	↗
Colours and paints on solvent base	↗
UV lacquers	↗
Primers	→
Shear sensitive paints	↗
Resins and adhesives	→
Inorganic zinc colours	↘

Legend
Recommended ↗ limited suitability → less suitable ↘

CAUTION

Abrasive materials and pigments!
Greater wear of the parts carrying the material

→ Do not use any grainy and abrasive materials with large, sharp-edged pigments.
→ Use suitable combinations of devices (packages, valves etc.).

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4.1.3 TYPICAL APPLICATIONS

Application	Cobra 40-10/2K
Coffin manufacturer	↗
Kitchen manufacturers	↗
Joinery	↗
Window factories	→
Steel fabrication	→
Construction of vehicles	↘
Offshore	↘

Legend
Recommended ↗ limited suitability → less suitable ↘

4.2 SCOPE OF DELIVERY

Part No.	Qty	Description
U850.00C	1	Double diaphragm pump Cobra 40-10/2K consists of: Material pump, air motor and connection elements mounted on trolley
U850.00M	1	Double diaphragm pump Cobra 40-10/2K consists of: Material pump, air motor, connection elements and holder for wall mounting
U850.00S	1	Double diaphragm pump Cobra 40-10/2K consists of: Material pump, air motor, connection elements and mounted on a special rack
The standard equipment includes:		
322981	1	Information plate
236219	1	Earthing cable assy.
341434	1	Double-ended open-jaw spanner
see Chap. 3	1	Declaration of conformity
322870	1	Operating manual German
see Chap. 1	1	Operating manual in the local language

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

4.3 DATA

4.3.1 TECHNICAL DATA

Description	units	Cobra 40-10/2K
Transmission ratio		40 :1
Flow volume per double stroke (DS)	cm^3 cu inch	10 0.6
Maxi. operating pressure	MPa bar psi	25 250 3626
Maxi. possible strokes in operation	DS/min	200
Min. - Maxi. air inlet pressure	MPa bar psi	0.25-0.6 2.5-6 36.3-87
Ø air inlet connection (female)	Zoll inch	G 1/2
Min. Ø compressed air hose	mm inch	13 0.51
Air consumption at 0.6 MPa; 6 bar; 87 psi per DS	NL	3.5
Sound pressure level at maxi. permissible air pressure*	dB(A)	74
Sound pressure level at 0.45 MPa; 4.5 bar; 65.27 psi air pressure*	dB(A)	72
Sound pressure level at 0.3 MPa; 3 bar; 43.5 psi air pressure*	dB(A)	69
Diameter piston of air motor	mm Inch	80 3.15
Ø material inlet connection (male)	mm	M36x2
Material outlet connection (female)	Zoll Inch	G 3/8
Weight	kg lb	19 41.9
Material pH value	pH	3.5-9
Maxi. material pressure at pump inlet	MPa bar psi	2 20 290
Permissible material temperature	°C °F	+10 ÷ +80 +50 ÷ +176
Ambient temperature	°C °F	+10 ÷ +60 +50 ÷ +140
Allowable sloping position at work	$\angle^o$	±10
Filling amount hydraulic oil	L Cu inch	0.065 3.97

* A rated sound pressure level measured at 1 m distance according to DIN EN 14462: 2005.

Reference measurements have been made by SUVA (Swiss accident insurance institute).

⚠ WARNING

Outgoing air containing oil!
Risk of poisoning if inhaled

→ Provide water-free and oil-free compressed air (quality standard 5.5.4 as per ISO 8573.1) 5.5.4 = 40 µm / +7 / 5 mg/m³.

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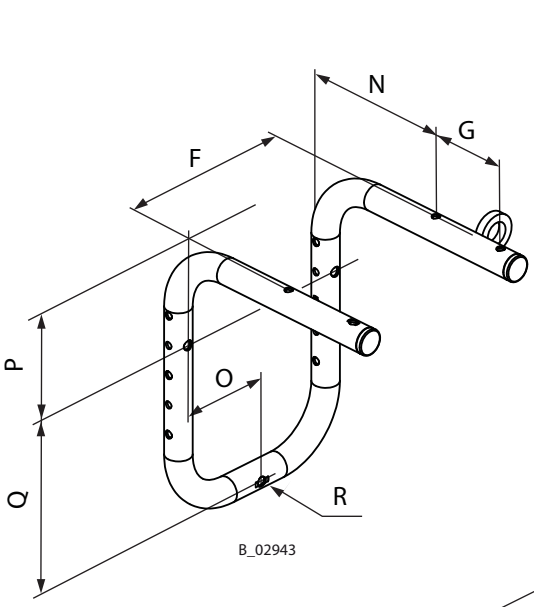
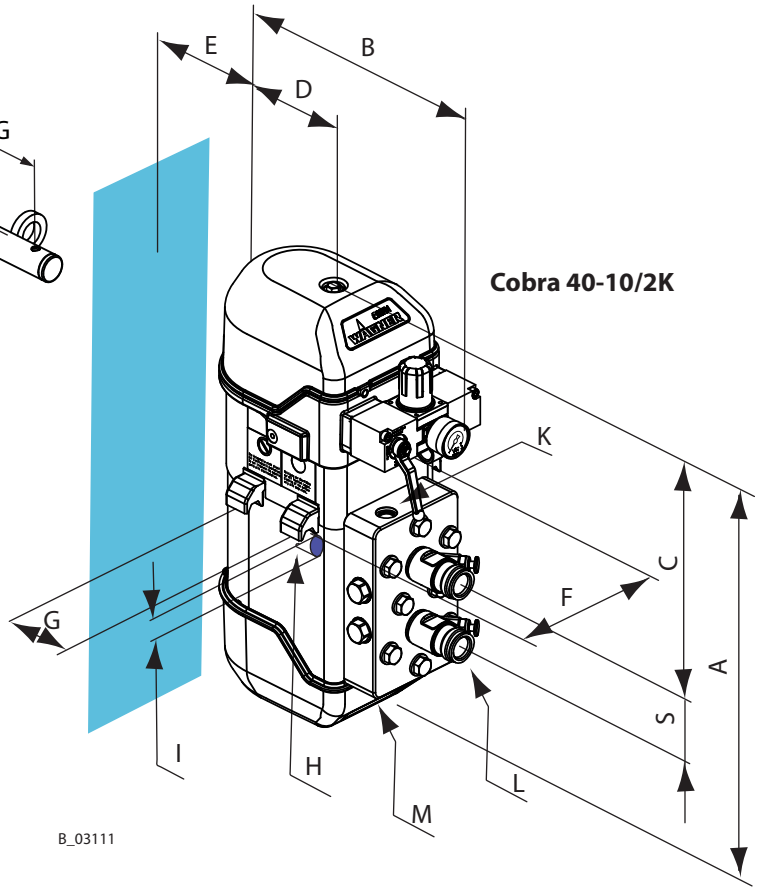
4.3.2 MEASUREMENTS AND CONNECTIONS





Dimension	mm; inch
A	505; 19.88
B	313; 12.32
C	313; 12.32
D	134; 5.28
E	55; 2.16
F	182; 7.16
G	80; 3.15
H	M6
I	ø25; ø0.98
K	M20x2

Dimension	mm; inch
L	M36x2
M	NPSM1/4-18
N	149; 5.87
O	91; 3.58
P	107; 4.21
Q	175; 6.89
R	ø7; ø0.28
S	65; 2.56

4.3.3 MATERIALS OF PAINT WETTED PARTS

Inlet housing	Consital®
Material pump	Consital®
Valve balls	Stainless steel
Valves seats / cone valve	Hard metal
Membrane	PA consistent
Valve fitting	1.4104

4.3.4 VOLUME FLOW

Wagner nozzles AL			**Volume flow in l/ min.***			
ø inch	ø mm	Spray angle	at 7 MPa 70 bar 1015 psi	at 10 MPa 100 bar 1450 psi	at 15 MPa 150 bar 2175 psi	
0.007	0.18	40°	0.1650	0.2000	0.2400	
0.009	0.23	20-30-40-50-60°	0.2060	0.2500	0.3090	
0.011	0.28	10-20-30-40-50-60°	0.2950	0.3450	0.4260	
0.013	0.33	10-20-30-40-50-60-80°	0.4530	0.5280	0.6600	
0.015	0.38	10-20-30-40-50-60-80°	0.5770	0.6720	0.8130	
0.017	0.43	20-30-40-50-60-70°	0.7310	0.7860	1.0640	
0.019	0.48	20-30-40-50-60-70-80°	0.9260	1.0920	1.3700	
0.021	0.53	20-40-50-60-80°	1.1430	1.3600	1.6900	**Cobra 40-10/2K**
0.023	0.58	20-40-50-60-70-80°	1.3700	1.5900	2.0100	
0.025	0.64	20-40-50-60-80°	1.6200	1.9100	2.4000	
0.027	0.69	20-40-50-60-80°	1.8300	2.1300	2.6800	

* Flow volume refers to water.

The values in the table are valid for continuous operation with 200 DS/min.

4.3.5 PERFORMANCE DIAGRAM

Example

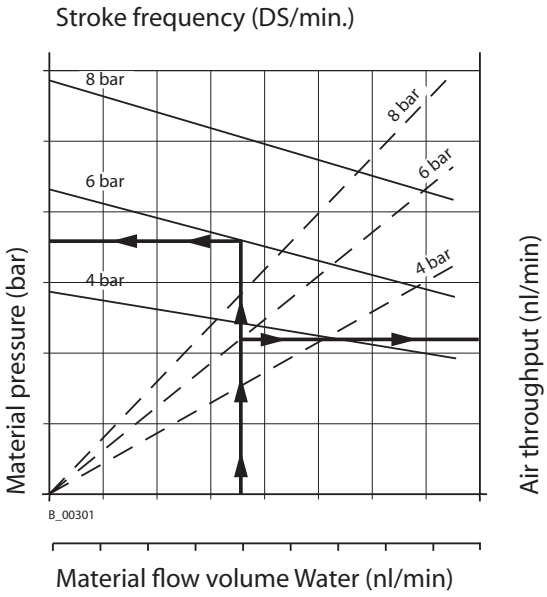
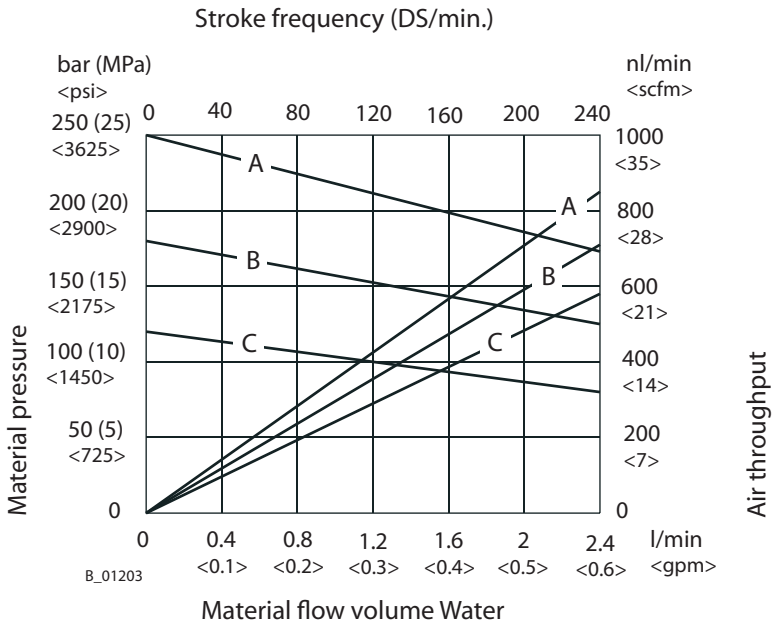


Diagram for Cobra 40-10/2K

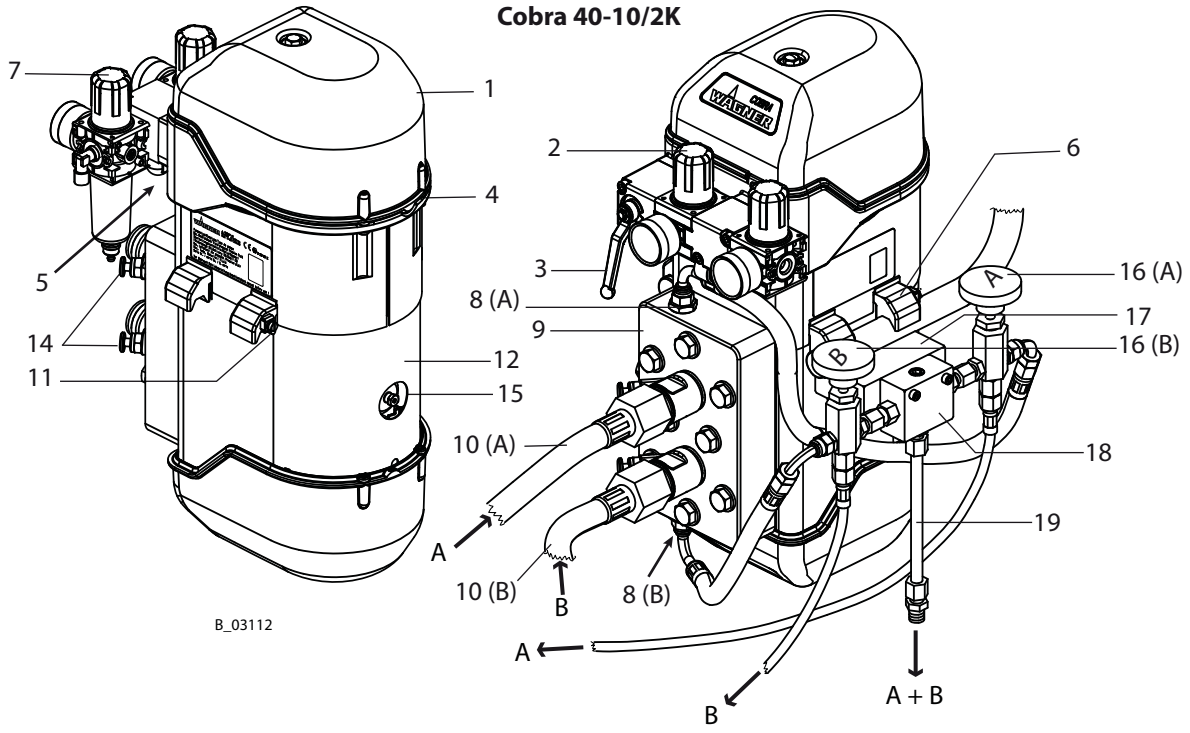


A = 6 bar (0.6 MPa; 87 psi) air pressure
B = 4.5 bar (0.45 MPa; 65 psi) air pressure
C = 3 bar (0.3 MPa; 44 psi) air pressure

4.4 FUNCTION

4.4.1 PUMP

Cobra 40-10/2K



1	Control housing with integrated silencer
2	Air pressure regulator
3	Ball valve
4	Air motor
5	Compressed air inlet
6	Fastening flange

7	Filter pressure regulator AirCoat (Option)
8	Material outlet (A, B)
9	Pressure stage 2K
10	Suction system material inlet (A, B)
11	Earth connection

12	Casing material pump
14	valve pushers (A, B)
15	Exhaust air cap
16	Relief valve (A, B)
17	Mixing block holder
18	Mixing block
19	Mixing pipe

General informations
The double diaphragm pump is driven with compressed air. Compressed air moves the air piston in the air motor (4) and concomitantly the piston rod in the pressure stage (9) on and off. At the end of each stroke the compressed air is redirected by a changeover valve and the control piston. The up- and down stroke of the 2 diaphragms within the colour stage is raised by hydraulic oil, which is moved by the piston in the pressure stage. At each piston stroke working material will be sucked in and delivered to the gun at the same time.

Air motor (4)
The air motor with its pneumatic reverse (1) does not require pneumatic oil.
The compressed air is fed to the motor over the air regulator (2) and the ball valve (3).
The air motor is fitted with a safety valve. The safety valve has been set and sealed at the factory. With pressures over and above the permissible operating pressure the valve, which is held with a spring, automatically opens and releases the excess pressure.

⚠ WARNING

Overpressure!
Risk of injury from bursting components

→ Never change the safety valve setting.

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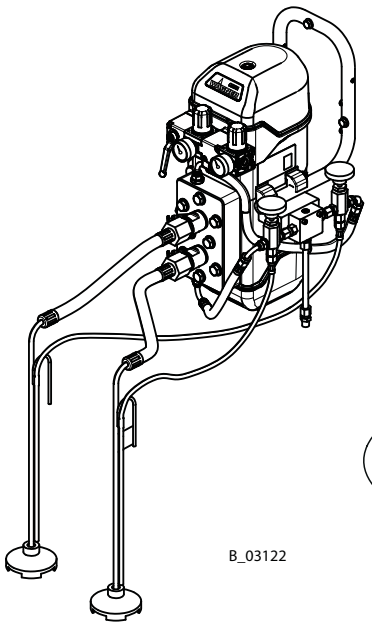
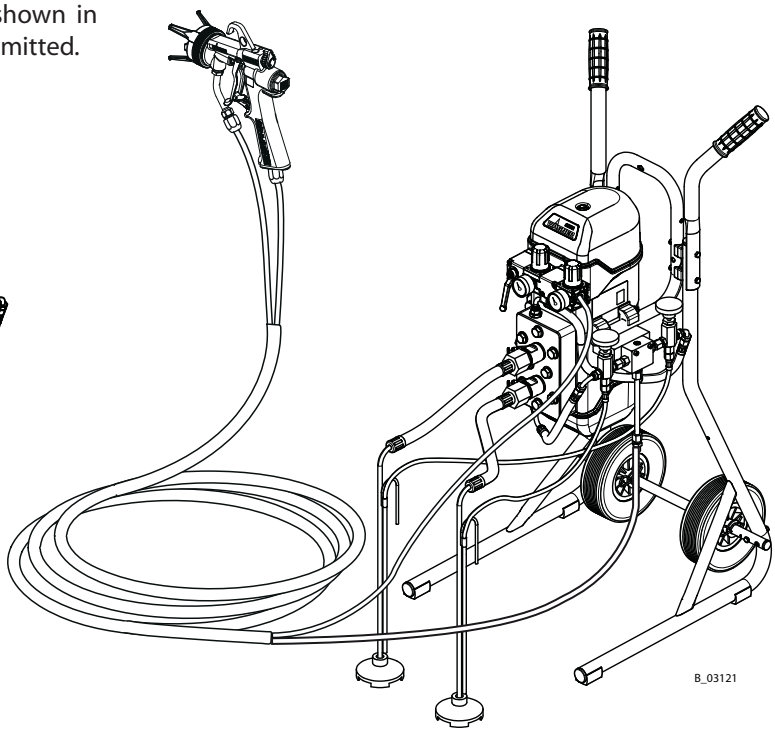
Colour stage / Pressure stage (9)
The material pump has been designed as a double diaphragm pump with exchangeable inlet valves and outlet valves. With the mixer (18 and 19) upstream relief valves (16) can be switched „spraying mode“ and „circulation mode“.

Positioning
The Cobra pump may only be operated in horizontal set-up or in vertical set-up as shown in pictures. Over head operating is not permitted.



Vertical position at wall mounting



Vertical position on trolley

CAUTION

Over-head operating or storage (**Air motor with pressure regulator downstairs**)
Air could get into the hydraulic oil circuit which would lead to malfunction

→ Avoid over-head operating or over-head storage.
→ Deaerate, see service instructions.

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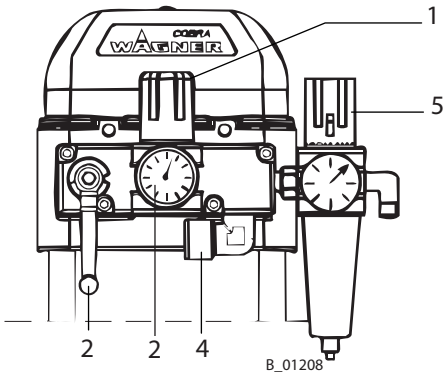
4.4.2 PRESSURE REGULATOR UNIT

1 Pressure regulator
2 Ball valve
3 Pressure gauge
4 Compressed air inlet
5 Filter pressure regulator AirCoat (Option)

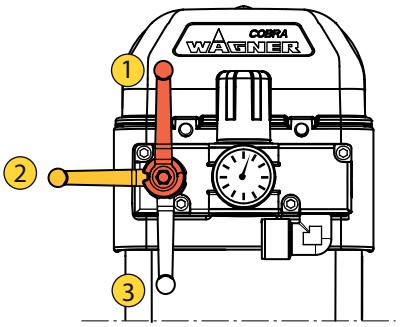


The AirCoat regulator (5) must mounted in all mounting variants of diaphragm pump in vertical position.

Positions of the ball valve

1 Closed: Operating pressure in the air motor will be vented. (Control pressure is available)
2 Closed: The air motor can still be under pressure.
3 Open: Working position

Note:
The air pressure for the control unit in the air motor is present also with closed ball valve (position 1 and 2). The pressure reliefs of the control unit takes place with the separation of the air pressure supply.



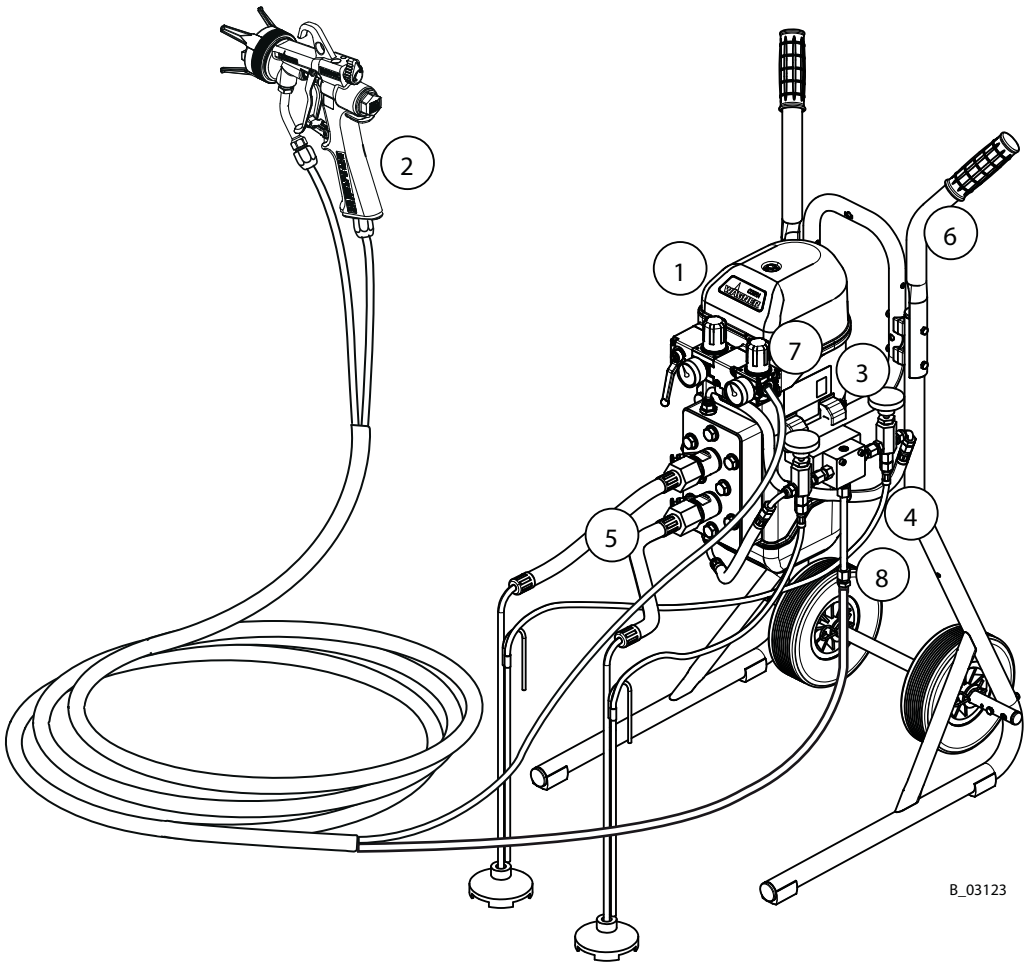
5 STARTING WORK AND HANDLING

5.1 INSTALLATION AND CONNECTION

5.1.1 SETTING UP THE PUMP

Note
This pump can be used as part of a spraying system for Airless or AirCoat applications. The components can be found in the accessories list, provided that the system was not obtained as a spraypack.
The nozzles must be selected according to the gun instructions.

Procedure:
1. Install pump (1) on trolley (6) or wall mounting.
2. For AirCoat system (see figure below): fit the additional filter pressure regulator (7) (optional).
3. Mounting suction systems (5).
4. Connect return hoses (4) of the suction system to return valves (3).
5. Connect the high-pressure hose of the gun (2) to statics mixers (8) and when using the AirCoat process connect air hose to filter pressure regulator (7).



⚠WARNING

Inclined surface!
Risk of accidents if the unit rolls away/falls

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

SIHI_0012_GB

5.1.2 EARTHING

⚠WARNING

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

→ Clean the piston pump only with a damp cloth.

SIHI_0041_GB

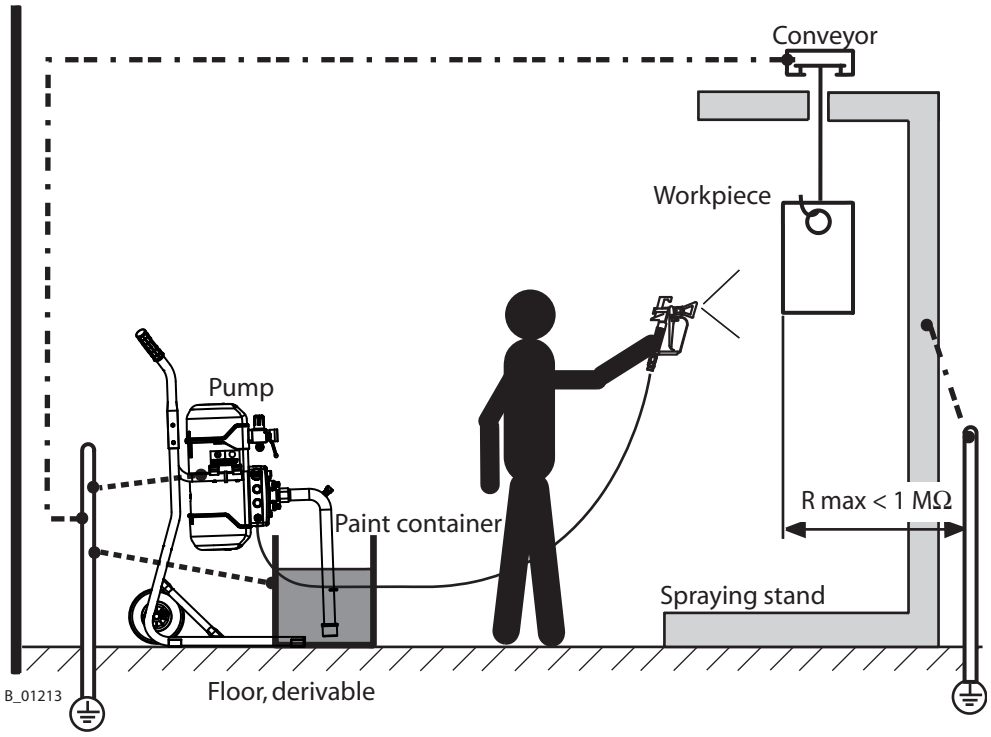
⚠WARNING

Heavy paint mist if earthing is insufficient!
Risk of poisoning
Insufficient paint application quality

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

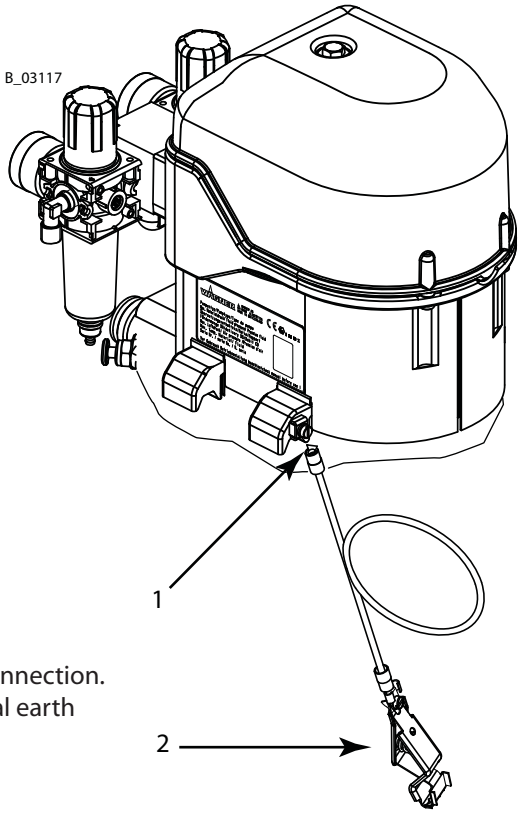
SIHI_0003_GB

Earthing schema (example)



Cable cross sections

Pump	4 mm²; AWG11
Paint container	6 mm²; AWG10
Conveyor	16 mm²; AWG5
Spraying booth	16 mm²; AWG5
Spraying stand	16 mm²; AWG5



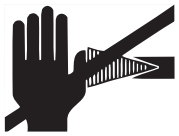
Procedure earthing:

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

5.2 STARTING UP

5.2.1 SAFETY INSTRUCTIONS

Every time before starting up the following points should be observed as laid down in the operating instructions:
- That it is possible to observe the safety regulations in chapt. 2.
- The starting up procedure, has been carried out properly.



⚠WARNING

High-pressure spray jet!
Danger to life from injecting paint or solvent

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

SIHI_0016_GB

⚠WARNING

Toxic and/or flammable vapor mixtures!
Risk of poisoning and burns

→ Operate the unit in a spraying booth approved for the working materials.
-or-
→ Operate the unit on an appropriate spraying wall with the ventilation (extraction) switched on.
→ Observe national and local regulations for the outgoing air speed.

SIHI_0028_GB

⚠WARNING

Gas mixtures can explode if there is an incompletely filled pump!
Danger to life from flying parts

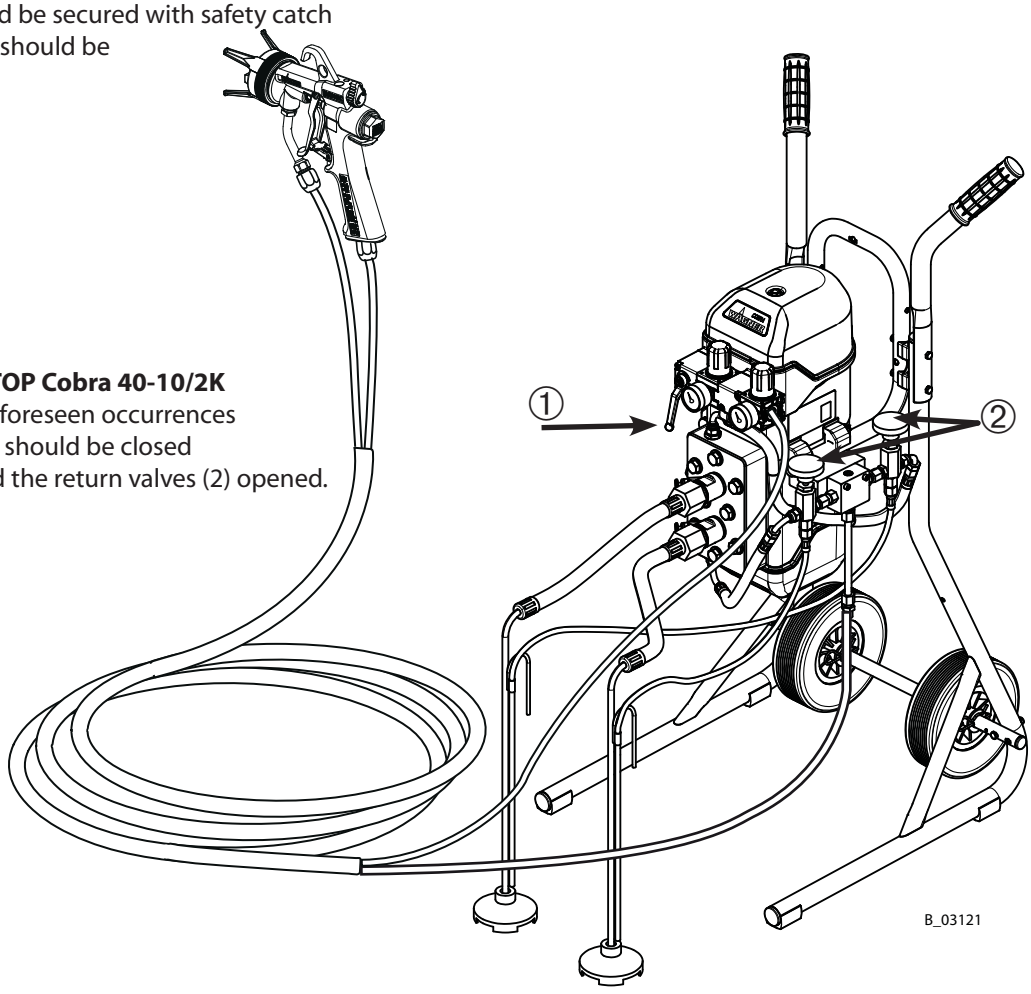
→ Ensure that the pump and suction system are always completely filled with cleaning agent or working medium.
→ Do not spray the unit empty after cleaning.

SIHI_0025_GB

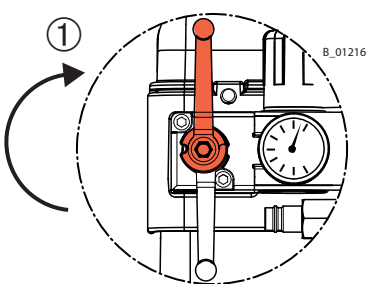
Before every start-up, the following points should be observed:
- Secure gun with safety catch
- Check the permissible pressures
- Check all connections for leaks
- Check hose for damage

It should be ensured that the unit is in the following state before carrying out any work on it:
- The pressure should be released from the pump and high-pressure hose with gun
- The gun should be secured with safety catch
- The air supply should be interrupted

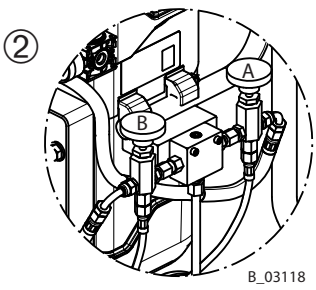
EMERGENCY STOP Cobra 40-10/2K
In the case of unforeseen occurrences the ball valve (1) should be closed immediately and the return valves (2) opened.



Closed



Open

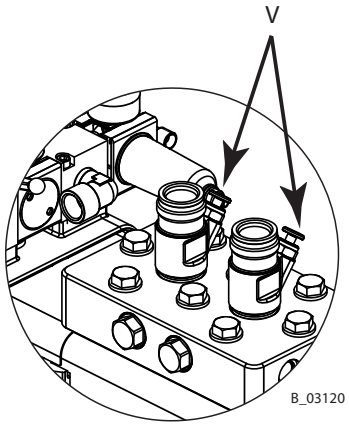


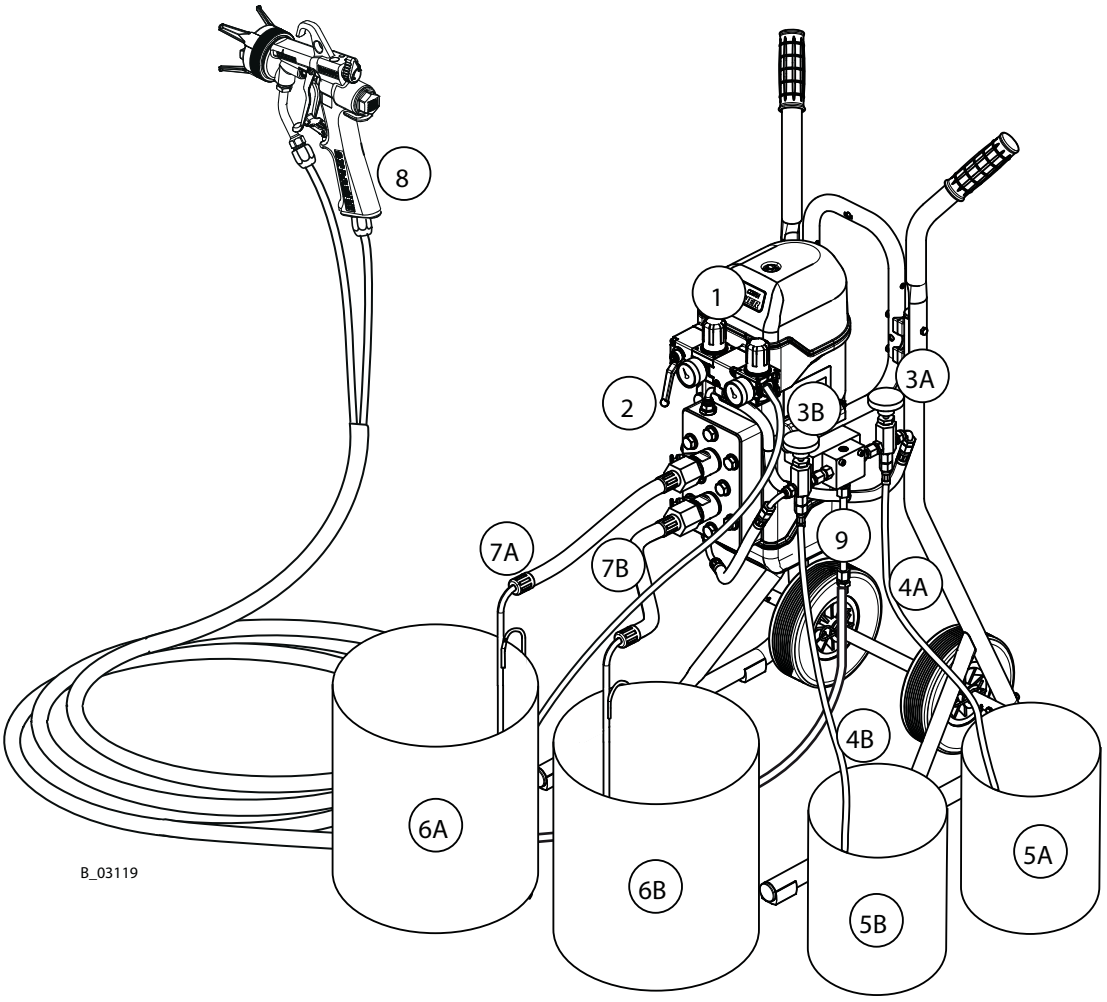
Set the valves to circulation (By turning clockwise)

5.2.2 BASIC CLEANING

1. Place empty container (5a and 5b) under return tubes (4a and 4b).
2. Place suction hoses (7a and 7b) in a containers with solvent (6a and 6b).
3. Set pressure regulator (1) to approx. 0.05 MPa; 0.5 bar; 7.25 psi.
4. Open return valves (3a and 3b).
5. Slowly open ball valve (2).
6. Adjust the air pressure on the pressure regulator (1) so that the pump runs regularly.
7. Rinse the system until clean solvent flows into the containers (5a and 5b).
8. Close ball valve (2).
9. Switch over return valves (3a and 3b).
10. Point the gun (8), without nozzle, into container (5) and open it.
11. Slowly open ball valve (2).
12. Rinse until clean solvent flows from the gun.
13. Close ball valve (2).

Note:
During cleaning procedure briefly push the valve pushers (V).



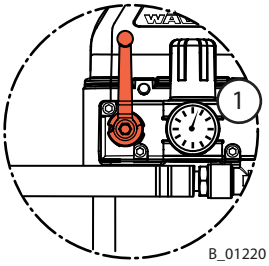


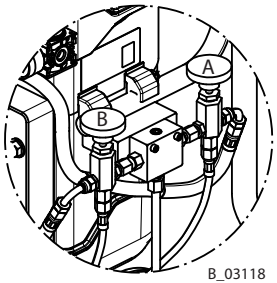
14. When there is no pressure remaining in the system close gun.
15. Secure the gun.
16. Dispose of the contents of the containers (5a and 5b) according to the local regulations.

5.2.3 FILLING WITH WORKING MATERIAL

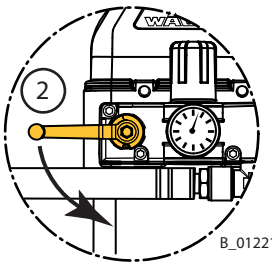
1. Place suction hoses (7a and 7b) with return tubes (4a and 4b) in the containers with working material (6a) and hardener (6b).
2. Set pressure regulator (1) to approx. 0.05 MPa; 0.5 bar; 7.25 psi.
3. Relief valves (3a and 3b) to the return tube open.
4. Slowly open ball valve (2).
5. Adjust the air pressure on the pressure regulator (1) so that the pump runs regularly.
6. Close ball valve (2) as soon as pure working material starts coming from the return hoses (4a and 4b).
7. Turn relief valves (3a and 3b) in spraying position (to the mixer 9 leading).
8. Point the gun (8), without nozzle, into empty container (5a) and open it.
9. Slowly open ball valve (2).
10. Close ball valve (2) as soon as pure working mixed material starts coming from the gun.
11. When there is no pressure remaining in the system close gun.
12. Secure the gun.

Ball valve is closed





Relief valves A and B



Open ball valve

5.3 WORKS

5.3.1 SPRAYING

1. Secure gun (8) and place nozzle in the gun.
2. Slowly open ball valve (2).
3. Set required working pressure on the pressure regulator (1).
4. Optimize the spraying results as laid down in the gun instructions.
5. Start work process.

Note: Functionally it is permissible, that the pump runs 1 - 2 DS/min after, when the gun is closed

5.3.2 BREAKS IN WORK

1. Close gun.
2. Close ball valve (2).
3. Release the system by opening the gun.
4. Close and secure gun.

⚠WARNING

Hardened material in the spraying system when 2-component material is worked!
Destruction of the pump and injection system

→ Follow the manufacturer's working instructions, particularly regarding the pot life.
→ Rinse thoroughly before the end of the pot life.

SIHI_0013_GB

5.3.3 SHUTTING DOWN AND CLEANING

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

Procedure:
1. Breaks in work -> chap. 5.3.2, carry out.
2. Carry out the basic cleaning -> chap. 5.2.2.
3. Maintain the gun as laid down in the operating instructions.
4. Clean and check the suction system and, in particular, the suction filter.
5. When using a high-pressure filter: Clean and check the filter insert and filter body.
6. Clean the outside of the system.

⚠WARNING

Brittle filter pressure regulator!
The container on the filter pressure regulator becomes brittle through contact with solvents and can burst
Flying parts can cause injury

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

SIHI_0014_GB

7. Put the whole system back together.
8. Fill the system with solvent as laid down in Paragraph 5.2.4 "Filling with working material".

⚠WARNING

Gas mixtures can explode if there is an incompletely filled pump!
Danger to life from flying parts

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

SIHI_0025_GB

5.4 LONG-TERM STORAGE

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

Procedure:
1. Carry out Paragraph 5.3.3 „Shutting down and cleaning“, points 1 through 7.
2. Flushing with preserving agent acc. paragraph 5.2.2.
3. Protect the air motor with pneumatic oil: Connect an oiler to the compressed air inlet and run for a few double strokes.

6 TROUBLE SHOOTING, MAINTENANCE AND REPAIR

6.1 TROUBLE SHOOTING AND SOLUTION

Problem	Cause	Remedy
The pump does not work.	Air motor does not work or stops.	Open and close ball valve on the pressure regulator unit or disconnect compressed air supply shortly.
	No pressure indication (pressure regulator defect).	Disconnect compressed air connection shortly or repair or change pressure regulator.
	Spray nozzle is clogged.	Clean 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 a suitable working material.
	Material feed pump or high-pressure hose are blocked (e.g., two-component material hardened).	Dismantle the paint pump and clean, replace high-pressure hose.
	Grease in spool-sleeve combination. Pump stops at the stroke end.	Degrease spool-sleeve combination. Check detent body (see Service manual).
Poor spray pattern.	See gun instructions.	
Strongly irregular operation of material pump; spray jet collapses (pulsation).	Viscosity too high.	Dilute working material.
	Spraying pressure too low.	Increase incoming air pressure, use smaller nozzle.
	Valve are clogged.	Press knocker for inlet valve. Clean material pump if necessary leave to soak in solvent.
	Foreign body in suction valve.	Dismantle suction valve housing, clean and check valve seat.
	Diameter of the compressed air line too small.	Assemble a larger incoming line -> Technical data see paragraph 4.3.2.
	Valves, packings or pistons worn.	Replace parts.
	Filter for control air or filter for work air is clogged.	Check filter and clean it.
Strongly irregular operation of material pump.	Diaphragm is "blocked" when the suction is to rapid.	Operate pump some time with minimum opened ball valve.

Problem	Cause	Remedy
Pump runs evenly, however does not suck up material.	Union nut of the suction system is loose, pump is taking in air.	Tighten
	Suction filter is clogged.	Clean filter.
	Valve are clogged.	Press knocker for inlet valve. Clean material pump if necessary leave to soak in solvent.
Pump runs fast when the gun is closed.	Valves worn.	Replace parts.
Loss of power owing to icing the air motor.	A lot of condensation water in the air supply.	Install a water separator.

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

6.2 MAINTENANCE

⚠WARNING

Incorrect maintenance/repair!
Danger to life and equipment damage

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

SIHI_0048_GB

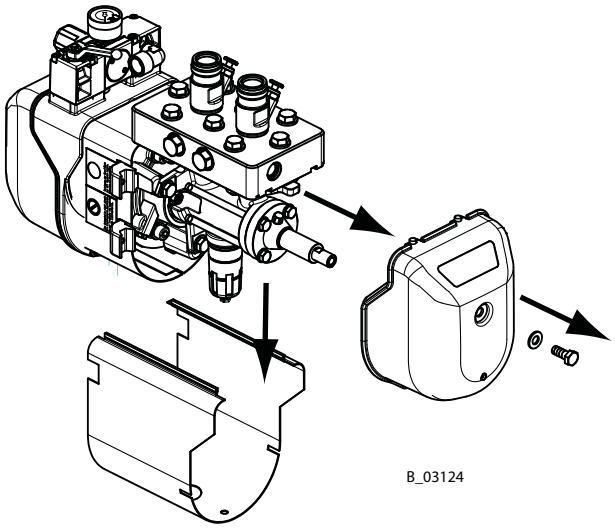
1. Check and clean the high-pressure filter every day or as required.
2. Every shut down should be carried out as laid down in paragraph 5.3.3!
3. Check and replace if necessary hoses, tubes, couplings every days.

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

6.3 MAINTENANCE HYDRAULIC STAGE

6.3.1 CHECK OIL LEVEL

1. Start up the pump for a short time without material.
2. Read the oil level A.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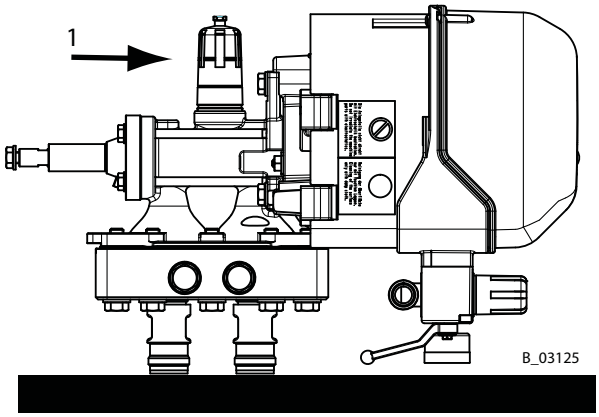
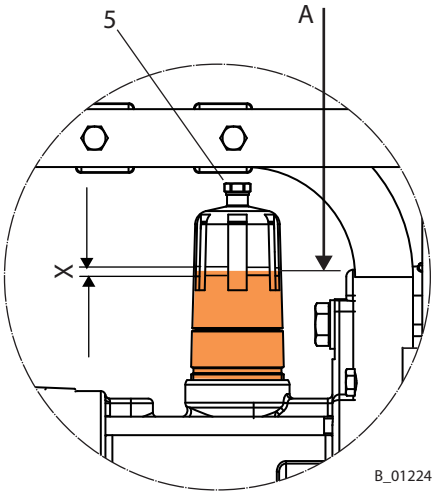


B_03125

Disassemble unit on stands as shown in the picture and place it on the head.
Observe the marking of fill level X on the oil reservoir.

The oil level A in the oil reservoir (1) has to be within the specified limit values X.

If there were variations to the specified level oil has to be refilled.



B_01224

Procedure:
1. Unscrew threaded plug (5).
2. Refill oil up to level A = middle of the mark X.
3. Start up the pump for a short time without any material and check for air-bubbles.
4. Screw in threaded plug (5) and tighten with 3-4 Nm; 2.2-3 lbft.

CAUTION

Using of hydraulic oil
Malfunction by using of wrong hydraulic oil

→ Take only original hydraulic oil - Wagner Order No. 322912 (250 ml; 15 cu inch)

SIHI_0072_GB

6.3.2 OIL CHANGE

After 500 service hours or one time per year an oil change is to be accomplished.

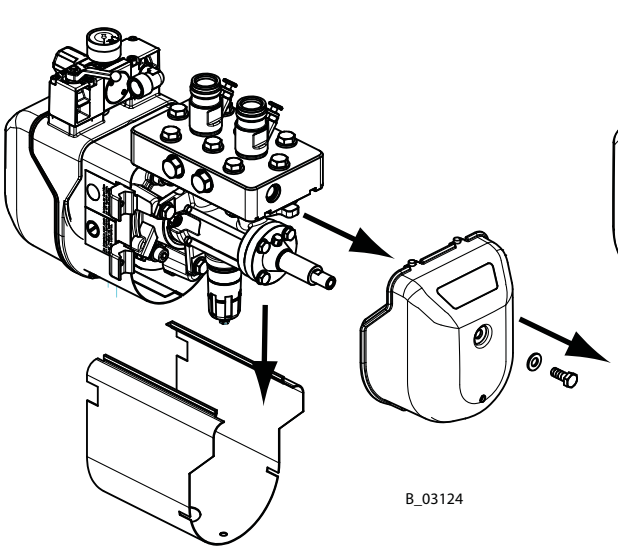
Necessary accessories:
Order No. 322911 Kit oil filling

CAUTION
Using of hydraulic oil Malfunction by using of wrong hydraulic oil → Take only original hydraulic oil - Wagner Order No. 322912 (250 ml; 15 cu inch)

SIHI_0072_GB

Discharge oil

Procedure
1. Shutting down and cleaning -> chapter 5.3.3 until point 6.
2. Place unit as shown in the picture and dismount cap and shuttering pressure stage.
3. Unscrew piston cover (1).
4. Place empty oil container (2).
5. Unscrew oil bowl assy. (3) and drain.
6. Unscrew lock plugs and lock screws (4).
7. Slowly start up the pump until no oil flows out the oil suction nipple (5).
8. Screw in clean oil bowl assy. (3) and o-ring.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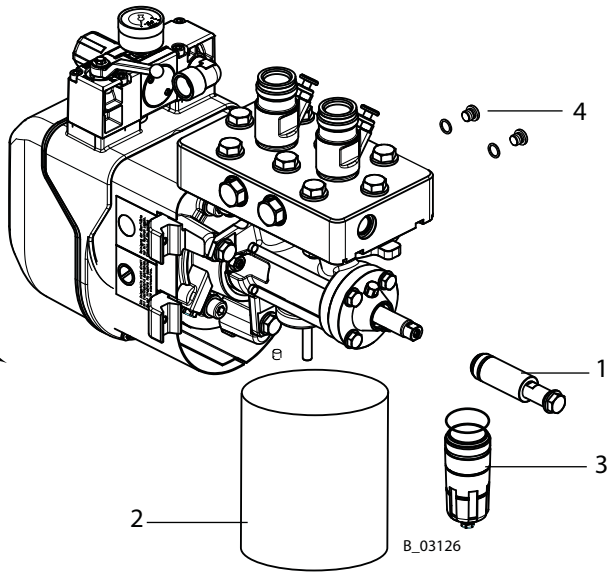

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⚠CAUTION

Environmental pollution by waste oil!
Waste oil in the duct system or buried in the soil leads to heavy environmental damage
Groundwater contamination is punishable

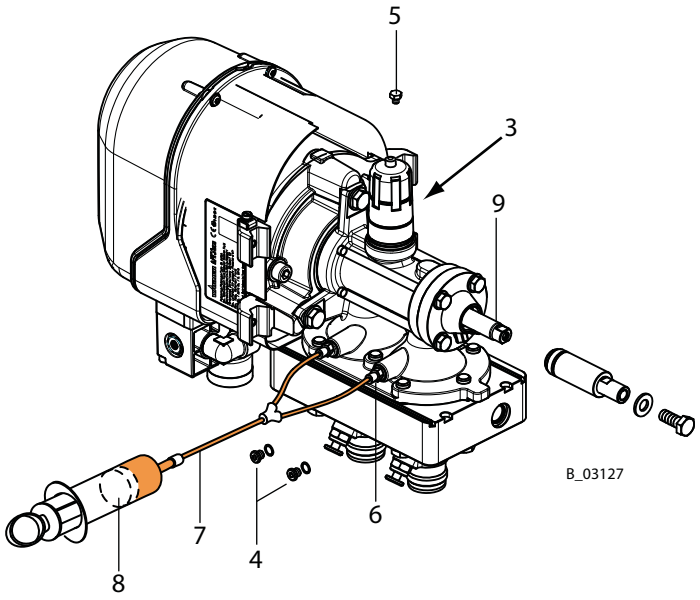
→ Collect waste oil and return it at punblic collecting point.
→ Waste oil is taken back with the purchase of hydraulic oil by the salesman.

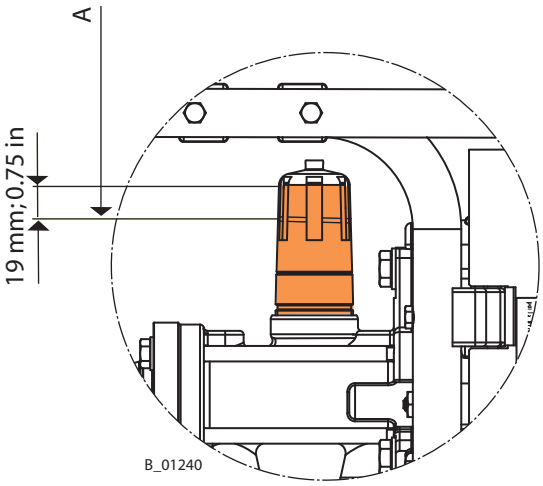
SIHI_0109_GB

Filling hydraulic stage with oil

Procedure

1. Pump as in the figure down shown on the head place.
2. Unscrew threaded plug (5).
3. Unscrew 2 lock screws (4) and replace it through the fittings straight (6) from the oil filling kit.
4. Connect hoses with Y- pieces (7).
5. Fill syringe (8) with hydraulic oil and put in at hose.
6. Drive piston (9) into front end position. Filling oil with catheter-shot into oil bowl (3) until oil flows out of the oil suction nipple free of blow holes.
7. Drive piston (9) into rear end position. Filling oil with catheter-shot into oil bowl (3) until oil flows out of the oil suction nipple free of blow holes.
8. Refill oil approx. 19 mm; 0.75 inches up to oil level A (oil level before exhaust).
9. Screw in threaded plug (5) and tighten lightly. Put pump on the side and remove oil filling kit. Screw in 2 lock screws (4) with seals and tighten.

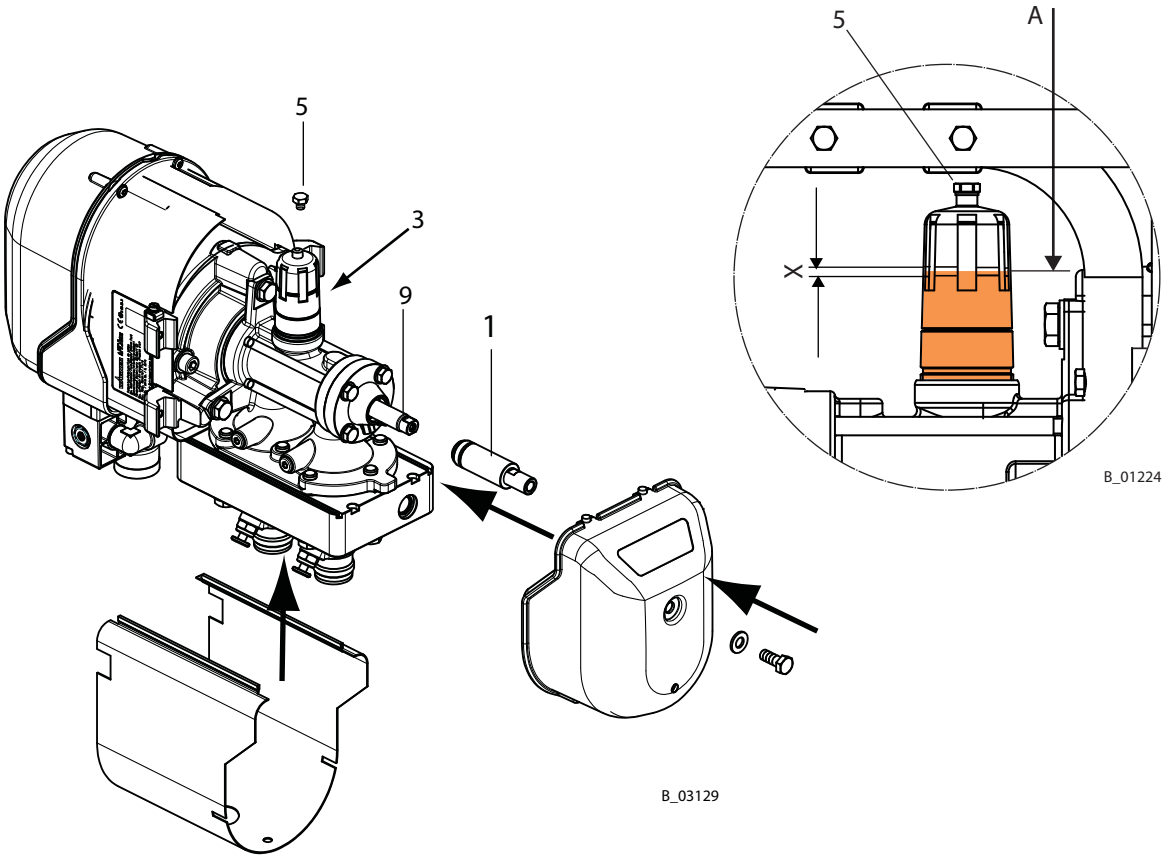




De aerate

Procedure

1. Place the pump on the head (figure down). Unscrew threaded plug (5).
2. Slowly start up the pump and check the oil suction nipple (3) until no more air-bubbles withdraw.
3. The oil level A in the oil reservoir (3) has to be within the specified limit values X.
4. Screw in threaded plug (5) and tighten with 3-4 Nm; 2.2-3 lbft.
5. Mount piston cover (1), cap with air-outlet and shuttering pressure stage.
6. The equipment is ready for operation and can be completed to the desired spraypack.



7 ACCESSORIES

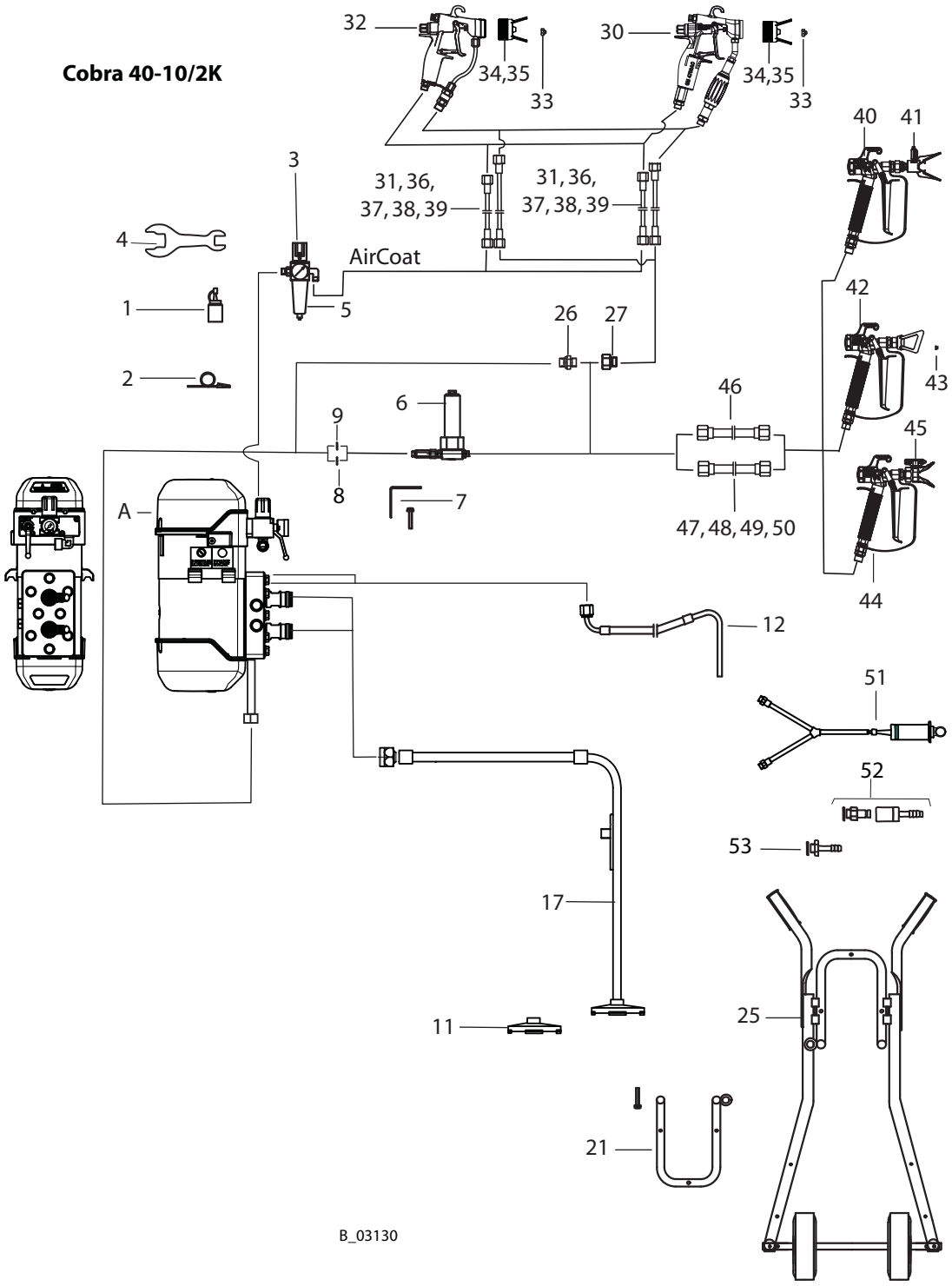
7.1 COBRA 40-10/2K ACCESSORIES

List Accessories Cobra 40-10/2K

Pos	K	No.	Description
A		322040	Diaphragm pump Cobra 40-10/2K
1	◆	322912	Hydraulic oil (for pressure stage) 250 ml; 250 cc
2	◆	236219	Earthing cable 3 m; 9.8 ft
3		322050	Filter pressure regulator with plastic bow
4		341434	Double-ended open-jaw spanner
5	◆	115985	Container metal for Filter pressure regulator
6	◆	322053	High pressure filter 3/8“ (without ball valve)
7		367115	Wall mounting assy. for high pressure filter
8	◆	9925024	Sealing ring Cu
9	◆	9974112	Sealing ring Al
11		R033.00	Suction hose cup GR assy.
12		367141	Return tube DN 13; ID 0.51 inch, M20x2
17		T423.00FA	Suction hose flexible Lack F36x2
18	◆	367527	O-ring PTFE
19	◆	9974127	O-ring FEP
20	◆	367959	Washer PTFE
21		367020	Wall mounting
22	◆	250245	Filter DN 25; ID 0.98 inch, MW 0.8; MW 0.03 inch, M28x1.5
23	◆	250243	Filter DN 25; ID 0.98 inch, MW 1.25; MW 0.05 inch, M28x1.5
25		367121	Stand with wheels, complete
26		369657	Double nipple A=G3/4“ -A=NPSM3/8”
27		367563	Fitting RF FM 3/8“ NPS M16x1.5 PN530-SSt
28		97073	Suction hose assy. Paint Niro DN 13; ID 0.98 inch
30	◆	2313585	AirCoat gun GM 4700AC, 25 MPa; 250 bar; 3626 psi, NPSM1/4“
31	◆	2309705	Hose set AC *Material:* NPSM1/4“, 7.5 m; 24.6 ft, DN 3 mm; ID 0.12 inch, 27 MPa; 270 bar; 3916 psi *Air:* G1/4“, 7.5 m; 24.6 ft, DN 6 mm; ID 0.24 inch, 0.8 MPa; 8 bar; 116 psi
32	◆	394012	AirCoat gun GM 4100AC, 25 MPa; 250 bar; 3626 psi, NPSM1/4“
33	◆	379HHH	Nozzle ACF3000 -> see nozzle table in the gun manual
34		394910	Air cap LV (red)
35		394911	Air cap HV (blue)
36	◆	2309706	Hose set AC *Material:* NPSM1/4“, 7.5 m; 24.6 ft, DN 4 mm; ID 0.16 inch, 27 MPa; 270 bar; 3916 psi *Air:* G1/4“, 7.5 m; 24.6 ft, DN 6 mm; ID 0.24 inch, 0.8 MPa; 8 bar; 116 psi

◆ = Wearing parts

Cobra 40-10/2K



List Accessories Cobra 40-10/2K

Pos	K	No.	Description
37	◆	2312801	Hose set AC *Material:* NPSM1/4“, 10 m; 32.8 ft, DN 4 mm; ID 0.16 inch, 27 MPa; 270 bar; 3916 psi *Air:* G1/4“, 10 m; 32.8 ft, DN 6 mm; ID 0.24 inch, 0.8 MPa; 8 bar; 116 psi
38	◆	2309634	Hose set AC *Material:* NPSM1/4“, 15 m; 49.2 ft, DN 4 mm; ID 0.16 inch, 27 MPa; 270 bar; 3916 psi *Air:* G1/4“, 15 m; 49.2 ft, DN 6 mm; ID 0.24 inch, 0.8 MPa; 8 bar; 116 psi
39	◆	2309635	Hose set AC *Material:* NPSM1/4“, 20 m; 65.6 ft, DN 4 mm; ID 0.16 inch, 27 MPa; 270 bar; 3916 psi *Air:* G1/4“, 20 m; 65.6 ft, DN 6 mm; ID 0.24 inch, 0.8 MPa; 8 bar; 116 psi
40	◆	257015	Airless gun AG-14, NPSM1/4“, 27 MPa; 270 bar; 3920 psi with nozzles holder Tip Wagner
41	◆	1088HHH	Nozzles Tip nozzles ...., 27 MPa; 270 bar; 3920 psi
42	◆	257017	Airless gun AG-14, NPSM1/4“, 27 MPa; 270 bar; 3920 psi with nozzles holder standard
43	◆	90HHH	Nozzles Standard ...., 27 MPa; 270 bar; 3920 psi
44	◆	347016	Airless gun AG-14 with ProfiTip HP, NPSM1/4“, 27 MPa; 270 bar; 3920 psi
45	◆	1006HHH	Nozzle Wagner ProfiTip HP...,
46	◆	9984583	High pressure hose Airless, 1/4 NPSM, DN 3 mm; ID 0.12 inch, 7.5 m; 24.6 ft, 27 MPa; 270 bar; 3920 psi
47	◆	9984573	High pressure hose Airless, 1/4 NPSM, DN 4 mm; ID 0.16 inch, 7.5 m; 24.6 ft, 27 MPa; 270 bar; 3920 psi
48	◆	9984573-10	High pressure hose Airless, 1/4 NPSM, DN 4 mm; ID 0.16 inch, 10 m; 32.8 ft, 27 MPa; 270 bar; 3920 psi
49	◆	9984573-15	High pressure hose Airless, 1/4 NPSM, DN 4 mm; ID 0.16 inch, 15 m; 49.2 ft, 27 MPa; 270 bar; 3920 psi
50	◆	9984573-20	High pressure hose Airless, 1/4 NPSM, DN 4 mm; ID 0.16 inch, 20 m; 65.6 ft, 27 MPa; 270 bar; 3920 psi
51	◆	322911	Set oil filling with 100 ml; 100 cc syringe
52	◆	322916	Set air coupling NW 10 mm; 0.39 inch
53	◆	9985619	Hose nozzle with sealing ring

◆ = Wearing parts

8 SPARE PARTS

8.1 HOW TO ORDER SPARE PARTS?

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

Part Number, description and quantity

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

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

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

Marks in spare parts lists

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

◆ = Wearing parts
Note: No liability is assumed for wearing parts

● = Not part of standard equipment, available, however, as additional extra.

⚠WARNING

Incorrect maintenance/repair!
Risk of injury and damage to the equipment

→ Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center.

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

→ Observe the operating and service instructions when carrying out all work.

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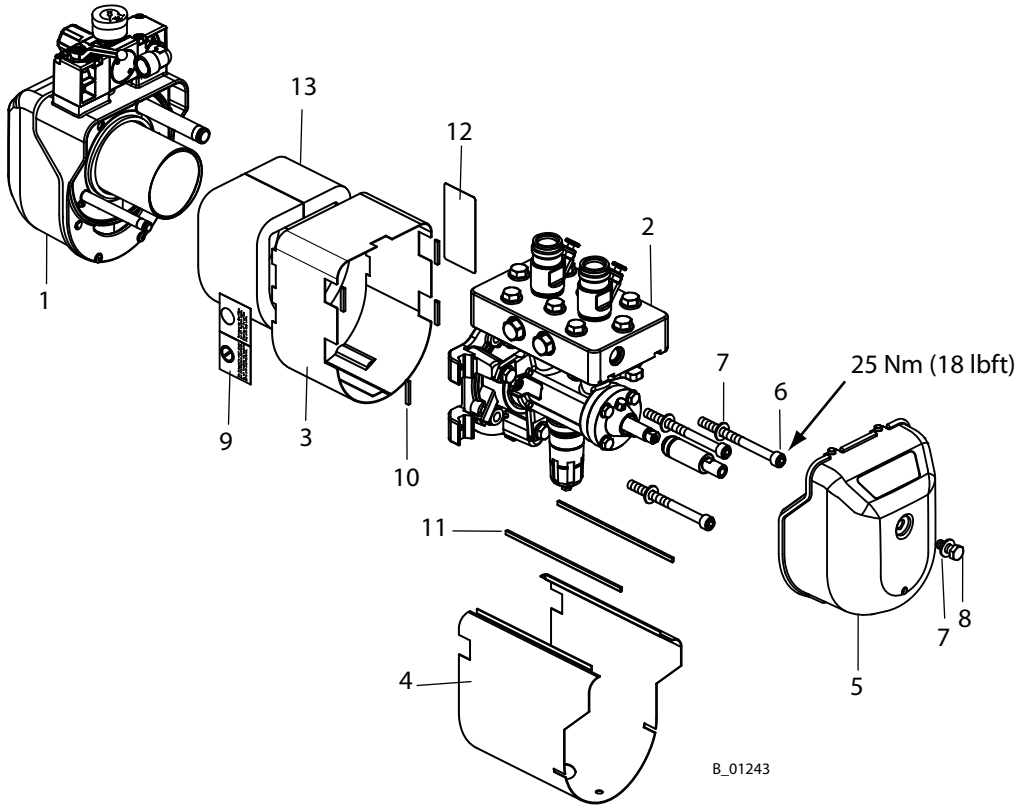
8.2 COBRA 40-10/2K, OVER VIEWS MODULES

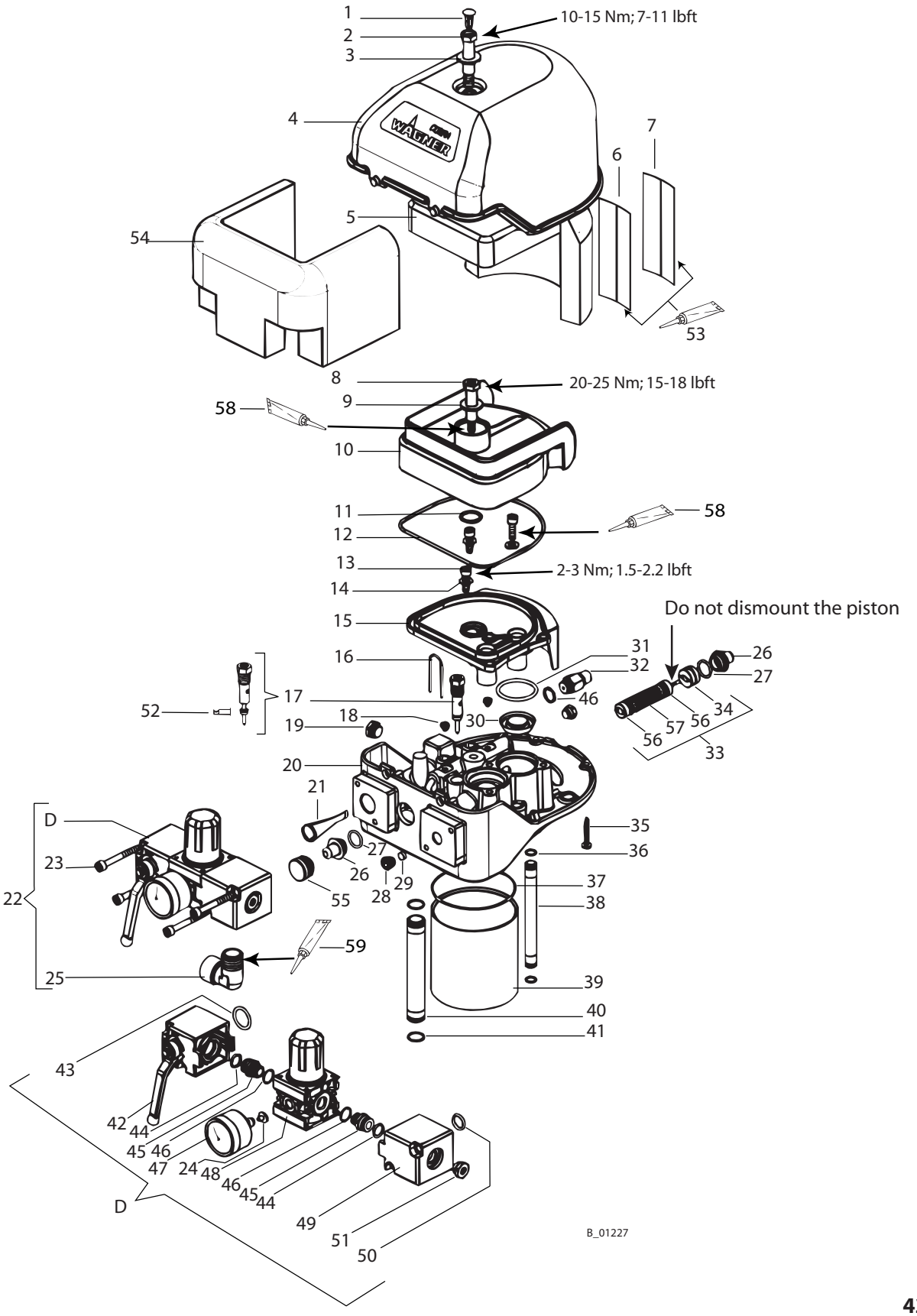
Pos	Qty	Part No.	Description
1	1	-	Air motor 3/53
2	1	-	Pump preassembled
3	1	322436	Shuttering air motor
4	1	322437	Shuttering pressure stage
5	1	322235	Hood (4) with air-outlet
6	3	9907224	Cheese head screw with hexagon
7	4	9920106	Washer
8	1	9900107	Hexagon screw
9	1	367807	Warning sign
10	4	9999211	Edge protection profile 30 mm; 1.18 inch
11	2	9999211	Edge protection profile 164 mm; 6.46 inch
12	1	377887	Warning sign Fluid (only for USA)
13	1	322438	Acoustical foam cylinder



8.3 COBRA 40-10 AIR MOTOR

Pos	K	Qty	Part No.	Description
1		1	9998718	Pin
2		1	367318	Shoulder screw 4
3		1	9925033	Washer
4		1	367311	Cap 4
5	◆	1	367319	Sound absorbing mat 4
6		1	9999152	Velcro fastener coating part
7		1	9999151	Velcro fastener adhesive part
8		1	367318	Shoulder screw 4
9		1	9925033	Washer
10		1	367310	Sound absorber 4
11	◆ ★	1	9974098	O-ring
12	◆ ★	1	9974097	O-ring
13		3	9900325	Cheese head screw
14		3	9920103	Washer A6.4
15		1	367309	Connection part 4
16		2	367320	Spring pin
17		1	369290	Pilot valve
18		2	9998674	Threaded plug
19		1	9998274	Threaded plug
20		1	367315	Control housing 4
21	◆ ★	1	367313	Filter compressed air 4/6
22		1	322060	Pressure regulator unit (3) assy.
23		4	9900316	Cheese head screw
24		1	322429	Throttle pressure gauge
25		1	9999228	Fitting L
26		2	367307	Lock plug 4/6
27	◆ ★	2	9974085	O-ring
28		1	367324	Filter location
29	◆ ★	1	367314	Filter Control air
30	◆ ★	1	322910	Set Seal, outlet Cobra (consisting for 2 seals)
31	◆ ★	2	9974095	O-ring
32		1	368285	Safety valve 0.63 MPa; 6.3 bar; 91 psi
33	◆	1	9943080	Spool-sleeve combination assembly
34	◆	1	368038	Detent body, assy. ISO 1/2
35		2	9907126	Screw SFS Plastite 45

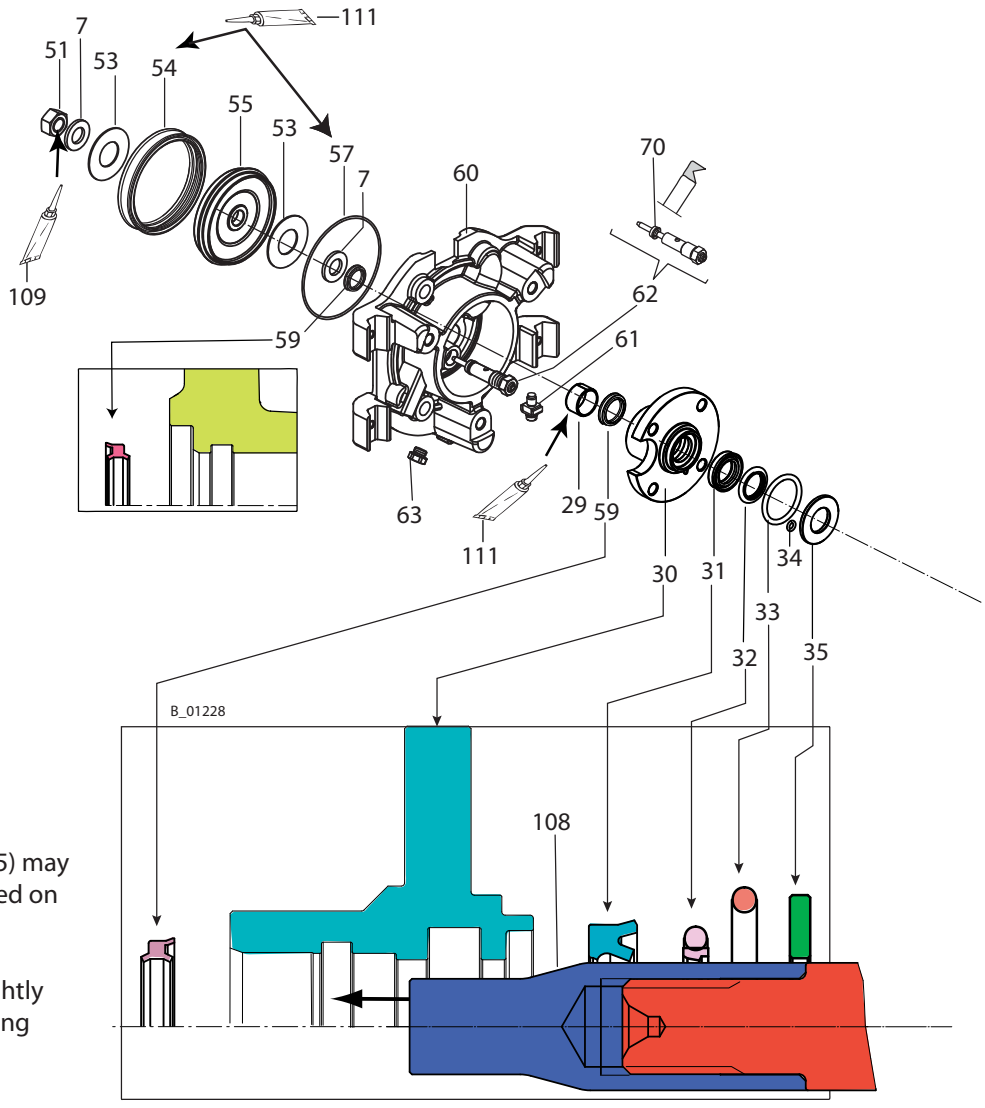
◆ = Wearing part
★ = Included in service set
● = Not part of standard equipment, available, however, as additional extra


1
2
3
10-15 Nm; 7-11 lbft
4
5
6
7
54
53
8
20-25 Nm; 15-18 lbft
9
58
10
11
12
58
13
2-3 Nm; 1.5-2.2 lbft
14
15
Do not dismount the piston
16
31
32
26
27
17
46
52
18
30
34
19
57
56
56
33
20
21
D
35
23
27
36
26
28
29
37
22
55
38
59
25
39
40
41
43
42
44
45
46
47
24
48
46
45
44
D
49
51
50
B_01227

Pos	K	Qty	Part No.	Description
36	◆ ★	1	9974089	O-ring
37	◆ ★	1	9974115	O-ring
38		1	322432	Control air pipe
39		1	322430	Cylinder tube
40		1	322431	Compressed air pipe
41	◆ ★	2	9971448	O-ring
42	◆	1	367061	Angle ball valve 4
43	◆ ★	1	9974086	O-ring
44	◆ ★	2	9974105	O-ring
45		2	367322	Connection piece
46	◆ ★	3	9970149	O-ring
47	◆	1	9998677	Pressure gauge
48	◆	1	9998676	Pressure regulator
		1	115943	Wear parts set for pos. 48
49		1	367321	Distributor piece
50	◆ ★	1	3055026	O-ring
51		1	9998274	Threaded plug
52	◆	1	9974217	Rod seal
53		-	9992816	Adhesive
54	◆	1	322439	Acoustical foam Air motor
55		1	9990861	Ribbed plug
56	◆	2	368313	Absorber 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
			322995	Service Set Air motor 3“/53

◆ = Wearing part
★ = Included in service set
● = Not part of standard equipment, available, however, as additional extra

8.4 COBRA 40-10/2K MATERIAL PUMP

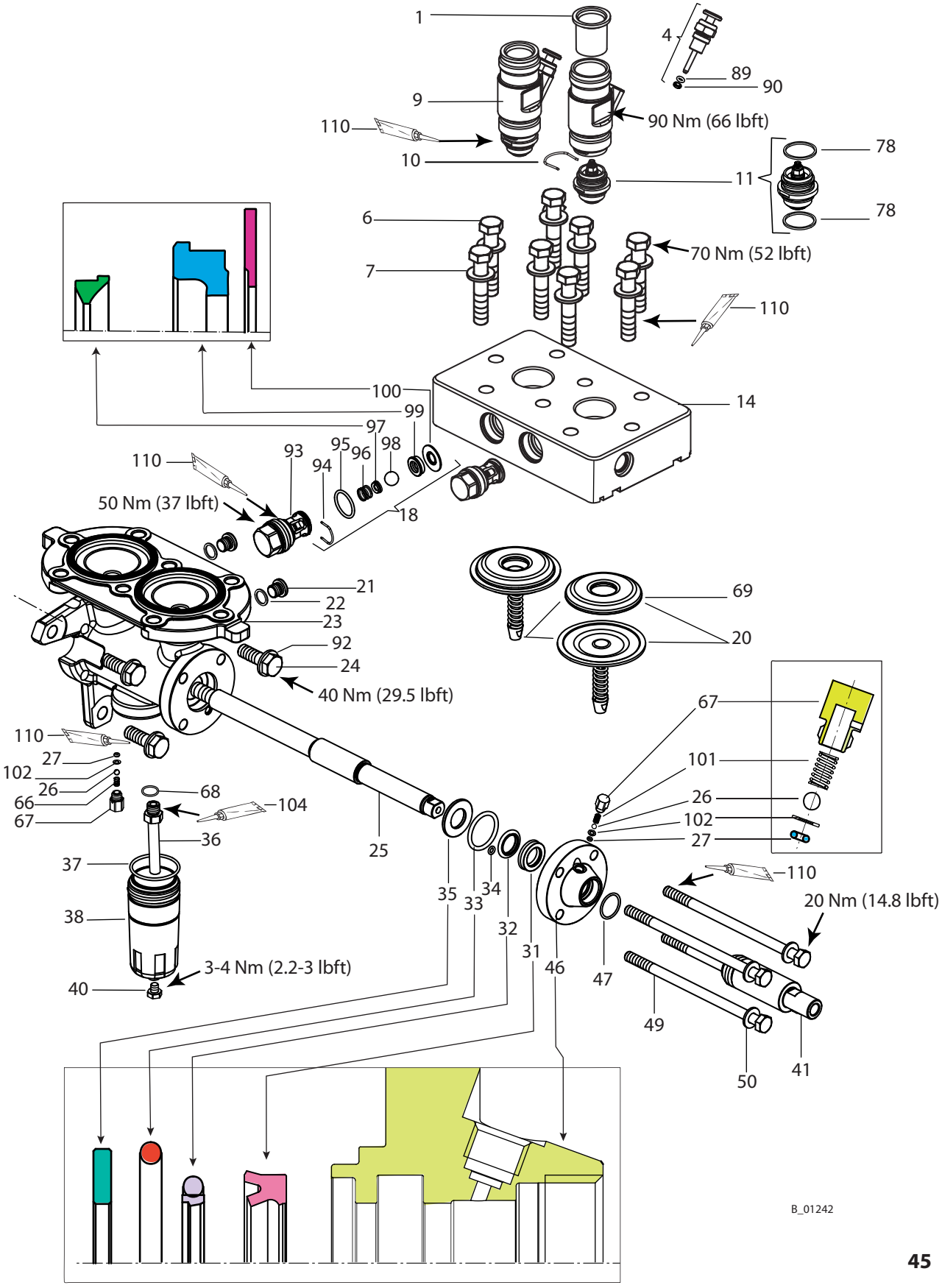


Note:
The assembly of the piston rod (25) may be accomplished only with screwed on assembly arbor (108).

Grease all the o-rings and seal slightly using grease (111) before mounting them.

Pos K	Qty	Part No.	Description
1	2	340339	Inlet
4	2	341241	Inlet valve pusher assy.
6	8	9907234	Hexagon screw
7	10	9920107	Washer
9	2	341335	Pusher housing
10	2	341336	Clasp

◆ = Wearing part
★ = Included in service set material pump Cobra 40-10
● = Not part of standard equipment, available, however, as additional extra


1
4
89
90
9
110
90 Nm (66 lbft)
10
11
78
78
6
7
70 Nm (52 lbft)
110
100
99
97
14
110
93
94
95
96
98
50 Nm (37 lbft)
18
21
22
23
92
24
40 Nm (29.5 lbft)
69
20
67
101
26
102
27
110
27
102
26
66
67
68
104
36
37
38
40
3-4 Nm (2.2-3 lbft)
25
35
33
34
32
31
46
47
110
20 Nm (14.8 lbft)
49
50
41
B_01242

Pos	K	Qty	Part No.	Description
11	◆ ★	1	322914	Set Inlet valve assy. (consisting of 2 valves)
14		1	322460	Material pump Cobra 40-10/2K
18	◆ ★	1	322915	Set outlet valve assy. (consisting of spare parts for 2 valves)
20	◆ ★	1	322913	Set membrane assy. with inlet (Consisting of 2 membranes)
21		2	9904306	Lock screw
22	◆	2	9970127	Sealing ring
23		1	322401	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	Flange Pressure stage
31	◆	2	9974182	Piston sealing profile BS
32	◆	2	9974183	Rod sealing set
33	◆	2	9974186	O-ring
34	◆	2	9971446	O-ring
35		2	322405	Pressure washer
36		1	322406	Oil suction nipple
37	◆	1	115944	O-ring
38		1	322236	Oil reservoir assy.
40		1	9999210	Threaded plug M7x1
41		1	322435	Piston cover
46		1	322404	Cover ring pressure stage
47	◆	1	9974074	O-ring
49		4	9907233	Hexagon screw
50		4	9920102	Washer
51		1	9910101	Hexagon nut
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	Scraper ring profile EM
60		1	322425	Flange Air motor
61		1	367258	Earthing assy.
62	◆	1	3813023	Sensor above M 80 T702.00
63		1	9998675	Threaded plug
66		1	9998780	Pressure spring

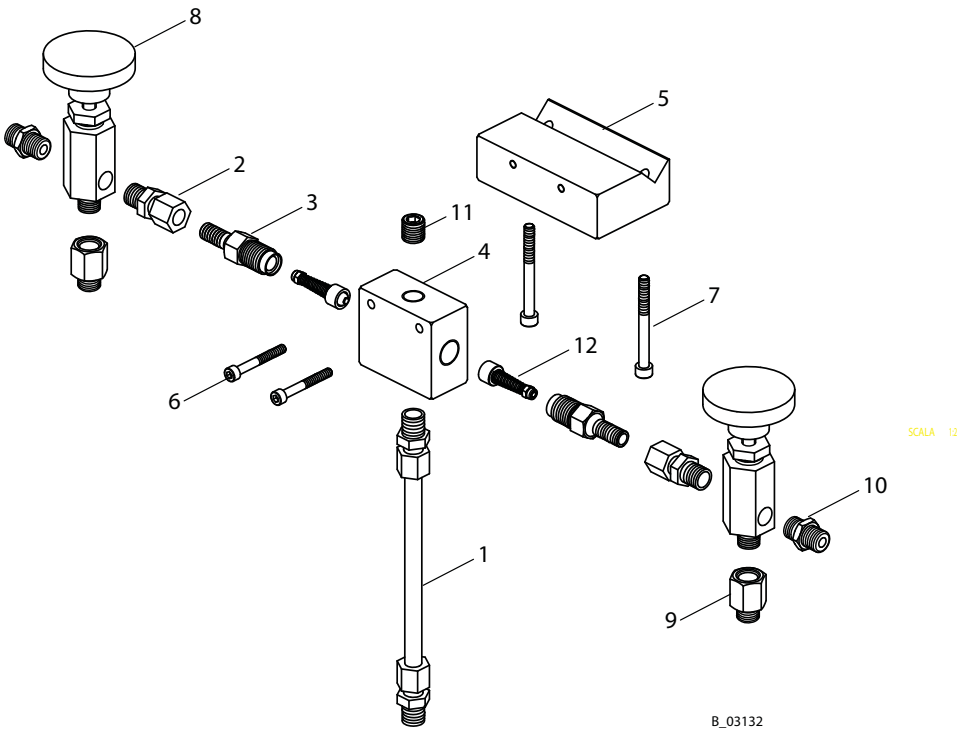
◆ = Wearing part
★ = Included in service set material pump Cobra 40-10
● = Not part of standard equipment, available, however, as additional extra

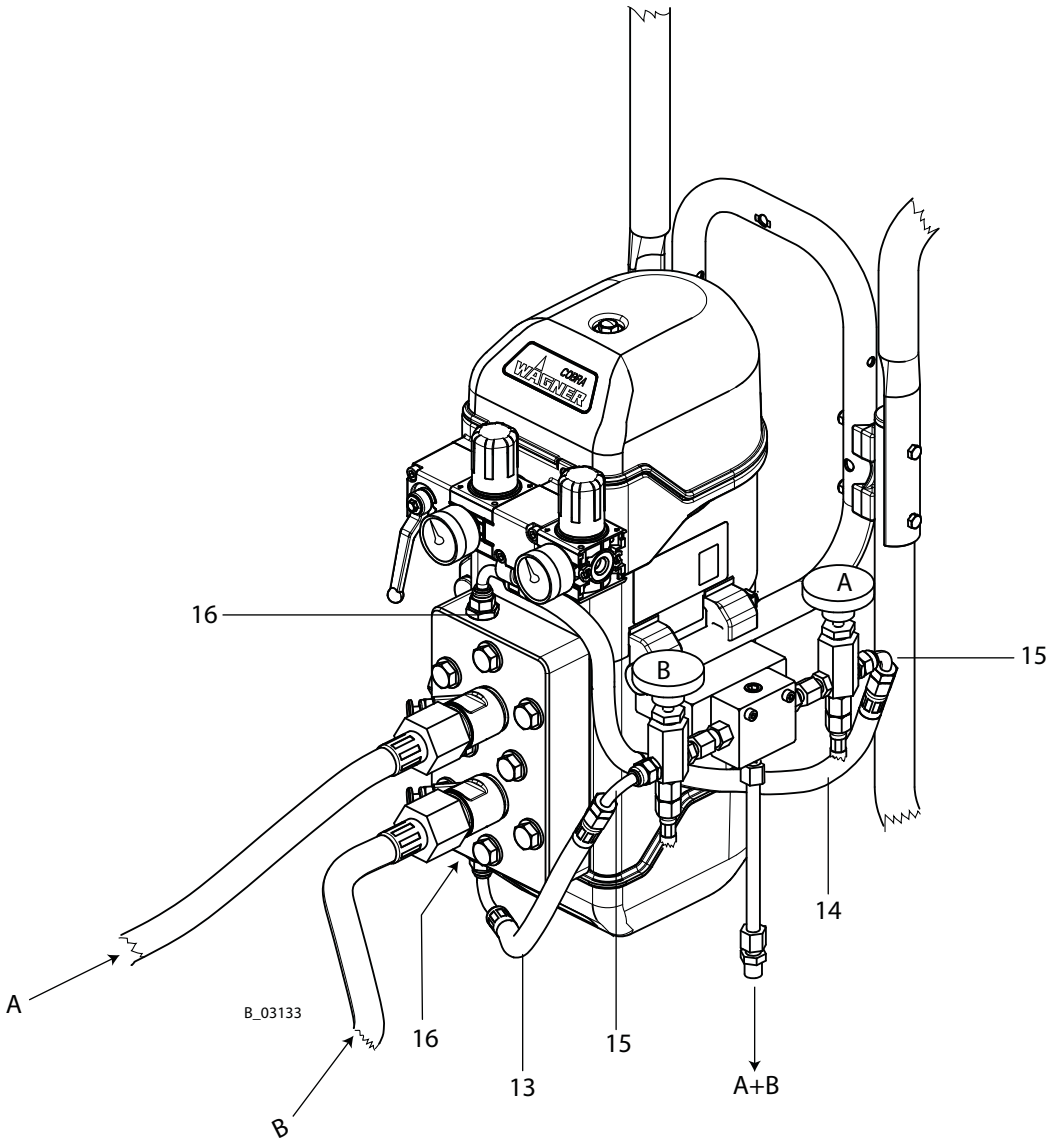
Pos	K	Qty	Part No.	Description
67		2	322407	Oil valve screw
68	◆	3	9971162	O-ring
69		2	322415	Inlet
70	◆	1	3807448	O-ring
78	◆	4	341331	Sealing ring
89	◆ ★	2	9971486	O-ring (solvent resistant)
90	◆	2	341316	Scraper
92		3	9920106	Washer
93		2	341325	Valve guide
94		2	341328	Clasp
95	◆	2	9971470	O-ring
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	Compression ring oil valve
103	◆ ●	1	9992590	Loctite 222 50 ml; 50 cc
104	◆ ●	1	9992831	Loctite 542 50 ml; 50 cc
105		1	2312288	Service Set Material pump Cobra 40-10
107		1	322917	Service set Cobra Piston 40-10 (incl. pos. 25, 31, 32, 33, 59 and 108)
108		1	322930	Assembly arbor Piston rod
109	◆ ●	1	9992511	Loctite 243 50 ml; 50 cc
110	◆ ●	1	9992616	Molykote DX grease
111	◆ ●	1	9998808	Grease Mobilux EP2

◆ = Wearing part
★ = Included in service set material pump Cobra 40-10
● = Not part of standard equipment, available, however, as additional extra

8.5 MIXER ASSY.

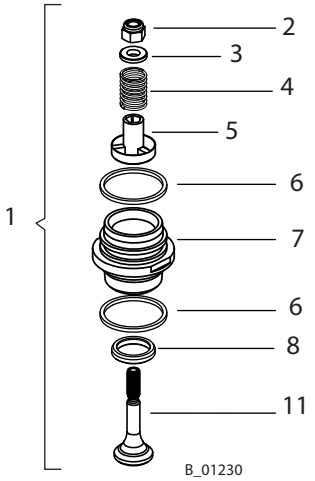
Pos		Qty	No.	Description
1		1	T678.00	Mixing pipe assy. D6
2		2	M604.12	Nipple D 1/4x10
3		2	A194.22	Valve body
4		1	B0284.03	Mixing block
5		1	B0285.71	Mixing block support
6		2	K118.62	Screw M5x40
7		2	K151.62	Screw M6x60
8		2	M116.00A	Ball valve A Needle 1/4 C/R
9		2	M6014.00	Nipple 1/4“ adjustable
10		2	M614.62	Nipple 1/4“
11		1	M623.12	Plug EI 1/4“
12		2	T701.00	Lock valve Paint Mix
13		1	S521.00	Hose AP 1/4 MT.0,500
14		1	S516.00	Hose AP 1/4 MT.0,65
15		2	M6029.00	Connection 90° M1/4xFG1/4
16		2	M618.62	Nipple 3/8-1/4

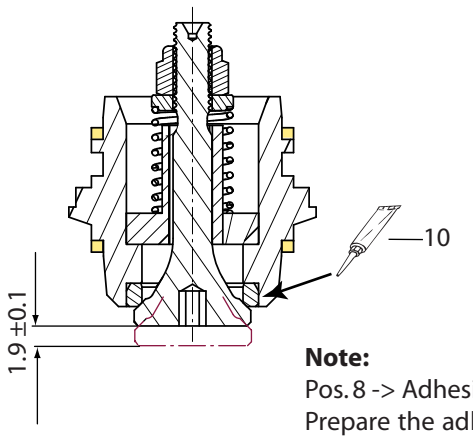



16
A
B
15
14
A
B_03133
16
15
13
A+B
B

8.6 COBRA 40-10 INLET VALVE

Pos K	Qty	No.	Description
1	2	322914	Set Inlet valve assy. Cobra 40-10
2	1	9912100	Hexagon nut with clamp
3	1	344334	Spring guide
4	1	190304	Pressure spring
5	1	158333	Guide
6	2	341331	Sealing ring
7	1	344322	Valve housing
8	1	340346	Valve seat
10	1	9992528	Loctite 270, 50 ml; 50 cc
11	1	340342	Valve cone

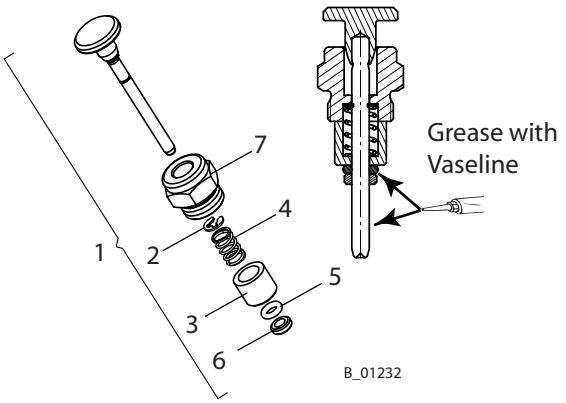




Note:
Pos. 8 -> Adhesive area:
Prepare the adhesive area with fast cleaner Loctite Type 7063.

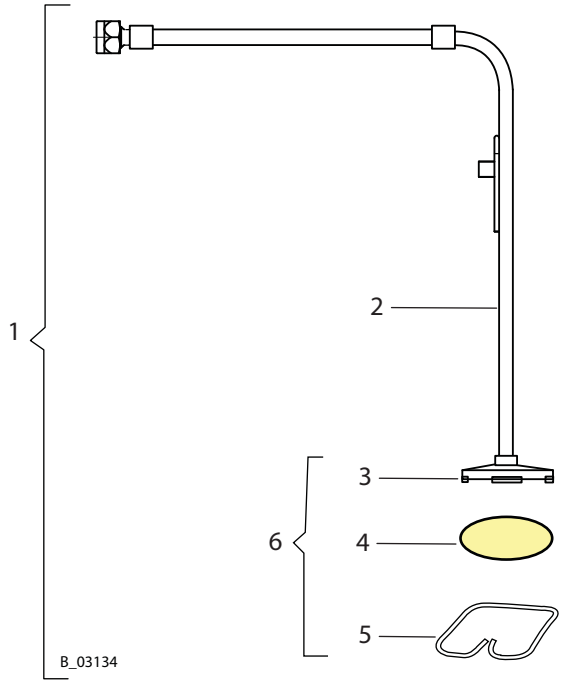
8.7 INLET VALVE PUSHER

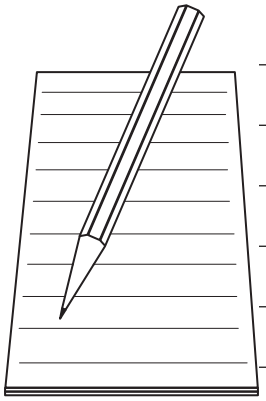
Pos	Qty	No.	Description
1	1	341241	Inlet valve pusher assy.
2	1	9922724	Lock washer 3.2
3	1	341377	Sleeve
4	1	9994275	Pressure spring
5	1	9971486	O-ring 4x2
6	1	341316	Scraper
7	1	341375	Lock screw



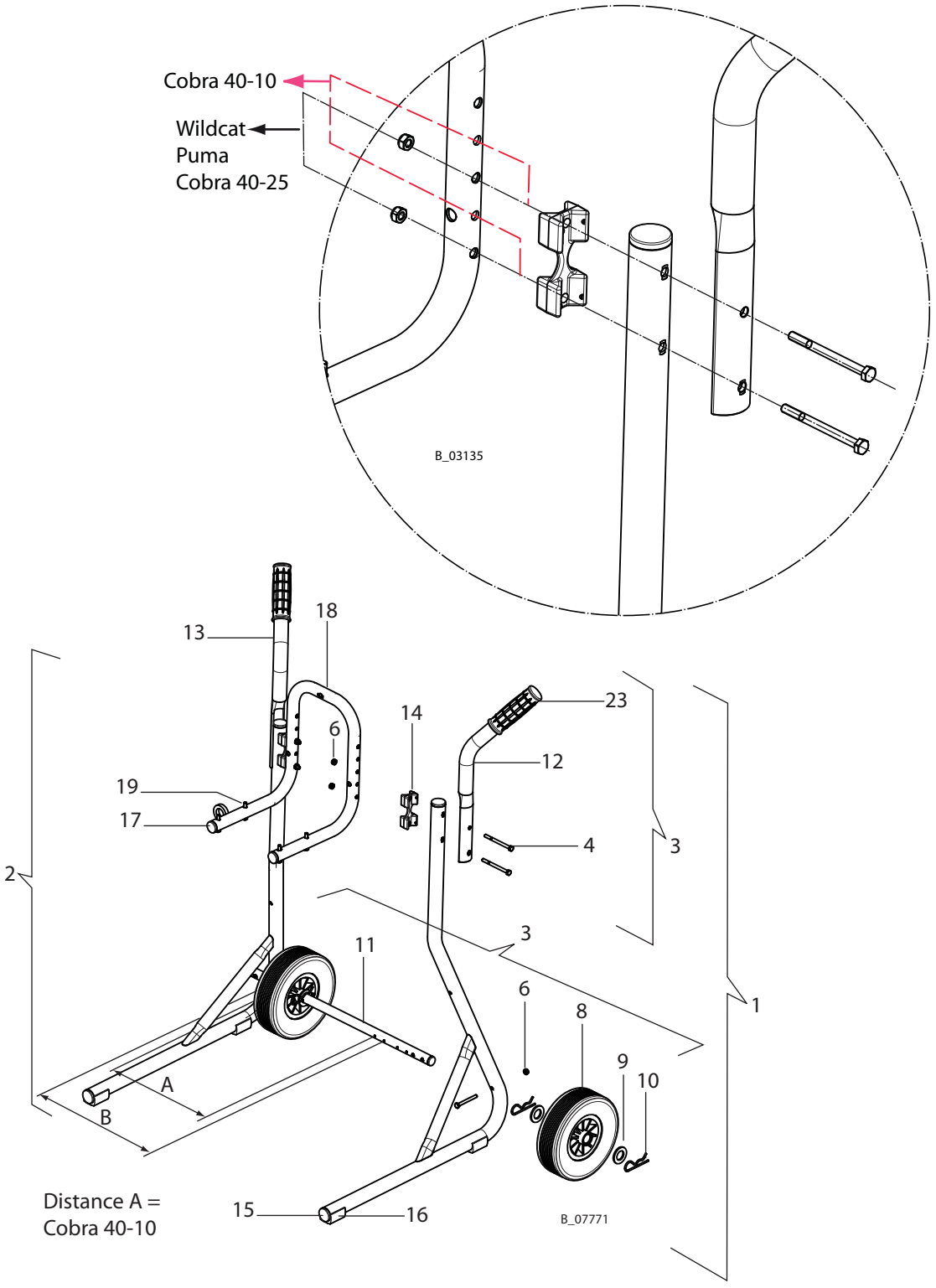
8.8 COBRA SUCTION SYSTEM

Pos K	Qty	No.	Description
1	1	T423.00FA	Suction system flexible assy.
2	1	T423.00F	Suction pipe
3	1	R033.00A	Filter housing
4	1	T468.00	Filter screen
5	1	H220.03	Holding spring
6	1	R033.00	Filter housing assy.





8.9 TROLLEY

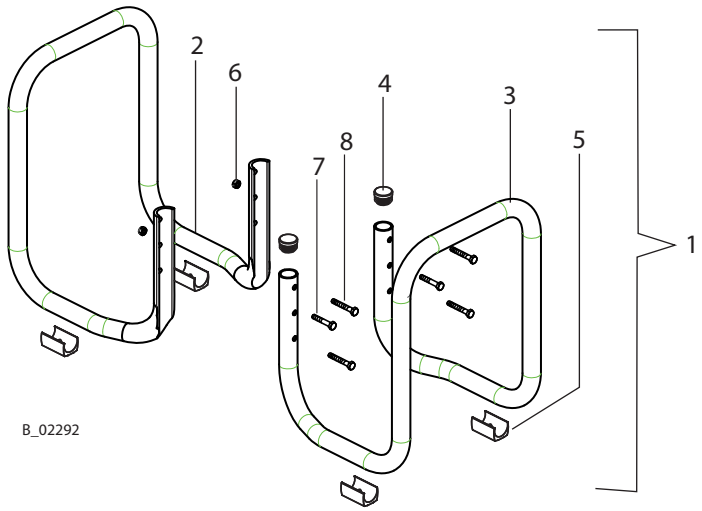

Cobra 40-10
Wildcat
Puma
Cobra 40-25
B_03135
13
18
6
14
23
12
19
17
4
3
2
11
3
6
8
1
9
10
A
B
Distance A =
Cobra 40-10
15
16
B_07771

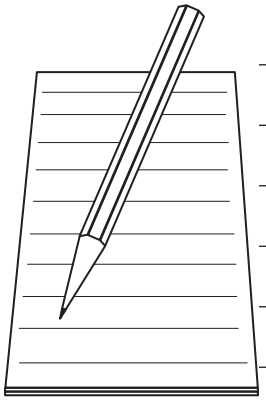
Pos	K	Qty	No.	Description
1		1	367121	Trolley assy.
2		1	367021	Stand
3		1	367022	Wheel set and handles
4		4	9907140	Hexagon screw DIN931 M6x..
6		6	9910204	Hexagon nut with clamp M6
8	◆	2	2302671	Wheel
9		4	340372	Washer
10		4	9995302	Spring pin
11	◆	1	367945	Wheel axle
12		1	367946	Handle left
13		1	367947	Handle right
13	◆	2	367943	Connection part
15	◆	2	9990812	Tube plug ribbed
16	◆	2	9998685	Saddle feet for round tubes
17		2	9998687	Plug
18		1	367940	Mounting for wall
19		4	9900218	Hexagon screw DIN931 M6x..
20		2	9907045	Hexagon screw DIN933 M6x55
23	◆	2	9998747	Handle

◆ = Wearing parts

8.10 COBRA 40-10 BASE FRAME ASSY.

Pos K	Qty	No.	Description
1		322052	Base frame Cobra 40-10
2	1	322442	Base frame pressed
3	1	322443	Base 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





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