



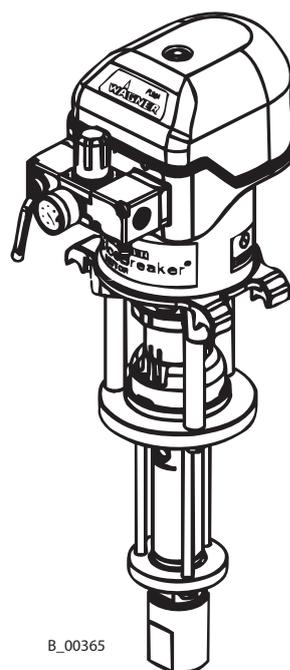
**Translation of the original
Operating manual**

**Wildcat 18 - 40
Puma 28 - 40**

Edition 03/2011

IceBreaker piston pumps

Feed volume 40 cm³



B_00365

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1 ABOUT THESE INSTRUCTIONS

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

→ Always follow these instructions when operating the unit.

1.1 LANGUAGES

This operating manual is available in the following languages:

Language:	Part No.	Language:	Part No.
German	2302505	English	2303659
French	2303661	Dutch	2303662
Italian	2303663	Spanish	2303665
Danish	2303666	Swedish	2303667

The corresponding service instructions are available under the following order number:

Language:	Part No.	Language:	Part No.
German	367865	English	367866

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.

	 DANGER
 SIHI_0100_GB	<p>This line warns of the hazard! Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

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

	 WARNING
 SIHI_0103_GB	<p>This line warns of the hazard! Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

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

	 CAUTION
 SIHI_0101_GB	<p>This line warns of the hazard! Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

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

	CAUTION
SIHI_0102_GB	<p>This line warns of the hazard! Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

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

2 GENERAL SAFETY INSTRUCTIONS

2.1 SAFETY INSTRUCTIONS FOR THE OPERATOR

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



2.1.1 ELECTRICAL EQUIPMENT

Electrical plant and unit

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

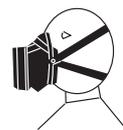


2.1.2 PERSONNEL QUALIFICATIONS

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

2.1.3 A SAFE WORK ENVIRONMENT

- Ensure that the floor of the working area is anti-static in accordance with EN 50053 Part 1, §7-2, measurement in accordance with DIN 51953.
- Ensure that all persons within the working area wear anti-static shoes.
- Ensure that during spraying, persons wear anti-static gloves so that they are earthed via the handle of the spray gun.
- Customer to provide paint mist extraction systems conforming to local regulations.
- Ensure that the following components of a safe working environment are available:
 - Material/air hoses adapted to the working pressure
 - Personal safety equipment (breathing and skin protection)
- Ensure that there are no ignition sources such as naked flame, glowing wires or hot surfaces in the vicinity. Do not smoke.



2.2 SAFETY INSTRUCTIONS FOR STAFF

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



2.2.1 SAFE HANDLING OF WAGNER SPRAY UNITS

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

Avoid injection of paint or cleaning agents:

- Never point the spray gun at people.
- Never reach into the spray jet.
- Before all work on the unit, in the event of work interruptions and functional faults:
 - Switch off the energy/compressed air supply.
 - Secure the spray gun against actuation.
 - Relieve the pressure from the spray gun and unit.
 - By functional faults: 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 high-voltage of the spray electrode and the flow rate at spray pressures can produce an electrostatic charge in the equipment. These can cause sparks and flames upon discharge.

- Ensure that the unit is always earthed.
- Earth the work pieces to be coated.
- Ensure that all persons inside the working area are earthed, e.g. that they are wearing antistatic shoes.
- When spraying, wear antistatic gloves to earth yourself via the spray gun handle.



2.2.3 PAINT 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  II 2G IIB c T3 X

- CE: Communautés Européennes
 Ex: Symbol for explosion protection
 II: Unit class II
 2: Category 2 (Zone 1)
 G: Ex-atmosphere gas
 IIB: Explosion group
 c: Constructional security
 T3: Temperature class: maximum surface temperature < 200 °C; 392 °F.
 X: Special Notes (see chapter 2.4.3)

2.4.3 IDENTIFICATION X

Maximum surface temperature

The maximum surface temperature of the piston pump can be reached if it runs dry.

- Ensure that the piston pump is filled with sufficient working or cleaning medium.
- Ensure that the separating fluid container is filled with sufficient separating fluid.

Ignition temperature of the coating material

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

Ambient temperature

- The permissible ambient temperature is +5 °C to +60 °C; +41 °C 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 unit parts with electrostatic (e.g. electrostatic spray gun).



Cleaning

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

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



3 3+2 YEARS GUARANTEE FOR PROFESSIONAL FINISHING

3.1 SCOPE OF GUARANTEE

All Wagner professional colour application devices (hereafter referred to as products) are carefully inspected, tested and are subject to strict checks under Wagner quality assurance. Wagner exclusively issues extended guarantees to commercial or professional users (hereafter referred to as „customer“) who have purchased the product in an authorised specialist shop, and which relate to the products listed for that customer on the Internet under www.wagner-group.com/profi-guarantee.

The buyer's claim for liability for defects from the purchase agreement with the seller as well as statutory rights are not impaired by this guarantee.

We provide a guarantee in that we decide whether to replace or repair the product or individual parts, or take the device back and reimburse the purchase price. The costs for materials and working hours are our responsibility. Replaced products or parts become our property.

3.2 GUARANTEE PERIOD AND REGISTRATION

The guarantee period amounts to 36 months. For industrial use or equal wear, such as shift operations in particular, or in the event of rentals it amounts to 12 months.

Systems driven by petrol or air are also guaranteed for a 12 month period.

The guarantee period begins with the day of delivery by the authorised specialist shop. The date on the original purchase document is authoritative.

For all products bought in authorised specialist shops from 01.02.2009 the guarantee period is extended to 24 months providing the buyer of these devices registers in accordance with the following conditions within 4 weeks of the day of delivery by the authorised specialist shop. Registration can be completed on the Internet under www.wagner-group.com/profi-guarantee.

The guarantee certificate is valid as confirmation, as is the original purchase document that carries the date of the purchase. Registration is only possible if the buyer is in agreement with having the data being stored that is entered during registration.

When services are carried out under guarantee the guarantee period for the product is neither extended nor renewed.

Once the guarantee period has expired, claims made against the guarantee or from the guarantee can no longer be enforced.

3.3 HANDLING

If defects can be seen in the materials, processing or performance of the device during the guarantee period, guarantee claims must be made immediately, or at the latest within a period of 2 weeks.

The authorised specialist shop that delivered the device is entitled to accept guarantee claims. Guarantee claims may also be made to the service centres named in our operating instructions. The product has to be sent without charge or presented together with the original purchase document that includes details of the purchase date and the name of the product. In order to claim for an extension to the guarantee, the guarantee certificate must be included.

The costs as well as the risk of loss or damage to the product in transit or by the centre that accepts the guarantee claims or who delivers the repaired product, are the responsibility of the customer.

3.4 EXCLUSION OF GUARANTEE

Guarantee claims cannot be considered

- for parts that are subject to wear and tear due to use or other natural wear and tear, as well as defects in the product that are a result of natural wear and tear, or wear and tear due to use. This includes in particular cables, valves, packaging, jets, cylinders, pistons, means-carrying housing components, filters, pipes, seals, rotors, stators, etc. Damage due to wear and tear that is caused in particular by sanded coating materials, such as dispersions, plaster, putty, adhesives, glazes, quartz foundation.
- in the event of errors in devices that are due to non-compliance with the operating instructions, unsuitable or unprofessional use, incorrect assembly and/or commissioning by the buyer or by a third party, or utilisation other than is intended, abnormal ambient conditions, unsuitable coating materials, unsuitable operating conditions, operation with the incorrect mains voltage supply/frequency, over-operation or defective servicing or care and/or cleaning.
- for errors in the device that have been caused by using accessory parts, additional components or spare parts that are not original Wagner parts.
- for products to which modifications or additions have been carried out.
- for products where the serial number has been removed or is illegible
- for products to which attempts at repairs have been carried out by unauthorised persons.
- for products with slight deviations from the target properties, which are negligible with regard to the value and usability of the device.
- for products that have been partially or fully taken apart.

3.5 ADDITIONAL REGULATIONS

The above guarantees apply exclusively to products that have been bought by authorised specialist shops in the EU, CIS, Australia and are used within the reference country.

If the check shows that the case is not a guarantee case, repairs are carried out at the expense of the buyer.

The above regulations manage the legal relationship to us conclusively. Additional claims, in particular for damages and losses of any type, which occur as a result of the product or its use, are excluded from the product liability act except with regard to the area of application.

Claims for liability for defects to the specialist trader remain unaffected.

German law applies to this guarantee. The contractual language is German. In the event that the meaning of the German and a foreign text of this guarantee deviate from one another, the meaning of the German text has priority.

J. Wagner GmbH
Division Professional Finishing
Otto Lilienthal Strasse 18
88677 Markdorf
Federal Republic of Germany

Wagner professional guarantee

3.6 CE-CONFORMITY

Herewith we declare that the supplied version of

Pneumatic pumps and their spray packs

Wildcat	Puma
1840	2840

Complies with the following guidelines

2006/42/EEC	94/9/EEC Atex-directives
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Applied standards, in particular:

DIN EN ISO 12100-1:2004	DIN EN 809:2011	DIN EN 12621/A1:2010
DIN EN ISO 12100-1/A1:2009	DIN EN 14462:2005	DIN EN 13463-1:2009
DIN EN ISO 12100-2:2004	DIN EN ISO 14121-1:2007	DIN EN 13463-5:2004
DIN EN ISO 12100-2/A1:2009	DIN EN 1127-1:2008	
DIN EN ISO 13732-1:2008	DIN EN 12621:2006	

Applied national technical standards and specifications, in particular:

BGR 500 Part 2 chap. 2.29 and chap. 2.36	BGR 104	TRBS 2153
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Marking:


 II 2G IIB c T3 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:

Professional Pumps 2302304

3.7 GERMAN REGULATIONS AND GUIDELINES

- a) BGR 500 Part 2, Chap. 2.36 Working with liquid ejection devices
- b) BGR 500 Part 2, Chap. 2.29 Using coating materials
- c) CHV 9 Regulations on flammable liquids
- d) BGR 104 Explosion protection rules
- e) TRBS 2153 Avoiding ignition risks
- f) BGR 180 Setting up for cleaning with solvents for cleaning workpieces with solvents
- g) ZH 1/406 Guidelines for liquid ejection devices
- h) BGI 740 Painting rooms and equipment

Note: All titles can be ordered from Heymanns Publishing House in Cologne, or they are to be found in the Internet.

4 DESCRIPTION

4.1 FIELDS OF APPLICATION

4.1.1 CORRECT USE

The pneumatic piston pump is suitable for process liquid materials according chapter 4.1.2.

4.1.2 PROCESSING MATERIALS

Application	WILDCAT 18-40	PUMA 28-40
Water based lacquers and paints	↗	↗
Solvent based lacquers and paints	↗	↗
Primers	→	→
Epoxy and polyurethane paints and lacquers	→	↗
Synthetic materials	↘	→
Wax based underseal	↘	↘
Chemically aggressive media that attack HM seats	↘	↘

Legend:

Recommended ↗ limited suitability → less suitable ↘

CAUTION

Abrasive materials and pigments!

Greater wear of the parts carrying the material

→ Use suitable combinations of devices (packages, valves etc.).

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4.1.3 TYPICAL APPLICATIONS

Application	WILDCAT 18-40	PUMA 28-40
Furniture industry	↗	↗
Kitchen manufacturers	↗	↗
Joinery	↗	↗
Window factories	→	→
Steel fabrication	↘	→
Construction of vehicles	↗	↗
Offshore	↘	↘

Legend:

Recommended ↗ limited suitability → less suitable ↘

4.3 DATA

4.3.1 MATERIALS OF THE PARTS TRANSPORTING PAINT

Housing	Stainless steel	Valve seats	Hard metal
Piston	Stainless steel and hard chrome	O-rings	PTFE
Valve balls	Stainless steel	V-packings	Standard PE/TG

PE = Polyethylen UHMW

TG = PTFE with graphite

4.3.2 RECOMMENDED V-PACKINGS

Wagner V-packings are manufactured in four different materials:

Code	Material	Colour
L	Leather	dark brown
TG	PTFE with graphite	black
PE	Polyethylen UHMW	transparent
T	PTFE	white

Each material has the following properties, which influence the packings:

	L	TG	PE	T
Mechanical stability	poor	good	good	poor
Coefficient of friction	poor	very good	good	very good
Sealing capacity	good*	good	good	good
Chemical resistance or reactivity	poor	good	very good	very good
Temperature stability	good	poor - good	very good	poor

* for abrasive materials

Standard combinations

Standard pneumatic pumps	PE/TG
Heavy duty (HD) pumps	PE/L
Hardener pump in 2C-Systems PE/T	PE/T

4.3.3 TECHNICAL DATA

Technical specifications description	Units	WILDCAT 18-40	PUMA 28-40
Transmission ratio		18 : 1	28 : 1
Flow volume per double stroke (DS)	cm ³ ; cc	40	40
Maxi. operating pressure	MPa bar psi	14.4 144 2089	22.4 224 3249
Maxi. possible strokes in operation	DS/min	60	60
Min. - Maxi. air inlet pressure	MPa bar psi	0.25-0.8 2.5-8 36-116	0.25-0.8 2.5-8 36-116
Ø air inlet connection (female)	Zoll; Inch		
Min. Ø compressed air hose	mm; Inch		
Air consumption at 0.6 MPa; 6 bar; 87 psi per DS	nl scf	5.3 0.19	8.3 0.29
Sound pressure level at maxi. permissible air pressure*	dB(A)	77	78
Sound pressure level at 0.6 MPa; 6 bar; 87 psi air pressure*	dB(A)	74	74
Sound pressure level at 0.4 MPa; 4 bar; 58 psi air pressure*	dB(A)	69	69
Ø piston of air motor	mm; Inch	80; 3.2	100; 4
Material inlet connection (female)	Zoll/ Inch	G 3/4"	G 3/4"
Material outlet connection (female)	Zoll/ Inch	G 3/8"	G 3/8"
Weight	kg; lb	15; 33	16; 35
pH range of the material	pH	3.5 ÷ 9	
Maxi. material pressure at pump inlet	MPa; bar; psi		
Range of material temperature	°C; °F		
Range of the ambient temperature	°C; °F		
Allowable sloping position at work	∠°		

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

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

	 WARNING
	<p>Outgoing air containing oil! Risk of poisoning if inhaled Function problem airmotor</p> <p>→ 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.</p>

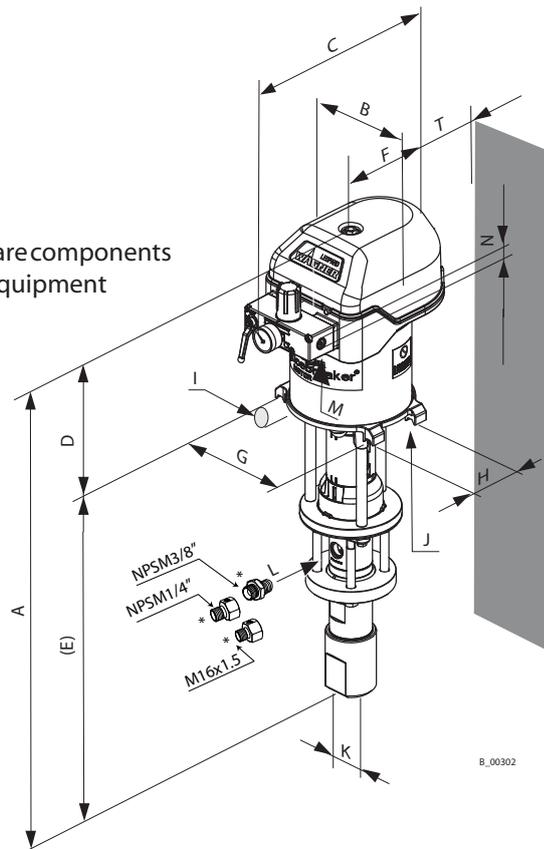
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4.3.4 MEASUREMENTS AND CONNECTIONS

	WILDCAT 18-40 mm; inch	PUMA 28-40 mm; inch
A	708; 27.9	708; 27.9
B	169; 6.7	169; 6.7
C	~ 313; 12.3	~ 313; 12.3
D	260; 10.2	260; 10.2
E	434; 17.1	434; 17.1
F	134; 5.3	134; 5.3
G	182; 7.2	182; 7.2
H	80	80
I	∅ 25; ∅ 1	∅ 25; ∅ 1
J	M6	M6

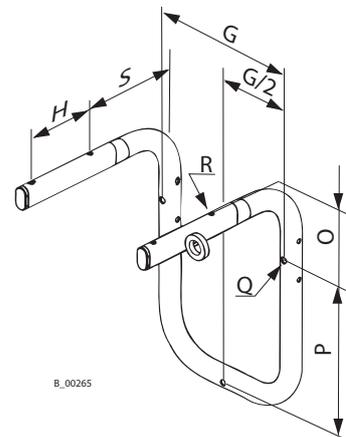
	WILDCAT 18-40 mm; inch	PUMA 28-40 mm; inch
K	G 3/4"	G 3/4"
L	G 3/8"	G 3/8"
M	G 1/2"	G 1/2"
N	G 1/4"	G 1/4"
O	107; 4.2	107; 4.2
P	175; 6.9	175; 6.9
Q	∅ 9; ∅ 0.35	∅ 9; ∅ 0.35
R	∅ 7; ∅ 0.28	∅ 7; ∅ 0.28
S	149; 5.9	149; 5.9
T	55; 2.2	55; 2.2

* The adapters are components of the basic equipment



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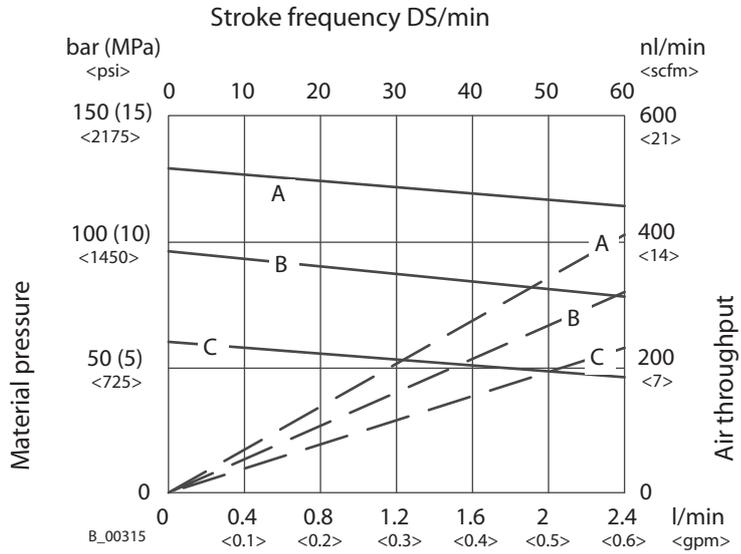
Wall mount



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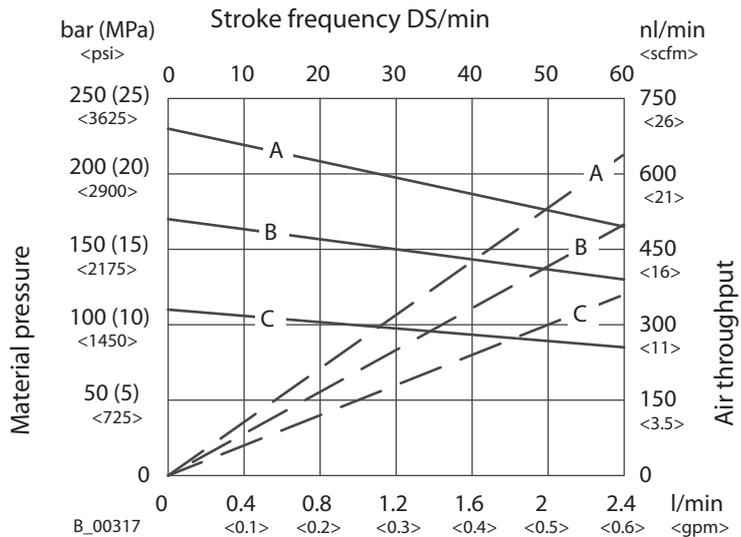


Diagram for WILDCAT 18-40



A = 8 bar; 0.8 MPa; 116 psi Air pressure
 B = 6 bar; 0.6 MPa; 87 psi Air pressure
 C = 4 bar; 0.4 MPa; 58 psi Air pressure

Diagram for PUMA 28-40

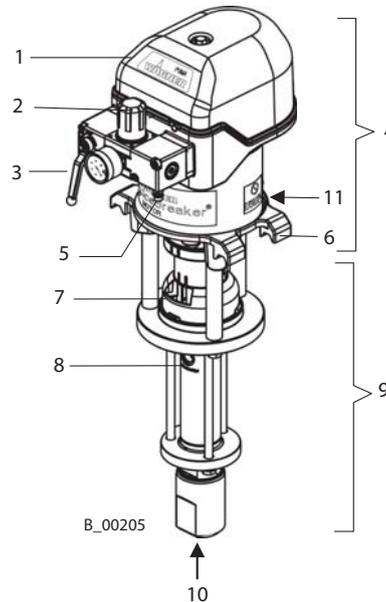


A = 8 bar; 0.8 MPa; 116 psi Air pressure
 B = 6 bar; 0.6 MPa; 87 psi Air pressure
 C = 4 bar; 0.4 MPa; 58 psi Air pressure

4.4 FUNCTION

4.4.1 PUMP

- 1 Control housing with integrated silencer
- 2 Air pressure regulator
- 3 Ball valve
- 4 Air motor
- 5 Compressed air inlet
- 6 Mounting flange
- 7 Separating fluid cup
- 8 Material outlet
- 9 Material pump
- 10 Material inlet
- 11 Earth connection



General

The piston pump is driven with compressed air. This compressed air moves up and down the air piston in the air motor (4) and thus also the pump piston in the material pump (9). At the end of each stroke the compressed air is redirected by a change over valve and the control piston.

Working materials are sucked in on the upward stroke and simultaneously conveyed to the gun in both strokes.

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
	<p>Overpressure! Risk of injury from bursting components</p> <p>→ Never change the safety valve setting.</p>

SIHI_0026_GB

Material pump (9)

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

Between the air motor and material pump there is a separating fluid cup (7) for holding the separating fluid.

4.4.2 PRESSURE REGULATOR UNIT

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

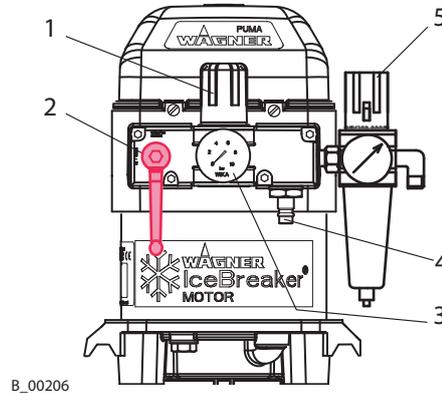
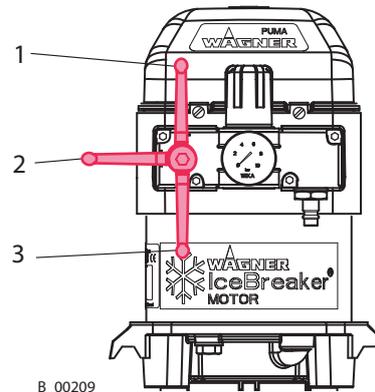


Figure:
Pneumatic pump Puma 28-40 Airless

Settings 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

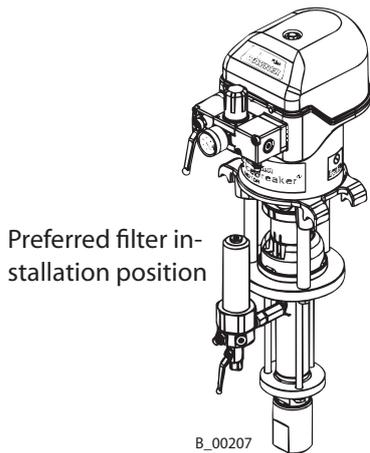
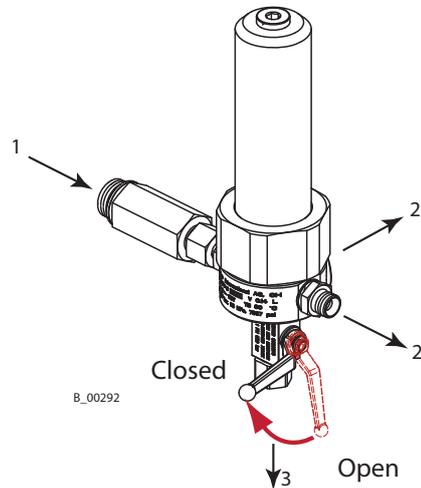


4.4.3 HIGH-PRESSURE FILTER (OPTION)

4.4.3.1 STANDARD HIGH-PRESSURE FILTER (OPTION)

To ensure problem-free operation it is recommended that a WAGNER high-pressure filter is used. These have been developed especially for the respective pneumatic pumps. The filter inserts can be exchanged depending on the material to be used. You will find the respective high pressure filters and their inserts for the device in the accessory list.

- 1 Connection, material pump
- 2 Two material outlets
- 3 Return



Preferred filter installation position

Installation position with filter housing at down is also possible



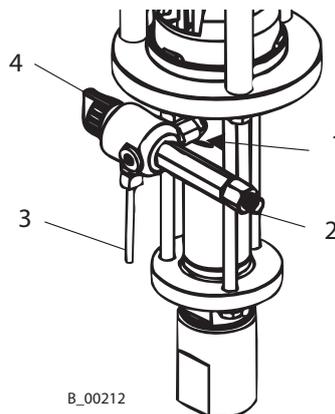
4.4.3.2 FILTER-RELIEF COMBINATION (OPTION)

Instead of the standard filter the advantageously filter-relief combination can be used if only a small volume of material will be delivered.

Use: for pumps to 28-40.

The filter inserts can be exchanged depending on the material to be used. You will find the respective high pressure filters and their inserts for the device in the accessory list.

- 1 Connection, material pump
- 2 Material outlet
- 3 Return
- 4 Relief valve



5 STARTING UP AND OPERATING

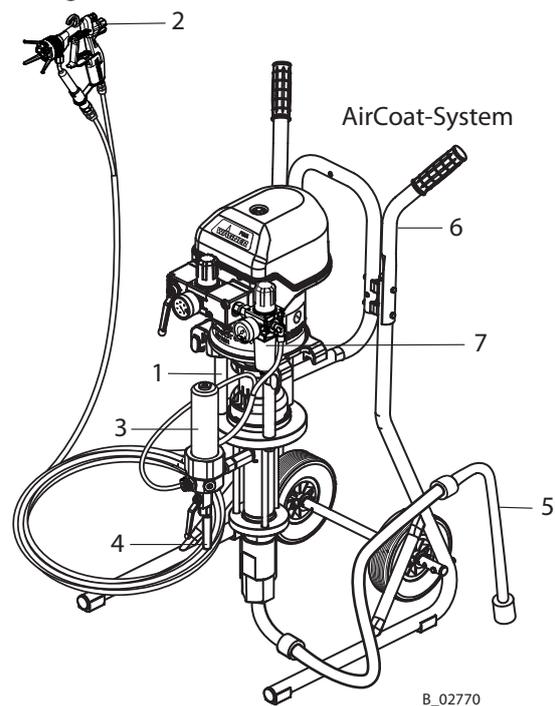
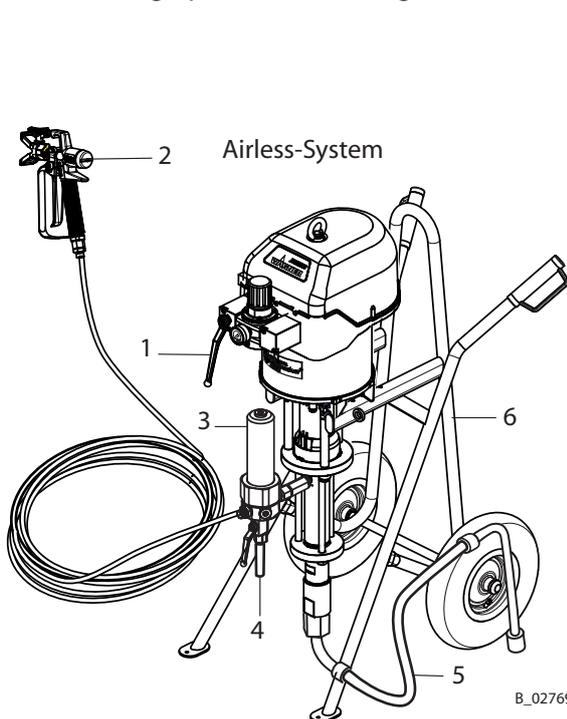
5.1 INSTALLATION AND CONNECTION

Note

This pump can be used as part of a spraying system for Airless or AirCoat applications. The individual components are shown in the accessories, or can be arranged with a spraypack configurator. The nozzles must be selected according to the gun instructions.

Procedure:

1. Install pump (1) on stand, trolley (6) or wall mounting. With spraypack orders are already pumps (1) on trolley (6) or on stands premounted by the factory.
2. Install with a AirCoat system the filter pressure regulator (7) and lock the thread of the air entrance to the pump (1) with Loctite 270.
3. Install a filter-relief combination or a high pressure filter (3).
4. Fit suction system (5).
5. Install return tube (4) or return hose.
6. Attach high-pressure hose and gun (2) in accordance with gun user manual.



	 WARNING
	<p>Inclined surface! Risk of accidents if the unit rolls away/falls</p> <ul style="list-style-type: none"> → Position the carriage with the piston pump horizontally. → If the surface is inclined, position the feet of the carriage towards the gradient. → Secure the carriage.

5.1.1 EARTHING

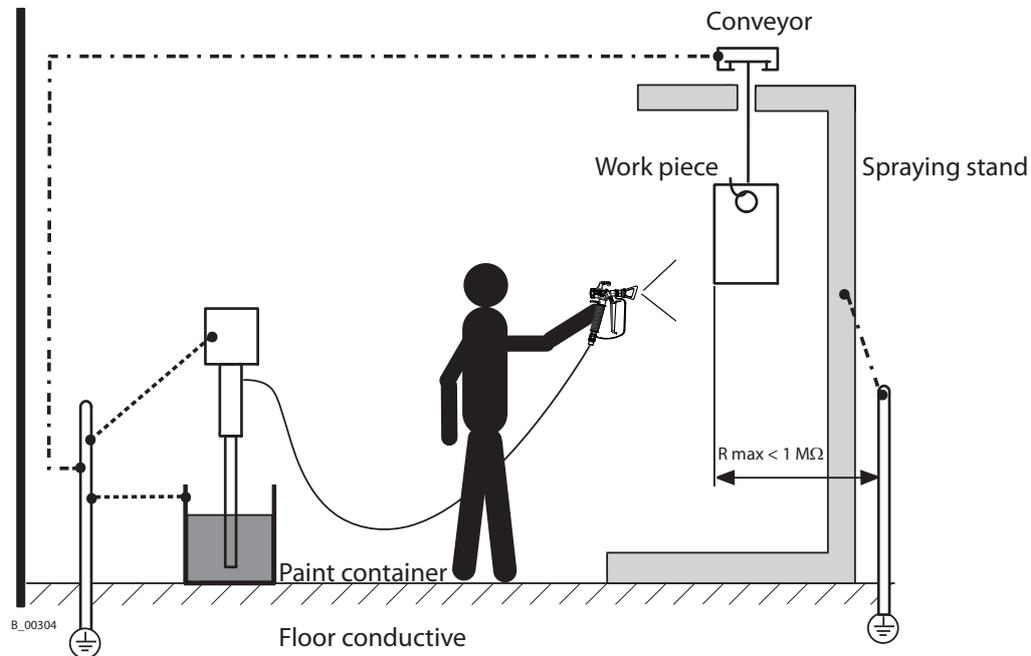
	 WARNING
	<p>Discharge of electrostatically charged components in atmospheres containing solvents! Explosion hazard from electrostatic sparks</p> <p>→ Clean the piston pump only with a damp cloth.</p>

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

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Earthing schema (example)



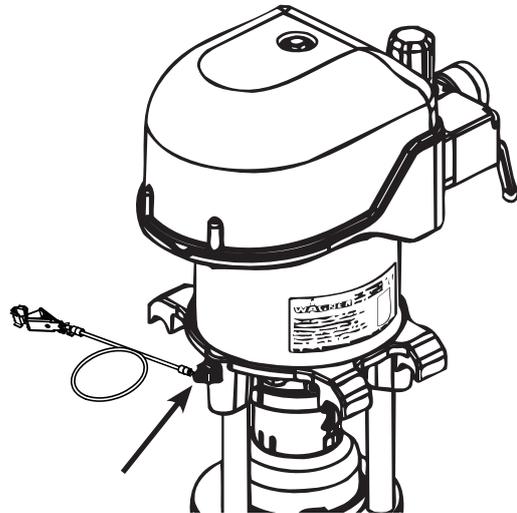
8_00304

Cable cross-section

Pump	4 mm ² ; AWG11
Paint container	6 mm ² AWG10
Conveyor	16 mm ² ; AWG5
Spray booth	16 mm ² ; AWG5
Spray stand	16 mm ² ; AWG5

Procedure:

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

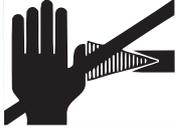


5.2 STARTING UP

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 Chap. 2.
- The starting up procedure, has been carried out properly.

	 WARNING
	<p>High-pressure spray jet! Danger to life from injecting paint or solvent</p> <ul style="list-style-type: none"> → Never reach into the spray jet. → Never point the spray gun at people. → Consult a doctor immediately in the event of skin injuries caused by paint or solvent. Inform the doctor about the paint or solvent used. → Never seal defective high-pressure parts, instead relieve the pressure from them and replace.

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

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	 WARNING
	<p>Gas mixtures can explode if there is an incompletely filled pump! Danger to life from flying parts</p> <ul style="list-style-type: none"> → 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.

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OPERATING MANUAL

WAGNER

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

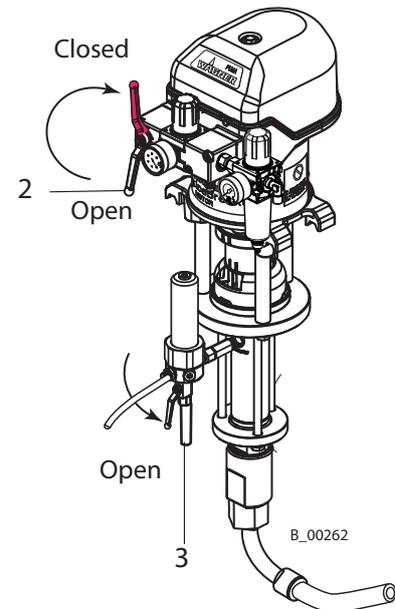
- Secure gun with safety catch
- Check the permissible pressures
- Check all connections for leaks
- Check hose for damage.

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

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

Emergency Stop

In the case of unforeseen occurrences the ball valve (2) should be closed immediately and the return valve (3) opened.

**5.2.2 FILLING UP WITH PARTING SOLVENTS****CAUTION****Piston pump dry run!**

High wear/damage to the packages
Paint or solvent can escape if the seals are dry

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

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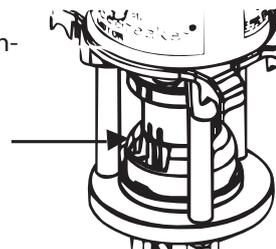
Place the supplied separating fluid into the separating fluid cup.

Filling level: 1 cm; 25.4 inch under the pot edge

Separating agent: Part No. 9992504

Note

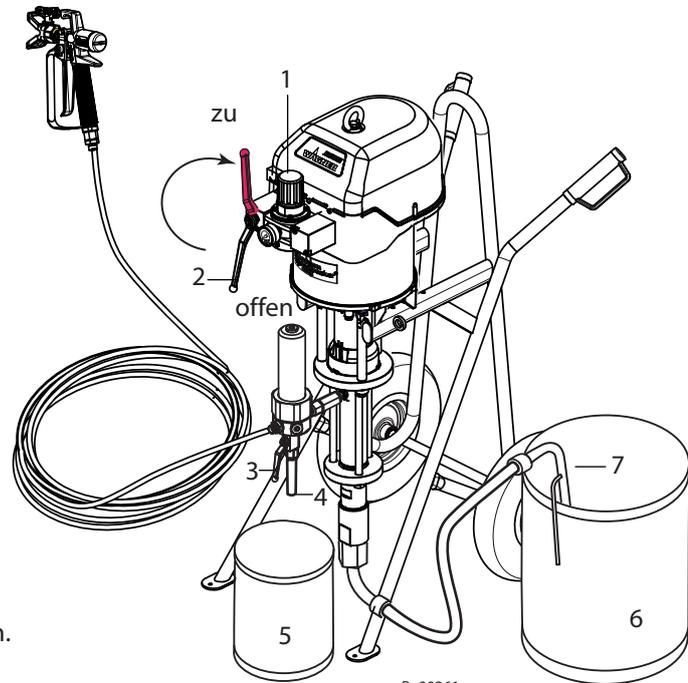
When preparation has taken place the maxi. allowed leaning angle of the pump is $\pm 30^\circ$ for moving, transport, etc.
During the operation it must standing vertical.



B_00303

5.2.3 BASIC CLEANING

1. Place empty container (5) under return tube (4).
2. Place suction hose (7) in a container with solvent (6).
3. Set pressure regulator (1) to approx. 0.05 MPa; 0.5 bar; 7.25 psi.
4. Open return valve (3).
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 container (5).
8. Close ball valve (2).
9. Close return valve (3).
10. Point the gun, 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).
14. When there is no pressure remaining in the system close gun.
15. Secure gun.
16. Dispose of the contents of the container (5) according to the local regulations.



5.2.4 FILLING WITH WORKING MATERIAL

1. Place empty container (5) under return tube (4) (see fig. B_00261).
2. Place suction hose (7) in the container with working material (6).

Note:

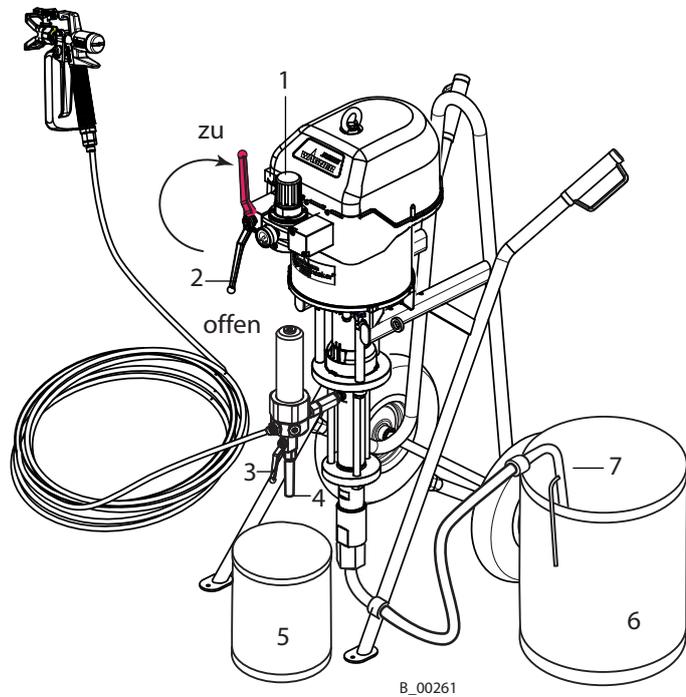
If the pump is equipped with a rigid suction system, it should only be dipped in into the working material in maximum to the middle of the inlet housing!

3. Set pressure regulator (1) to approx. 0.05 MPa; 0.5 bar; 7.25 psi.
4. Open return valve (3).
5. Slowly open ball valve (2).
6. Adjust the air pressure on the pressure regulator (1) so that the pump runs regularly.
7. Close ball valve (2) as soon as pure working material starts coming from the return hose.
8. Close return valve (3).
9. Point the gun, without nozzle, into container (5) and open it.
10. Slowly open ball valve (2).
11. Close ball valve (2) as soon as pure working material starts coming from the gun.
12. When there is no pressure remaining in the system close gun.
13. Secure gun.
14. Dispose of the contents of the container (5) according to the local regulations.

5.3 WORKS

5.3.1 SPRAYING

1. Secure gun 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.



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.

If the system has been used with two component material

	<p style="text-align: center;">! WARNING</p> <p>Hardened material in the spraying system when 2-component material is worked! Destruction of the pump and injection system</p> <p>→ Follow the manufacturer's working instructions, particularly regarding the pot life. → Rinse thoroughly before the end of the pot life. → The potlife time decreases at raising temperature.</p>
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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 -> Create Chap. 5.3.2.
2. Basic cleaning -> Execute Chap. 5.2.3.
3. Maintain the gun as laid down in the operating instructions.
4. Clean and check the suction system and, in particular, the suction filter.
5. When using a high-pressure filter: Clean and check the filter insert and filter body.
6. Clean the outside of the system.

	 WARNUNG
	<p>Versprödeter Filterdruckregler! Behälter am Filterdruckregler versprödet bei Kontakt mit Lösungsmitteln und kann platzen Verletzungsgefahr durch umherfliegende Teile</p> <p>→ Behälter am Filterdruckregler nicht mit Lösungsmittel reinigen.</p>

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

	 WARNUNG
	<p>Gas mixtures can explode if there is an incompletely filled pump! Danger to life from flying parts</p> <p>→ 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.</p>

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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. Fill separating fluid cup with separating fluid.

Procedure:

1. Carry out Paragraph 5.3.3 „Shutting down and cleaning“, points 1 through 9.
2. Cleaning with preserving agent acc. Chap. 5.2.3.
3. Protect the air motor with pneumatic oil: connect an oiler to the compressed air inlet and run for a few double strokes.

6 TROUBLE SHOOTING, MAINTENANCE AND REPAIRS

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 supply shortly or repair or change pressure regulator
	• Spray nozzle clogged	• Clean nozzle as laid down in the instructions
	• Insufficient supply of compressed air	• Check compressed air supply
	• Filter insert in spray gun or high-pressure filter is clogged	• Clean the parts and use an appropriate spraying 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 (air motor stops at the stroke end)	• Degrease spool-sleeve combination, check detent body (use service manual)
Poor spray pattern	• See gun instructions	
Irregular operation of material feed pump: spray jet collapses (pulsation)	• Viscosity too high	• Dilute working material
	• Spraying pressure too low	• Increase incoming air pressure, use smaller nozzle
	• Valve stuck	• Clean material pump, if necessary leave to soak in solvent
	• Foreign body in suction valve	• Dismantle suction valve housing, clean and check valve seat
	• Diameter of the compressed air line too small	• Assemble a larger incoming line - >technical data, paragraph 4.3.3
	• Valves, packings or pistons worn	• Replace parts
	• Filter for control air or filter for work air is clogged	• Check filter and clean it
Pump runs evenly, however does not suck up material	• Union nut of the suction system is loose, pump is taking in air	• Tighten union nut
	• Suction filter clogged	• Clean filter
	• Ball in suction or piston valve is sticking	• Clean with solvent (if necessary vent device)
Pump runs when the gun is closed	Packings, valves, pistons worn	• Replace parts

Störungssuche und Behebung

Problem	Cause	Remedy
Air motor iced up	A lot of condensation water in the air supply	• Install a water separator.

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

6.2 MAINTENANCE

	 WARNING
	<p>Incorrect maintenance/repair! Danger to life and equipment damage</p> <ul style="list-style-type: none"> → Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts. → Only repair and replace parts that are listed in the chapter "Spare parts catalog". → Before all work on the unit and in the event of work interruptions: <ul style="list-style-type: none"> - Disconnect the control unit from the mains. - Relieve the pressure from the spray gun and unit. - Secure the spray gun against actuation. → Observe the operating and service instructions when carrying out all work.

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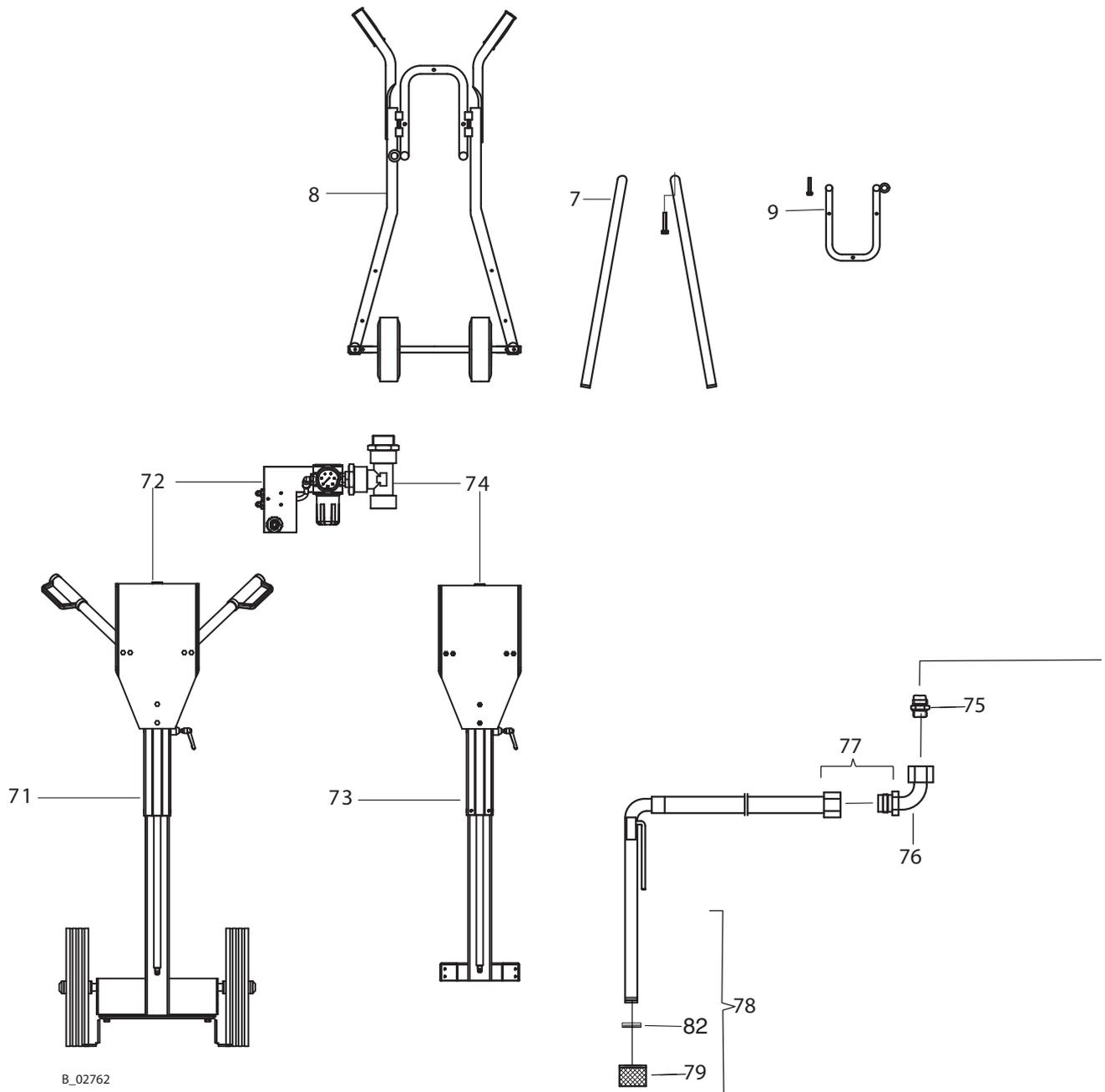
1. Check the level of separating fluid in the separating fluid cup every day, and top up if necessary.
2. Check and clean the high-pressure filter every day or as required.
3. Every shut down should be carried out as laid down in paragraph 5.3.3!
4. Check and replace if necessary hoses, tubes, couplings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

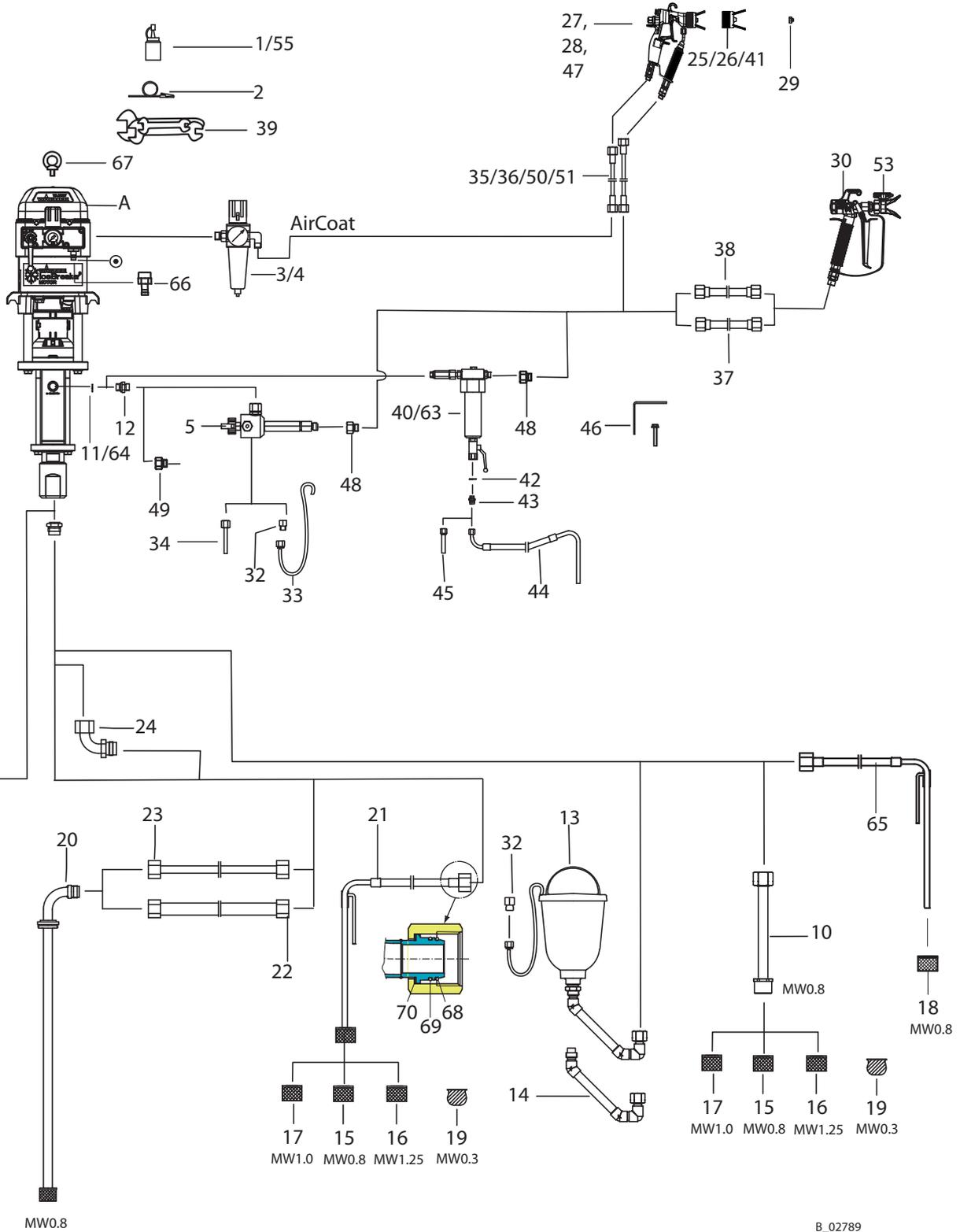
WAGNER recommends to check the whole spray system every year from a technical expert (e.g. WAGNER service technician).

The service instructions manual is available in various languages.
Part Number see chapter 1.1

7 ACCESSORIES

7.1 ACCESSORIES FOR WILDCAT AND PUMA PUMPS





List Accessories

Pos	K	Description	WILDCAT	PUMA
			18-40	28-40
			No.	No.
A		Piston pump PE/TG	366110	367103
1		Separating agent 250 ml; 250 cc	9992504	
2		Earthing cable 3 m; 9.8 ft	236219	
3	◆	Filter pressure regulator with plastic bow	367062	
4	◆	Metal bow for 367062	115985	
5		Filter-relief combination	367135	
7		4-leg stand	367023	
8		Stand 4 with wheels assy.	367121	
9		Mounting for wall 4 assy.	367020	
10		Rigid suction system 352	367986	
11	◆	Sealing ring A18x22x2.5 Cu	9925024	
12		Reducing double nipple with 2 x 60°, G 3/8" -NPSM3/8"	367556	
13		Upper hopper set 5 l; 1.3 gal	367045	
14		Suction elbow for pos. 13	366950	
15	◆	Filter DN 25 mm; ID 1 inch, MW 0.8 mm, M28x1.5	250245	
16	◆	Filter DN 25 mm; ID 1 inch, MW 1.25 mm, M28x1.5	250243	
17	◆	Filter DN 25 mm; ID 1 inch, MW 1.0 mm, M28x1.5	344341	
18	◆	Filter DN 13 mm; ID 0.5 inch, MW 0.8 mm, M15x1	250244	
19	◆	Suction filter bag MW 0.3 mm	97531	
20		Barrel suction pipe DN 25 mm; ID 1 inch	115175	
21	◆	Suction hose flexibly, DN 25 mm; ID 1 inch	367140	
22	◆	Extension hose, DN 25 mm; ID 1 inch	115285	
23	◆	Extension hose, DN 13 mm; ID 0.5 inch	115284	
24		Suction elbow M36x2	97075	
25		Air cap LV (red = suitable for low viscosity paints)	394910	
26		Air cap HV (blue = suitable for high viscosity paints)	394911	
27		AC 4600 Pro (blue) with nozzle 11/40, 25 MPa; 250 bar; 3625 psi, NPSM 1/4"	394150	
28		AC 4600 Pro (red) with nozzle 11/40, 25 MPa; 250 bar; 3625 psi, NPSM 1/4"	394151	
29	◆	Nozzle ACF3000 -> see nozzle list in gun manual	379HHH...	
30		Airless gun AG-14, NPSM 1/4", 27 MPa; 270 bar; 3920 psi without Trade Tip nozzle	502119	
32		Adapter M16-M20	118231	
33	◆	Return tube	366290	
34		Return tube (for pos. 5)	115858	
35	◆	Hose set AC Material DN3, Air DN6, 7.5 m; 24.6 ft;	9984595	
36	◆	Hose set AC Material DN3, Air DN6, 10 m; 32.8 ft,	9984596	

◆ Wearing part

List Accessories

Pos	K	Description	WILDCAT	PUMA
			18-40	28-40
			No.	No.
37	◆	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	9984573	
38	◆	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	9984583	
39		Tool set	368870	
40		High-pressure filter HPF-3, NPSM 3/8", with ball valve made of steel	367175	
41		Air cap (green = small air requirement)	394912	
42	◆	Sealing ring A17x21x1.5 AL	9974111	
43		Double nipple G 3/8", -M20x2	367962	
44	◆	Return hose DN 13 mm; ID 0.5 inch, M20x2, (incl. pos. 42 + pos. 43)	367189	
45		Return tube HPF (incl. pos. 42 and 43)	367188	
46		Mounting for wall assy. for high-pressure filter (for pos. 40 or. 63)	367115	
47		AC 4600 Pro (green) with nozzle 11/40, 25 MPa; 250 bar; 3625 psi, NPSM 1/4"	394152	
48		Adapter NPSM 3/8" I -NPSM1/4" A	367562	
49		Adapter NPSM 3/8" I -M16x1.5 A	367563	
50	◆	Hose set AC Material DN4, Air DN6, 7.5 m; 24.6 ft;	2302378	
51	◆	Hose set AC Material DN4, Air DN6, 10 m; 32.8 ft,	2302379	
53	◆	Wagner Trade Tip nozzles, selection table see chap. 7.2	552HHH-	
55		Separating agent 10 l; 2.6 gal	356940	
63		High-pressure filter HPF-3 NPSM 3/8" with ball valve made of stainless steel	367178	
64	◆	Sealing ring A18x22x2.5 AL	9974112	
65	◆	Suction hose assy. Lack Niro; DN 13 mm; ID 0.5 inch, 1 m; 3.28 ft, M36X2	97073	
66		Quick coupling with hose nozzle	9998811	
67		Lifting screw	9907133	
68	◆	O-ring PTFE (spare part for pos. 21)	367527	
69	◆	O-ring FEP (spare part for pos. 21)	9974127	
70	◆	Washer PTFE (spare part for pos. 21)	367959	
71		Lifting trolley	367031	
72		Lifting trolley pneumatic	367032	
73		Wall lifting gear	367035	
74		Wall lifting gear pneumatic	367036	

◆ Wearing part

OPERATING MANUAL



7.2 SELECTION TABLE TRADE TIP NOZZLES (AIRLESS)

Airless-nozzle list

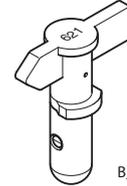
Wagner Trade Tip 2
to 270 bar
(27 MPa)



B_02818

without nozzle
F-thread (11/16 - 16 UN)
for Wagner spray gun
Part No. 556042

without nozzle
G-thread (7/8 - 14 UNF)
for Graco/Titan spray gun
Part No. 556041

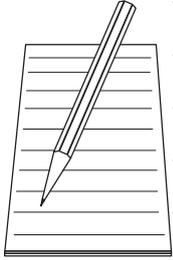


B_02819

Application	Nozzle mark	Spray angle	Holes inch / mm	Spray width mm ¹⁾	Part No.	
Natural paint Transparent lacquer Oils	Spray gun filter „RED“	407	40°	0.007 / 0.18	160	552407
		507	50°	0.007 / 0.18	190	-----
		209	20°	0.009 / 0.23	145	552209
		309	30°	0.009 / 0.23	160	552309
		409	40°	0.009 / 0.23	190	552409
		509	50°	0.009 / 0.23	205	552509
609	60°	0.009 / 0.23	220	552609		
Synthetic resin paints PVC paint	Spray gun filter „YELLOW“	111	10°	0.011 / 0.28	85	552111
		211	20°	0.011 / 0.28	95	552211
		311	30°	0.011 / 0.28	125	552311
		411	40°	0.011 / 0.28	195	552411
		511	50°	0.011 / 0.28	215	552511
		611	60°	0.011 / 0.28	265	552611
Paint, undercoat Zinc chromate primer Priming paint Filler	Spray gun filter „WHITE“	113	10°	0.013 / 0.33	100	552113
		213	20°	0.013 / 0.33	110	552213
		313	30°	0.013 / 0.33	135	552313
		413	40°	0.013 / 0.33	200	552413
		513	50°	0.013 / 0.33	245	552513
		613	60°	0.013 / 0.33	275	552613
813	80°	0.013 / 0.33	305	552813		
Filler Spray primer Rustproofing paint	Spray gun filter „GREEN“	115	10°	0.015 / 0.38	90	552115
		215	20°	0.015 / 0.38	100	552215
		315	30°	0.015 / 0.38	160	552315
		415	40°	0.015 / 0.38	200	552415
		515	50°	0.015 / 0.38	245	552515
		615	60°	0.015 / 0.38	265	552615
		715	70°	0.015 / 0.38	290	552715
		815	80°	0.015 / 0.38	325	552815
Spray primer Rustproofing paint Minium Latex paint	Spray gun filter „GREEN“	217	20°	0.017 / 0.43	110	552217
		317	30°	0.017 / 0.43	150	552317
		417	40°	0.017 / 0.43	180	552417
		517	50°	0.017 / 0.43	225	552517
		617	60°	0.017 / 0.43	280	552617
		717	70°	0.017 / 0.43	325	552717
		219	20°	0.019 / 0.48	145	552219
		319	30°	0.019 / 0.48	160	552319
		419	40°	0.019 / 0.48	185	552419
		519	50°	0.019 / 0.48	260	552519
		619	60°	0.019 / 0.48	295	552619
		719	70°	0.019 / 0.48	320	552719
819	80°	0.019 / 0.48	400	552819		
Mica paint Zinc dust coating Dispersions	Spray gun filter „WHITE“	221	20°	0.021 / 0.53	145	552221
		421	40°	0.021 / 0.53	190	552421
		521	50°	0.021 / 0.53	245	552521
		621	60°	0.021 / 0.53	290	552621
		821	80°	0.021 / 0.53	375	552821
Rustproofing paint	Spray gun filter „WHITE“	223	20°	0.023 / 0.58	155	552223
		423	40°	0.023 / 0.58	180	552423
		523	50°	0.023 / 0.58	245	552523
		623	60°	0.023 / 0.58	275	552623
		723	70°	0.023 / 0.58	325	552723
		823	80°	0.023 / 0.58	345	552823
Dispersions Dispersion paint, distemper and filler paint	Spray gun filter „GREEN“	225	20°	0.025 / 0.64	130	552225
		425	40°	0.025 / 0.64	190	552425
		525	50°	0.025 / 0.64	230	552525
		625	60°	0.025 / 0.64	250	552625
		825	80°	0.025 / 0.64	295	552825
		227	20°	0.027 / 0.69	160	552227
		427	40°	0.027 / 0.69	180	552427
		527	50°	0.027 / 0.69	200	552527
		627	60°	0.027 / 0.69	265	552627
		827	80°	0.027 / 0.69	340	552827
		629	60°	0.029 / 0.75	285	552629
		231	20°	0.031 / 0.79	155	552231
		431	40°	0.031 / 0.79	185	552431
		531	50°	0.031 / 0.79	220	552531
		631	60°	0.031 / 0.79	270	552631
		433	40°	0.033 / 0.83	220	552433
		235	20°	0.035 / 0.90	160	552235
		435	40°	0.035 / 0.90	195	552435
535	50°	0.035 / 0.90	235	552535		
635	60°	0.035 / 0.90	295	552635		
839	80°	0.039 / 0.99	480	-----		
Large-area paintwork	Spray gun filter „GREEN“	243	20°	0.043 / 1.10	185	552243
		543	50°	0.043 / 1.10	340	552543
		552	50°	0.052 / 1.30	350	552552

1) Jet width in mm; inches at a distance of 30 cm; 11.8 inches from the object and at a pressure of 10 MPa; 100 bar; 1450 psi, synthetic resin paint, 20 DIN4 seconds.

OPERATING MANUAL



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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.

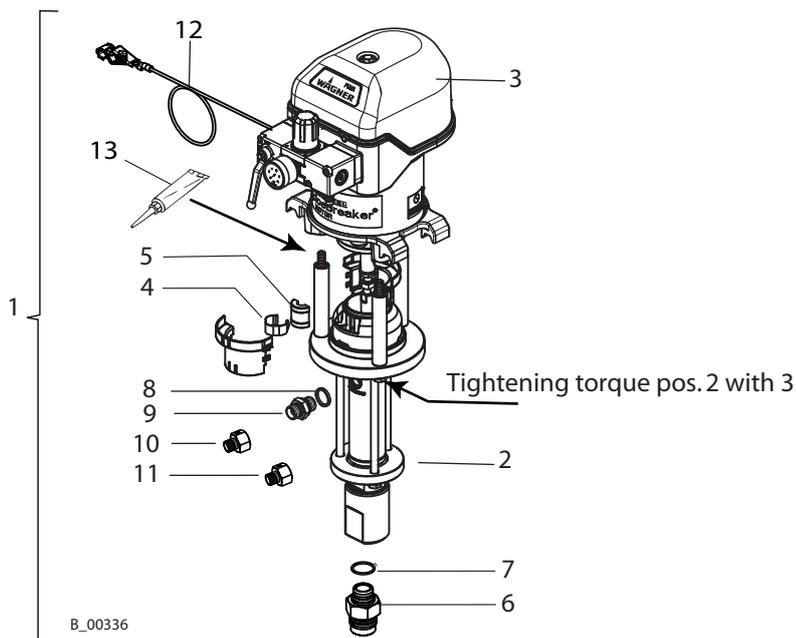
- ◆ = Wearing parts
Note: No liability is assumed for wearing parts
- = Not part of standard equipment, available, however, as additional extra.

	 WARNING
	<p>Incorrect maintenance/repair! Danger to life and equipment damage</p> <p>→ Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts.</p> <p>→ Only repair and replace parts that are listed in the chapter "Spare parts catalog".</p> <p>→ Before all work on the unit and in the event of work interruptions:</p> <ul style="list-style-type: none"> - Disconnect the control unit from the mains. - Relieve the pressure from the spray gun and unit. - Secure the spray gun against actuation. <p>→ Observe the operating and service instructions when carrying out all work.</p>

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8.2 OVER VIEWS MODULES

Pos	Description	WILDCAT	PUMA
		18-40 PE/TG	28-40 PE/TG
1	Piston pump	366110	367103
2	Material pump	367070	
3	Air motor	366080	367080
4	Spring	367530	
5	Coupling	367529	
6	Double nipple (M36x2 - G3/4")	367958	
7	Sealing ring	9974109	
8	Sealing ring	9925024	
9	Double nipple (G 3/8" -NPSM 3/8")	367556	
10	Adapter (NPSM 3/8" -NPSM1/4")	367562	
11	Adapter (NPSM 3/8" -M16x1.5)	367563	
12	Earthing cable assy.	236219	
13	Molykote DX grease	9992616	
Tightening torque Air motor/ Material pump		25 Nm; 18 lbft	
Tightening torque Pos. 6		160 Nm; 118 lbft	
Tightening torque Pos. 9		100 Nm; 74 lbft	



8.3 AIR MOTORS

8.3.1 AIR MOTORS WILDCAT AND PUMA

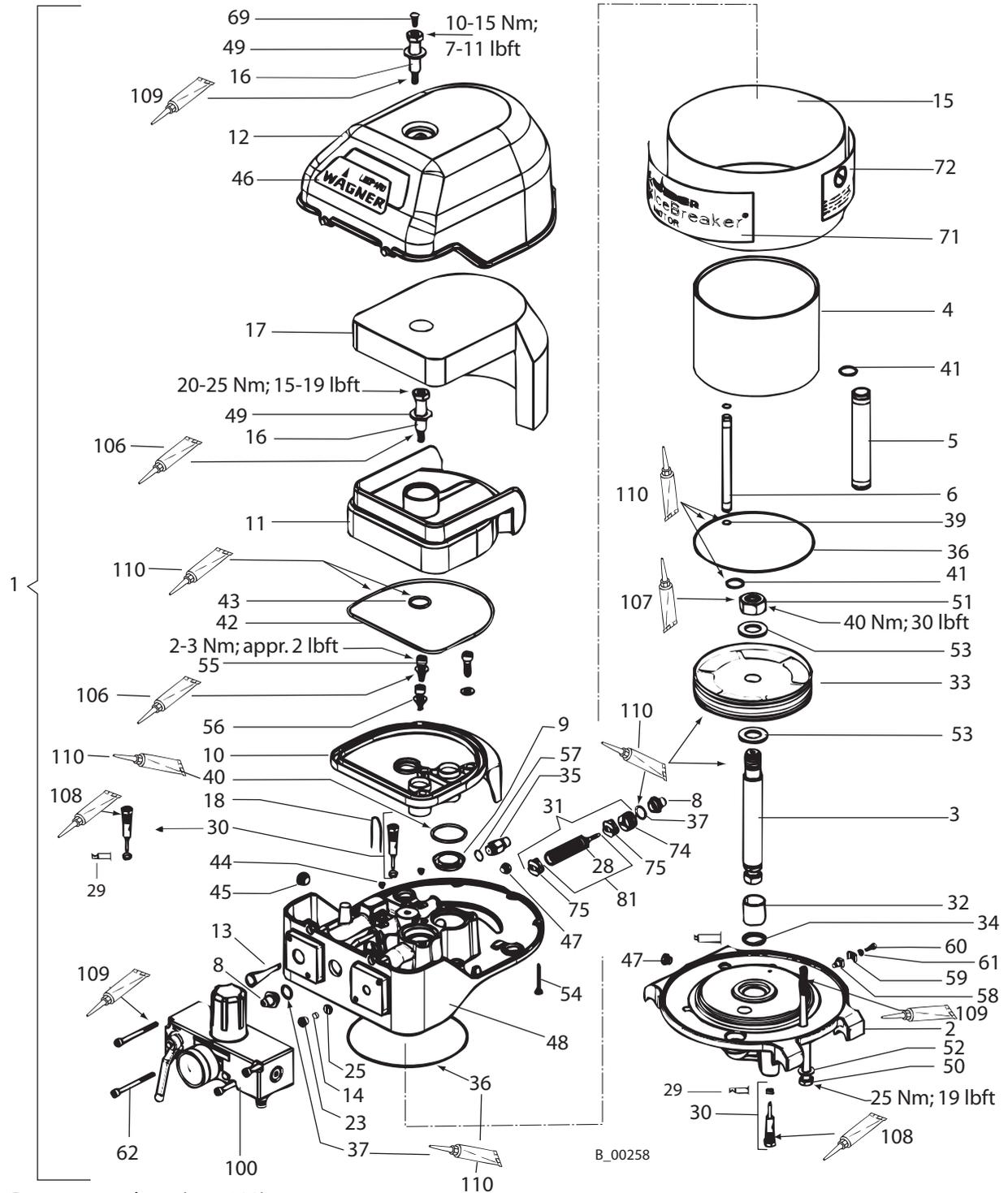
	 WARNING
	<p>Incorrect maintenance/repair! Risk of injury and damage to the equipment</p> <p>→ Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center.</p> <p>→ Before all work on the unit and in the event of work interruptions:</p> <ul style="list-style-type: none"> - Switch off the energy/compressed air supply. - Relieve the pressure from the spray gun and unit. - Secure the spray gun against actuation. <p>→ Observe the operating and service instructions when carrying out all work.</p>

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Spare parts list for air motor			WILDCAT Ø80mm/ H75mm Ø3.1inch/S3inch		PUMA Ø100mm/ H75mm Ø4inch/S3inch	
			Qty	No.	Qty	No.
1		Air motor		366080		367080
2		Flange	1	367316	1	367316
3		Piston rod	1	367302	1	367302
4		Cylinder rod	1	366303	1	367303
5		Compressed air pipe	1	367304	1	367304
6		Control air pipe	1	367305	1	367305
8		Stopper	2	367307	2	367307
9	◆★	Seal, outlet	2	L414.06C	2	L414.06C
10		Connection part	1	367309	1	367309
11		Silencer	1	367310	1	367310
12		Hood	1	367311	1	367311
13	◆★	Filter air pressure	1	367313	1	367313
14	◆★	Filter control air	1	367314	1	367314
15		Casing	1	367312	1	367312
16		Shoulder screw	2	367318	2	367318
17	◆	Sound absorbing mat	1	367319	1	367319
18		Spring pin	2	367320	2	367320
19		Distributor	1	367321	1	367321
20	◆	Pressure regulator	1	9998676	1	9998676

◆ = Wearing part

★ = Included in service set



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Pressure regulator (pos. 100)
Detail see chap. 8.3.2

Do not dismount the piston (Pos. 81)

Spare parts list for air motor			WILDCAT Ø80mm/ H75mm Ø3.1inch/S3inch		PUMA Ø100mm/ H75mm Ø4inch/S3inch	
			Qty	No.	Qty	No.
20	◆	Pressure regulator XR-15 (as additional extra)		-		-
21	◆	Angle ball valve	1	367061	1	367061
22		Connection piece	2	367322	2	367322
23		Filter seat	1	367324	1	367324
24		Stop washer SW9 180	1	9943114	1	9943114
25		Throttle		-		-
26		Handle SW9	1	9943115	1	9943115
27		Hexagonal screw	1	9943116	1	9943116
28	◆	O-ring	6	9971123	6	9971123
29	◆	Rod seal	2	9974217	2	9974217
30	◆	Pilot valve	2	369290	2	369290
31	◆	Spool-sleeve combination assy.	1	9943080	1	9943080
32	◆	Permaglide bushing	1	9962018	1	9962018
33	◆	Complete piston	1	9998663	1	9998661
34	◆★	Sealing-wiper ring	1	9974090	1	9974090
35		Safety valve	1	368288	1	368288
36	◆★	O-ring	2	9974115	2	9974084
37	◆★	O-ring	2	9974085	2	9974085
39	◆★	O-ring	2	9974089	2	9974089
40	◆★	O-ring	2	9974095	2	9974095
41	◆★	O-ring	2	9971448	2	9971448
42	◆★	O-ring	1	9974097	1	9974097
43	◆★	O-ring	1	9974098	1	9974098
44		Threaded plug	2	9998674	2	9998674
45		Threaded plug	2	9998274	2	9998274
46		Sticker WAGNER	1	366804	1	367804
47		Threaded plug	2	9998675	2	9998675
48		Control housing	1	367315	1	367315
49		Washer	2	9925033	2	9925033
50		Hexagonal screw	3	9900225	3	9900225
51		Hexagon nut	1	9910101	1	9910101
52		Washer	3	9920106	3	9920106
53		Washer	1	9920107	1	9920107

◆ = Wearing part

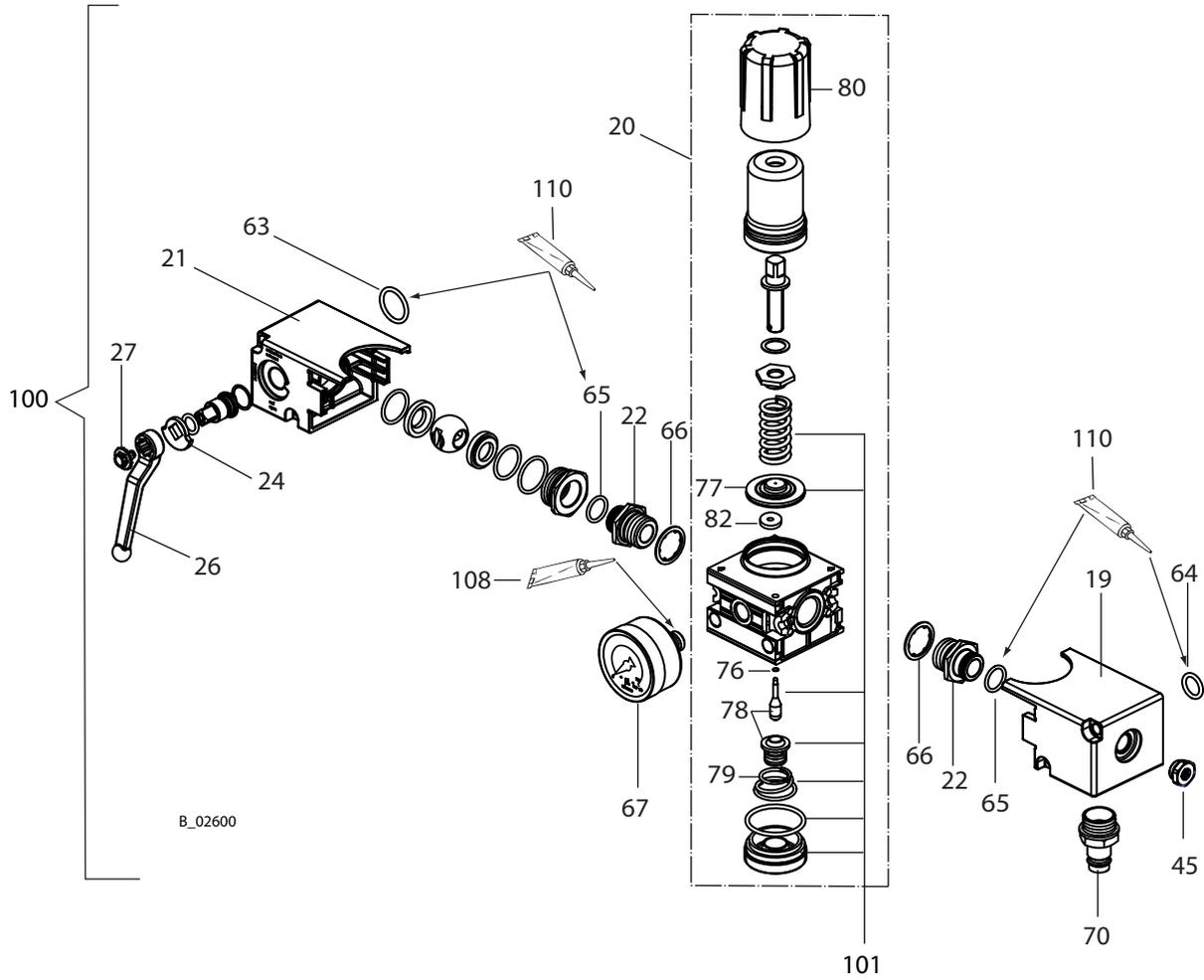
★ = Included in service set

		WILDCAT Ø80mm/ H75mm Ø3.1inch/53inch		PUMA Ø100mm/ H75mm Ø4inch/53inch		
Spare parts list for air motor						
Pos	K	Description	Qty	No.	Qty	No.
54		Screw SFS	2	9907126	2	9907126
55		Cheese-head screw M6x16	3	9900325	3	9900325
56		Washer	3	9920103	3	9920103
57	◆★	Sealing ring	1	9970149	1	9970149
58		Socket	1	9952668	1	9952668
59		Clamping strap	1	9952667	1	9952667
60		Cheese-head screw	1	9900701	1	9900701
61		Spring ring	1	9921505	1	9921505
62		Cheese-head screw	4	9900316	4	9900316
63	◆★	O-ring	1	9974086	1	9974086
64		O-ring	1	3055026	1	3055026
65		O-ring	2	9974105	2	9974105
66		Sealing ring	2	9970149	2	9970149
67		Manometer	1	9998677	1	9998677
69		Pin	1	9998718	1	9998718
70		Plug-in nipple	1	9998810	1	9998810
71		Sticker IceBreaker	1	367806	1	367806
72		Warning sign	1	367807	1	367807
74	◆	Detent body assy. ISO 1/2	1	368038	1	368038
75	◆	Silencer ISO 1/2	2	368313	2	368313
80	◆	Hand-wheel	1	2315535	1	2315535
81	◆	Spool and sleeve assembly ISO1/ ISO2	1	9943097	1	9943097
100		Pressure regulator unit assy. (incl. Pos. 62)	1	367060	1	367060
101		Wearing parts set for pos. 20	1	0115943	1	115943
106		Loctite 222, 50 ml; 50 cc		9992590		9992590
107		Loctite 243, 50 ml; 50 cc		9992511		9992511
108		Loctite 542, 50 ml; 50 cc		9992831		9992831
109		Molykote DX grease		9992616		9992616
110		Grease Beacon		9998808		9998808
		Service set	1	366995	1	367995

◆ = Wearing part

★ = Included in service set

8.3.2 REGULATOR FOR AIR MOTOR WILDCAT AND PUMA



8.4 MATERIAL PUMPS**8.4.1 MATERIAL PUMP 40 CCM**

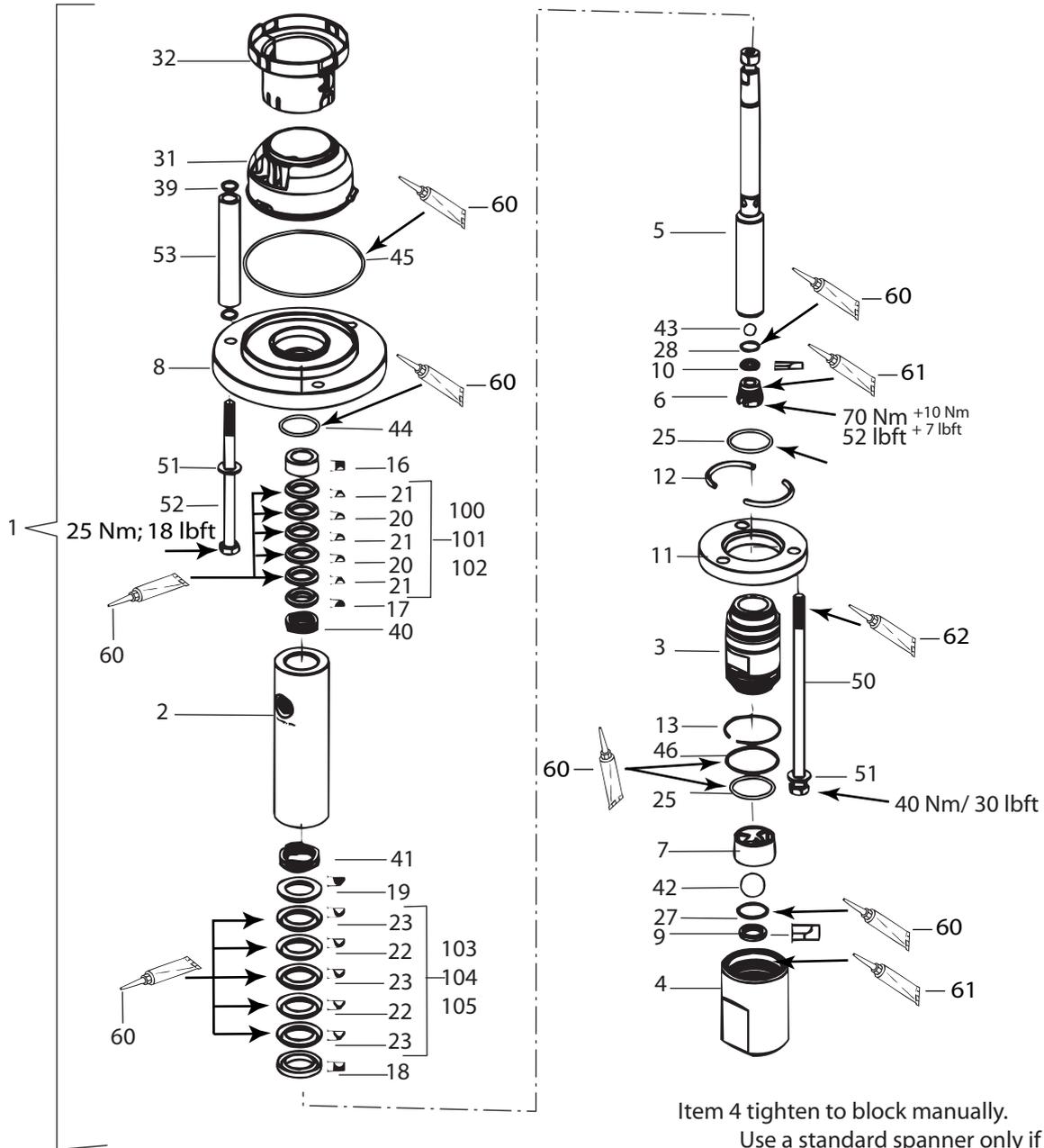
	 WARNING
	<p>Incorrect maintenance/repair! Risk of injury and damage to the equipment</p> <p>→ Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center.</p> <p>→ Before all work on the unit and in the event of work interruptions:</p> <ul style="list-style-type: none"> - Switch off the energy/compressed air supply. - Relieve the pressure from the spray gun and unit. - Secure the spray gun against actuation. <p>→ Observe the operating and service instructions when carrying out all work.</p>

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Spare parts list material pump

				40 cm³ PE/TG
Pos	K	Qty	Description	No.
1		1	Material pump	367070
2		1	Rod	367502
3		1	Cylinder	367503
4		1	Inlet housing	367504
5	◆	1	Piston	367505
6		1	Valve screw	367506
7	◆★	1	Ball guide inlet	367507
8		1	Connection flange	367501
9	◆	1	Valve seat, inlet	367509
10	◆	1	Valve seat, outlet	367510
11		1	Snap ring flange	367511
12		2	Snap ring half	367512
13		1	Securing ring	367513
16		1	Support ring	367516
17		1	Compression ring	367517
18		1	Support ring	367518
19		1	Compression ring	367519
100	◆		Packing PE/TG compl. (small)	115805
20	◆★	2	Sealing collar TG (small)	123398
21	◆★	3	Sealing collar PE (small)	123427
103	◆		Packing PE/TG compl. (large)	367991

◆ = Wearing part ★ = Included in service set ● = Special accessories



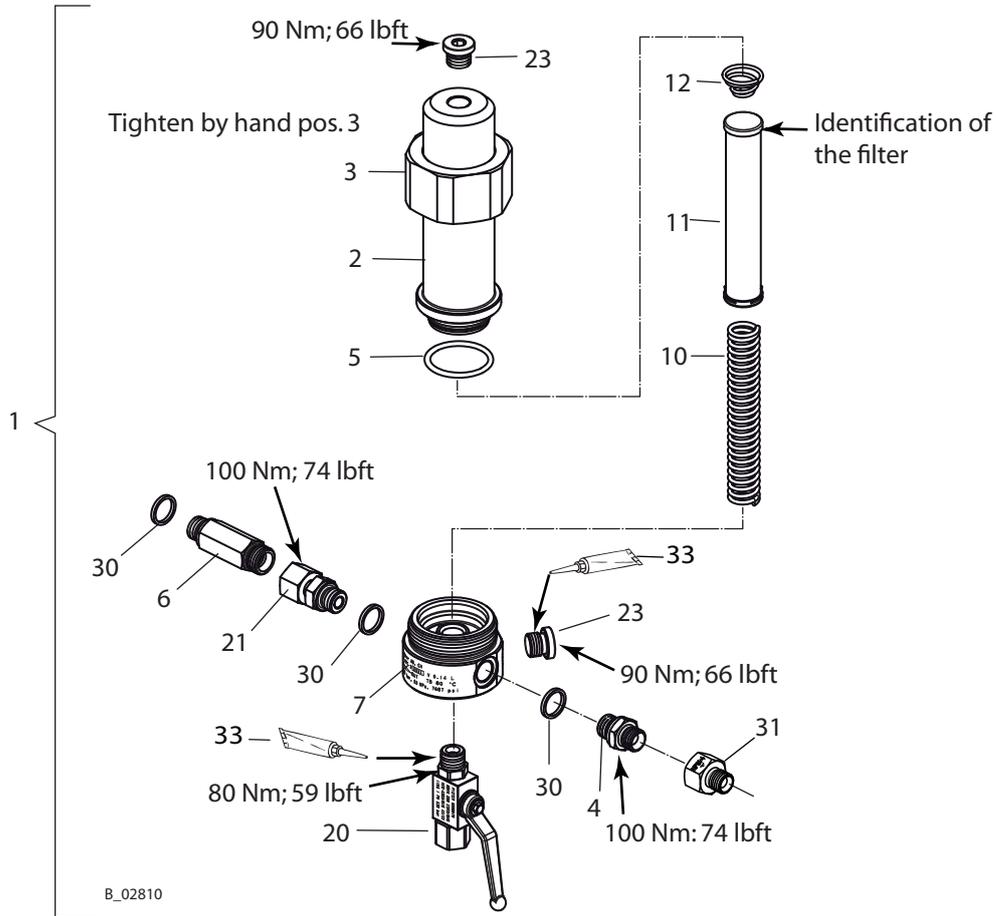
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Item 4 tighten to block manually.
 Use a standard spanner only if it's necessary.
 In this case use a spanner to counter on item 3.

Spare parts list material pump			40 cm ³ PE/TG	
Pos	K	Qty	Description	No.
22	◆★	2	Sealing collar TG (large)	367522
23	◆★	3	Sealing collar PE (large)	367523
25	◆★	2	O-ring	367525
27	◆★	1	O-ring	367527
28	◆★	1	O-ring	367528
31	◆	1	Separating fluid cup	367531
32	◆	2	Coupling cover	367532
39	◆★	6	O-ring	9974089
40	◆★	1	Wave spring (small)	9998669
41	◆★	1	Wave spring (large)	9998670
42	◆★	1	Ball (large)	9941513
43	◆★	1	Ball (small)	9941518
44	◆★	1	O-ring	9974094
45	◆★	1	O-ring	9974093
46	◆★	1	O-ring	9974106
50		3	Hexagon screw	9907124
51		6	Washer	9920106
52		3	Hexagon screw	9900225
53		3	Connecting tube	367306
60			Grease Mobilux EP 2	9998808
61			Anti-sieze paste	9992609
62			Molykote DX grease	9992616
		1	Service set PE/TG	367990

◆ = Wearing part ★ = Included in service set ● = Special accessories

8.5 HIGH-PRESSURE FILTER



				Ball valve version in:	
Pos	K	Qty	Description	Steel Part No.	Stainless steel Part No.
1			High-pressure filter HPF-3 3/8"	367175	367178
2		1	Filter housing		367911
3		1	Union nut		367912
4		1	Reducing double nipple with 2x 60°		367556
5	◆	1	O-Ring		367914
6		1	Screwed connector		367916
7		1	Distribution housing		367910
10		1	Filter support		9894245

◆ = Wearing part

● = Not part of standard equipment for spray gun. Available, however, as additional extra

			Ball valve version in:		
Pos	K	Qty	Description	Steel Part No.	Stainless steel Part No.
11	◆	1	Filter cartridges *		
			* Filter cartridge 200	295721	
			* Filter cartridge 100	3514068	
			* Filter cartridge 50	3514069	
			* Filter cartridge 20	291564	
12	◆	1	Cone spring	3514058	
20	◆	1	Ball valve	9998679	9999159
21		1	Screwed connecting piece	9998680	
23		2	Lock screw	9907127	
30	◆	3	Sealing ring	9925024	
31		1	Adapter I NPSM 3/8" - A NPSM 1/4"	367562	
33	●	1	Loctite 542 50 ml; 50 cc	9992831	

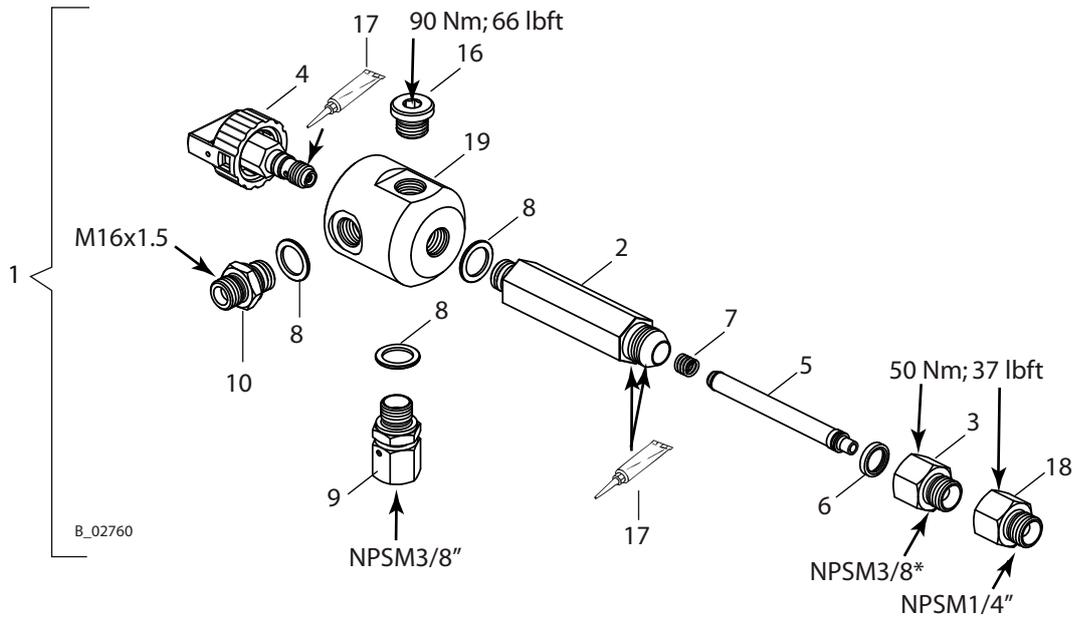
◆ = Wearing part

● = Not part of standard equipment for spray gun. Available, however, as additional extra

	 WARNING
	<p>Incorrect maintenance/repair! Danger to life and equipment damage</p> <ul style="list-style-type: none"> → Only a WAGNER service center or a suitably trained person may carry out repairs and replace parts. → Only repair and replace parts that are listed in the chapter "Spare parts catalog". → Before all work on the unit and in the event of work interruptions: <ul style="list-style-type: none"> - Disconnect the control unit from the mains. - Relieve the pressure from the spray gun and unit. - Secure the spray gun against actuation. → Observe the operating and service instructions when carrying out all work.

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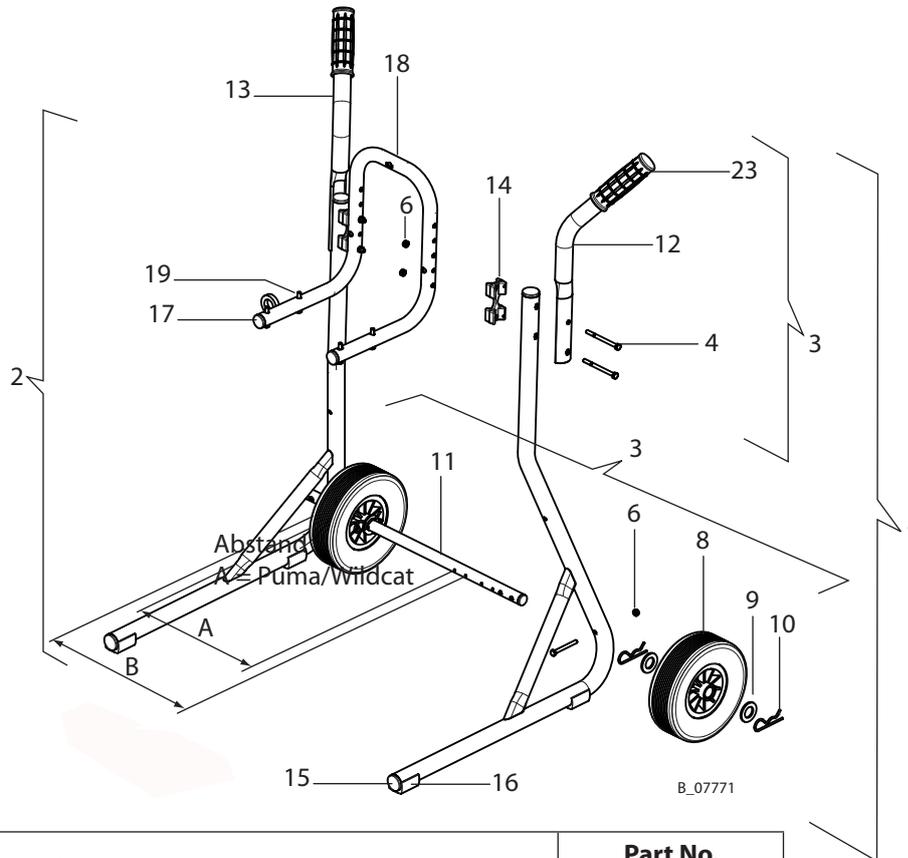
8.6 FILTER-RELIEF COMBINATION



Pos	K	Qty	Part No.	Description
1			367135	Filter-relief combination
2		1	123469	Filter housing
3		1	367564	Adapter I=M20x1.5, A=NPSM 3/8"
4	◆	1	169248	Relief valve assy.
5	◆	1	-	Filter cartridge *
			34383	* 200 mesh (red)
			43235	* 100 mesh (yellow) (Standard)
			34377	* 50 mesh (white)
			89323	* 30 mesh (green)
6	◆	1	43303	Handle sealing washer
7	◆	1	43590	Compression spring
8	◆	3	9971525	Seal, U-Seal
9		1	367567	Swivel, assy.
10		1	123510	Double connection
16		1	9904312	Lock screw
17			9992609	Anti-sieze paste
18			367562	Adapter I=NPSM 3/8"; A=NPSM 1/4"
19		1	115199	Release housing

◆ = Wearing part

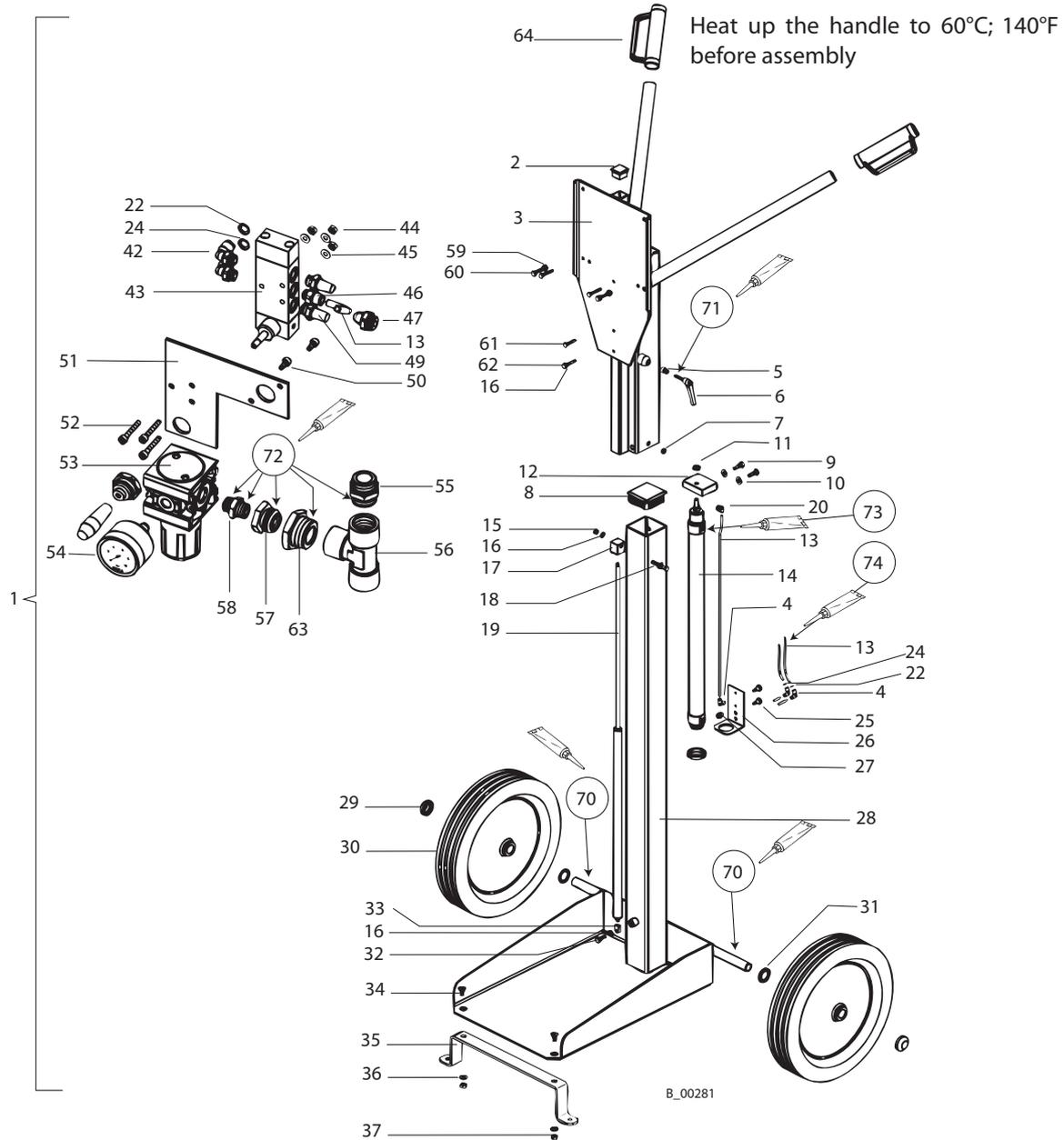
8.7 TROLLEY



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

◆ = Wearing part

8.9 LIFTING TROLLEY PNEUMATIC



Mounting materials

Pos	Qty	Part No.	Description
70	1	9998808	Grease Beacon EP2
71	1	9992528	Loctite 270
72	1	9992831	Loctite 542
73	2	9992610	Cable ties
74	3	9950615	Cable ties

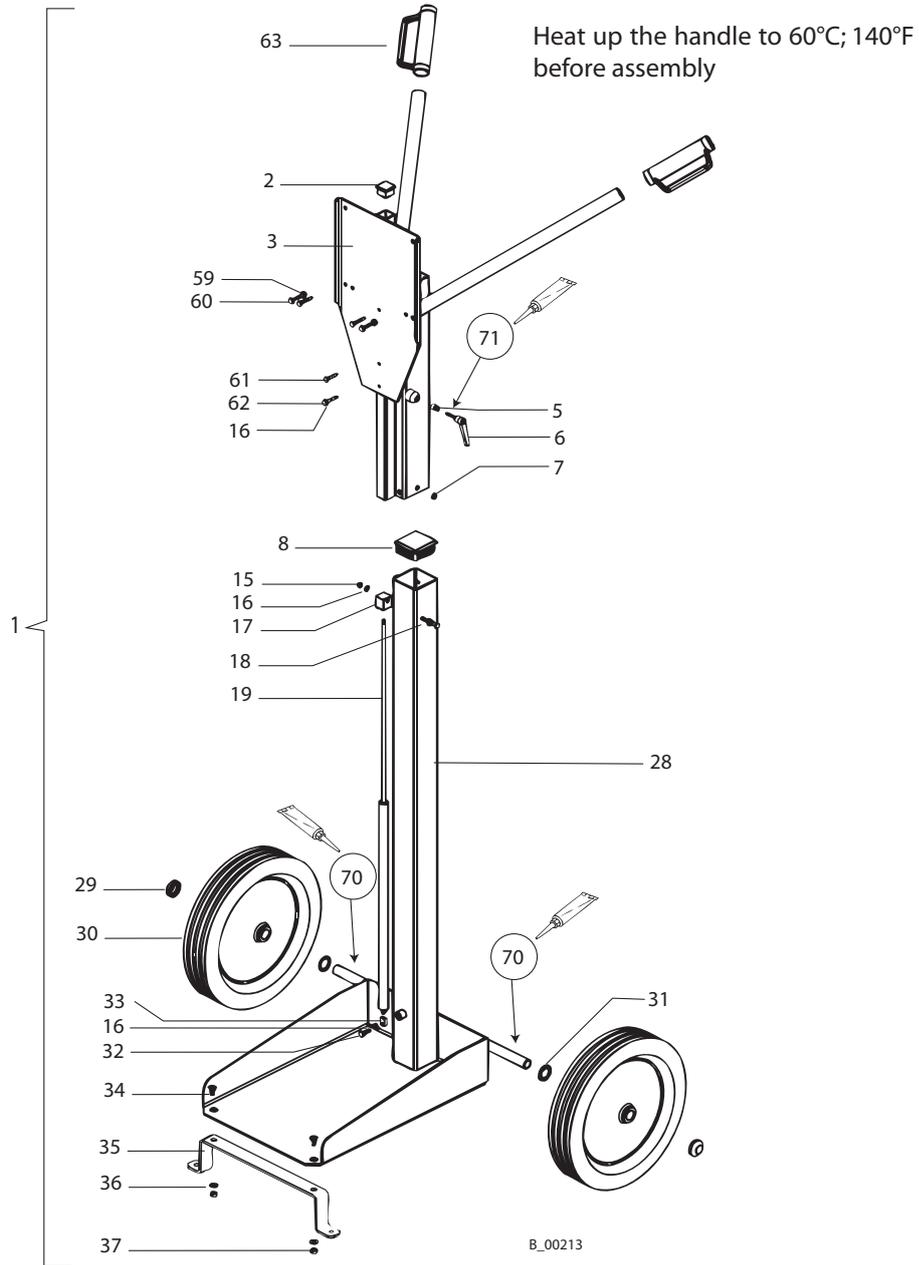
Spare parts list for Lifting trolley pneumatic				WILDCAT PUMA
Pos	K	Qty	Description	Part No.
1		1	Lifting trolley pneumatic compl.	367032
2		1	Cross head block	9999007
3		1	Lifting gear pneumatic	369237
4		3	Elbow hose connection	9999125
5		1	Joint thrust piece	9999008
6		1	Clamping lever	9998230
7	◆	14	Sliding plug	369706
8		1	Cross head block	9998232
9		2	Hexagon head screw	9900107
10		2	Washer	9920106
11		1	Hexagon nut	9911016
12		1	Mounting-part	369732
13		1	Hose black 3.4 m; 11.15 ft	9982079
14	◆	1	Cylinder	9999388
15		1	Hexagon nut with clamp	9910208
16		8	Washer	9920102
17		1	Block	369702
18		1	Hexagon head screw	9900125
19	◆	1	Gas pressure spring	9999010
20		1	Screwed elbow	9998250
22		2	Coding ring red	9998995
24		2	Coding ring green	9998994
25		2	Bolt	369724
26		1	Angle	369723
27		1	Screw-in screw connection, straight	9998255
28		1	Trolley rack pneumatic	369236
29		2	Washer with plastic house	9998895
30		2	Wheel assy.	9994922
31		2	Retaining ring	9998894
32		1	Hexagon head screw	9900109
33		1	Joint eye on pipe	9999009
34		2	Countersunk screw	9907183
35		1	Foot set	369713
36		2	Washer	9920106
37		2	Hexagon nut	9910105

◆ = Wearing part

Spare parts list for Lifting trolley pneumatic				WILDCAT PUMA
Pos	K	Qty	Description	Part No.
42		2	Screw in angle	9998110
43	◆	1	Way valve	9943120
44		3	Hexagon nut	9910108
45		3	Washer	9920104
46		1	Screw-in screw connection, straight	9998090
47		1	Screw in angle	9998250
49		2	Silencer	9991761
50		2	Cap head screw	9900334
51		1	Mounting sheet	369721
52		3	Cap head screw	9900365
53	◆	1	Pressure regulator	9998676
54	◆	1	Manometer	9998677
55		1	Double nipple	9985684
56		1	Fitting T	9999109
57		1	Reducing nipple	9985685
58		1	Double nipple	9985720
59		2	Hexagon nut	9910107
60		2	Hexagon head screw	9900123
61		1	Hexagon head screw	9907195
62		3	Hexagon head screw	9907196
63		1	Reducing nipple	-
64		2	Handle with hand protection black	9998893

◆ = Wearing part

8.10 LIFTING TROLLEY



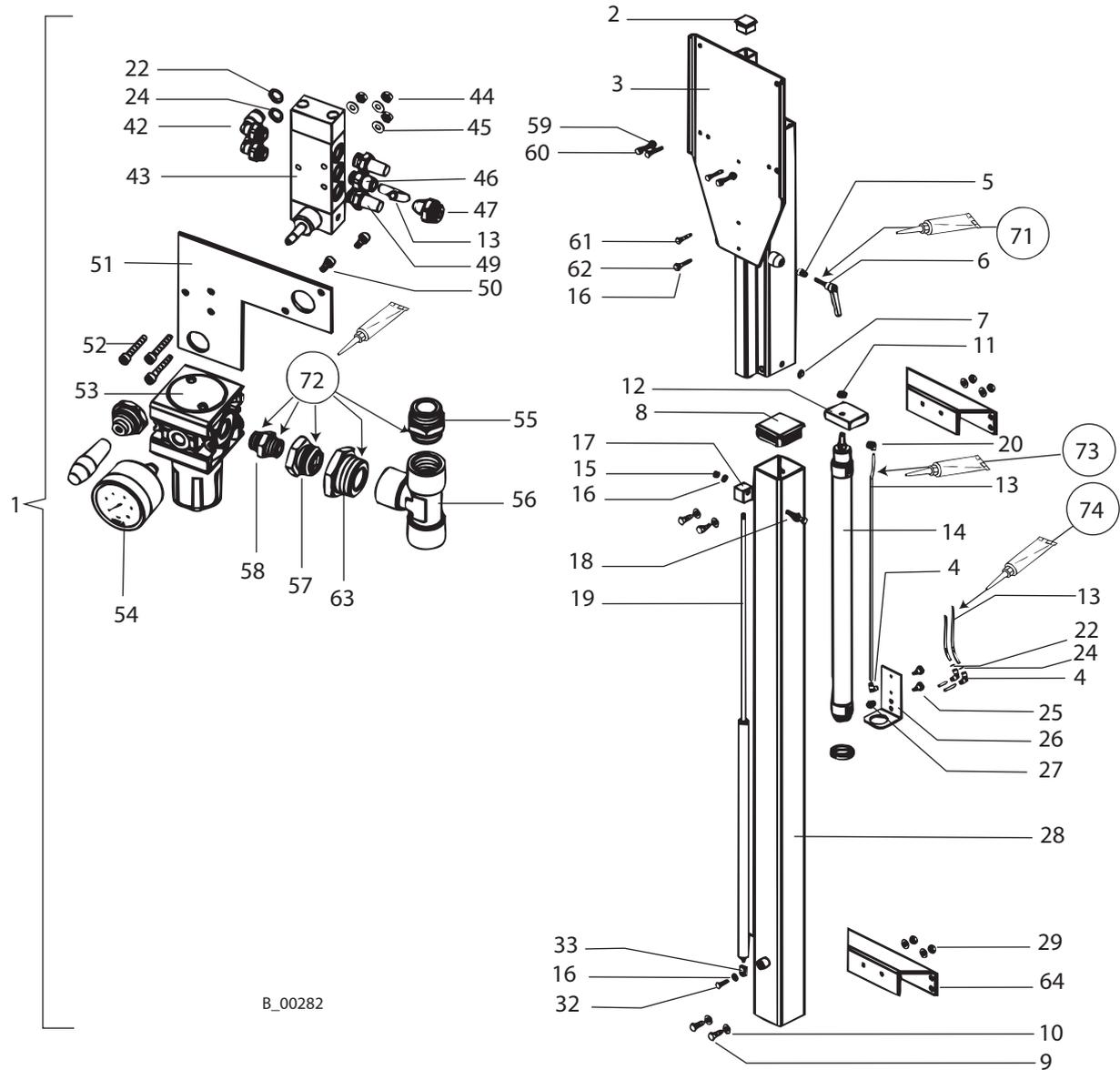
Mounting materials

Pos	Qty	Part No.	Description
70	1	9998808	Grease Beacon EP2
71	1	9992528	Loctite 270

Spare parts list for Lifting trolley				WILDCAT PUMA 400N
Pos	K	Qty	Description	Part No.
1		1	Lifting trolley assy.	367031
2		1	Cross head block	9999007
3		1	Lifting gear, welded	369262
5		1	Joint thrust piece	9999008
6		1	Clamping lever	9998230
7	◆	14	Sliding plug	369706
8		1	Cross head block	9998232
15		1	Hexagon nut with clamp	9910208
16		8	Washer	9920102
17		1	Block	369702
18		1	Hexagon head screw	9900125
19	◆	1	Gas pressure spring	9994303
28		1	Trolley rack	369261
29		2	Washer with plastic house	9998895
30		2	Wheel assy.	9994922
31		2	Retaining ring	9998894
32		1	Hexagon head screw	9900109
33		1	Joint eye on pipe	9999009
34		2	Countersunk screw	9907183
35		1	Foot set	369713
36		2	Washer	9920106
37		2	Hexagon nut M10	9910105
59		2	Hexagon nut M8	9910107
60		2	Hexagon head screw M8x45	9900123
60		1	Hexagon head screw M8x45	-
61		1	Hexagon head screw M8x35	9907195
62		3	Hexagon head screw M8x40	9907196
62		1	Hexagon head screw M8x40	-
62		2	Hexagon head screw M8x55	-
63		2	Handle with hand protection black	9998893

◆ = Wearing part

8.11 WALL LIFTING GEAR PNEUMATIC



Mounting materials

Pos	Qty	Part No.	Description
71	1	9992528	Loctite 270
72	1	9992831	Loctite 542
73	2	9992610	Cable ties
74	3	9950615	Cable ties

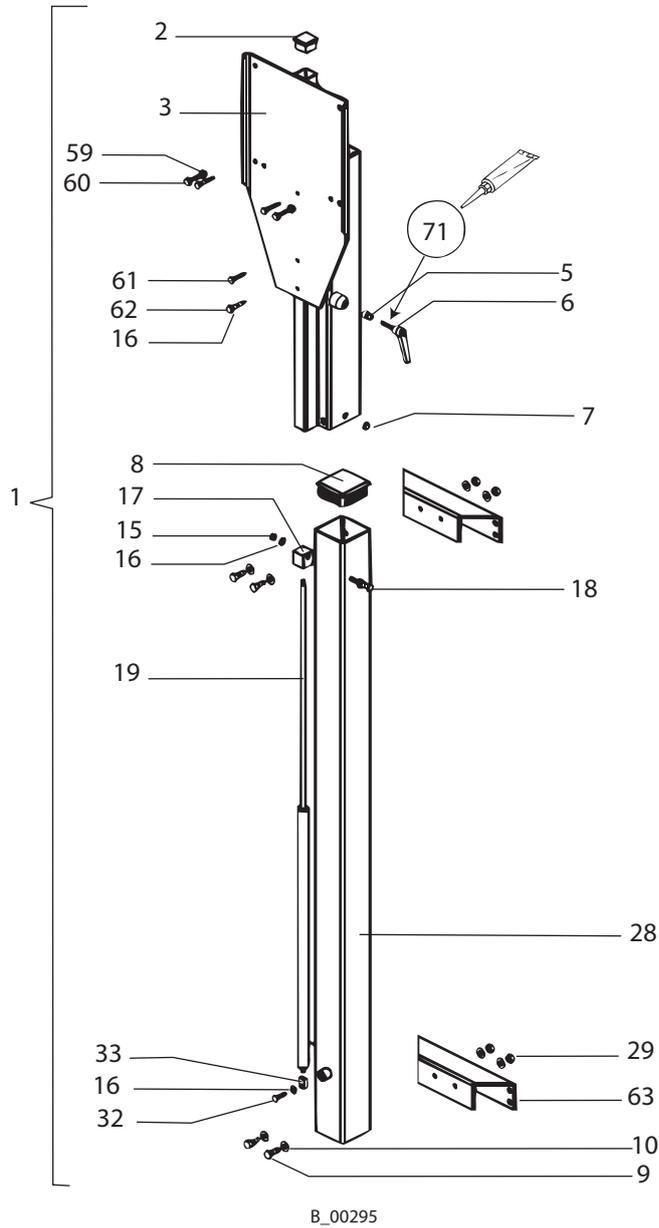
Spare parts list for Wall lifting gear pneumatic				WILDCAT PUMA
Pos	K	Qty	Description	Part No.
1		1	Wall lifting gear pneumatic assy.	367036
2		1	Cross head block	9999007
3		1	Wall lifting gear pneumatic welded	369241
4		3	Elbow hose connection	9999125
5		1	Joint thrust piece	9999008
6		1	Clamping lever	9998230
7	◆	14	Sliding plug	369706
8		1	Cross head block	9998232
9		4	Hexagon head screw	9900107
10		8	Washer	9920106
11		1	Hexagon nut	9911016
12		1	Mounting-part	369732
13		1	Hose black 3.4 m; 11.15 ft	9982079
14	◆	1	Cylinder	9999388
15		1	Hexagon nut with clamp	9910208
16		8	Washer	9920102
17		1	Block	369702
18		1	Hexagon head screw	9900125
19	◆	1	Gas pressure spring	9999010
20		1	Screwed elbow	9998250
22		2	Coding ring red	9998995
24		2	Coding ring green	9998994
25		2	Bolt	369724
26		1	Angle	369723
27		1	Screw-in screw connection, straight	9998255
28		1	Profile 1 wall pneumatic assy..	369240
29		4	Hexagon nut	9910105
32		1	Hexagon head screw	9900109
33		1	Joint eye on pipe	9999009
42		2	Coupling L	9998110
43	◆	1	Way valve	9943120
44		3	Hexagon nut	9910108
45		3	Washer	9920104
46		1	Screw-in screw connection, straight	9998090
47		1	Angle	9998250
49		2	Silencer	9991761

◆ = Wearing part

Spare parts list for Wall lifting gear pneumatic				WILDCAT PUMA
Pos	K	Qty	Description	Part No.
50		2	Cap head screw	9900334
51		1	Mounting sheet	369721
52		3	Cap head screw	9900365
53	◆	1	Pressure regulator	9998676
54	◆	1	Manometer	9998677
55		1	Double nipple	9985684
56		1	Screw connection	9999109
57		1	Reducing nipple	9985685
58		1	Double nipple	9985720
59		2	Hexagon nut	9910107
60		2	Hexagon head screw M8x45	9900123
61		1	Hexagon head screw M8x35	9907195
62		3	Hexagon head screw	9907196
63		1	Reducing nipple	-
64		2	Mounting bracket	369712

◆ = Wearing part

8.12 WALL LIFTING GEAR



Mounting materials

Pos	Qty	Part No.	Description
71	1	9992528	Loctite 270

**Spare parts list for
Wall lifting gear**

Spare parts list for Wall lifting gear				WILDCAT PUMA 400N
Pos	K	Qty	Description	Part No.
1		1	Wall lifting gear assy.	367035
2		1	Cross head block	9999007
3		1	Lifting gear, welded	369265
5		1	Joint thrust piece	9999008
6		1	Clamping lever	9998230
7	◆	14	Sliding plug	369706
8		1	Cross head block	9998232
9		4	Hexagon head screw M10x25	9900107
10		8	Washer A10.5	9920106
15		1	Hexagon nut with clamp	9910208
16		8	Washer	9920102
17		1	Block	369702
18		1	Hexagon head screw	9900125
19	◆	1	Gas pressure spring	9994303
28		1	Profile 1 wall assy.	369268
29		4	Hexagon nut M10	9910105
32		1	Hexagon head screw M8x25	9900109
33		1	Joint eye on pipe	9999009
59		2	Hexagon nut M8	9910107
60		2	Hexagon head screw M8x45	9900123
60		1	Hexagon head screw M8x45	-
61		1	Hexagon head screw M8x35	9907195
62		3	Hexagon head screw M8x40	9907196
62		1	Hexagon head screw M8x40	-
62		2	Hexagon head screw M8x55	-
63		2	Mounting bracket	369712

◆ = Wearing part

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