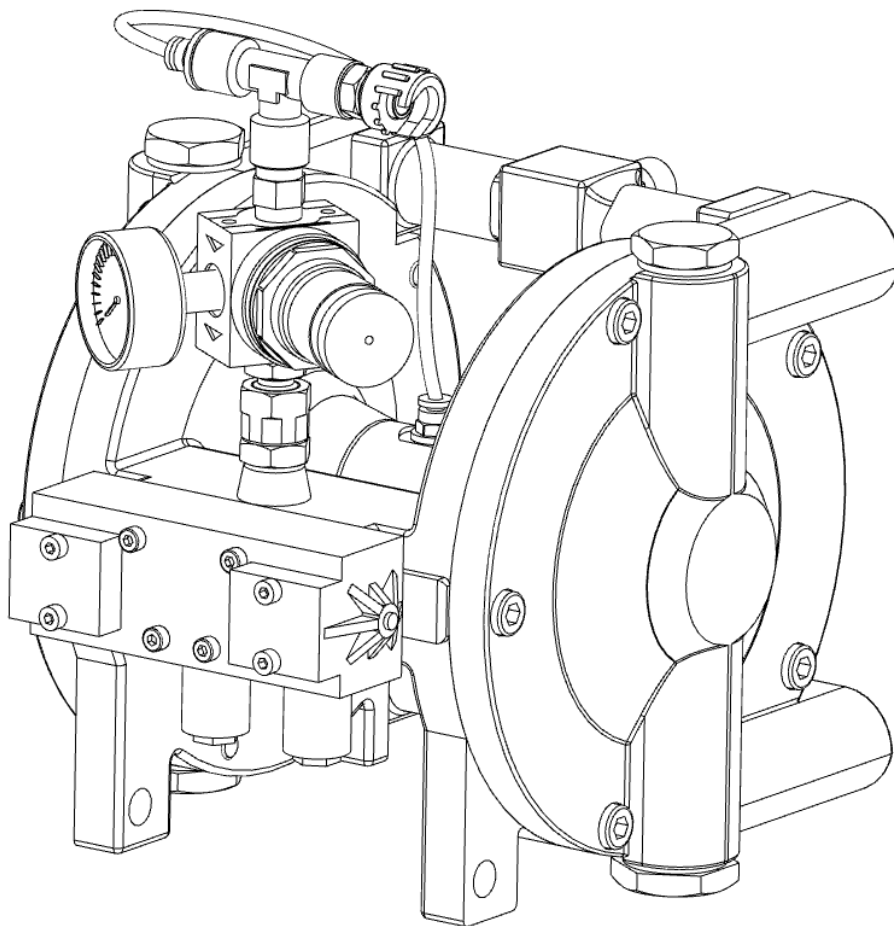


Line Boxer Transfer cē

Mod.

Boxer Transfer

Ref. TK13000



Owners Manual Low Pressure Double Diaphragm Pump



FILTERMEDIA S.R.L.

Via XXV Aprile 1, Monte Marenzo 23804 (LC)

Tel. +39 0341 63.01.84 Fax +39 0341.60.87.07

Web: www.filtermediasrl.com

Dear Customer,

First of all, thank you for choosing a product FILTERMEDIA S.R.L.

Our company aims to be a landmark in the paint spraying equipment's. FILTERMEDIA S.R.L. production is synonymous with reliability and safety, our quality control system allows us to guarantee reliability and quality of the components. All parts and components have been designed and manufactured to ensure the best performance. To maintain a high quality level and long-term reliability we suggest you to use only original spare parts.

All FILTERMEDIA spraying equipments have the EUROPEAN CERTIFICATION according to directive 89/392.

We believe we meet in this way all requirements for safety and reliability and to improve further on the quality of work.

All spraying equipment have a identification's plate conform to CE Directive, and also together with the equipment is attached the operating manual and the CE Certification with European Directive 89/392 and its amendments.

The Management

The following manual is a document that accompanies the machine throughout its lifetime. It is, therefore, an integral part of the machine. Carefully read the following warning and procedures before engaging IN ANY ACTIVITY with the machine, including handling gun unloading it from its transportation mean. For easier references, this instructin manual has been divided into the following sections:

SECTION1

Transportation, packing, handling, inspection of the purchased product.

SECTION 2

This section describes the machine, its field of application (the work it can perform) and it lists technical features.

SECTION 3

Machine installation

SECTION 4

Safety precaution

SECTION 5

Start-up procedures, Hints for Airless Spraying, Tip selection chart. Cleaning Insuctrions. Troubleshooting

SECTION 6

Explosion Drawing & Spare Parts List

SECTION 7

Machine storage.

SYMBOLS USED

Those operations which, in order to avoid risks, must be performed by trained and authorized personnel are indicated by the following symbol.



USE AND MAINTENANCE MANUAL

INFORMATION LETTER

The following maintenance and instruction manual is an integral part of machine and must always be available to the personnel in charge of using and maintaining it. The operator and the personnel in charge of handling the machine must have knowledge of the contents of the manual. The descriptions and illustrations in the manual are not to be considered as binding. Although the main features of the machine described in this manual are not subject to change, FILTERMEDIA S.R.L. reserves the right to change those components, details and accessories it deems necessary to improve the machine or to meet manufacturing or commercial requirements, at any time and without updating this manual immediately.



WARNING

ALL RIGHTS ARE RESERVED. The reproduction of any part of this manual in any given form, without prior written authorization from FILTERMEDIA S.R.L., is strictly forbidden. The content of this manual can be modified without prior notice. Great care has been taken in collecting and checking the documentation contained in this manual in order to make it as complete and comprehensible as possible.

FILTERMEDIA S.R.L. machines are not designed to function in areas at risk of fires and/or explosions. For problems or information call FILTERMEDIA S.R.L. customer care technical service or your local dealer.

CUSTOMER CARE TECHNICAL SERVICE

FILTERMEDIA S.R.L.

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WARNING:

The machine original configuration must not be modified in any way.

On receiving the machine make sure that:

- The packaging is intact and undamaged
- The supply corresponds to what has been ordered.
- In case of damage please call FILTERMEDIA S.R.L.

SECTION 1

1.1 PACKAGING

To transport the machine in Italy and abroad, the unit is packaged in a cardboard box. All optional components (pipes, suction components, gravity tank) are placed with the machine in the same cardboard box.

The box is fairly light and can be hand-lifted; this prevents any bumps which could damage the machine inside it.



WARNING

Do no dispose of the packaging in the environment.



1.2 TRANSPORTATION

To transport the unit use a trolley. Do not transport more than one at a time. Warning: the packaging of a pump on a trolley is 1000 mm (39.37 in.) high and 700 mm (27.56in.) wide.

1.3 STORAGE

When transporting and storing the machine make sure the surrounding temperature remains between -15 and 40° C. if transportation or storage operations last 24 hours or less do not exceed 50°C or the unit could be damaged.

If the need arises to store the machine, make sure the humidity values in the storage area remain between 30 and 80%



SECTION 2

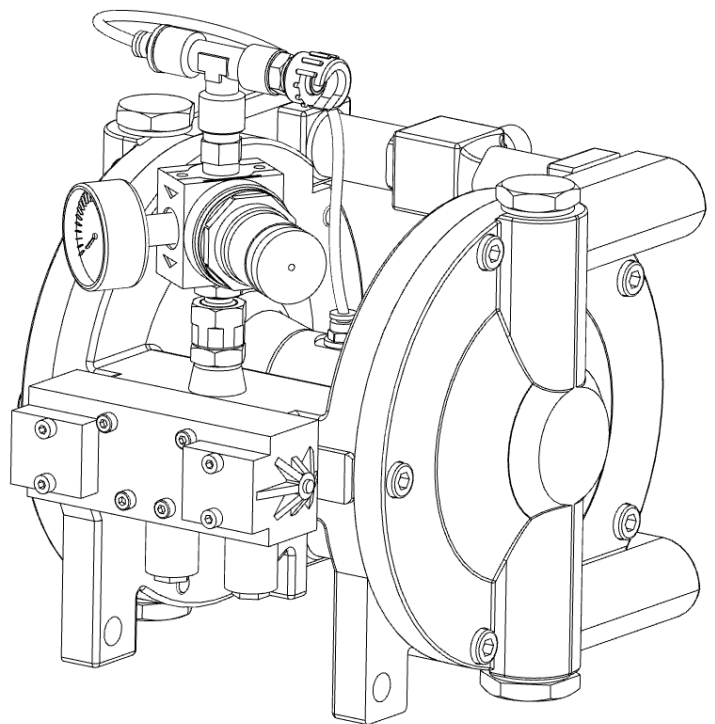
2.1 MACHINE DESCRIPTION

The manufacturer's identification and CE no. 89/392 conformity is placed on the junction rib of the two bodies.

The plate must be not removed at any time even if the machine should be sold again. Always refer to the serial number (reported on the plate) When contacting the manufacturer. Varois safety drawings are located in the same place, the warnings conveyed must be carefully observed by everyone using this machine. The company is not to be held responsible for damage to property or accidents to people which might occur if the above-mentioned warnings are not observed. In such a case, the operator is the only person responsible.

MACHINE DESCRIPTION

Balls	Stainless Steel
Ball Seats	Tungsten Carbide



SECTION 2

PUMP TYPE:

The BOXER 24 paint units are designed to paint on iron, wood and plastic material, textile fabrics, leather.

The materials which can be used in the pump are: paints, orange-peel effect paints, multicolor paints, inks, oil paints and resins.

The manufacturer must authorize the use of the unit with other products and consequently the unit technical features must be changed in order to function properly with the alternative materials.

FILTERMEDIAS s.r.l. is relieved of all responsibility in case of accidents resulting from the use of the machine by unauthorized and unqualified personnel or by personnel using the machine differently than intended.

STANDARD AND OPTIONAL COMPONENTS

The machine is delivered with the following standard components: 9 Double diaphragm pump

- * Use and maintenance manual.
- * Declaration of conformity to CE RULINGS.
- * Warranty certificate.

On request:

- * Trolley w/wheels
- * Pressure regulators
- * Line Filter W/pressure gauge and dump valve
- * Wall mounting bracket
- * Connection hoses
- * Paint suction hoses w/filter
- * (1.25 gal) (5 Lt.) Gravity tank.
- * Self-cleaning tip
- * Spray gun

Technical		Boxer Transfer
Specifications		
Free flow volume ltr/min.		25
Ratio		1:1
Max. air pressure (bar)		8
Pump Motor Feeding Pressure		2 to 8
Air Consumption	lt/mt	250-750
Weight	kg	12

Capability: All conventional coatings, ie: latex, stain, lacquer, varnish, ink, primer, architectural coatings such as block filters and some elastomerics and glues.

SECTION 3

3.1 INSPECTION OF PURCHASED PRODUCT

Inspect the equipment before using it to check for damage caused by transportation or improper storage. Make sure that all standard and optional components have been delivered.

3.2 INSTALLATION CONDITIONS

The machine does not require special installation procedures; just read the following warnings carefully.



WARNING

Do not place the machine near flammable products.



WARNING

The paint container must be placed near the machine.

3.3 EQUIPMENT AND CONDITIONS NEEDED TO WORK

Painting operations **MUST** be carried out in an appropriate booth equipped with a filtering system. Do not use the unit if the filtering system is not activated. Always wear protective gloves, goggles, breathing filters with active carbon and adequate clothing for the protection of the entire body. All the machine standard hoses are made of antistatic material.

SECTION 4

4.1 SAFETY ROULINGS TO FOLLOW DURING USE

TO use the painting unit STRICTLY OBSERVE the following precautions and safety criteria.

FILTERMEDIA S.R.L. declines every responsibility whatsoever in case the user does not observe said precautions and safety criteria; furthermore, it is not responsible for any kind of negligence during the use of the equipment.

WARNING

As it is not possible to protect the working area around the installation and consequently the operator from sudden hose ruptures or elements under pressure, IT IS MANDATORY TO CHECK THAT:

- All the components are not worn-out or damaged.
- The filter fittings and joints are tight.
- Always wear protective gloves, masks, breathing filters with activated carbon and adequate clothing for the protection of the entire body.
- The unit is employed with paints and thinners which are highly inflammable; therefore, use the machine in well ventilated areas and avoid any action which might start a fire (eg. smoking, high temperature slags or shavings, sparks or electric elements). Static electricity can be developed by airless spraying. Ground unit and object to be sprayed. On electric units, unit power cord must be connected to a grounded outlet. Use only three wire extensions cords. Static explosion can occur with ungrounded unit.
- CHECK the chemical compatibility of the products on their technical safety charts. Further information on the materials which make up the unit are available, on request, from FILTERMEDIA S.R.L.
- The use of products which contain organic solvents might cause intoxication from the created toxic vapours.
- DO NOT USE the unit with food or medicines.
- DO NOT EXCEED the indicated maximum working pressure
- BEFORE starting on any dismantling, cleaning, maintenance or assembly operation DISCHARGE the paint pressure in the hoses.
- It is MANDATORY to use the unit inside a painting booth equipped with a filtering system.
- The operator must wear shoes with leather soles or antistatic.
- Never aim the gun at anything other than the surface you intend to spray.
- The unit must be used by one operator only.
- Caution: Static electricity can be developed by airless spraying. Ground unit and object to be sprayed. On electric units, unit power cord must be connected to a grounded outlet. Use only three wire extension cords. Static explosion can occur with ungrounded unit.

Thinners, such as trichloroethane and dichloroethane, can react with the aluminum, with which the great part of the pump and the spray gun are made and can even cause dangerous explosions. Always read the paint technical data very carefully and avoid using materials which contain said thinners. Do not use chlorinated thinners to clean and/or reduce paints. Make sure that the regenerated thinners (diluent for cleaning) used are acid-free: these acids are due to the regeneration and are responsible for the pump and spray gun corrosion.

DO NOT USE the unit with HALOGENATED HYDROCARBON thinners (eg. Ethylchloride, Trichloride, etc.) which might explode when coming into contact with aluminum or galvanized parts.

SECTION 4

4.2 NORMAL USE

To carry out all painting operations correctly the user must:

- * never mix different kinds of paints
- * thoroughly clean the spray booth, the unit and everything that comes into contact with the paint every time the color is changed.
- * never use the paint deposited in the filters since it is contaminated.
- * degrease the components to be painted for a better result.
- * make sure the pieces to be painted are perfectly dry and not oxidized, stained by grease, oil or contaminated by other residue.
- * observe the instructions given by paint manufacturers to obtain weather resistant and mechanical resistant finishes.

4.3 EMERGENCY SITUATIONS

FIRE: Use dry powder extinguishers. They must be kept near the equipment as prescribed by LAW (Ruling 626/94 company safety) **DO NOT USE WATER.** Personnel must be trained to know how to deal with success cases.

4.4 SAFETY RULINGS DURING MAINTENANCE

- * Disconnect the electric feed when removing parts of the unit or when replacing any component.
- * Do not wear rings, watches, chains, bracelets etc. during maintenance operations.
- * Always wear individual protective devices (protective gloves, goggles and shoes).
- * Do not smoke
- * Do not use naked flames, pointed elements or pins
- * Use only original spare parts

4.5 MAINTENANCE CHART

Below is a simple CHECK – LIST:

OPERATION	FREQUENCY			CONDITIONS
	Daily	Weekly	Monthly	
Equipment's cleaning	X			
Hoses check	X			
Dump Valve check	X			Operations to be performed with the equipment stopped without putting it in work.
Check filters		X		
Check hoses tightening			X	
Check screw tightening			X	
Check connections			X	
Check wear parts			X	

SECTION 5

5.1 BEGINNING OF THE WORKING SESSION

- * Mix the paint following the instructions given by the manufacturer.
- * Immerse the suction system (or fill the gravity tank) into the fluid.
- * Any flexible suction used in suction from drums or containers, must be cut obliquely at their end in order to prevent it from sticking at the bottom and must be of the type “reinforced by rigid spiral”.
- * Open the air pressure regulator and adjust the atomizing air pressure. Press the spray gun’s Trigger.
- * Start spraying.

5.2 END OF THE WORKING SESSION

- * Close the inlet air pressure regulator
- * Remove the suction system from container
- * Close slowly the dump valve.
- * Release the materials inside the hoses by pushing the spray gun’s trigger. x Clean all parts carefully as described

5.3 CLEANING OPERATION

Clean the exterior of the unit at the end of each workday or at the end of each work session. This keeps the unit in good working condition.

- Once finished to spray, close the atomization air by turning CCW the regulator.
- Reduce the air pressure at 2 Bar.
- Open the dump valve
- Remove the suction system from container and wait up to the paints is flushed out from the system (for gravity hopper: remove the return hose from the hopper and drug into an empty container). Leave the pump recycling for few minutes.
- Immerge the suction system in a container with solvent (or fill the gravity hopper with solvent). Leave the pumpre cycling for few minutes
- Close the dump valve
- Keep the spray gun open on the container with solvent up to see clean solven flushing from the spray gun.
- Release the spray gun trigger
- Close the inlet air regulator
- Open the dump valve.
- The cleaning operation is finished.

5.4 FILTER REPLACEMENT

After approximately 40 hours of operation it requires cleaning or replacement of the sieve in line filter. The life of the filter sieve depends exclusively on the type of paint used. To replace, unscrew the filter upper body then remove the filter from the holder. See the picture below. Replace or clean the filter sieve and then reassemble everything shut harder.

WARNING

Before unscrewing the upper body, relieve pressure therein by closing the inlet air valve, and opening the dump valve.

SECTION 5

5.5 ROUTINE AND PREVENTIVE MAINTENANCE

Adequate maintenance lengthens the equipment life expectancy of the equipment and keeps it in excellent and efficient working condition. It also ensures the upkeep of safety standards throughout the years. It is highly recommended that only skilled personnel should carry out maintenance operations.

Personnel should be equipped with the individual safety clothing or equipment commonly used in such cases and should observe the safety rulings described in the following chapter.

5.6 CLEANING OPERATIONS

Clean the exterior of the unit at the end of each workday or at the end of each work session. This keeps the unit in good working condition. The picture on the side indicates the parts that must be kept clean:

- * The pump support and the pressure gauges.

- * The pump body and the hoses.

Use a soft cloth soaked in thinners or detergent solution to clean the above mentioned components.

5.7 TROUBLESHOOTING

CAUSE

A) The pump does not function

REMEDY

a. Check if there is a pressure in the air supply circuit.

b. Push the starter buttons places on ISO VALVE alternately

B) The pump functions but it doesn't suction

a. Check that the filter on suction systems or suction valves are not blocked.

C) The flow of paint is insufficient and it does not change by increasing the air inlet pressure regulator

a. Check that the suction filter is not partially obstructed, if the paint has a high viscosity, dilute it according to the instructions of the manufacturer.

D) The pump continues to operate with spray gun and dump valve closed

a. The valves of the pumps do not close, check the seats

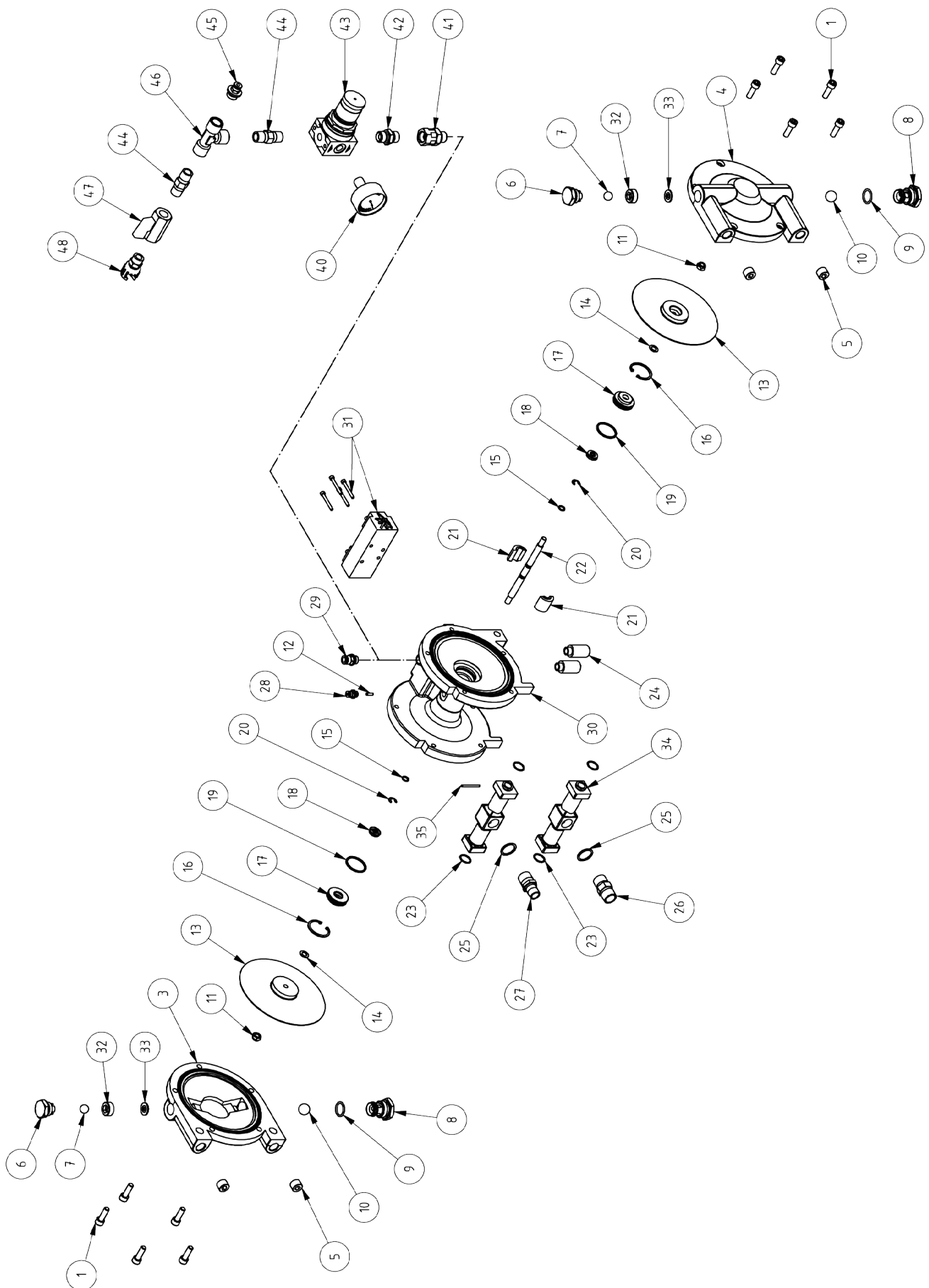
Provided you have followed the instructions, the sprayer will operate efficiently and give trouble-free service. Should any unexpected problem arise you can, in most cases, remedy the problem by following the chart below. If you find that you cannot correct the problem, then take the sprayer to your nearest authorized service agency. Many of the "causes" listed are unlikely to happen. However, all are included in an attempt to cover every possibility.

IT IS ABSOLUTELY ESSENTIAL FOR TROUBLE-FREE OPERATION THAT YOUR AIRLESS SPRAYER BE KEPT CLEAN AND FREE OF RESIDUAL PAINT BUILD-UP ON THE INTERNAL PARTS. IT MUST BE CLEANED AND LUBRICATED AFTER EVERY USE

SECTION 6

PART LIST AND DIAGRAM

Boxer Transfer



SECTION 6

PART LIST AND DIAGRAM

Boxer Transfer

POS	CODICE	DESCRIZIONE	QTA
1	212462R	Vite TCE M 8X20 / Screw TCE M 8X20	12
3	13501	Testata destra nuda / Head block, rights (bare)	1
4	13502	Testata sinistra nuda / Head block, links (bare)	1
5	3214NY	Tappo M 3/8" / Cap M 3/8	4
6	212424R	Valvola compressione inox / Compression valve, s.s.	2
7	12012	Sfera superiore Ø11 mm in nylon / Upper ball Ø11 mm nylon	2
8	212422R	Valvola aspirazione / Suction valve	2
9	212420R	Guarnizione valvola aspirazione / Gasket, suction valve	2
10	13111	Sfera inferiore Ø19 mm in nylon / Lower ball Ø18 mm nylon	2
11	212463R	Dado autobloccante inox M. 8 / Self-locking nut M. 8	2
12	SPE312	Spina elastica 3x12 / Spin 3x12	1
13	040119	Kit membrana - Nylon / Diaphragm kit - Nylon	2
14	TR2109	Rondella schnoor Ø8 / Schnoor washer Ø8	2
15	212432R	Guarnizione O-Ring OR 2031 / O-Ring OR 2031	2
16	212436R	Anelli Seeger interni mm. 37 / Internal Seeger ring mm. 37	2
17	212440R	Guida albero / Shaft guide	2
18	212442R	Guarnizione Macma / Gasket Macma	2
19	212438R	Guarnizione O-Ring OR 3118 / Gasket O-Ring OR 3118	2
20	212444R	Anelli Beenzing mm. 8 / Ring Beenzing mm. 8	2
21	212448R	Kit semiguscio guida stelo / Half bearing kit (2 pcs)	1
22	212446R	Albero inox / Shaft, s.s.	1
23	12552	OR in viton / OR in Viton	4
24	212461R	Silenziatore / Silencer	2
25	120012	Rondella rame 1/2" / Copper washer 1/2"	2
26	151212	Nipplo MM 1/2" / Nipple MM 1/2	1
27	151238	Nipplo MM 1/2" x 3/8" / Nipple MM 3/8x1/2	1
28	110418	Raccordo automatico tubo mm. 4 M. 1/8" / Auto adapter mm. 4 M. 1/8"	1
29	110814	Raccordo automatico tubo mm. 8 M. 1/4" / Auto adapter mm. 8 M. 1/4"	1
30	13550	Corpo pompa nudo / Pump body, bare	1
31	212460R	Scambiatore pneumatico / Pneumatic Exchanger	1
32	12510	Sede sfera completa / Complete ball seat	2
33	10124	Guarnizione sede sfera / Gasket ball seat	2
34	12551	Canalino connessione boxer / Connection	2
35	SPE335	Spina elastica 3x35 / Spin 3x35	1
40	212486	Manometro posteriore Ø50 / Manometer rear conn. Ø50	1
41	161410	Adattatore M x FG 1/4" / Adaptors M x FG 1/4"	1
42	151410	Nipplo MM 1/4" x 1/4" / Nipple MM 1/4" x 1/4"	1
43	BIT000	Microregolatore di pressione F 1/4" / Pressure Micro Regulator F 1/4"	1
44	46100	Nipplo MM 1/4" / Steel Nipple MM 1/4"	2
45	110414	Raccordo automatico tubo mm 4 M 1/4" / Steel automatic pipe connector 4 M 1/4"	1
46	50800	Raccordo a T FFF 1/4" / Steel T Fitting FFF 1/4"	1
47	383014	Valvola a sfera FF 1/4" / Ball Valve FF 1/4"	1
48	40180	Attacco con dado fresato M 1/4" / Joint with milled nut M 1/4"	1

SECTION 7

10.1 STORING THE EQUIPMENT

If the need arises to store the equipment for a certain amount of time observe the following instructions:

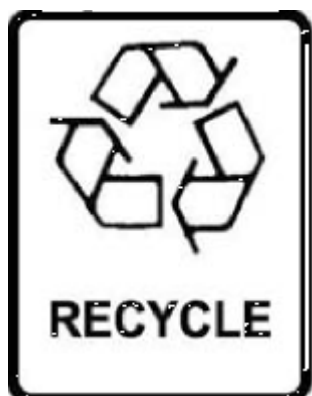
- Disconnect the unit from the compressed air line
- Thoroughly clean the unit from paint residue.
- Insert thinners in the hoses.
- Cover the unit with a waterproof sheet.

Keep the unit in a dry environment. To preserve all mechanical components the room temperature must be between 15°C and 40°C (59°F and 104°F).

10.2 DISMANTLING

Whenever the need arises to dismantle the paint unit, it is mandatory to observe a few fundamental rules for the safeguarding of the environment.

Protective coverings, flexible pipes, plastic or non-metal material should be dismantled and disposed of separately. The machine DOES NOT CONTAIN POLLUTING OILS but residue paints must be disposed of at authorized waste disposal sites



WARRANTY

All FILTERMEDIA S.R.L. appliances are guaranteed for a period of 12 months from the date written on the invoice, unless otherwise stated in writing. The warranty covers all manufacturing faults and material defects. Replacements and repair operations are covered only if carried out by our company and at our servicing shops.

The faulty parts must be sent CARRIAGE FREE.

Once the components have been repaired they will be sent CARRIAGE PAID to the customer.

The warranty does not cover our company personnel aid during installation or dismantling operations. If for practical purposes one of our employee is sent to the premises, a charge will be made for the time plus extra for travelling and expenses.

Our warranty does not cover direct or indirect damage, to people or property, caused by our appliances and it does not cover repair operations carried out by the owner or by a third party.

The following are not covered by our warranty:

- failure caused by incorrect use or assembly. “ failure caused by external agents.
- failure caused by lack of maintenance or negligence.

WARRANTY FORFEITURE:

If the form attached below is not filled out and returned.

In case of delayed payment or other contract defaults.

All repair operations carried out under warranty do not interrupt its duration.

Whenever changes or repairs are carried out on our machinery without prior authorization Whenever the unit seems tampered with, dismantled or previously repaired in unauthorized servicing shops.

Whenever the serial number is damaged or removed.

When the damage is caused by improper use or functioning, or if the machine falls, is bumped or by other causes of malfunctioning not due to normal working conditions

All disputes will be settled in the court of justice of LECCO (Italy).

NAME

ADDRESS

V.A.T. NR

EQUIPMENT TYPE:

SERIAL N°

DATE

STAMP AND SIGNATURE

To be send, completed in all parts (in capital letters), to: FILTERMEDIA S.R.L. Via XXV Aprile, 1 – 23803 Monte Marenzo Z.I. Levata (LC)