REV. 11 - 02/2024

Manuale Cod. 150108

INSTRUCTION MANUAL

SAMOA®

LEADING THROUGH INNOVATION

EN

www.larius.com

SIRIO 30:1 / 45:1

Pneumatic pump plunger piston

ATEX Ex II 2 G Ex IIB T6 Gb certified pump

IT	https://www.larius.com/wp-content/uploads/SIRIOTUFFO_I.pdf
EN	https://www.larius.com/wp-content/uploads/SIRIOTUFFO_UK.pdf
ES	https://www.larius.com/wp-content/uploads/SIRIOTUFFO_SP.pdf

99011	SIRIO 30:1 Stainless steel transfer pump
99013	SIRIO 45:1 Stainless steel transfer pump

This manual is to be considered as an English language translation of the original manual in Italian. The manufacturer shall bear no responsibility for any damages or inconveniences that may arise due to the incorrect translation of the instructions contained within the original manual in Italian.

Due to a constant product improvement programme, the factory reserves the right to modify technical details mentioned in this manual without prior notice.

SIRIO

Pneumatic pump - Plunger piston 30:1 - 45:1

INDEX

WE ADVISE THE USE OF THIS EQUIPMENT ONLY BY PROFESSIONAL OPERATORS.
ONLY USE THIS MACHINE FOR USAGE SPECIFICALLY MENTIONED IN THIS MANUAL.

Thank you for choosing a **SAMOA** product.
As well as the product purchased, you will receive a range of support services enabling you to achieve the results desired, quickly and professionally.

A WARNINGS

The table below provides the meaning of the symbols used in this manual in relation to using, earthing, operating, maintaining, and repairing of this equipment.

- Read this operator's manual carefully before using the equipment.
- An improper use of this machine can cause injuries to people or things.
- Do not use this machine when under the influence of drugs or alcohol.
- Do not modify the equipment under any circumstances.
- Use products and solvents that are compatible with the various parts of the equipment, and read the manufacturer's warnings carefully.
- See the Technical Details for the equipment given in the Manual.
- Check the equipment for worn parts once a day. If any worn parts are found, replace them using ONLY original spare parts.
- Keep children and animals away from work area.
- Comply with all safety standards.

- It indicates an accident risk or serious damage to equipment if this warning is not followed.

FIRE AND EXPLOSION HAZARD

- Solvent and paint fumes in work area can ignite or explode.
- **To help prevent fire and explosion:**
  - Use equipment ONLY in well ventilated area.
  - Eliminate all ignition sources, such as pilot lights, cigarettes and plastic drop cloths (potential static arc).
  - Ground equipment and conductive objects.
  - Use only grounded hoses.
  - Do not use trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminium equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.
  - Do not form connections or switch light switches on or off if the air contains inflammable fumes.
- If electrical shocks or discharges are encountered the operation being carried out using the equipment **must be stopped immediately**.
- Keep a fire extinguisher at hand in the immediate vicinity of the work area.

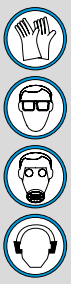
- It indicates wound and finger squashing risk due to movable parts in the equipment.
- Tenersi lontano dalle parti in movimento.
- Do not use the equipment without the proper protection.
- Before any inspection or maintenance of the equipment, carry out the decompression procedure explained in this manual, and prevent any risk of the equipment starting unexpectedly.

- Report any risk of chemical reaction or explosion if this warning has not been given.
- (IF PROVIDED) There is a risk of injury or serious lesion related to contact with the jet from the spray gun. If this should occur, IMMEDIATELY contact a doctor, indicating the type of product injected.
- (IF PROVIDED) Do not spray before the guard has been placed over the nozzle and the trigger on the spray gun.
- (IF PROVIDED) Do not put your fingers in the spray gun nozzle.
- Once work has been completed, before carrying out any maintenance, complete the decompression procedure.

- It indicates important recommendations about disposal and recycling process of products in accordance with the environmental regulations.

- Mark any clamps attached to earth cables.
- Use ONLY 3-wire extension cords and grounded electrical outlets.
- Before starting work make sure that the electrical system is grounded and that it complies with safety standards.
- High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin.
- **To help prevent injection, always:**
  - (IF PROVIDED) Engage trigger lock when not spraying.
  - (IF PROVIDED) Do not put your hand over the spray tip. Do not stop or deflect leaks with your hand, body or other.
  - (IF PROVIDED) Do not point gun at anyone or at any part of the body.
  - (IF PROVIDED) Never spray without tip guard.
  - Do pressure relief if you stop spraying or being servicing sprayer and before any maintenance operations.
  - Do not use components rated less than sprayer Maximum Working Pressure.
  - Never allow children to use this unit
  - (IF PROVIDED) Brace yourself; gun may recoil when triggered.

If high pressure fluid pierces your skin, the injury might look like "just a cut", but it is a serious wound!
Get immediate medical attention.



- It is obligatory to wear suitable clothing as gloves, goggles and face shield.
- Wear clothing that complies with the safety standards in force in the country in which the equipment is used.
- Do not wear bracelets, earrings, rings, chains, or anything else that may hinder the operator's work.
- Do not wear clothing with wide sleeves, scarves, ties, or any other piece of clothing that could get tangled up in moving parts of the equipment during the work, inspection, or maintenance cycles.

B TRANSPORT AND UNPACKING

- Observe the orientation of the packaging indicated externally by inscriptions or symbols
- Before installing the equipment to prepare a suitable environment with the space that you need the proper lighting clean, smooth flooring
- All unloading and handling of the equipment are covered by the user must be very careful to avoid injury or damage to the equipment.

  For the use of the specialized personnel and discharge operation enabled (forklift, crane operators, etc.) and a suitable lifting means I have sufficient strength for the weight of the package and will comply with all safety regulations.

  The personnel must be equipped with the necessary individual protection.
- The manufacturer declines any responsibility concerning the unloading and transport of the equipment at the workplace
- Verify the integrity of the package upon receipt, remove the unit from the packaging and check that it has not been damaged during transport

  If any part is broken, contact the **the manufacturer** and shipping agency. The deadline for submissions is corruption of 8 days from the date of receipt of the equipment. The communication must be made by registered letter with return receipt up to **the manufacturer** and transport operator within.

Disposal of packaging materials, borne by the user and must be performed in compliance with the regulations in force in the country of use of the equipment.
It is always good to recycle as much as possible in an environmentally friendly packaging materials.

C SAFETY REGULATIONS

Read carefully the following before using the product.
Keep these instructions.

Unauthorized tampering or replacement of one or more parts composing the equipment, accessories, tools, materials other than those recommended by the manufacturer, may pose risk of injury and raise the manufacturer from civil and criminal liability.

- THE EMPLOYER SHALL TRAIN ITS EMPLOYEES ABOUT ALL THOSE RISKS STEMMING FROM ACCIDENTS, ABOUT THE USE OF SAFETY DEVICES FOR THEIR OWN SAFETY AND ABOUT THE GENERAL RULES FOR ACCIDENT PREVENTION IN COMPLIANCE WITH INTERNATIONAL REGULATIONS AND WITH THE LAWS OF THE COUNTRY WHERE THE PLANT IS USED.
- THE BEHAVIOUR OF THE EMPLOYEES SHALL STRICTLY COMPLY WITH THE ACCIDENT PREVENTION AND ALSO ENVIRONMENTAL REGULATIONS IN FORCE IN THE COUNTRY WHERE THE PLANT IS INSTALLED AND USED.
- KEEP YOUR WORK PLACE CLEAN AND TIDY. DISORDER WHERE YOU ARE WORKING CREATES A POTENTIAL RISK OF ACCIDENTS.
- ALWAYS KEEP PROPER BALANCE AVOIDING UNUSUAL STANCE.
- BEFORE USING THE TOOL, ENSURE THERE ARE NOT DAMAGED PARTS AND THE MACHINE CAN WORK PROPERLY.
- ALWAYS FOLLOW THE INSTRUCTIONS ABOUT SAFETY AND THE REGULATIONS IN FORCE.
- KEEP THOSE WHO ARE NOT RESPONSIBLE FOR THE EQUIPMENT OUT OF THE WORK AREA.
- NEVER EXCEED THE MAXIMUM WORKING PRESSURE INDICATED.
- NEVER POINT THE SPRAY GUN AT YOURSELVES OR AT OTHER PEOPLE. THE CONTACT WITH THE CASTING CAN CAUSE SERIOUS INJURIES.
- IN CASE OF INJURIES CAUSED BY THE GUN CASTING, SEEK IMMEDIATE MEDICAL ADVICE SPECIFYING THE TYPE OF THE PRODUCT INJECTED. NEVER UNDERVALUE A WOUND CAUSED BY THE INJECTION OF A FLUID.
- ALWAYS DISCONNECT THE SUPPLY AND RELEASE THE PRESSURE IN THE CIRCUIT BEFORE PERFORMING ANY CHECK OR PART REPLACEMENT OF THE EQUIPMENT.
- NEVER MODIFY ANY PART IN THE EQUIPMENT. CHECK REGULARLY THE COMPONENTS OF THE SYSTEM.

  REPLACE THE PARTS DAMAGED OR WORN.
- TIGHTEN AND CHECK ALL THE FITTINGS FOR CONNECTION BETWEEN PUMP, FLEXIBLE HOSE AND SPRAY GUN BEFORE USING THE EQUIPMENT.
- ALWAYS USE THE FLEXIBLE HOSE SUPPLIED WITH STANDARD KIT.
- THE USE OF ANY ACCESSORIES OR TOOLING OTHER THAN THOSE RECOMMENDED IN THIS MANUAL, MAY CAUSE DAMAGE OR INJURE THE OPERATOR.
- THE FLUID CONTAINED IN THE FLEXIBLE HOSE CAN BE VERY DANGEROUS. HANDLE THE FLEXIBLE HOSE CAREFULLY. DO NOT PULL THE FLEXIBLE HOSE TO MOVE THE EQUIPMENT. NEVER USE A DAMAGED OR A REPAIRED FLEXIBLE HOSE.

The high speed of travel of the product in the hose can create static electricity through discharges and sparks. It is suggested to earth the equipment.
The pump is earthed through the earth cable of the supply (1).
The gun is earthed through the high pressure flexible hose.
All the conductors near the work area must be earthed.

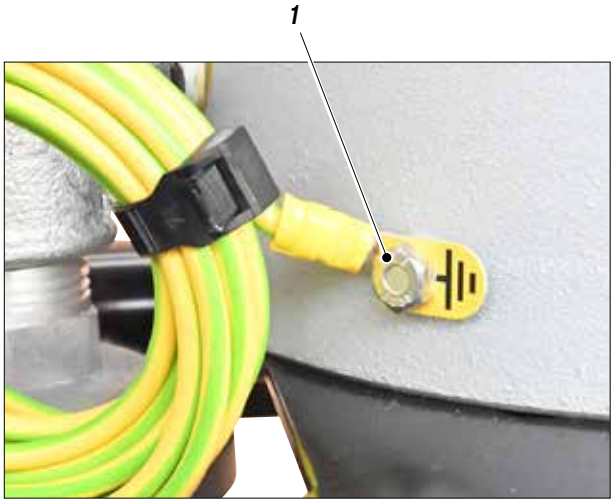


Fig. 1

Never spray over flammable products or solvents in closed places.

Never use the tooling in presence of potentially explosive gas.

Always check that the product is compatible with the materials composing the equipment (pump, spray gun, flexible hose and accessories) with which it can come into contact. Never use paints or solvents containing Halogen Hydrocarbons (as the Methylene Chloride). If these products come into contact with aluminium parts can provoke dangerous chemical reactions with risk of corrosion and explosion.

Avoid approaching too much to the pump piston rod when the pump is working or under pressure. A sudden movement of the piston rod can cause wounds or finger squashing.

If the product to be used is toxic, avoid inhalation and contact by using protection gloves, goggles and proper face shields.

Take proper safety measures for the protection of hearing in case of work near the plant.

D CONDITIONS OF GUARANTEE

The conditions of guarantee do not apply in the following situations:
- improper washing and cleaning of components causing malfunction, wear or damage to the equipment or any of its parts;
- improper use of the equipment;
- use that does not conform with applicable national legislation;
- incorrect or faulty installation;
- modifications, interventions and maintenance that have not been authorised by the manufacturer;
- use of non-original spare parts or parts that do not correspond to the specific model;
- total or partial non-compliance with the instructions provided.

E REFERENCE STANDARDS

The reference documentation for the design and manufacture of the line/machine is as follows:

- **Directive 2006/42/EC** on the approximation of the laws of the Member States relating to machines.
- **EN ISO 12100-1/-2** - Safety of machinery - General design principles - Risk assessment and risk reduction.

F WORKING PRINCIPLE

SIRIO pumps are pneumatic pumps for high pressure painting without the use of compressed air.

The stainless steel version is particularly suitable for use with water-based paints.

The ***SIRIO*** pump is essentially comprised of an air motor and a structure known as the “Material Pumping Unit”, or simply the “Pumping Unit”.
In the pneumatic motor, compressed air causes the vertical reciprocating movement of the motor piston; this movement is transmitted through a connecting rod to the material pumping piston.

This allows for the material to be aspirated and pushed towards the outlet.

The unit comes complete with a transportation trolley, a high-pressure material filter, an air supply regulator for the pump, a material suction tube (complete with filter) and a recirculation tube.

The ratio 30:1 - 45:1 means that the outlet pressure of material is 30 - 45 times higher than the pump feed air pressure.

G TECHNICAL DATA

	SIRIO 30:1	SIRIO 45:/1
Pump pressure ratio	30:1	45:1
Air pressure range	3 - 7 bar // 40 - 100 psi	3 - 7 bar // 40 - 100 psi
Max. fluid outlet pressure	210 bar / 3,000 psi	315 bar / 4,500 psi
Delivery per cycle	125 cc	85 cc
Max. delivery at 60 cycles/min	7.5 l/min	5.1 l/min
Air inlet thread	3/4" BSPP (F)	3/4" BSPP (F)
Fluid outtlet thread	3/4" BSPP(F)	3/4" BSPP (F)
Fluid inlet thread	M36X2 (M)	M36X2 (M)
Air consumption at 60 cycles/min	3 bar 760 l/m	3 bar 760 l/m
	5 bar 1,260 l/m	5 bar 1,260 l/m
	7 bar 1,760 l/m	7 bar 1,760 l/m
Sound pressure level	< 80 dB (A)	< 80 dB (A)
Air motor diameter and piston stroke	6 1/2" - 4" // 162 mm - 100 mm	6 1/2" // 162 mm - 100 mm
Seals material	PTFE + PE 1000	PTFE + PE 1000
Pump cylinder tube material	AISI 303	AISI 303
Piston material	AISI 420B	AISI 420B
Weight	60 kg	60 kg
Height (A)	930 mm	930 mm
Width (B)	450 mm	450 mm
Depth (C)	450 mm	450 mm

H DESCRIPTION OF THE SUPPLY

Code	Description
K99001	**Sirio 27:1 Stainless steel - Trolley version + accessories** 99000 Sirio 27:1 Stainless steel complete with FRL unit, line filter, drain valve, suction-recirculation system 35014 High pressure hose ø¼" 7.5 m M16x1.5 fitting 11200 AT250 airless spray gun with M16x1.5 revolving fitting 18270 Super Fast Base Clean SFC Airless nozzle (choice of size) 17200 Toolbox
K99003	**Sirio 32:1 Stainless steel - Trolley version + accessories** 99002 Sirio 32:1 Stainless steel complete with FRL unit, line filter, drain valve, suction-recirculation system 35014 High pressure hose ø¼" 7.5 m M16x1.5 fitting 11200 AT250 airless spray gun with M16x1.5 revolving fitting 18270 Super Fast Base Clean SFC Airless nozzle (choice of size) 17200 Toolbox

Parts of the pump in contact with the material
Pumping group: galvanised carbon steel and aluminium or stainless steel (based on the versions)
Sealing balls: stainless steel AISI 420B
Gaskets: PTFE

Other parts of the pump
Motor casing and motor piston: aluminium
Pneumatic motor piston rod: stainless steel
Trolley structure: painted sheet metal

Always observe these instructions carefully when evaluating the product compatibility and in case of disposal of some parts of the pump no more usable, in order to meet the environmental regulations on recycling process.

I DESCRIPTION OF THE EQUIPMENT

Fig. 1

Pos.	Description
1	Pneumatic motor pump
2	Trolley transport equipment
3	Feed air pressure regulatoror group

Pos.	Description
4	Spray technology
5	Material pumping group
6	Material suction group

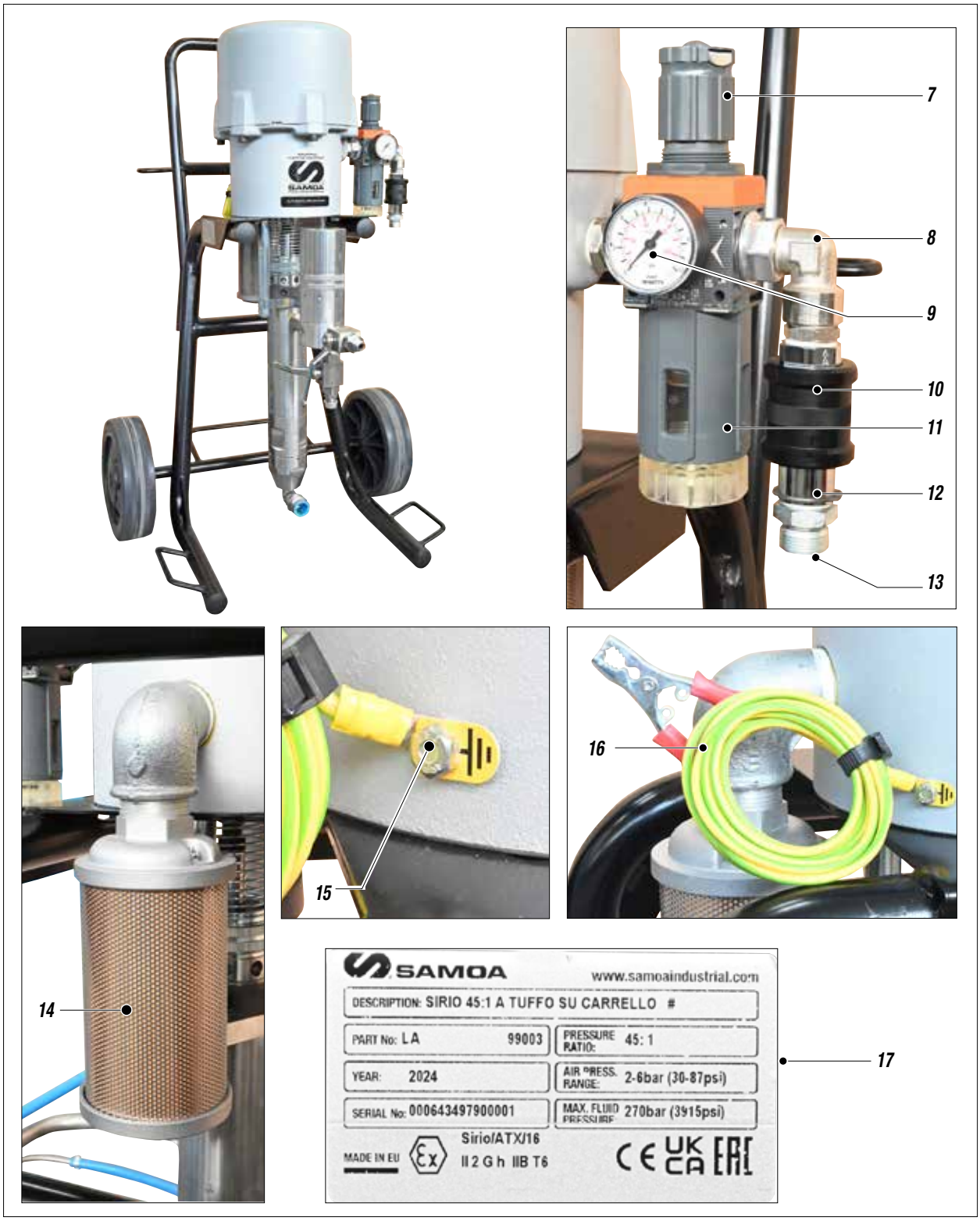


Fig. 2

Pos.	Description
7	Feed air pressure regulator pump
8	Elbow
9	Feed air pressure reading manometer
10	Slide valve
11	Air filter
12	Nipple

Pos.	Description
13	Compressed air inlet
14	Sound absorbing filter
15	Earthing cable securing point
16	Cable grounding with gripper
17	Machine identification plate

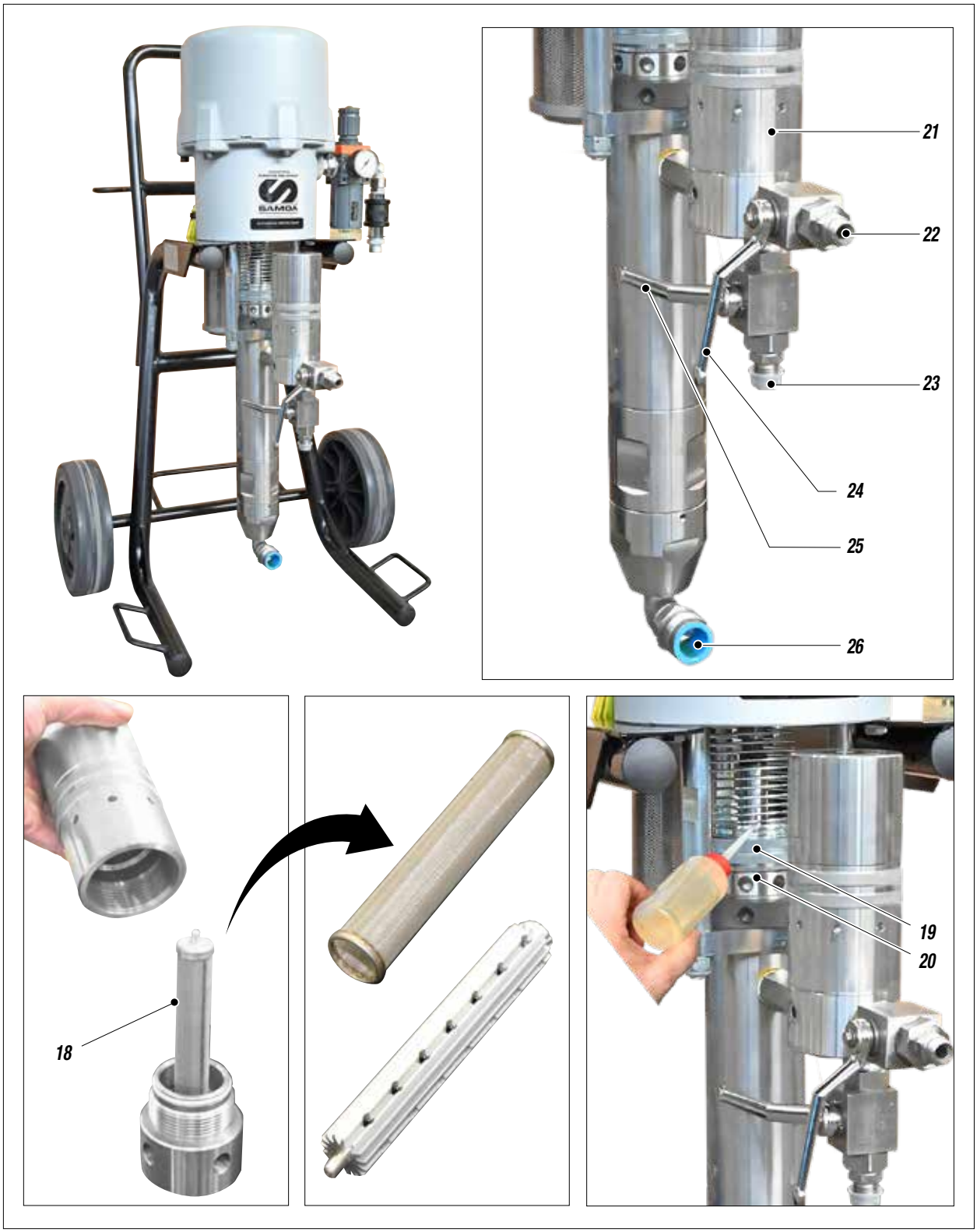


Fig. 3

Pos.	Description
18	Filter
19	Oil cup
20	Gasket holder
21	High pressure material out filter
22	Material outlet fitting

Pos.	Description
23	Recirculation pipe fitting fixing
24	Product delivery tap
25	Recirculating cock
26	Fitting pipe fitting intake

Fig. 4

Pos.	Description
27	Material flexible pipe
28	Gun AT250 - OPTIONAL
29	Gun L91 - OPTIONAL

Pos.	Description
30	Material suction filter
31	Fluid recirculation pipe
32	Material suction pipe

J SETTING-UP

CONNECTION TO THE FEED AIR

- For pump feed use a hose (**1**) with an internal diameter no lower than 10 mm and connect it to the fitting (**2**).

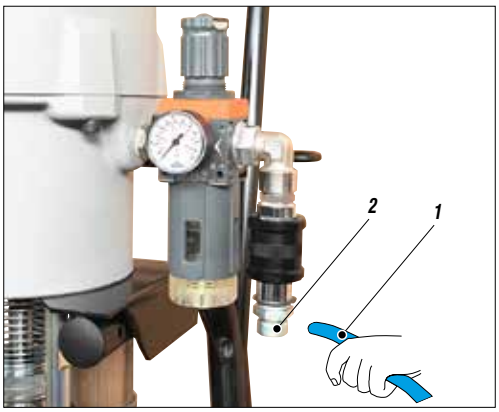


Fig. 1

CONNECTION OF SUCTION AND RECIRCULATING PIPES

- Connect the suction pipe (**3**) to the pump and connection (**4**) and the recirculation pipe (**5**) to the connection (**6**). The suction hose can be locked finger tight. Use a spanner to tighten the recirculating pipe. In both cases do not use sealant agents for fitting threads.

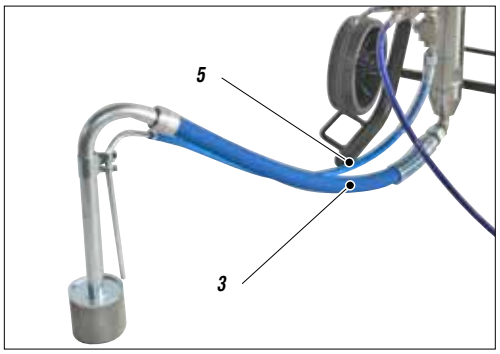


Fig. 2

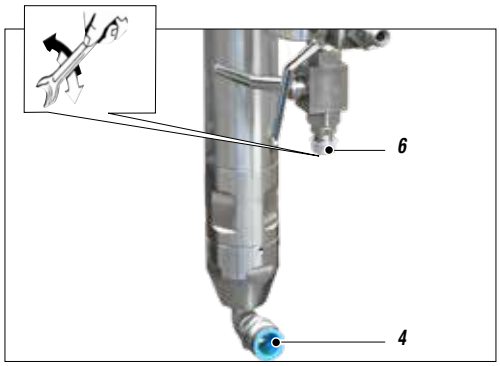


Fig. 3

CONNECTION OF SUCTION AND RECIRCULATING PIPES

- Connect the high pressure flexible hose (**7**) to the pump by means of the connection (**8**) and to the spray gun (**9**), paying attention to tighten the fittings strongly (the use of two spanners is suggested). Do not use sealant agents for fitting threads.
- Make sure the spray gun is without the atomization nozzle.

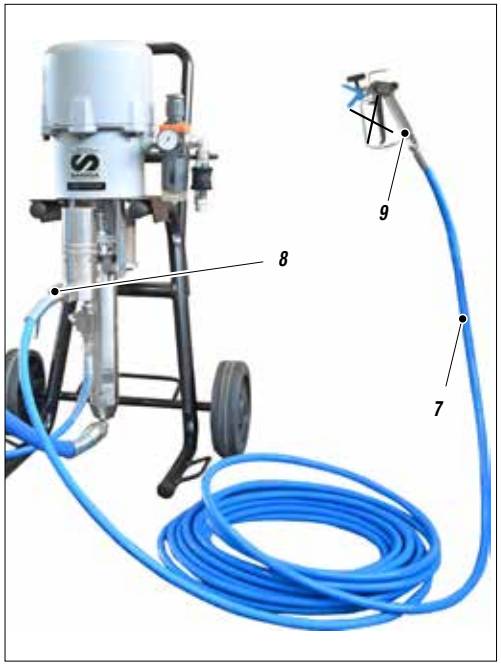


Fig. 4

PREPARATION OF THE PAINT

- Ensure the product is suitable to be used with a spray gun.
- Mix and filter the product before using it. For filtration, the use of close-mesh (Ref. 214) and large-mesh (Ref. 215) LARIUS METEX braids is suggested.

Make sure the product to be used is compatible with the materials employed for manufacturing the equipment. For this reason, please contact the supplier of the product.

WASHING OF THE BRAND-NEW EQUIPMENT

- The equipment has been tested at our plant with light mineral oil left inside of the pumping element as protection. Therefore, before sucking the product, carry out a washing using a diluent.
- Dip the suction hose (**3**) into the tank of the washing.
- Insert the recirculating pipe (**5**) into a container (a metal container is suggested).

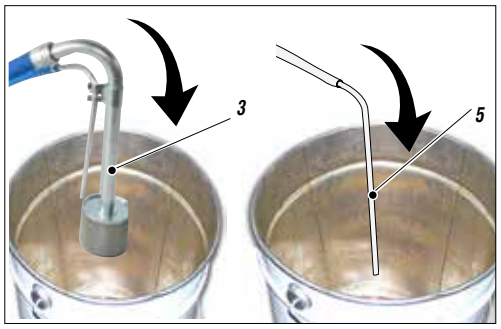


Fig. 5

- Open the recirculating cock (**10**).

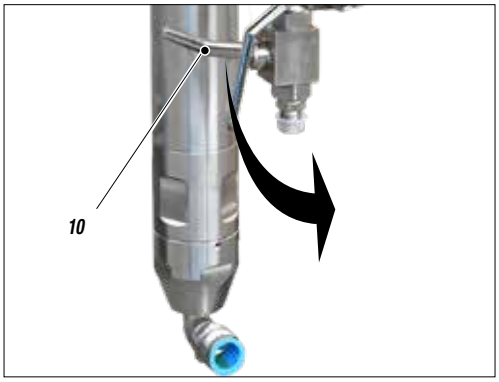


Fig. 6

- Set the pump feed pressure at about 3 bar and open the air passage valve.
- The pump will start working and will drain oil from the recirculating pipe. Close the recirculating cock (**10**) as soon as the clean solvent has come out.
- Lift the solvent tank's suction tube (**3**).
- Lean the spray gun (**9**) against the rim of the container (**11**) and drain the residual oil pressing the trigger. Release the trigger as soon as the clean solvent comes out.
- Point the spray gun at the tank of the solvent and press the trigger so as to recover the clean solvent left inside the pump.
- As an accelerated working of the pump (*the pump "idles"*) appears, close the air passage valve.

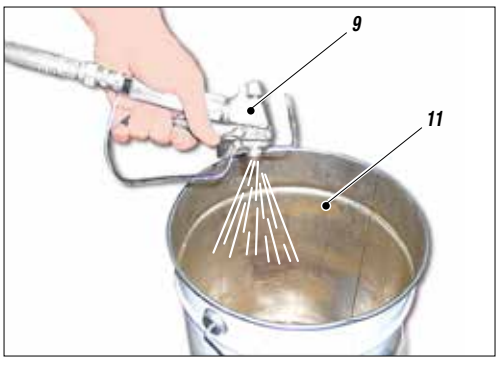


Fig. 7

K WORKING

- Use the machine after carrying out all the setting-up operations described in the previous paragraph.

Check all the fittings for connection of the different components (pump, flexible hose, spray gun, etc.) before using the equipment.

- Use the supplied lubricant (**1**)(ref. 16325) to facilitate the sliding of the piston inside the seal packing and to interpose the oil within the air. It also prevents any material which may have leaked out of the seals from drying once the equipment has been shut off.

Fig. 1

At the start of each working day, make sure that the ring nut is filled with hydraulic oil (ref. 16325); the oil facilitates the sliding of the piston and prevents any material which may have leaked out of the seals from drying once the equipment has been shut off.

- Fix the atomization nozzle (**2**) on the spray gun. Select the right nozzle according to the characteristics of the material to be used and to the type of work to be performed.

Fig. 2

- Dip the suction (**3**) and recirculating pipes (**4**) into the tank of the product.

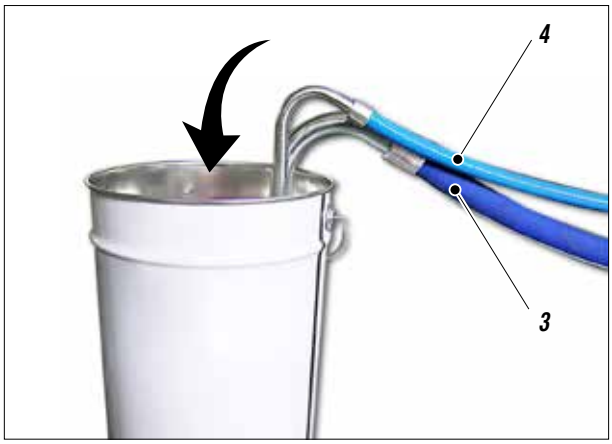


Fig. 3

- Open the recirculating cock (**5**).

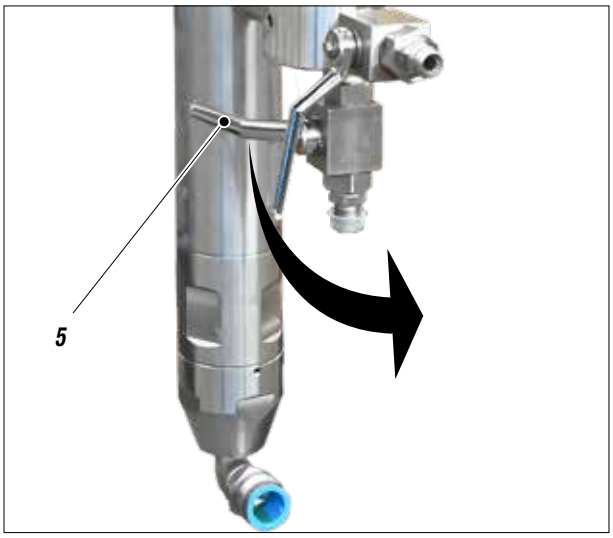


Fig. 4

- Adjust the supply pressure of the pump by acting on the knob (**6**) at approx. 3-4 bars and open the air passage valve.

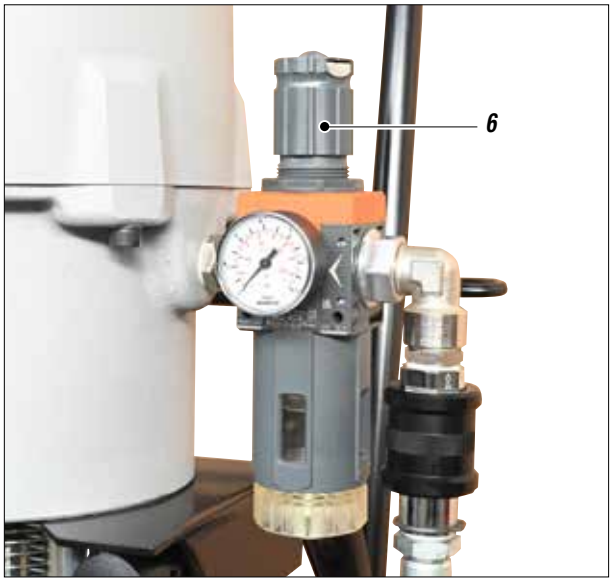


Fig. 5

- Allow the product to circulate for a few seconds. Then close the recirculating cock (**5**). The pump will keep on working until the high pressure flexible hose is full of product up to the spray gun. Then the pump will stop automatically.
- Increase pump feed pressure so as to reach a pressure value to guarantee a good atomization of the product and open the delivery valve (**7**).

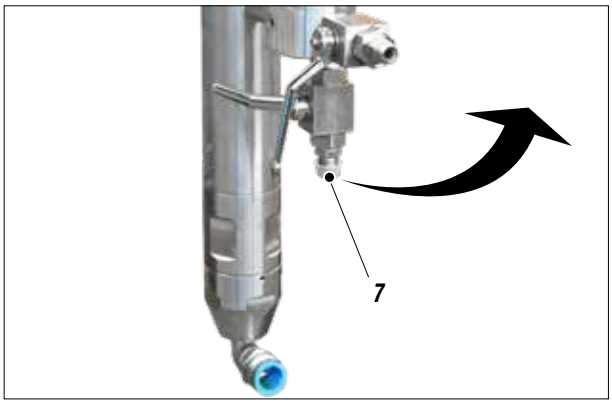


Fig. 6

NOTA

An irregular and marked spray on the sides indicates a low working pressure. On the contrary, a too high pressure causes a high fog ("overspray") and waste of product.

In order to avoid overthick ness of paint, let the gun advance sideways (right-left) when spraying.

Always paint with regular parallel bands coats.

Keep a safety and constant distance between the spray gun and the support to be painted and keep yourselves perpendicular to it.

Never point the spray gun at your selves or at other people.
The contact with the cating can cause serious injuries.

L CLEANING AT THE END OF THE WORK

- Lift the suction hose (**1**) from the tank of the product.

Fig. 1

- Reduce the pump feed pressure to about 3-4 bar acting on the knob (**2**).

Fig. 2

- Open te recirculating cock (**3**) so as to recover the product left inside the equipment.

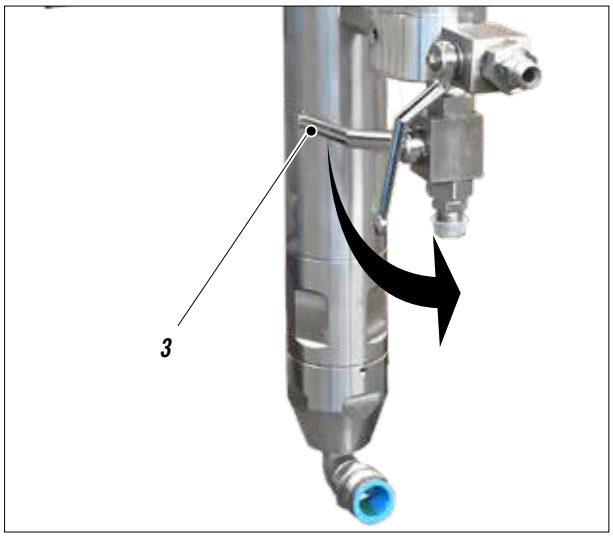


Fig. 3

- Close the air passage valve for pump feed acting on the knob (**2**).
- Point the spray gun (**4**) at the tank (**5**) of the solvent and press the trigger so as to recover the clean solvent left inside the pump.

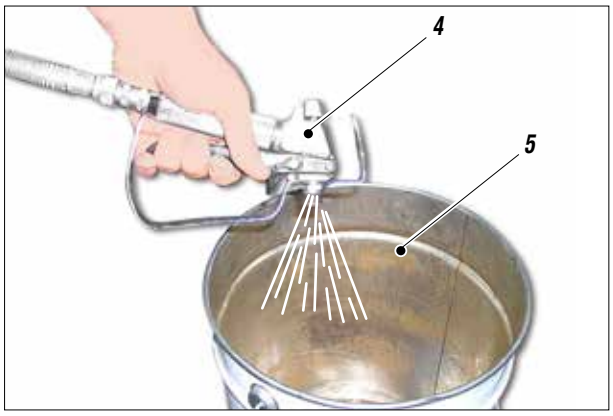


Fig. 4

- Remove the nozzle (**6**) from the spray gun (Do not forget to clean it using a solvent!).

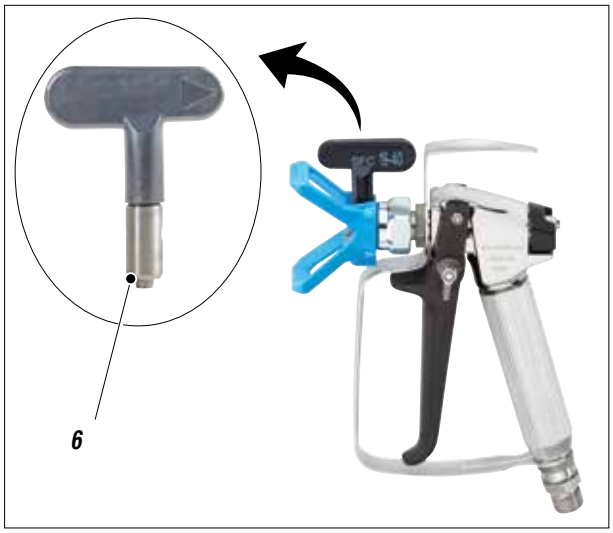


Fig. 5

- Dip the suction hose (**7**) into the tank of the washing solvent (ensure it is compatibile with the product being used).

- Insert the recirculating hose (**8**) into a container (a metal container is recommended).

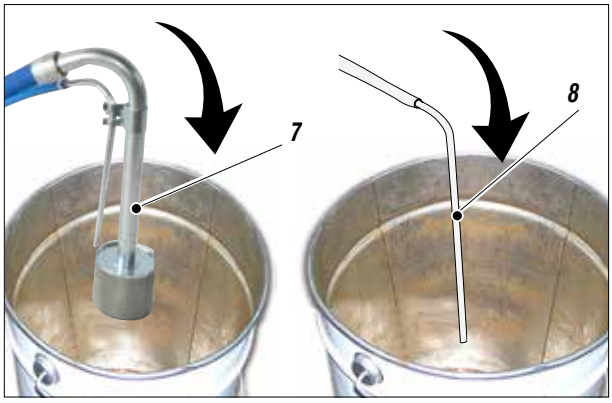


Fig. 6

- Open the recirculating cock. (**3**).
- Open the air passage valve (**2**) in order to start up the pump.
- Close the recirculating cock (**3**) as soon as a clean solvent comes out.
- Lift the solvent tank's suction tube.
- Point the spray gun (**4**) at the tank (**9**) of the solvent and press the trigger so as to recover the clean solvent left inside the pump.
- As an accelerated working of the pump (*the pump "idles"*) appears, close the air passage valve.

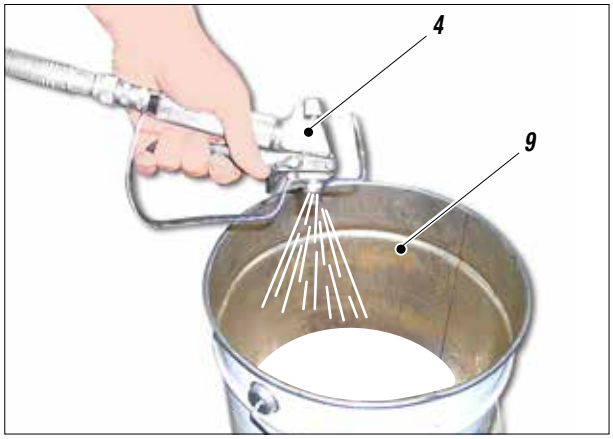


Fig. 7

- In case of long storage, we recommend you to suck and to leave light mineral oil inside the pumping group and the flexible hose.
- In this case, please follow the washing procedure described on page 8 before using the tooling.

Store possible dangerous fluids in proper containers. Their disposal must be performed in accordance with the regulations in force about the industrial waste goods.

M ROUTINE MAINTENANCE

Always close the compressed air supply and release the pressure in the plant before performing any check or maintenance of the pump.

RING NUT CHECK

- Check periodically (and every time the pump is operated after a long storage) the packing nut is not loosened, causing otherwise the coming out of the product. To tighten the packing nut (**1**) use wrench supplied (**2**).

NOTE

The packing nut (1) must be tightened so as to avoid wastes of product, but not excessively to avoid the seizure of the pumping piston and the wear of seals. In case of persistent coming out of product, replace the seals.

At the start of each working day, make sure that the ring (3) nut is filled with hydraulic oil (ref. 16340); the oil facilitates the sliding of the piston and prevents any material which may have leaked out of the seals from drying once the equipment has been shut off.

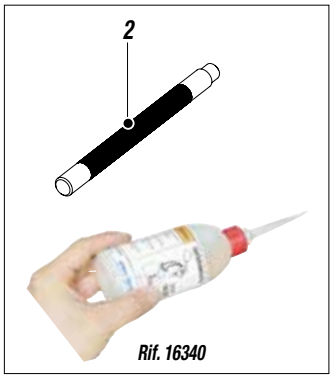


Fig. 1

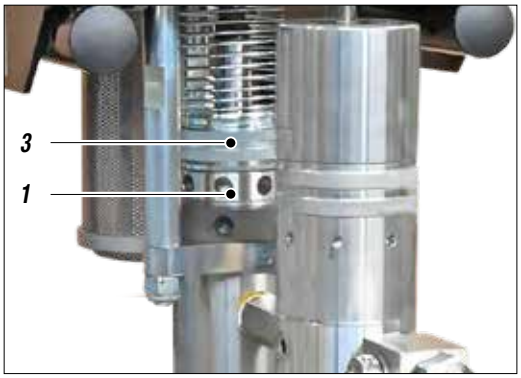


Fig. 2

Fig. 3

MATERIAL SUCTION FILTER

- Remove and clean the material suction filter (**4**).

High pressure FILTER CLEANING

- Remove and clean the high pressure filter for material outlet (**5**) using the proper wrench (**2**) supplied.
- Check periodically the air supply to the pump. Ensure the air is always clean and lubricated.

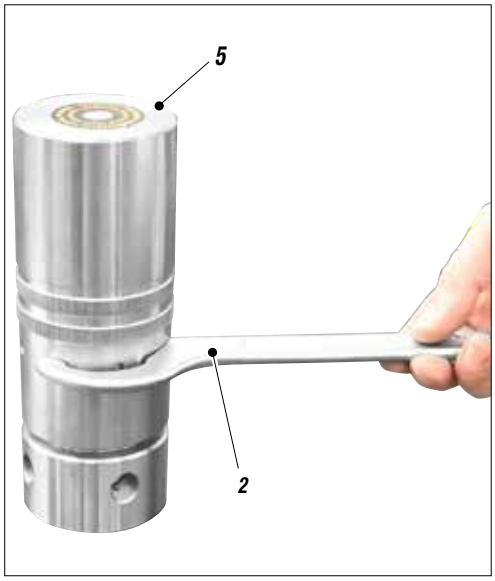


Fig. 4


Fig. 5

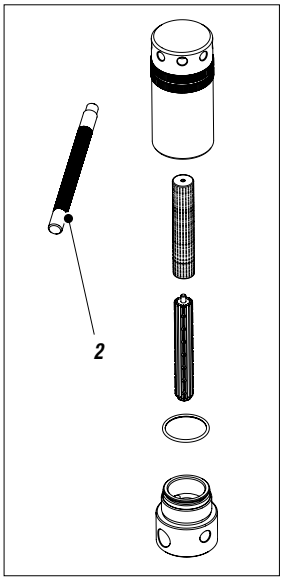
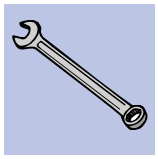


Fig. 6

N DISMANTLING AND REASSEMBLING THE PUMPING UNIT

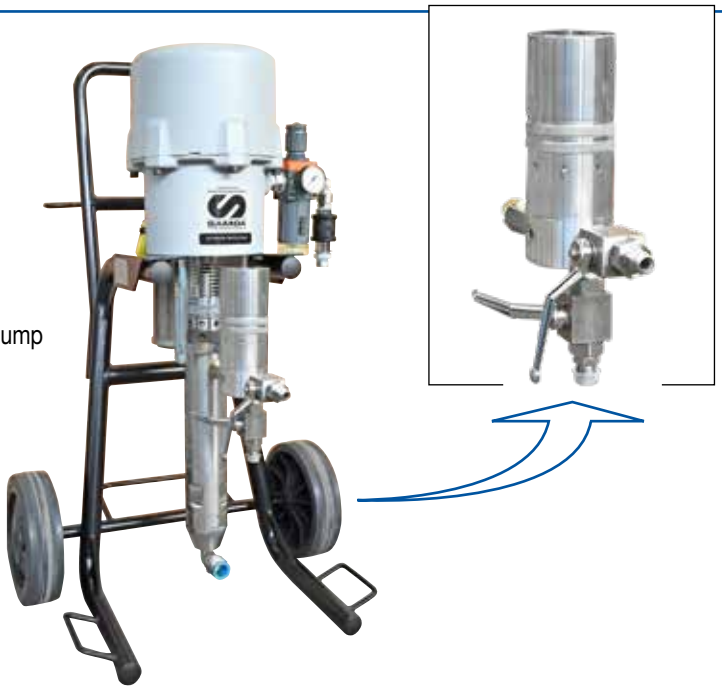
1

Necessary tools and equipment



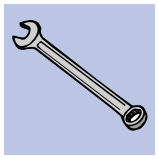
Procedure

1.1 Remove the high pressure filter unit from the pump



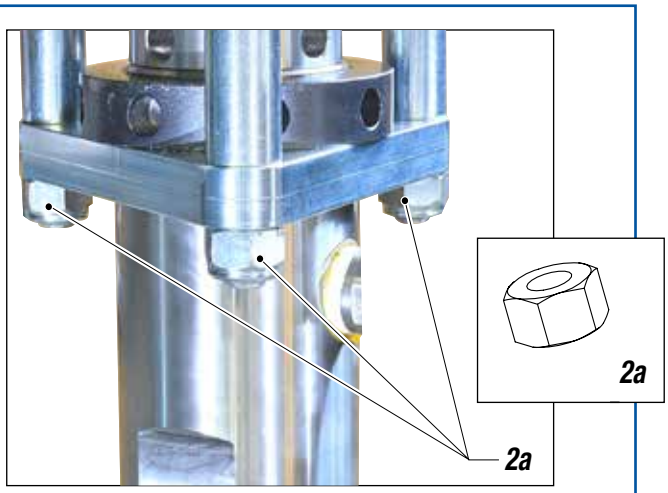
2

Necessary tools and equipment



Procedure

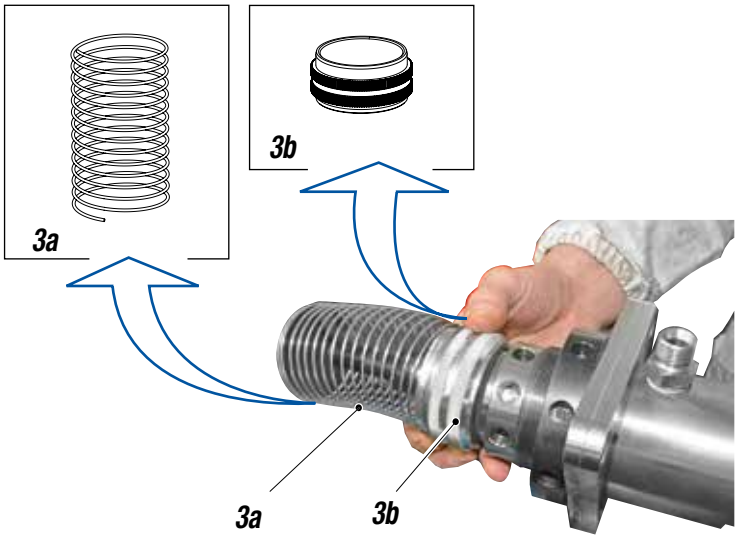
2.1 Remove nuts (**2a**)



3

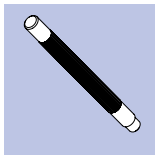
Procedure

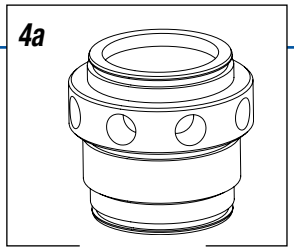
3.1 Remove the protection spring (**3a**) and the oil holder cup (**3b**)

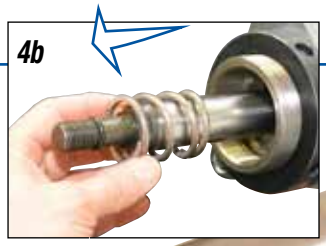


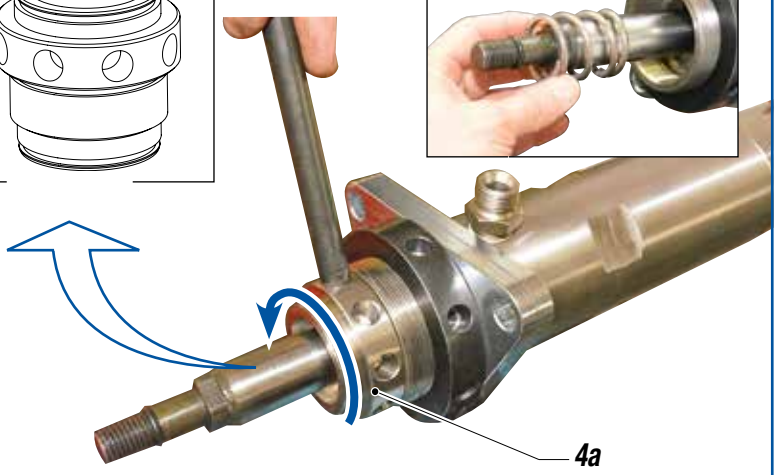
4

Necessary tools and equipment









Procedure

4.1 Unscrew the gasket bring ring (**4a**)

4.2 Pull out the spring (**4b**)

5

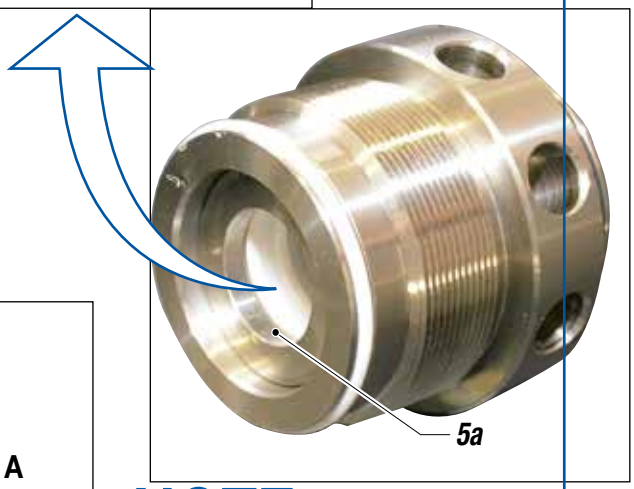
Necessary tools and equipment

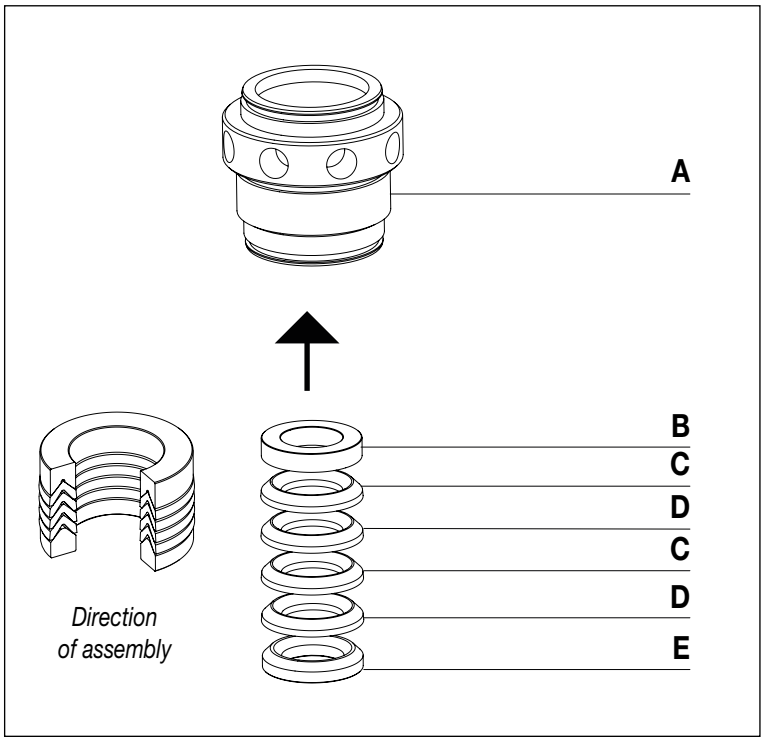
Procedure

5.1 Remove the gaskets (**5.a**) contained inside the ring nut

5.2 Clean and lubricate the gasket housing

5.3 Replace gaskets with the new complete kit (**5.b**)





NOTE

Follow the direction of rotation of gaskets

A: *Gasket holder*
B: *Female STEEL ring*
C: *PTFE seal ring*
D: *POLYPROPYLENE HD seal ring*
E: *Male STEEL ring*

6

Necessary tools and equipment

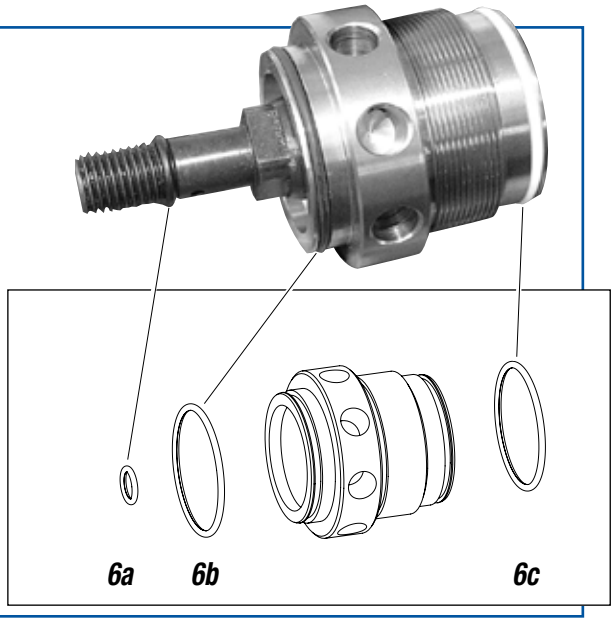
Procedure

6.1 Remove the gaskets (**6a, 6b, 6c**)
6.2 Clean and lubricate the gasket housing
6.3 Replace the gaskets with the new complete kit

6a: *OR ring in NBR*

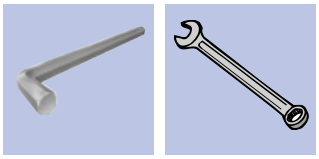
6b: *OR ring in VITON*

6c: *OR ring in PTFE*



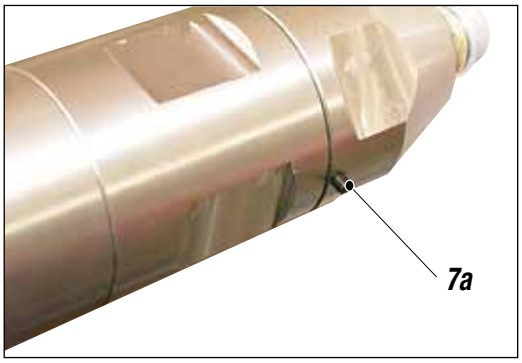
7

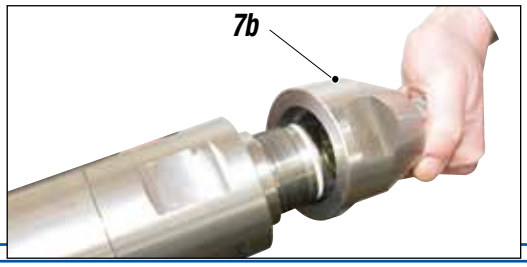
Necessary tools and equipment



Procedure

7.1 Remove the screw (**7a**) on the bottom valve body
7.2 Using a 70 mm wrench, unscrew the bottom valve body (**7b**)
7.3 Remove the bottom valve body and remove the ball (**7c**)



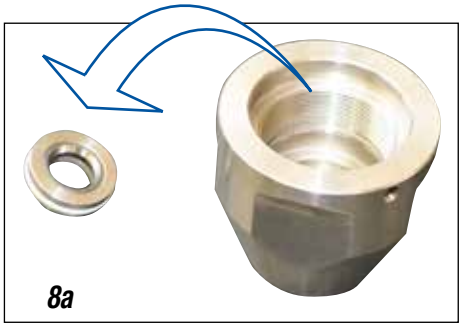


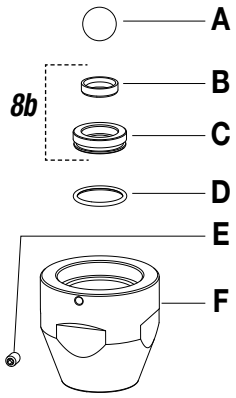
8

Necessary tools and equipment

Procedure

8.1 Remove the gaskets (**8a**) contained inside the bottom valve
8.2 Clean and lubricate the gasket housing
8.3 Replace the gaskets with the new complete kit (**8b**)





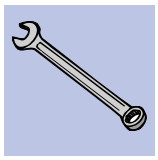
A: *Ball*
B: *Ball housing*
C: *Ball housing holder*
D: *OR ring in PTFE*
E: *Hex socket set screw*
F: *Bottom valve body*

NOTE

Follow the direction of rotation of gaskets

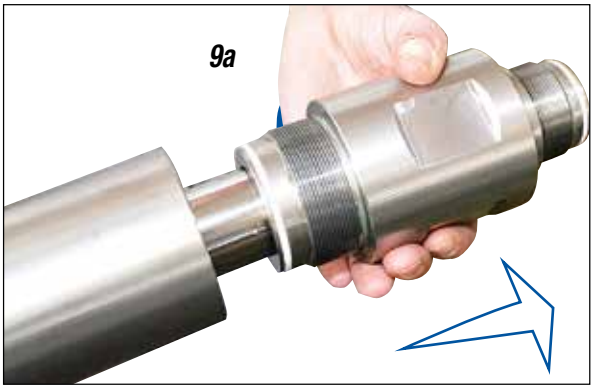
9

Necessary tools and equipment



Procedure

9.1 Unscrew and remove the lower cylinder (**9a**)

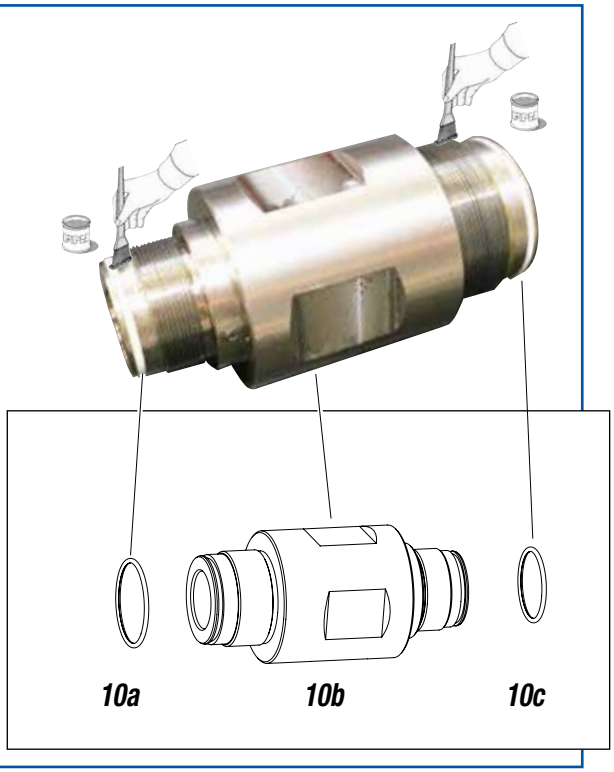


10

Necessary tools and equipment

Procedure

10.1 Remove the gaskets (**10a, 10b, 10c**)
10.2 Clean and lubricate the gasket housing
10.3 Replace the gaskets with the new complete kit



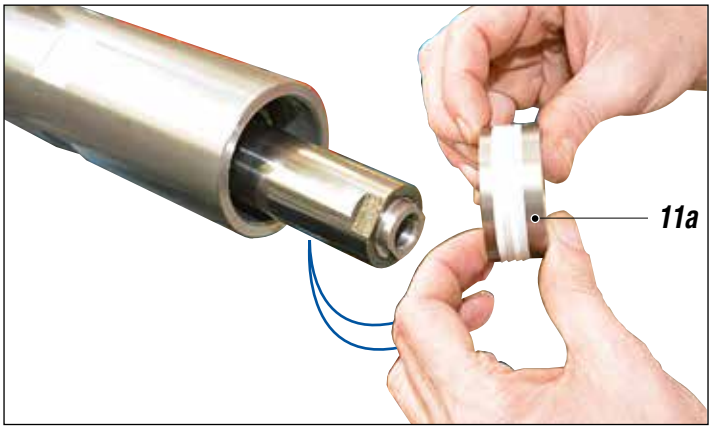
10a: OR ring in PTFE
10b: Lower cylinder
10c: OR ring in PTFE

11

Necessary tools and equipment

Procedure

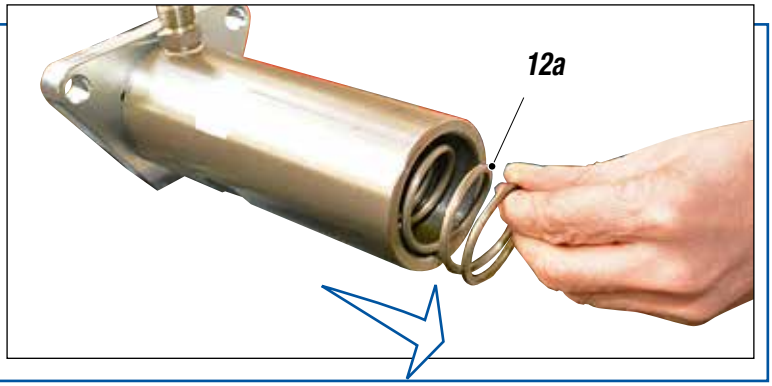
11.1 Remove the gaskets (**11.a**) contained inside the upper cylinder
11.2 Clean and lubricate the gasket housing



12

Procedure

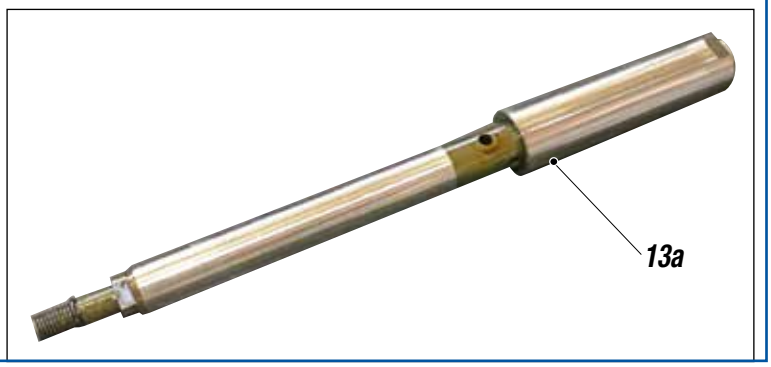
12.1 Remove the spring (**12a**) from the upper cylinder



13

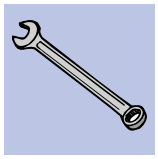
Procedure

13.1 Remove the piston shaft (**13a**) from the upper cylinder



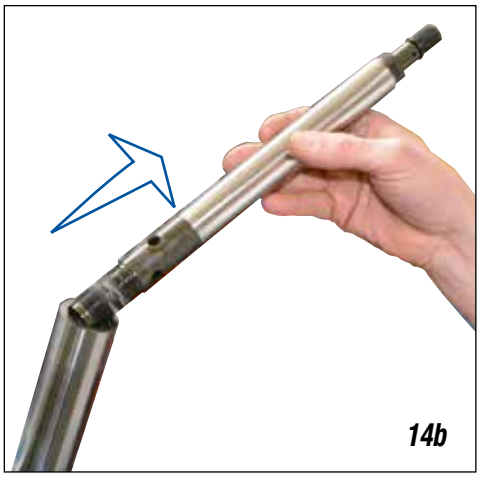
14

Necessary tools and equipment



Procedure

14.1 Using a wrench, unscrew the piston shaft (**14a**) and separate it (**14b**)

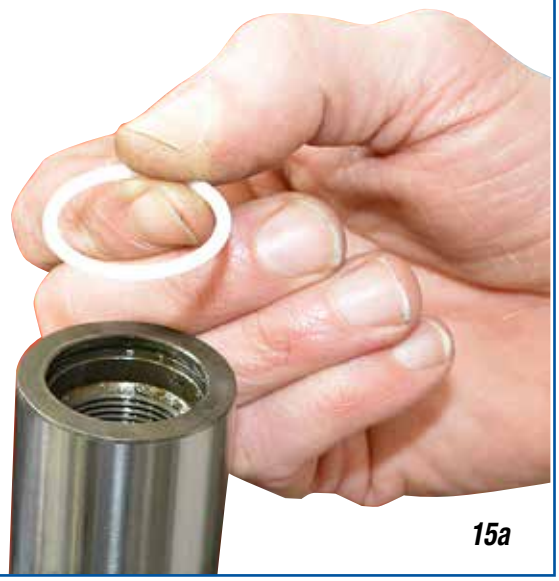


15

Necessary tools and equipment

Procedure

15.1 Using a screwdriver, remove the gasket contained inside the lower piston shaft (**15a**)
15.2 Clean and lubricate the gasket housing
15.3 Replace the gasket with a new one



REV. 11 - 02/2024 - Cod. 150108

16

Necessary tools and equipment

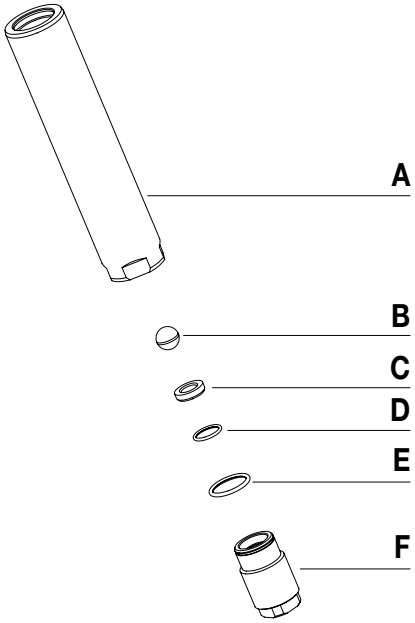
Procedure

16.1 Using a wrench, unscrew the lower piston shaft (**16a**)

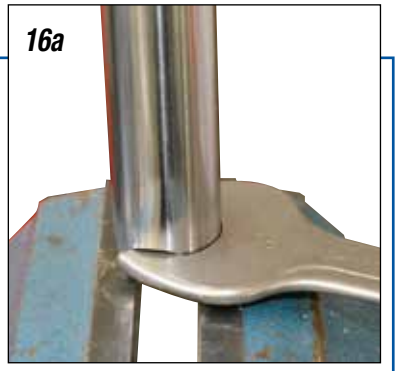
16.2 Replace the components (**B, C, D, E**)

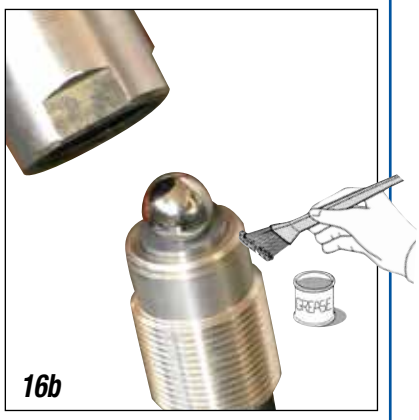
16.3 Clean and lubricate the gasket housing on the stem valve body (**16b**)

16.4 Reassemble the stem valve body (**16c**)



A: *Lower piston shaft*
B: *Ball*
C: *Ball housing*
D: *PTFE ring*
E: *PTFE ring*
F: *Stem valve body*


16a


16b


16c

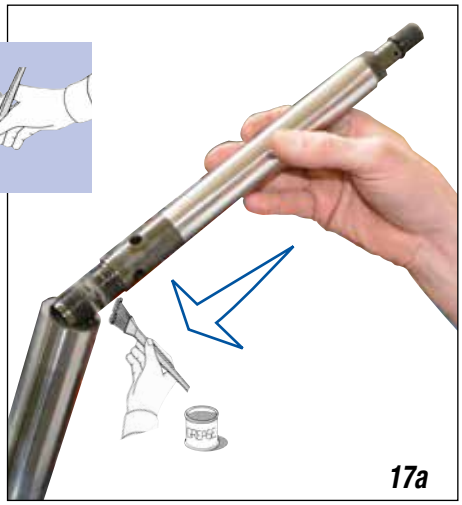
17

Necessary tools and equipment

Procedure

17.1 Clean and lubricate the lower and upper shaft (**17a**)

17.2 Reassemble the piston shaft (**17b**) (**17c**)


17a


17b


17c

18

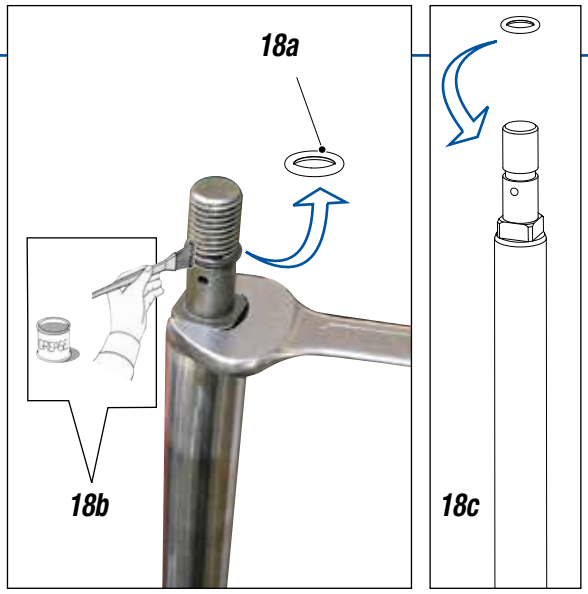
Necessary tools and equipment

Procedure

18.1 With a screwdriver, remove the gasket (**18a**)

18.2 Clean and lubricate the gasket housing (**18b**)

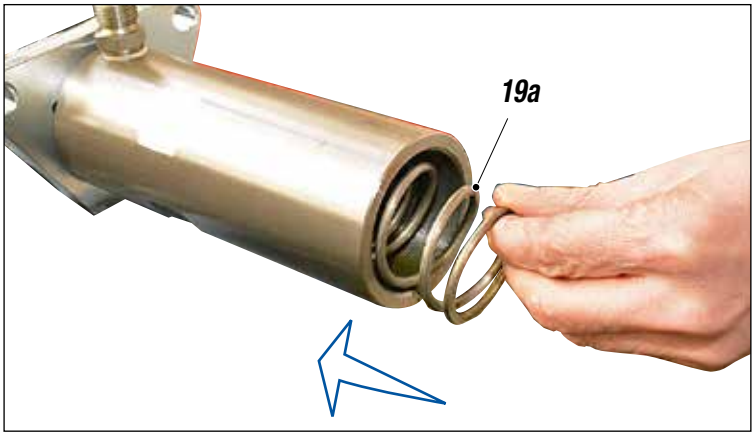
18.3 Replace the gasket with a new one (**18c**)



19

Procedure

19.1 Reassemble the spring (**19a**) inside the upper cylinder



20

Necessary tools and equipment

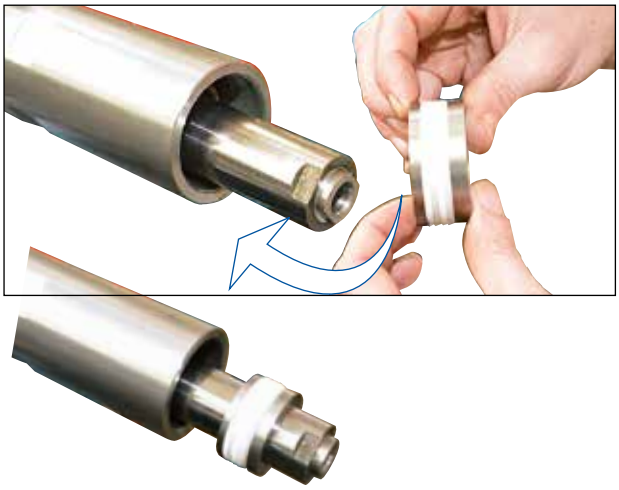
Procedure

20.1 Clean and lubricate the gasket housing (**20a**)

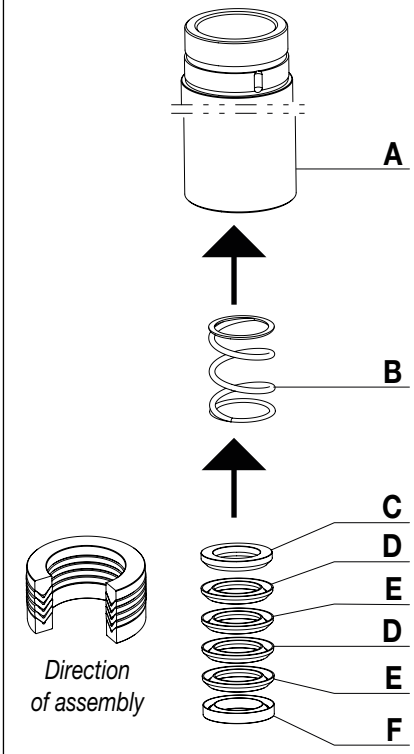
REV. 11 - 02/2024 - Cod. 150108

Procedure

20.2 Reassemble the lower gaskets (**20b**)



20b



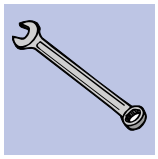
NOTE

Follow the direction of rotation of gaskets

A: *Upper Cylinder*
B: *Spring*
C: *Male STEEL ring*
D: *PTFE seal ring*
E: *PROPYLENE seal ring*
F: *Female STEEL ring*

21

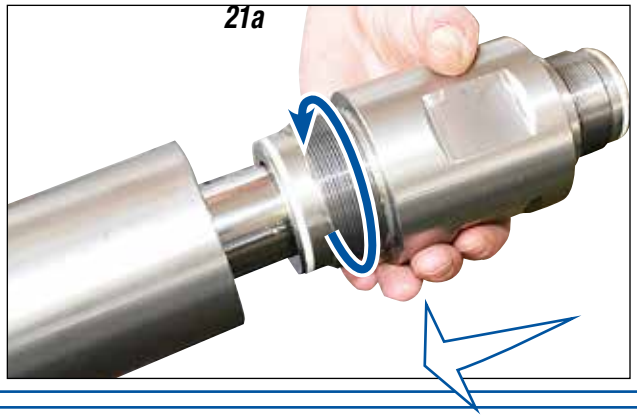
Necessary tools and equipment



Procedure

21.1 Screw in and reassemble the lower cylinder (**21a**)

21a



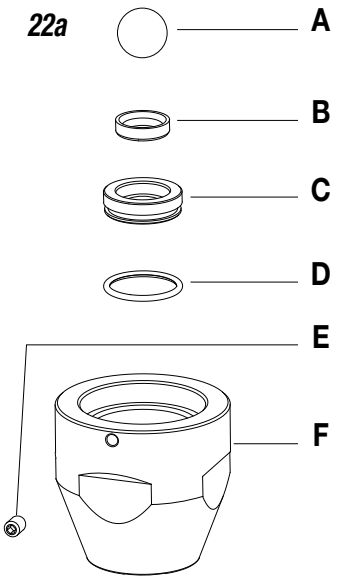
22

Necessary tools and equipment

Procedure

22.1 Clean and lubricate the gasket housing
22.2 Reassemble the bottom valve body as shown in the figure (**22a**)
22.3 Insert the ball inside the housing

22a



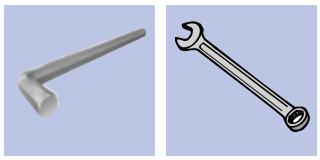
NOTE

Follow the direction of rotation of gaskets

A: *Ball*
B: *Ball housing*
C: *Ball housing holder*
D: *OR ring in PTFE*
E: *Hex socket set screw*
F: *Bottom valve body*

23

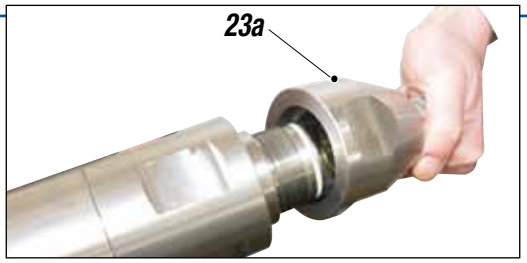
Necessary tools and equipment



Procedure

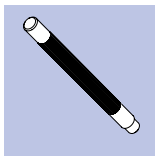
23.1 Using a 70 mm wrench, re-screw in the bottom valve body (**23a**)

23.2 Re-screw in the screw (**23b**) on the bottom valve body



24

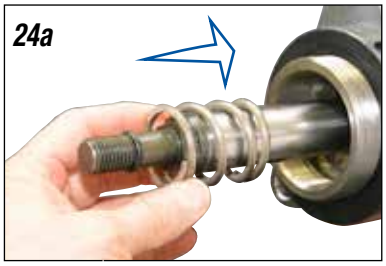
Necessary tools and equipment

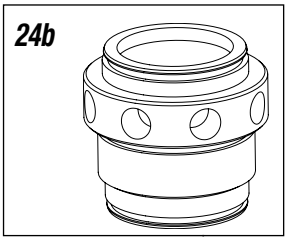


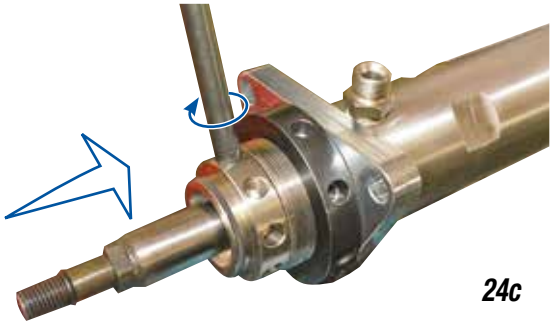
Procedure

24.1 Insert the spring (**24a**)

24.1 Re-screw in the gasket holder ring nut (**24b**) as shown in the figure (**24c**)



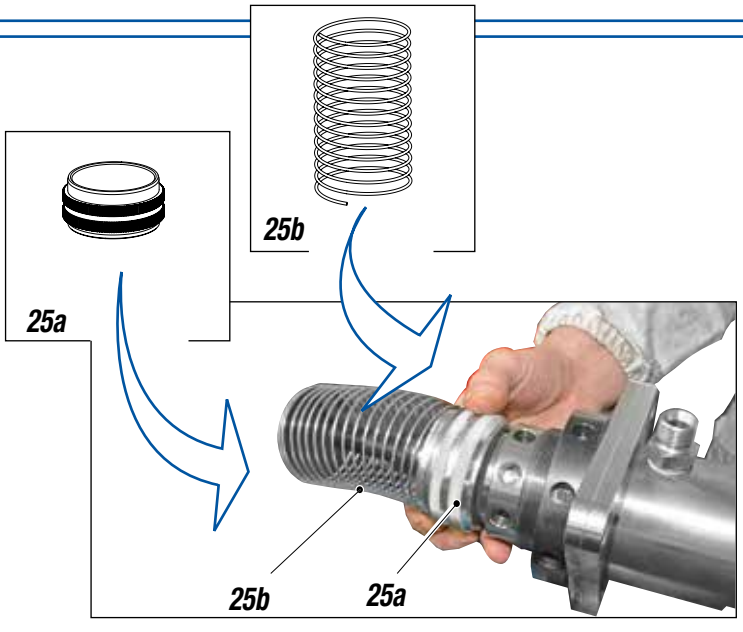




25

Procedure

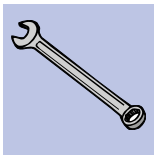
25.1 Insert the oil holder cup (**25a**) and the protection spring (**25b**)



REV. 11 - 02/2024 - Cod. 150108

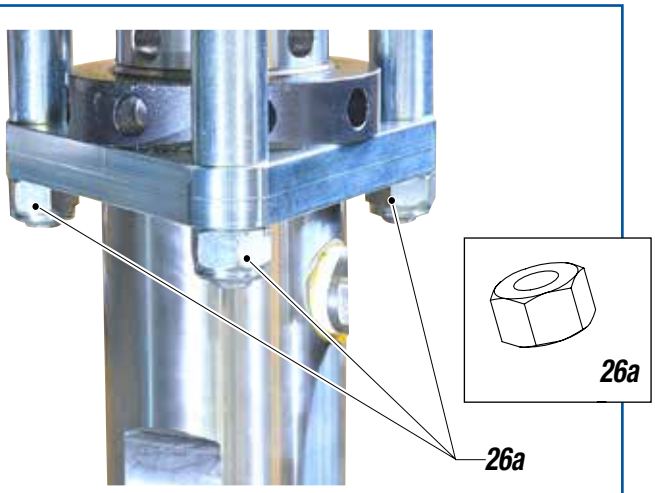
26

Necessary tools and equipment



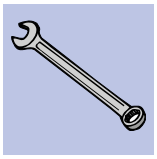
Procedure

26.1 Re-screw in nuts (**26a**)



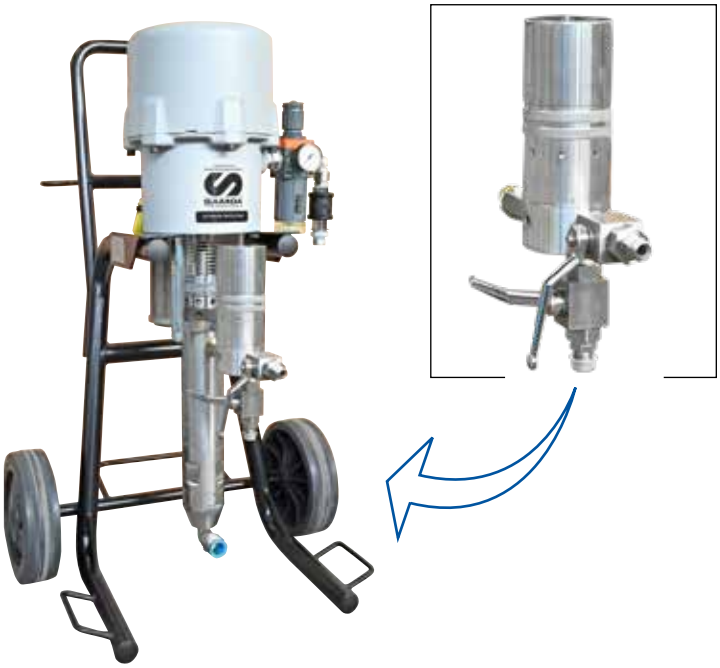
27

Necessary tools and equipment



Procedure

27.1 Reassemble the high pressure filter unit on the pump



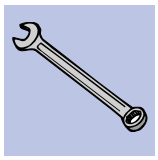
0 MANUAL RESET OF THE PNEUMATIC MOTOR

- The feed air pressure of the pump must never be higher than the maximum value indicated in the technical data. Exceed this value can block the valves of the pneumatic motor in the intermediate position of the cycle reversal.
- To start again a blocked motor, close the air supply and release pressure in the plant. This operation should allow the recovery of the valves.
- In case the motor is blocked, proceed as follows:
  - Close the air supply to the pump and release the residual pressure in the plant;
  - unscrew the motor cap (**1**) and pull it upward along with the guide rod (**2**) so as to manually trigger the stroke inversion unit;
  - screw again the plug.

P DISMANTLING AND REASSEMBLING THE PNEUMATIC MOTOR

1

Necessary tools and equipment



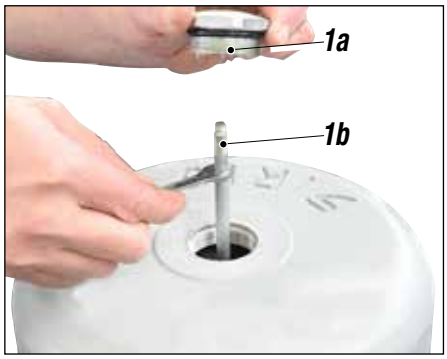
Procedure

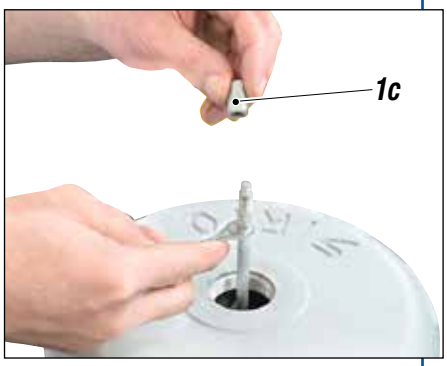
1.1 Close the compressed air supply to the pump and release the residual pressure in the plant.

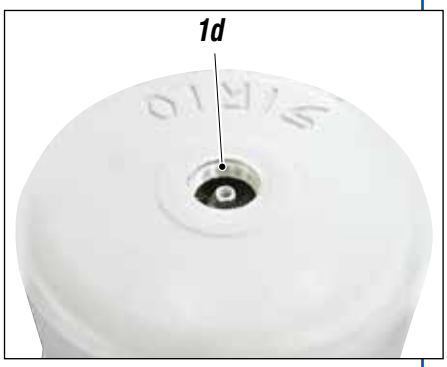
1.2 Unscrew the motor cap (**1a**) and pull it upwards together with the guide rod (**1b**) (**1e**)

1.3 Hold the guide rod (**1b**) and remove the plug (**1a**) (using two wrenches).

Replace immediately the plug with a usual M8 (1c) nut before the guide rod (1b) slides into the cylinder (1d).

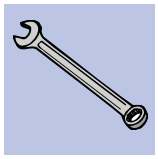






2

Necessary tools and equipment



Procedure

2.1 Remove the screws and the washers. (**2a**)(**2c**)

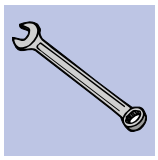
3

Procedure

3.1 Carefully extract the motor cylinder (**3a**) fom the pump.

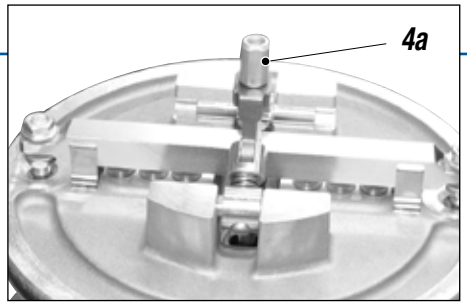
4

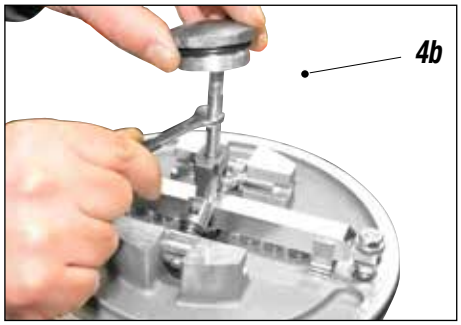
Necessary tools and equipment



Procedure

4.1 Unscrew the nut (**4a**), holding the guide rod with a 7mm wrench. Then reassemble the cap (**4b**).

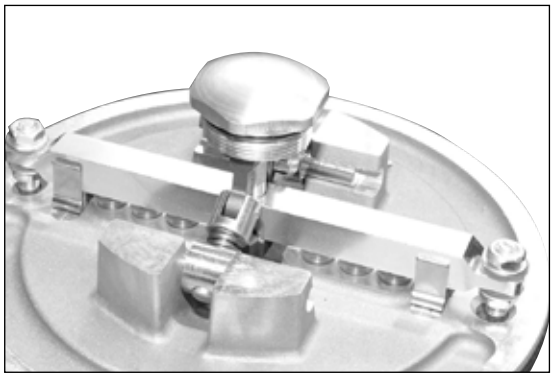


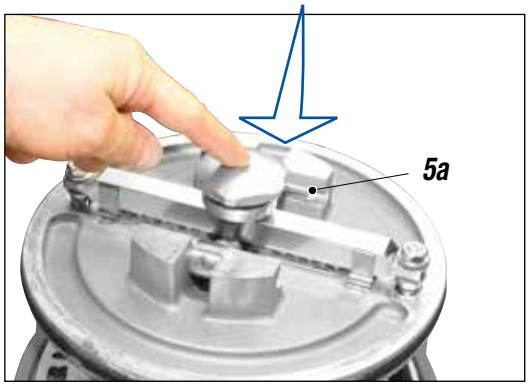


5

Procedure

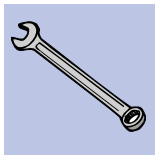
5.1 Press at the point (**5a**) to snap inside the rocker arm stud screw





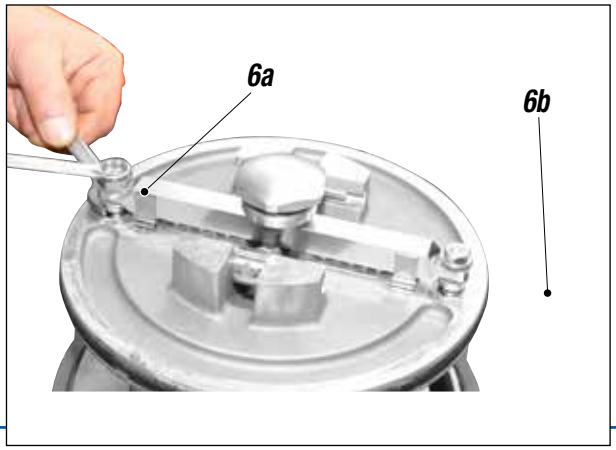
6

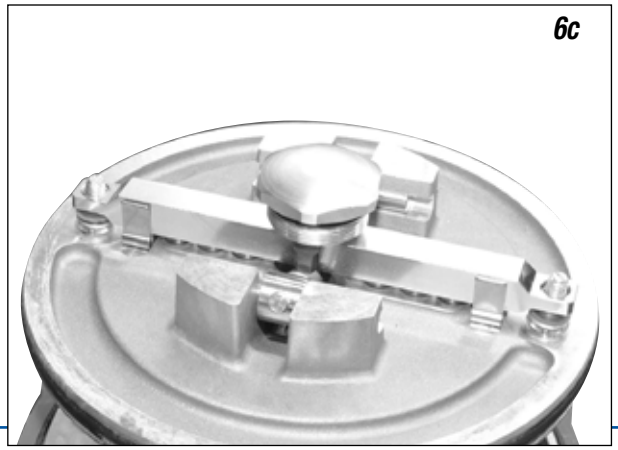
Necessary tools and equipment



Procedure

6.1 Unscrew and remove the two screws (**6a**, **6b**) with 2 13mm wrenches as shown in figure (**6c**)

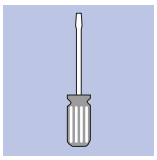


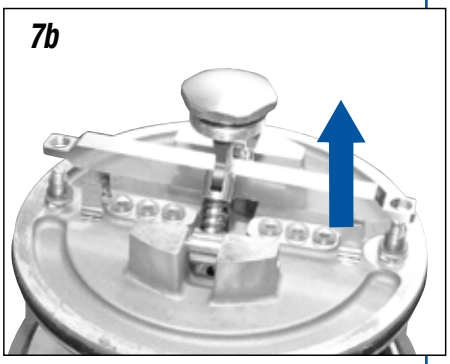


REV. 11 - 02/2024 - Cod. 150108

7

Necessary tools and equipment



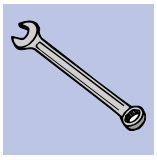


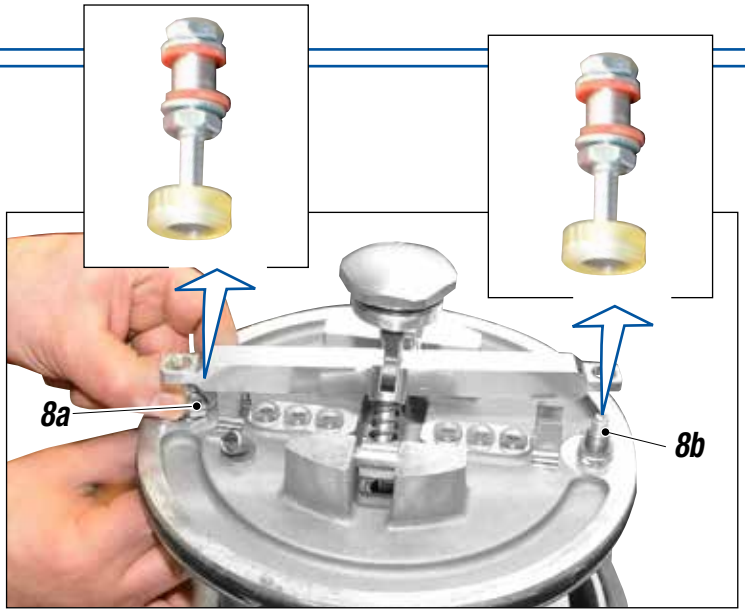
Procedure

7.1 Use a screwdriver to lever the lower part of the stud screw (**7a**), keeping a hand over the cap to accompany it. (**7b**)

8

Necessary tools and equipment





Procedure

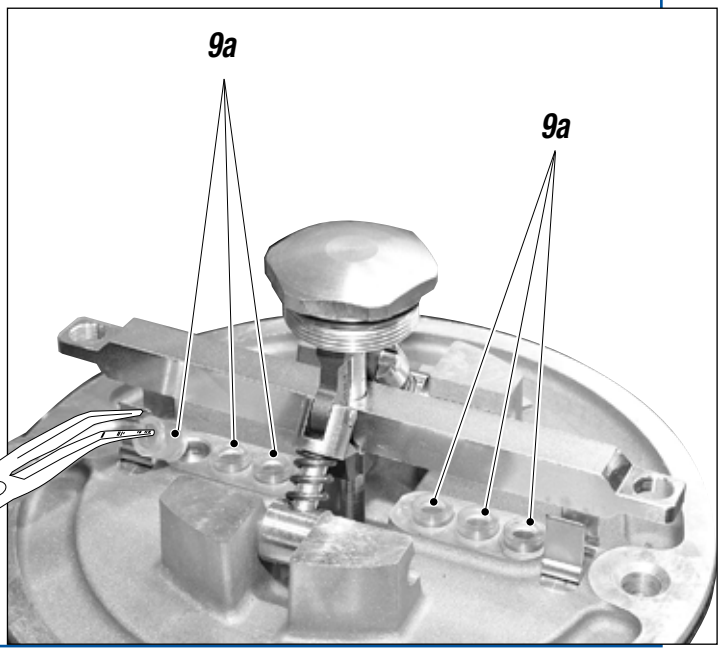
8.1 Remove the two valve screws (**8a**, **8b**)

9

Necessary tools and equipment

Procedure

9.1 Proceed with disassembly and replace the 6 seal sleeves (**9a**) with pliers

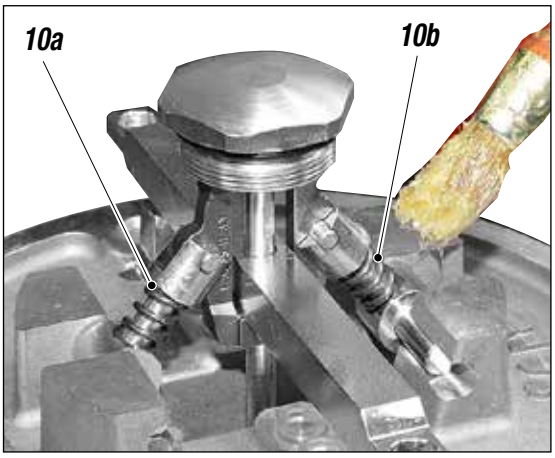


10

Necessary tools and equipment

Procedure

10.1 Lubricate the springs (**10a, 10b**).



11

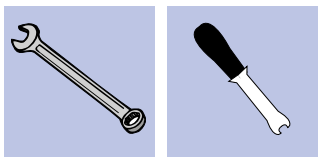
Necessary tools and equipment

Procedure

11.1 Remove the OR gasket (**11a**) and replace it if necessary with a spare part

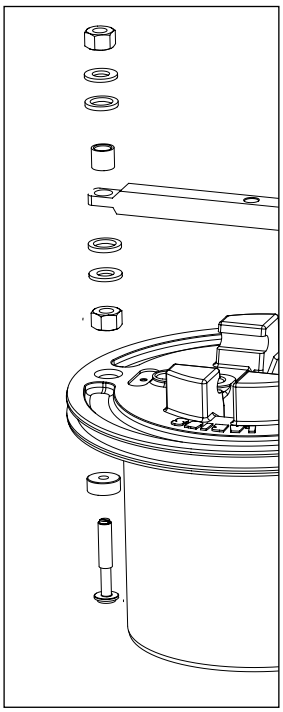
12

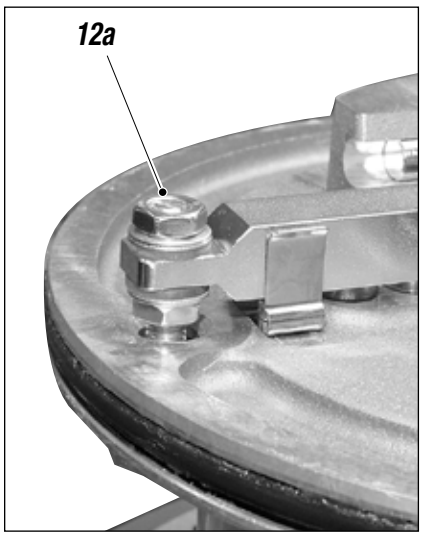
Necessary tools and equipment



Procedure

12.1 Reassemble the two valve screws (**12a**) as shown in the drawing



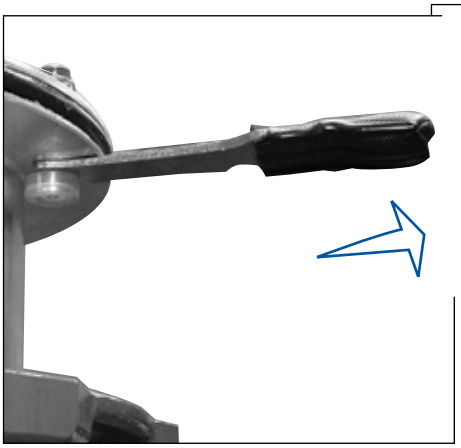


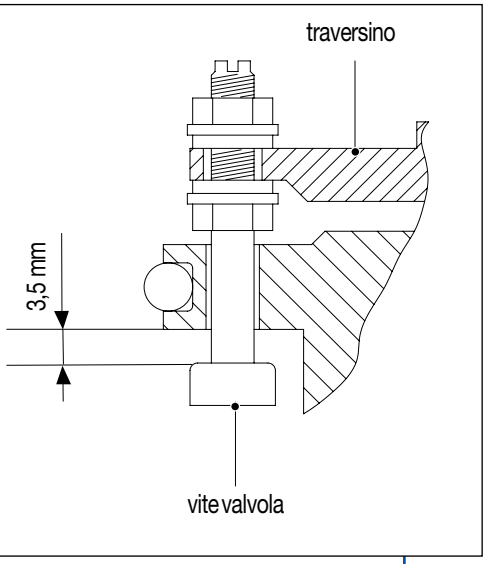
NOTE

Follow the direction of rotation of gaskets

Procedure

12.2 Reassemble the two valve screws, inserting a 3.5 mm thickness gauge as shown in the drawing and adjusting the exact position of the stud screw as shown in the drawing, keeping a tolerance distance of 3.5 mm



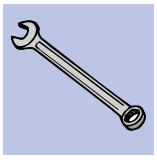


NOTE

Make adjustments in the same way on both valve screws

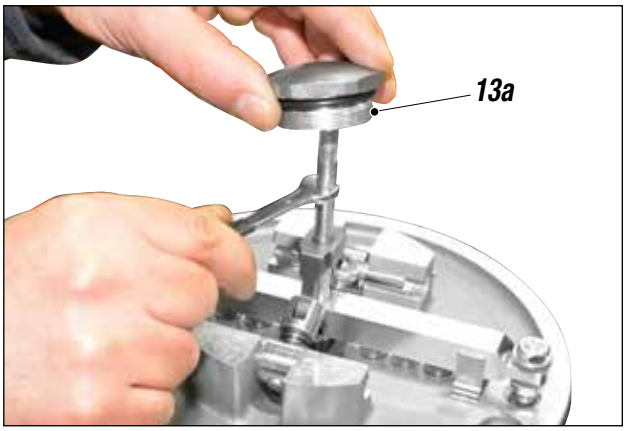
13

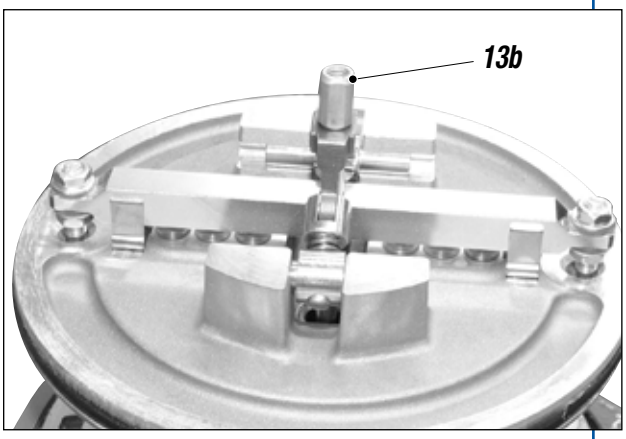
Necessary tools and equipment



Procedure

13.1 Unscrew the cap (**13a**), holding the guide rod with a 7mm wrench. Then reassemble the nut (**13b**).





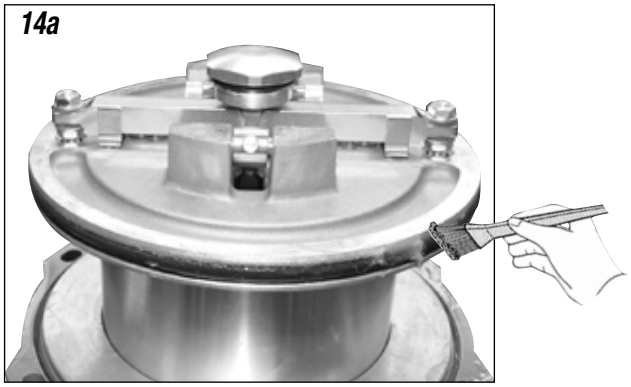
14 Necessary tools and equipment

Procedure

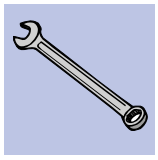
14.1 Lubricate the gasket (**14a**)

14.2 Carefully reassemble the motor cylinder (**14b**) on the pump.

14a



15 Necessary tools and equipment

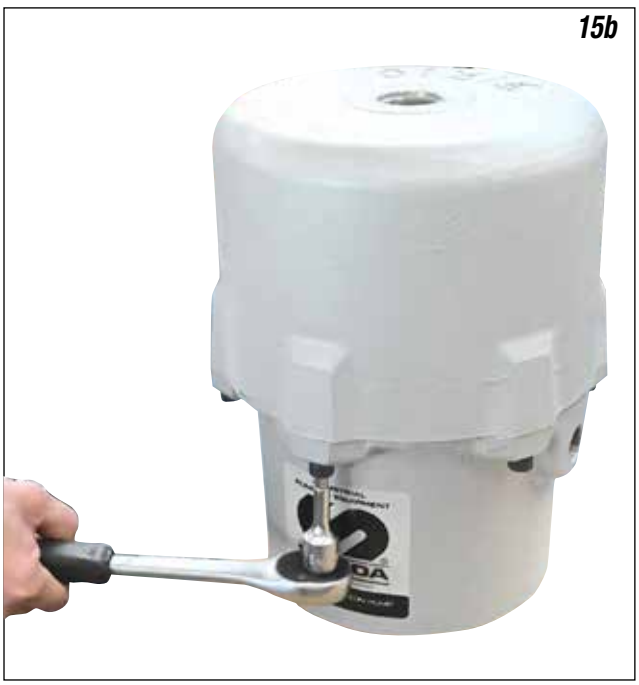


Procedure

15.1 Re-screw in the 6 screws and the washers. (**15a**)(**15b**)

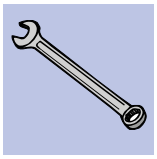
15a

15b



16

Necessary tools and equipment

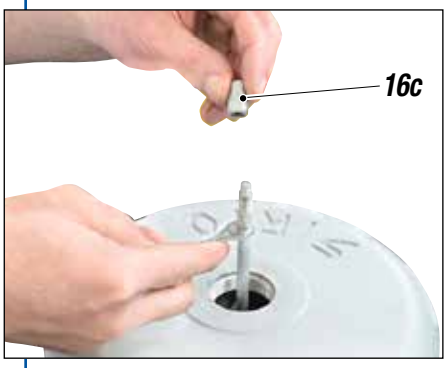


Procedure

16.1 Raise the central guide rod (**16b**) from inside the cylinder (**16d**)

16.2 Remove the nut (**16c**)

16.3 Re-screw the cap (**16a**) onto the rod using 2 wrenches and re-screw in the cap on the cover (**16e**)



Q PROBLEMS AND SOLUTION

Problem	Cause	Solution
The pump does not start	Feed air not sufficient;	Check on the air supply line. Increase the diameter of the feed hose;
	Outlet product line clogged;	Open the recirculation tap to check whether the pump starts up. Unscrew the high pressure filter and clean/ replace the filter sieve. Clean/replace the spray gun's filter;
	Clogged product intake line;	Clean the suction filter;
	Pneumatic motor blocked in the cycle reversal position;	Reduce feed air pressure;
	Parts failure of the pneumatic motor;	Disassemble the motor and verify;
Accelerate working and no pressure of the pump	There is no product;	Add the product;
	The pump sucks air;	Check the flexible suction tube;
	Gaskets of the pumping rod worn;	Replace the lower gaskets;
	Suction valve worn or partially clogged;	Disassemble the suction valve. Clean and/or replace, if possible, the parts worn;
	Suction filter clogged;	Clean/replace the suction filter's two disks;
	Suction filter too fine;	Remove the fine disk, leaving only the larger one inside;
The pump functions, but doesn't stop when the chamber is full (the pump continues slowly, increasing and/or decreasing)	Gaskets of the pumping rod worn;	Replace the lower seals
	Suction valve worn or partially clogged;	Disassemble the suction valve. Clean and/or replace, if possible, the parts worn;
	Delivery valve worn or partially obstructed;	Remove the delivery valve and clean/ replace any worn parts;
	Upper gaskets worn.	Tighten the packing nut.
The pressure of the material is significantly reduced when the trigger is pressed	The spray gun's nozzle is too large or worn	Replace it with a smaller one
	The spray gun's filter and the material output filter's sieve are too fine	Replace them with filters of a larger mesh size

Always close the compressed air supply and release the pressure in the plant before performing any check or replacement of parts of the pump.

R SPARE PARTS

R1 COMPLETE PNEUMATIC MOTOR Ref. 99100

WARNING: always indicate code and quantity for each part required.

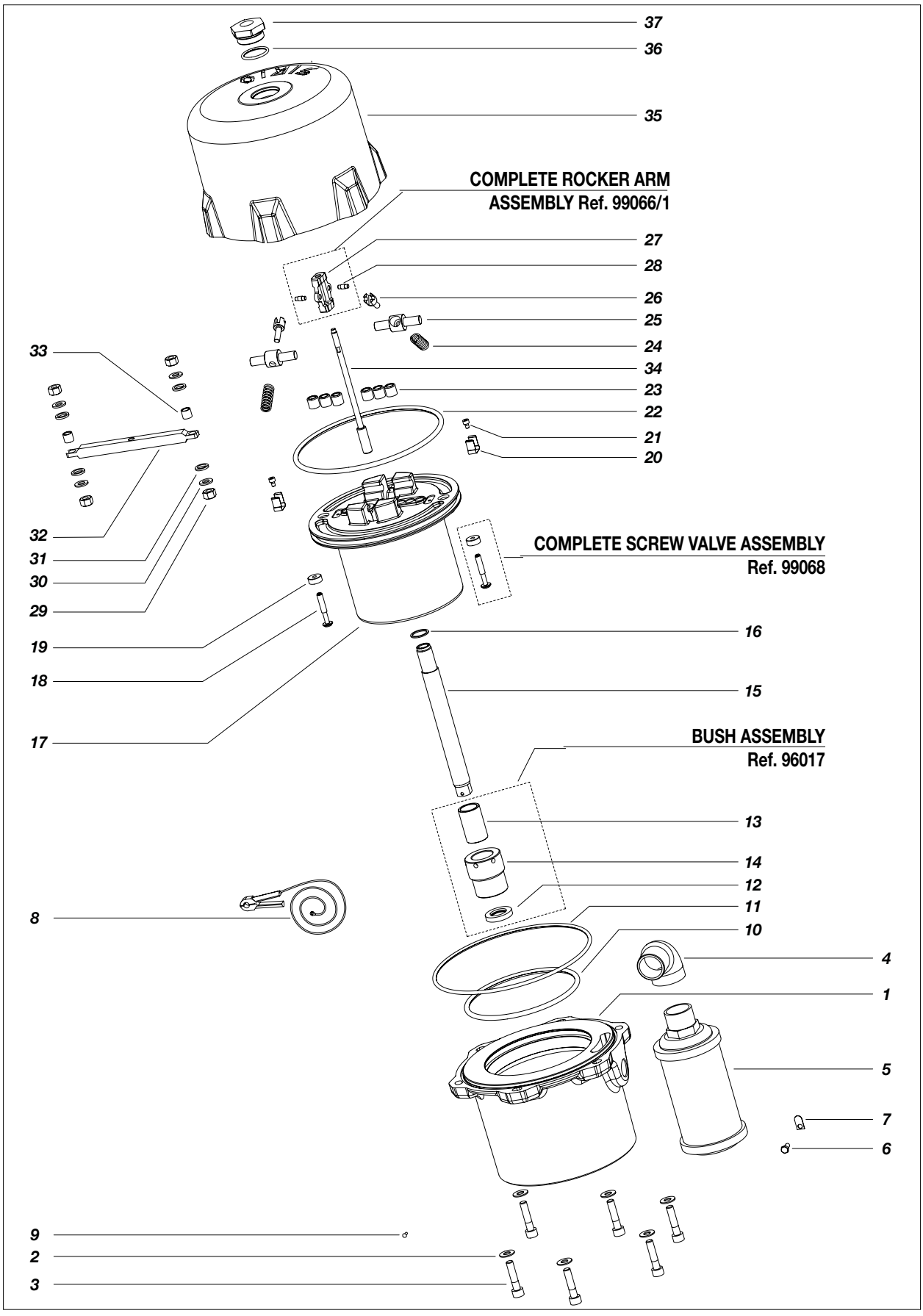


Fig. 1

Pos.	Code	Description		Q.ty
	99100	**Complete motor**		-
1	99050	Motor base		1
2	33005	Washer Ø 10		6
3	16111	Screw		6
4	20172	Elbow Fitting		1
5	99054	Sound Absorbing Filter		1
6	96211	Screw Te		1
7	96210	Grounding Plate		1
8	5010	Grounding Cable		1
9	34021	Rivet Ø2.5x5		12
10	99056	O-ring 226		1
11	99055	O-ring 3925		1
12	Assembled 96017	96019	Seal Ring	1
13		96017/1	Brass Bearing	1
14		96017/2	Guide Bushing	1
15	96016	Piston rod		1
16	33031	Washer		1
17	99051	Piston		1
18	Assembled 99068	99057	Valve Screw	2
19		99058	Valve Gasket	2

Pos.	Code	Description		Q.ty
20	96011	Guide Spring		2
21	96025	Screw Tce		2
22	99059	O-ring 8850		1
23	96009	Seal Bushing		6
24	99061	Exchange Spring		2
25	99060	Roller		2
26	96007	Fork		2
27	Assembled 99066/1	96008/1	Rocker lever	1
28		96024	Fork pin	2
29	4108	Nut		4
30	32024	Washer Ø 8		4
31	96111	Gasket		4
32	99062	Crosspiece		1
33	96112	Guide Bushing		2
34	96010	Guide Rod		1
35	99053	Motor cylinder		1
36	95075	O-ring		1
37	96001	Cap		1

GASKETS KIT MOTOR - CODE 40094

Pos.	Description		Q.ty
13	O-ring		1
14	O-ring		1
21	Assembled 99068	Valve Screw	2
22		Valve Gasket	
26	Seal Bushing		6
33	Washer Ø 8		4
34	Gasket		4
39	O-ring		1

MOTOR MOVEMENT INVERSION DEVICE - CODE 40095

Pos.	Description	Q.ty
27	Exchange Spring	2
28	Roller	1
29	Fork	2
31	Fork pin	2

R2 PNEUMATIC REGULATOR UNIT ASSEMBLY Ref. 99291

WARNING: always indicate code and quantity for each part required.

NOT INCLUDED IN THE MOTOR ASSEMBLY

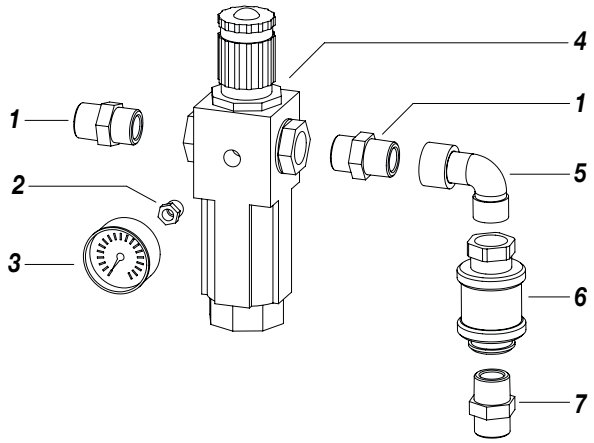


Fig. 1

Pos.	Code	Description	Q.ty
1	20823	Nipple	2
2	22020	Fitting	1
3	96259	Manometer	1
4	99290	Pneumatic regulator	1
5	20824	Elbow	1
6	ZZ11	Slide valve	1
7	95090	Nipple	1

R3 FILTER ASSEMBLY Ref. 99250/1

WARNING: always indicate code and quantity for each part required.

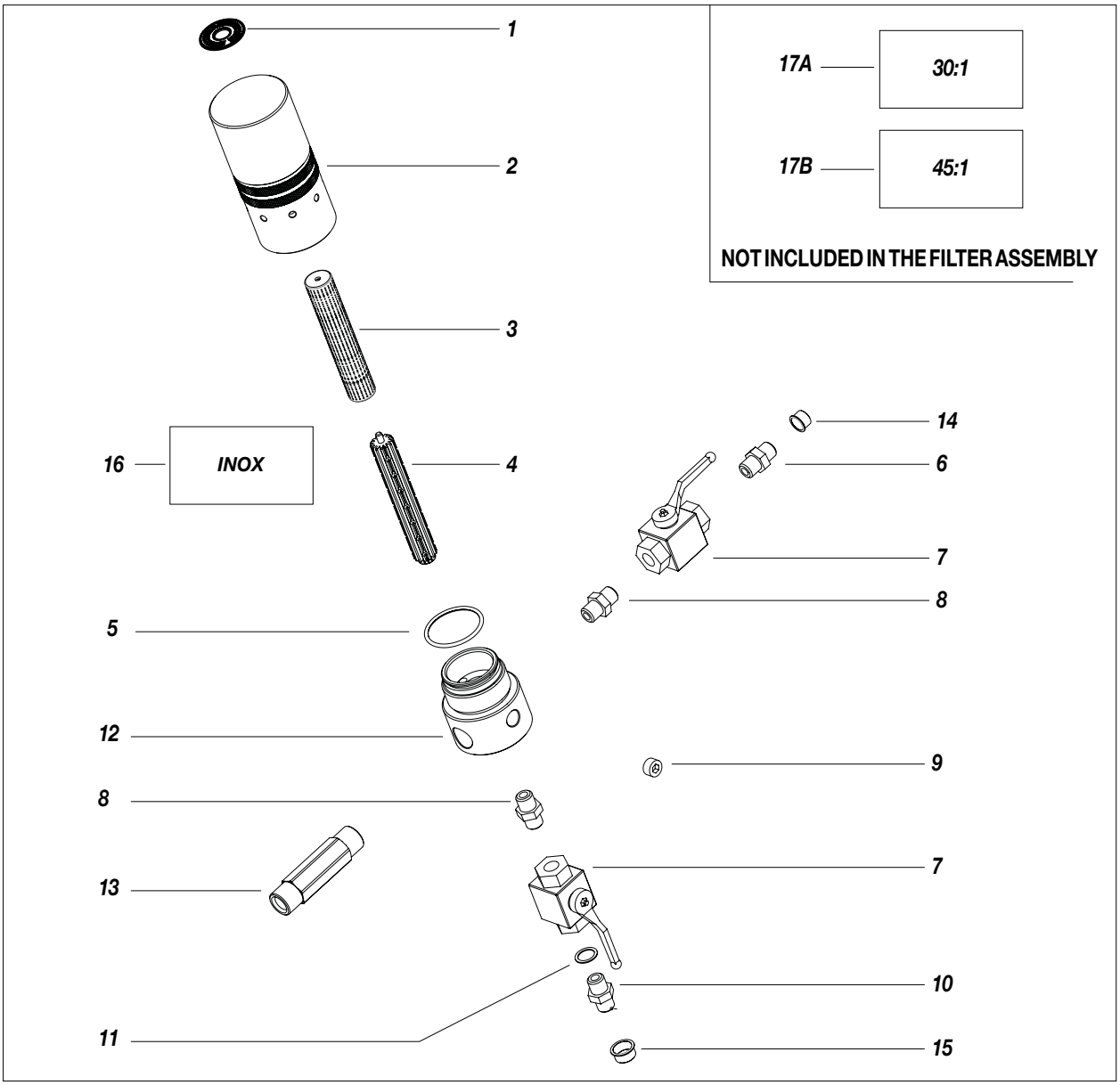


Fig. 1

Pos.	Code	Description	Q.ty
-	**99250/1**	**Filter assembly**	-
1	10107	Warning label	1
2	99252/1	Filter tank	1
3	95219	60 mesh filter sieve	1
4	65078	Filter sieve support	1
5	65099	OR	1
6	6149	Fitting 3/8”	1
7	33037	Ball valve	2
8	6149/1	Fitting	2
9	98385	45:1 cap	1
	95214	30:1 cap	1
10	3385	Fitting	1

Pos.	Code	Description	Q.ty
11	33010	Seal washer	1
12	99251/1	Filter base	1
13	99253	Filter inlet fitting	1
14	110	Cap	1
15	107	Cap	1
16	10112	INOX label	1

NOT INCLUDED IN THE FILTER ASSEMBLY

Pos.	Code	Description	Q.ty
17A	96002	30:1 label	1
17B	95069	45:1 label	1

R4 COMPLETE BOTTOM VALVE ASSEMBLY

WARNING: always indicate code and quantity for each part required.

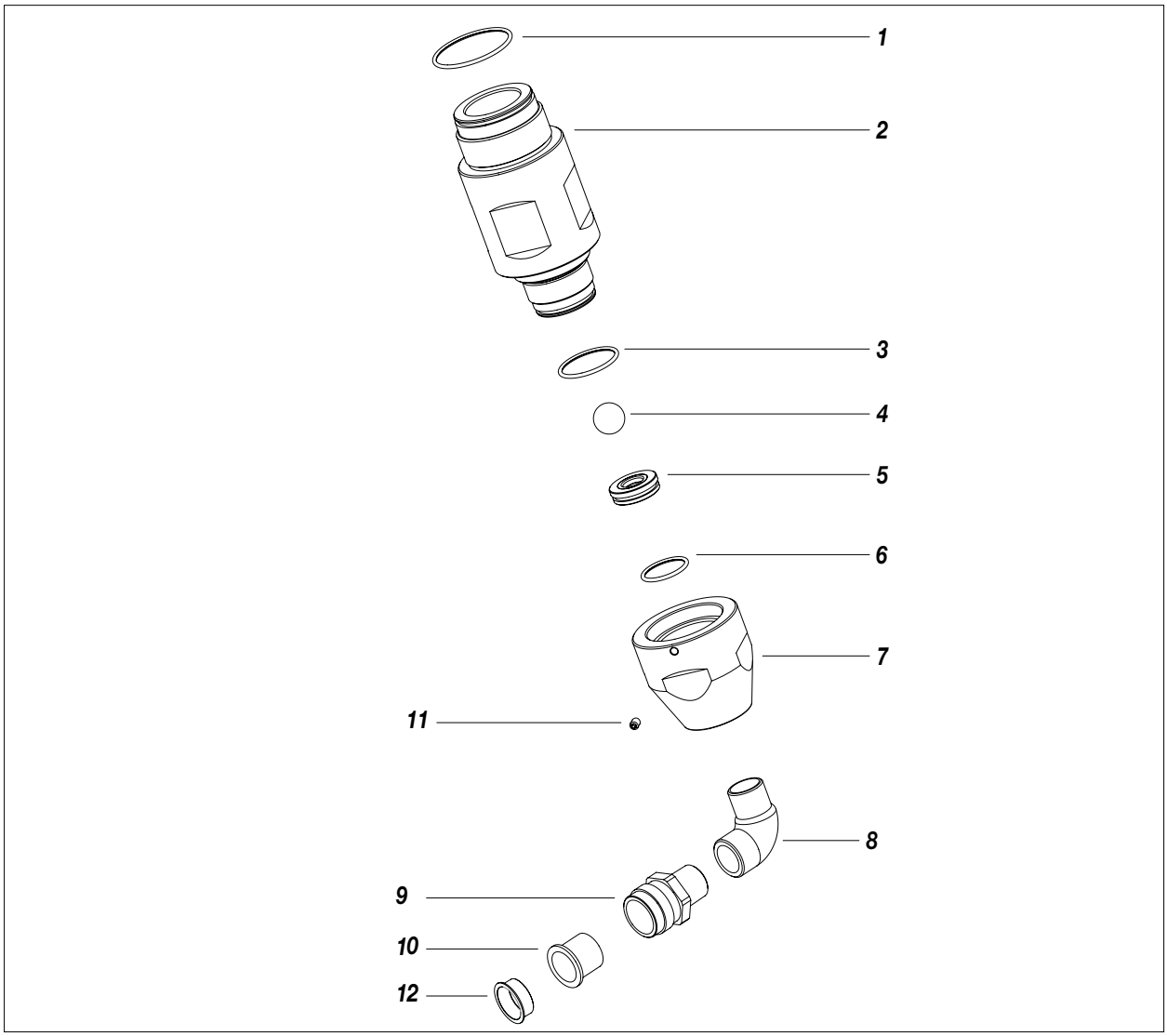


Fig. 1

COMPLETE BOTTOM VALVE ASSEMBLY 30:1 Ref. 99120			
Pos.	**Code**	**Description**	**Q.ty**
-	**99120**	**Complete bottom valve 30:1**	-
1	99086	O-ring	1
2	99087	Lower Cylinder	1
3	99088	O-ring	1
4	95021	Ball Ø 7/8”	1
5	99045	Ball Housing	1
6	99090	O-ring	1
7	99091	Bottom Valve Body	1
8	99092	Elbow Fitting	1
9	98376	Intake Fitting	1
10	96099	Seal Liner	1
11	31102	Hex socket set screw	1
12	100	Cup	1

COMPLETE BOTTOM VALVE ASSEMBLY 45:1 Ref. 99210			
Pos.	**Code**	**Description**	**Q.ty**
-	**99210**	**Complete bottom valve 45:1**	-
1	99095	O-ring	1
2	99231	Lower Cylinder	1
3	99088	O-ring	1
4	95021	Ball Ø 7/8”	1
5	99045	Ball Housing	1
6	99090	O-ring	1
7	99091	Bottom Valve Body	1
8	99092	Elbow Fitting	1
9	98376	Intake Fitting	1
10	96099	Seal Liner	1
11	31102	Hex socket set screw	1
12	100	Cup	1

R5 COMPLETE PISTON SHAFT ASSEMBLY

WARNING: always indicate code and quantity for each part required.

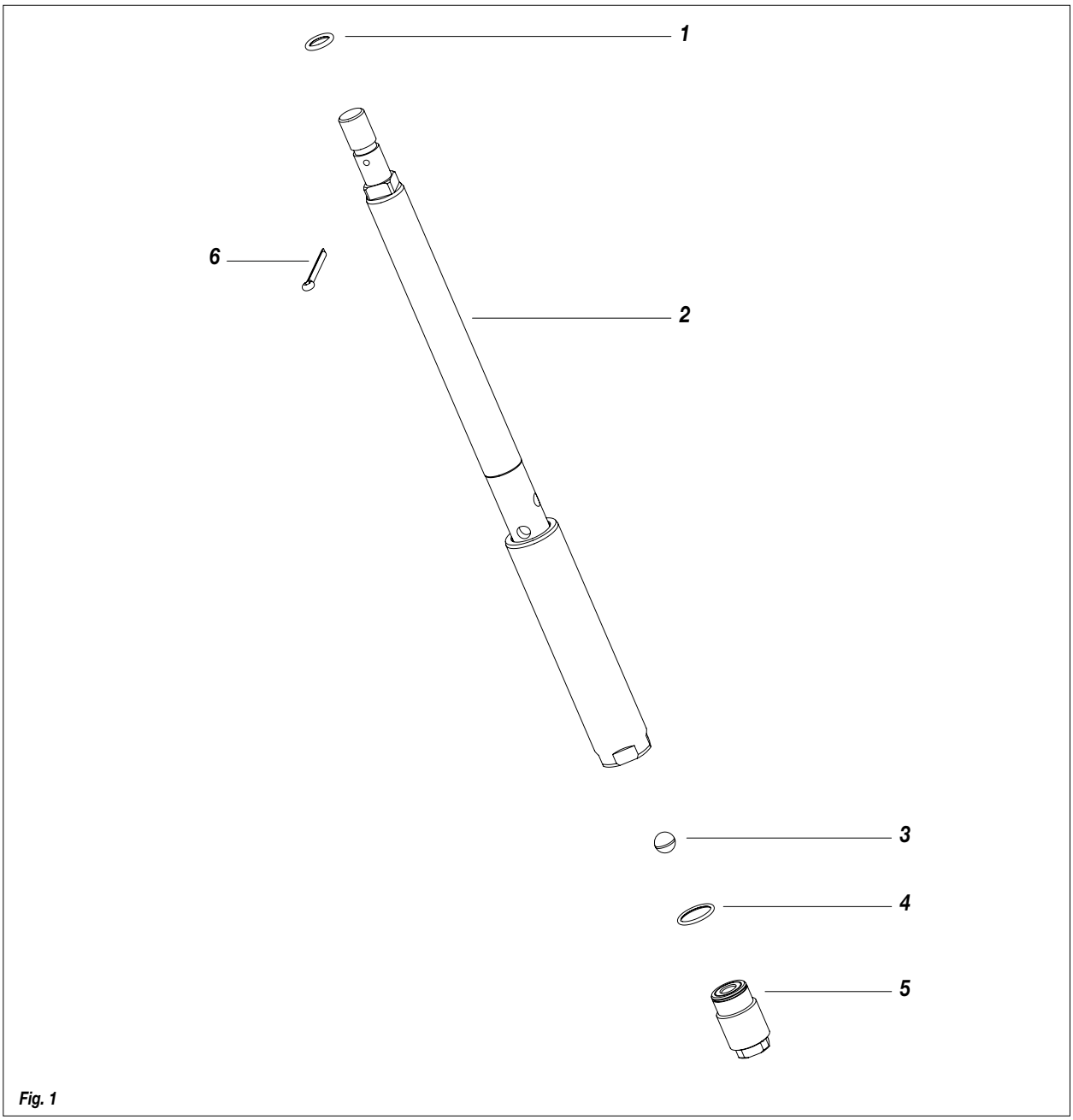


Fig. 1

COMPLETE PISTON SHAFT ASSEMBLY 30:1 Ref. 99121			
Pos.	**Code**	**Description**	**Q.ty**
-	**99121**	**Complete piston shaft 30:1**	-
1	96073	O-ring	1
2	99097	Piston Shaft	1
3	96094	Ball ø 1/2”	1
4	99084	O-ring	1
5	99235	Stem valve assembly	1
6	3323	Split Pin	1

COMPLETE PISTON SHAFT ASSEMBLY 45:1 Ref. 99211			
Pos.	**Code**	**Description**	**Q.ty**
-	**99211**	**Complete piston shaft 45:1**	-
1	96073	O-ring	1
2	99098	Piston Shaft	1
3	96094	Ball ø 1/2”	1
4	99229	O-ring	1
5	99236	Stem valve assembly	1
6	3323	Split Pin	1

R6 COMPLETE CYLINDER BODY ASSEMBLY

WARNING: always indicate code and quantity for each part required.

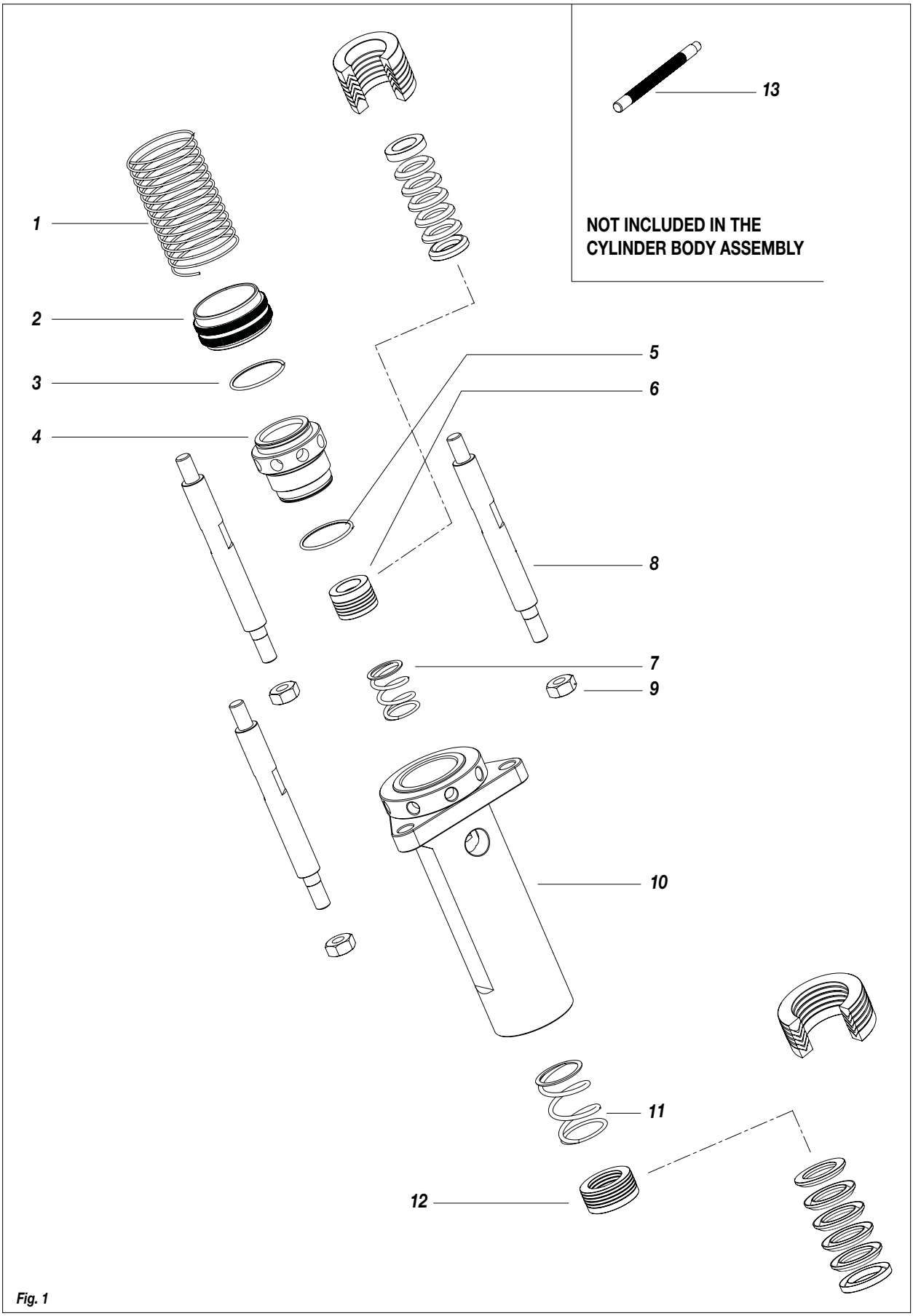


Fig. 1

COMPLETE CYLINDER BODY ASSEMBLY 30:1 Ref. 99122			
Pos.	**Code**	**Description**	**Q.ty**
-	**99122**	**Complete cylinder body 30:1**	**-**
1	99093	Protection spring	1
2	99094	Oil cup	1
3	99096	O-ring	1
4	99070	Gasket holder	1
5	99095	O-ring	1
6	99035	Upper gasket pack	1
7	99072	Upper gasket pressure spring	1
8	99073	Tie rod	3
9	95127	Self-lock nut	3
10	99233	Upper cylinder	1
11	99079	Lower gasket pressure spring	1
12	99030	Lower gasket pack	1

COMPLETE CYLINDER BODY ASSEMBLY 45:1 Ref. 99212			
Pos.	**Code**	**Description**	**Q.ty**
-	99212	**Complete cylinder body 45:1**	**-**
1	99093	Protection spring	1
2	99094	Oil cup	1
3	99096	O-ring	1
4	99222	Gasket holder	1
5	99095	O-ring	1
6	99213	Upper gasket pack	1
7	99223	Upper gasket pressure spring	1
8	99073	Tie rod	3
9	95127	Self-lock nut	3
10	99224	Upper cylinder	1
11	99225	Lower gasket pressure spring	1
12	99209	Lower gasket pack	1

NOT INCLUDED IN THE CYLINDER BODY ASSEMBLY

Pos.	Code	Description	Q.ty
13	20144	Tightening pin	1

40092 GASKETS KIT SIRIO 30:1 PUMP
40093 GASKETS KIT SIRIO 45:1 PUMP

R7 STANDARD COMPLETE TROLLEY Ref. 99150

WARNING: always indicate code and quantity for each part required.

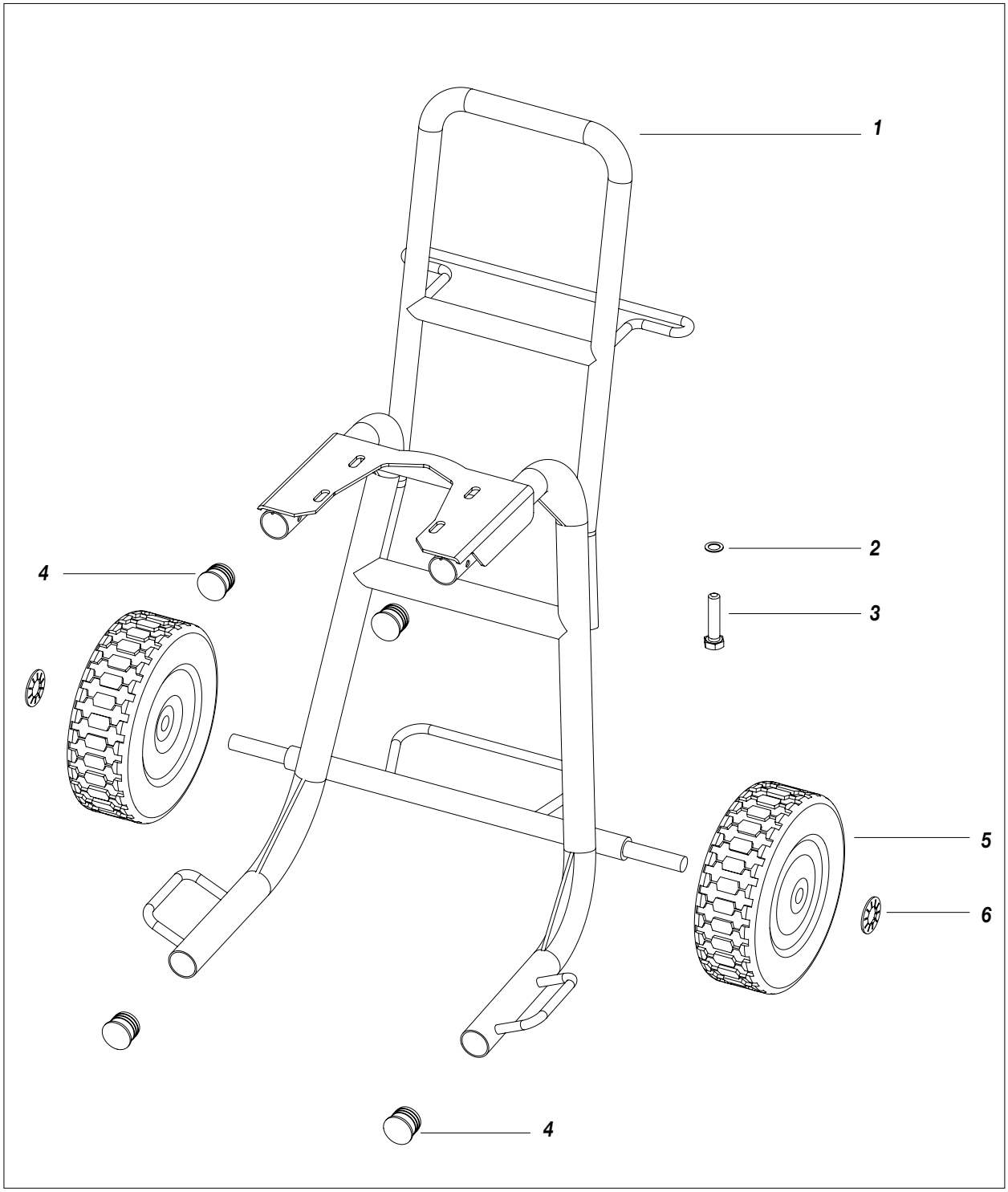


Fig. 1

Pos.	Code	Description	Q.ty
-	**99150**	**Standard complete trolley**	-
1	99153	Base trolley	1
2	81033	Washer Ø 10	4
3	4409	Screw Te	4

Pos.	Code	Description	Q.ty
4	95229	Tube cap	4
5	37238	Wheel	2
6	20305	Wheel stop washer	2

HEATER ASSEMBLY KIT (MOD. 6099) Ref. 99151

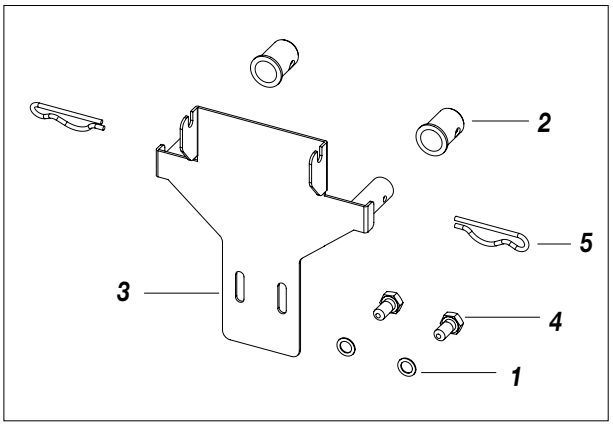


Fig. 2

Pos.	Code	Description	Q.ty
1	81033	Washer Ø 10	2
2	99155	Bushing	2
3	99154	Heater Holder	1
4	6130	Screw Te	2
5	18902	Split Pin	2

R8 WALL MOUNTING BRACKET Ref. LA99157 (for transfer version)

WARNING: always indicate code and quantity for each part required.

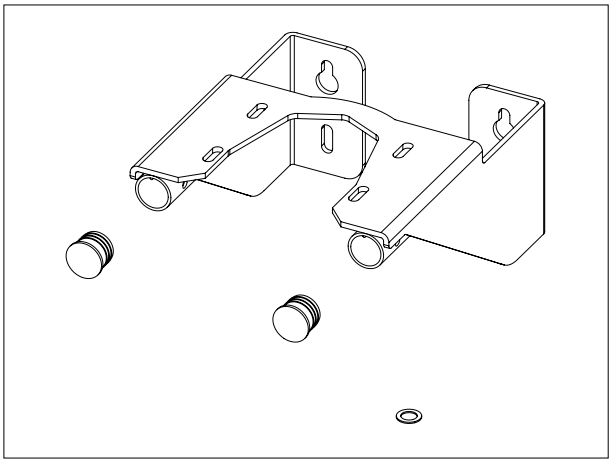


Fig. 1

Code	Description	Q.ty
LA99157	Wall mounting bracket	1

R9 INOX PAINT SUCTION SYSTEM SPLIT

WARNING: always indicate code and quantity for each part required.

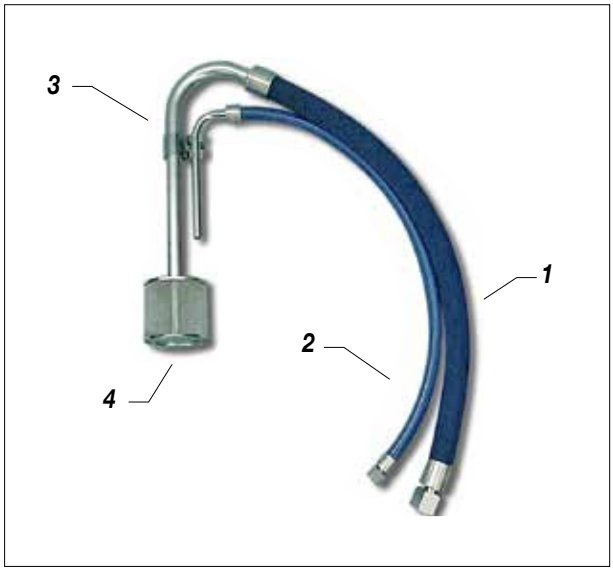


Fig. 1

Pos.	Code	Description
-	**85026**	**Intake system**
1	18097	Suction pipe complete
2	16613	Recirculation hose
3	18096	Locking spring
4	37216	Intake filter

S ACCESSORIES

WARNING: always indicate code and quantity for each part required.

Cod. 11250: AT 250 1/4"
Cod. 11200: AT 250 M16x1,5

Cod. 11090: AT 300 1/4"
Cod. 11000: AT 300 M16x1,5

Cod. 11131: L91X 1/4"
Cod. 11130: L91X M16x1,5

PISTON GUNSTOCK FILTERS
Cod. 11039: Green (30M)
Cod. 11038: White (60M) - supplied
Cod. 11037: Yellow (100M) - supplied
Cod. 11019: Red (200M) - supplied

FILTER
Cod. 95218: STACCIO 30M
Cod. 95219: STACCIO 60M
Cod. 95220: STACCIO 100M
Cod. 95221: STACCIO 200M

FITTING WITH MANOMETER
Cod. 147: M16x1,5
Cod. 150: 1/4"

Cod. 91044: PNEUMATIC MIXER

Cod. 7030: HP FLOW REGULATOR

Cod. 6099: HEATER

SUPER FAST-CLEAN NOZZLE

SUPER FAST-CLEAN BASE
UE 11/16x16 Cod. 18270

GASKET: Cod. 18280
(included in the nozzle code)

*Cod. nozzle-angle	Ø inch	Ø mm	Prod. type	Filter recom.
SFC07-20	0,007"	0,18	Clear and pigmented coats, thin enamels	Red 200 M
SFC07-40				
SFC09-20	0,009"	0,23		
SFC09-40				
SFC11-20	0,011"	0,28	Nitro, synthetic and polyurethane paints	Yellow 100 M
SFC11-40				
SFC13-20	0,013"	0,33		
SFC13-40				
SFC13-60				
SFC15-20	0,015"	0,38	Antitrust	
SFC15-40				
SFC15-60				
SFC17-20	0,017"	0,43		
SFC17-40				
SFC17-60				
SFC19-20	0,019"	0,48	Coatings, zinc inorganic water paints	White 60 M
SFC19-40				
SFC19-60				
SFC21-20	0,021"	0,53		
SFC21-40				
SFC21-60				
SFC23-20	0,023"	0,58		
SFC23-40				
SFC23-60				
SFC25-20	0,025"	0,63	Thixotropic, stucco spray, high solids paints with glue, fillers	
SFC25-40				
SFC25-60				
SFC27-20	0,027"	0,68		
SFC27-40				
SFC27-60				
SFC27-80				
SFC29-20	0,029"	0,74		
SFC29-40				
SFC29-60				
SFC29-80				
SFC31-40	0,031"	0,79		
SFC31-60				
SFC31-80				
SFC33-40	0,033"	0,83		
SFC33-60				
SFC33-80				
SFC35-40	0,035"	0,89		
SFC37-40	0,037"	0,94		
SFC39-40	0,039"	1,00		
SFC39-60				
SFC39-80				
SFC41-40	0,041"	1,05		Green 30 M
SFC43-40	0,043"	1,10		
SFC43-60				
SFC43-80				
SFC45-60	0,045"	0,15		
SFC47-60	0,047"	1,20		
SFC51-60	0,051"	1,30		
SFC51-80				

- Compatible with all Airless guns
- Rapid remplacement of working nozzle
- Rapid safe cleaning
- Maximum working pressure 350 bar (5075 psi)
- Long lasting carbon-tungsten insert
- Excellent finish

GUN EXTENSION
Cod. 153: cm 30 - **Cod. 153:** cm 40
Cod. 155: cm 60 - **Cod. 158:** cm 80 - **Cod. 156:** cm 100

T ATEX - DECLARATION OF CONFORMITY

TECHNICKÁ INŠPEKCIA, a.s.

SLOVENSKÁ REPUBLIKA

CEOC INTERNATIONAL

ACKNOWLEDGEMENT OF RECEIPT

no. 1775/5/2016

Technická inšpekcia, a. s.,

Trnavská cesta 56, 821 01 Bratislava

Notified body: 1354,

confirms, that Technical File Documentation

prepared by

Larius s.r.l.
Via Antonio Stoppani, 21
23801 CALOLZIOCORTE (LC) - ITALY

has been received and stored according to the Article 13.1(b) (ii) of Directive 2014/34/EU on equipment and protective systems intended for use in potentially explosive atmospheres

Scope of Ex Equipment:

HIGH PRESSURE PAINT SPRAYING AUTOMATIC AND MANUAL GUNS WITH AIR-LESS TECHNOLOGY Series: AUTOMATIC PAINT SPRAY GUNS LA95 and MAUNUAL PAINT SPRAYING GUNS AT250-AT300 - L91X

PAINT SPRAYING AUTOMATIC AND MANUAL GUNS WITH MIST-LESS TECHNOLOGY Series: AUTOMATIC PAINT SPRAY GUNS L200 and MAUNUAL PAINT SRAYING GUNS L400

LOW PRESSURE AUTOMATIC PAINT SPRAYING GUNS Series: L100 - MA98

PAINT SPRAYING PNEUMATIC PUMP Series: SIRIO

Marking: ⟨Ex⟩ II 2 G Ex h IIB T6 Gb

Technical File Documentation according to the Annex VIII Article 2 of Directive 2014/34/EU

Doc. no.	Issue
Fascicolo tecnico Secondo la direttiva 2014/34/EU	Data 24/11/2016 Rev. 0

Technical documentation will be stored for 10 years until December 12th, 2026.

Bratislava, December 12th, 2016

TECHNICKÁ INŠPEKCIA TI NB 1354 - 5 - SLOVENSKÁ REPUBLIKA

On behalf of Technická inšpekcia, a.s.

Ing. Dušan Perniš
General Director

301087
PDOKA2-413

CE DECLARATION OF CONFORMITY

Company

LARIUS srl
Via Antonio Stoppani 21 - 23801 Calolziocorte (LC) ITALY
Tel: +39 0341 621152
Fax: +39 0341 621243
E-mail: larius@larius.com

Declares under his owns resonsibility that the product:

SIRIO PNEUMATIC PUMP
PLUNGER PISTON 30:1 - 45:1

complies with the directives:	**- EC Directive 2006/42 Machinery Directive**
furthermore to the harmonized standards:	**- UNI EN ISO 12100-1/-2** **Machinery safety, basic concepts, general principles of design. Basic terminology, methodology. Technical principles.**

This declaration relates exclusevely to the product in the state in which it was placed on the market, and excludes components or modifications which are added or carried out subsequently by end user.

Signature

Calolziocorte, 21 February 2024
Location / Date

Pierangelo Castagna
Managing Director

SAMOA
LEADING THROUGH INNOVATION

SAMOA INDUSTRIAL, S.A. - HEADQUARTERS
SPAIN AND EXPORT MARKETS
POL. IND. PORCEYO, I-14 - CAMINO DEL FONTÁN, 831
E-33392 GIJÓN (ASTURIAS), SPAIN
TEL.: +34 985 381 488 - FAX: + 34 985 147 213

SAMOA S.A.R.L.
FRANCE
P.A.E.I. DU GIESSEN
3, RUE DE BRISCHBACH
67750 SCHERWILLER, FRANCE
TEL.: +33 3 88 82 79 62 - FAX: +33 3 88 82 77 88

SAMOA ITALIA - LARIUS
ITALY
VIA ANTONIO STOPPANI,21
23801 CALOLZIOCORTE (LC) ITALY
Tel.: +39 0341 621152 - Fax: + 39 0341 621242

SAMOA FLOWTECH GMBH
GERMANY, AUSTRIA, SWITZERLAND, THE NETHERLANDS AND GREECE
AM OBEREICHHOLZ 4
D - 97828 MARKTHEIDENFELD, GERMANY
TEL.: +49 9391 9826 0 - FAX: +49 9391 98 26 50

SAMOA LTD.
UNITED KINGDOM AND REP. OF IRELAND
ASTURIAS HOUSE - BARRS FOLD ROAD
WINGATES INDUSTRIAL PARK
WESTHOUGHTON, BL5 3XP, UK
TEL.: +44 1942 850600 - FAX: +44 1942 812160

SAMOA CORPORATION
USA AND CANADA
90 MONTICELLO ROAD
WEAVERVILLE, NC 28787, USA
TEL. +1 (828) 645-2290 - FAX: +1 (828) 658 0840

Contact us today!

Visit **www.samoaindustrial.com** for more information.

INSTRUCTION MANUAL AVAILABLE IN:		
	IT	https://www.larius.com/wp-content/uploads/SIRIOTUFFO_I.pdf
	EN	https://www.larius.com/wp-content/uploads/SIRIOTUFFO_UK.pdf
	ES	https://www.larius.com/wp-content/uploads/SIRIOTUFFO_SP.pdf