INSTRUCTION AND MAINTENANCE MANUAL

HF - HF Z22

TRANSLATION OF ORIGINAL INSTRUCTIONS

INDEX

1 INFORMATIVE SECTION 5
1.1 Forward 5
1.2 main parts 8
1.3 Optional parts 9
1.4 manufacturer's identification data 9
1.5 Identification plate 9
1.6 Permitted uses 10
1.7 Authorised environmental conditions 10
1.8 Noise level 11
1.9 Technical data 12
hf atex Z22 13
1.10 Warranty 14
2 Safety section 16
2.1 safety information 16
2.2 Safety recommendations 17
2.3 Safety plates and symbols 19
2.4 Residual risk 21
2.5 Applied directions 22
3 Unpacking, installation and handling section 28
3.1 Handling 28
3.2 Unpacking 28
3.3 Installation 30
4 Operation section 35
4.1 Command description 35
4.2 Operating cycle 37
4.3 Storage – decommissioning 39
5 Maintenance section 39
5.1 Informative notes 40
5.2 General safety regulations 40

5.3 Replacing the filter 43
5.4 Troubleshooting 56
5.5 Scrapping 58
INTERVENTION 1: DATE:..... 59
INTERVENTION 2: DATE:..... 60
INTERVENTION 3: DATE:..... 61

DEPURECO
INDUSTRIAL VACUUMS

DECLARATION OF COMPLIANCE

The manufacturer:

DEPURECO INDUSTRIAL VACUUMS S.r.l. – Via Venezia, 32 – 10088 Volpiano (TO) – ITALY | **Phone**. +39 011 98 59 117 – **Fax** + 39 011 98 59 326 – **Tax code. | VAT REG. NO.** 02258610357

e-mail: depureco@depureco.com – **www.depureco.com**

hereby declares

under their sole responsibility that the vacuum cleaner model described in this manual

To which this declaration refers, complies with the essential safety requirements provided by the **Machinery Directive 2006/42/EC,** the **Directive 2014/30/EU** regarding Electromagnetic Compatibility, the **Directive 2011/65/EU - ROHS -** regarding restriction of the use of certain hazardous substances in electrical and electronic appliances and by the **ATEX Directive 2014/34/EU** with the following details.

The conformity has been verified in accordance with the requirements mentioned by the Standards:

UNI EN 1127-1 **UNI EN ISO 80079-36**

Marking: CE Ex **II 3 D Ex htc IIIB T140°C Dc**

The Harmonised Standards applied for the design, manufacture and testing of the vacuum cleaner are listed in a technical file stored at the technical department of DEPURECO S.r.l. premises.

This declaration shall become invalid if modifications on the vacuum cleaner are carried out without approval from the manufacturer.

First issue: 15 June 2019
Revision 01: 16 October 2023.

The Legal Representative
Marco Devincentis CEO

1 INFORMATIVE SECTION

1.1 FORWARD

Dear Customer

Thank you for choosing DEPURECO and congratulations on choosing a DEPURECO HF series vacuum cleaner.

We have prepared this manual to enable you to fully appreciate the quality of this machine.

We recommend that you read it through in its entirety before using it for the first time.

It contains important information, advice and warnings for the use of the vacuum cleaner which will help you to fully exploit the technical qualities of your machine.

The manuals for the ATEX components mounted on the equipment are enclosed: the user must observe all safety instructions regarding the use of these components. The plug is of the ATEX type.

Please read the messages, warnings and indications, preceded by the symbols, carefully:

for people's safety;

for the integrity of the vacuum cleaner;

for the protection of the environment.

This manual describes the following models:

HF 300	**HF 5,5** Z22
HF 5,5	**HF 7,5** Z22
HF 10	**HF 10** Z22
HF 15P/ HF 15S	**HF 15** Z22
HF 18	**HF 20** Z22
HF 30P/ HF 30S	**HF 25** Z22
HF 35P/ HF 35S	**HF 35P/ HF 35S** Z22

L'aspiratore è equipaggiato con i seguenti filtri:

- **M FILTER**
- **TEFLON-COATED M FILTER**
- **M FILTER CARTRIDGE WITH COUNTERCURRENT SYSTEM**
- **ANTISTATIC M FILTER**
- **H14 ABSOLUTE FILTER (optional)**

The filter configuration may vary according to customer-specific versions and/or requirements.

These vacuum cleaners are classified according to the following dust extracion classes:

L Moderate risk - suitable for separating dust with an exposure limit value depending on the volume occupied > 1 mg/m3

M Medium risk - suitable for separating dust with an exposure limit value depending on the volume occupied > 0.1 mg/m3

H High risk - suitable for separating all dusts with all exposure limit values depending on the volume occupied, including carcinogenic and pathogenic dusts.

This manual provides you with all the necessary information for the use and maintenance of your vacuum cleaner.

This specific model has undergone strict testing to ensure maximum reliability; its proper functioning and durability will depend on good maintenance and careful use.

This manual is an integral part of the vacuum cleaner and must accompany it until it is destroyed.

In the event of loss or damage, a replacement copy must be requested from DEPURECO INDUSTRIAL VACUUMS S.r.l. (hereinafter simply referred to as DEPURECO).

The technical information contained in this manual is the property of DEPURECO and must be considered confidential.

The reproduction, even partial, of the graphic design, text and illustrations is prohibited by law.

Some details depicted in the illustrations in this manual may differ from those of your vacuum cleaner, as some components may have been removed in order to ensure maximum clarity of the illustrations.

This manual, for ease of reference, is divided into sections identifiable by specific graphic symbols.

The subjects dealt with in this manual are those expressly required by the Machinery Directive 2006/42/EC and the technical data reported are taken from the technical file filed at DEPURECO.

In relation to Regulation 1907/2006/EC (REACH), DEPURECO declares that its products do not contain any of the substances of very high concern - SVHC, i.e. Substances of Very High Concern - listed in the Candidate List.

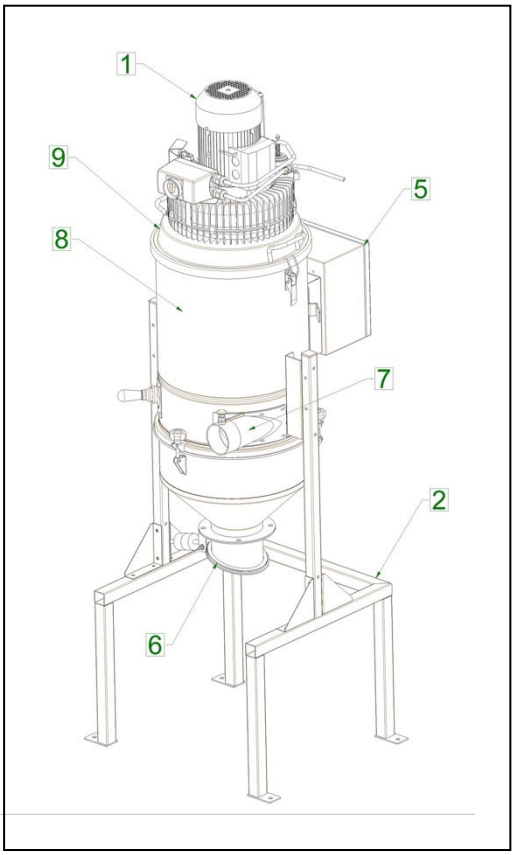
This manual must be kept in a place accessible to all personnel in charge of operating and maintaining the vacuum cleaner.

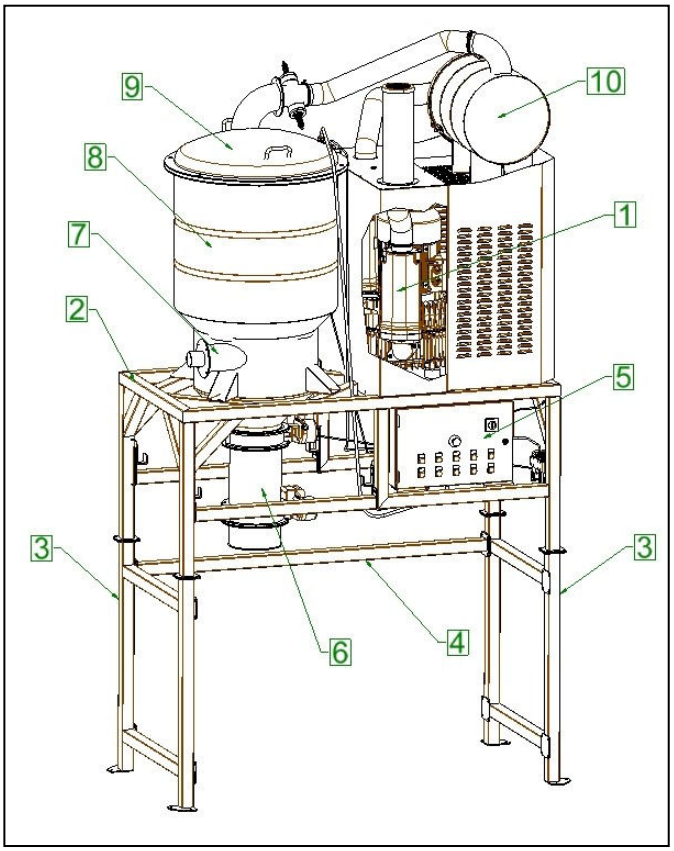
For any disputes, the Court of Turin (Italy) is competent.

The manual must accompany the vacuum cleaner in case of resale!

1.2 MAIN PARTS

HF 300





1. Pump
2. Support structure
3. Lower support structure
4. Bottom structure reinforcement bar
5. Electrical cabinet
6. Exhaust system
7. Tangential nozzle
8. Filter chamber
9. Filter chamber lid
10. HEPA filter (optionanal)

1.3 OPTIONAL PARTS

Depending on the vacuum cleaner application, a wide range of other optional accessories is available from DEPURECO.

1.4 MANUFACTURER'S IDENTIFICATION DATA

DEPURECO INDUSTRIAL VACUUMS S.r.l.

Via Venezia, 32 - 10088 Volpiano (TO) - ITALIA

tel. +39 011 98 59 117

fax +39 011 98 59 326

e-mail: depureco@depureco.com

website: www.depureco.com

P.I. 02258610357

1.5 IDENTIFICATION PLATE

For any communication with the manufacturer or dealer, always quote the data on the vacuum cleaner's identification plate.

Atex marking

II 3 D Ex htc IIIB T140°C Dc

1.6 PERMITTED USES

These vacuum cleaners are constructed and designed in accordance with Directive 2006/42/EC (Machinery Directive) for professional industrial use only; however, for purposes other than normal domestic use.

This vacuum cleaner is suitable for cleaning and collection of solid materials and only in covered areas.

The vacuum cleaner is designed to be used by a single operator.

In accordance with Directive 1999/92/EC, if combustible dusts and/or flammable gases are present in the workplace, it is the responsibility of the Employer to carry out the classification of the Zone, and to choose an appropriate Category machine (as defined in Directive 2014/34/EU).

Any other use is considered **IMPROPER**

1.7 AUTHORISED ENVIRONMENTAL CONDITIONS

To ensure correct operation, the vacuum cleaner must be positioned away from atmospheric agents (rain, hail, snow, fog, suspended dust, etc.) with an ambient temperature between 5° and 45°C and humidity not exceeding 70%.

The working environment must be clean, sufficiently bright and in the absence of a potentially explosive atmosphere.

1.8 NOISE LEVEL

Phonometric tests carried out on this specific vacuum cleaner model show a sound pressure level of

HF 300	**74 dB(A)**
HF 5,5-7,5	**76 dB(A)**
HF 10-15-18-20	**74 dB(A)**
HF 30-35	**78 dB(A)**

Attention!

For sound pressure levels above 85 dB(A), workers exposed to must be protected by appropriate personal protective equipment (PPE), such as approved individual hearing protectors.

For these conditions, it is necessary to provide workers with training and information on the risks resulting from exposure to noise

1.9 TECHNICAL DATA

Feature	Unit	HF 300	HF 5,5	HF 10	HF 15P	HF 15S	HF 18	HF 30P	HF 30S	HF 35P	HF 30S
Power	**KW-HP**	3 - 4	4 - 5,5	7,5 - 10	11 - 15	11 - 15	12,5 -18	22 -30	22 -30	25 -34	25 -34
Voltage/frequency	**V/Hz**	400 / 50-60									
Continuous vacuum	**mBar**	270	360	260	300	440	290	275	460	320	445
Maximum flow rate	**m³/h**	350	320	730	950	550	1120	1770	1100	2100	1130
Suction nozzle	**Ømm**	80		102				130			
Noise level	**dB (A)**	74	76	74				78			
Discharge	**Ømm**	150	250								
Dimensions	**mm**	600x650	1120x1590	1120x1790				960x1950			
Height	**mm**	2110	3140	3530				3530			
Primary filter		stellare									
Surface	**cm²**	24000		45000				110000			
Filter cleaning syste		manual	PSC								
Absolute filter H14 - SURFACE	**cm²**	28000		110000							

(*) optional absolute filter

HF ATEX Z22

Feature	Unità di Misura	HF 5,5	HF 7,5	HF 10	HF 15	HF 20	HF 25	HF 30P	HF 30S
Power	**KW-HP**	4 - 5,5	5,5 - 7,5	7,5 - 10	11 - 15	15 - 20	18,5 - 25	22 - 30	22 - 30
Voltage/frequency	**V/Hz**	400 / 50-60							
Continuous vacuum	**mBar**	230	240	280	300	350	270	200	380
Maximum flow rate	**m³/h**	450	550	700	920	920	1350	1985	1100
Suction nozzle	**Ømm**	80		102				130	
Noise level	**dB (A)**	73		74				76	
Discharge	**Ømm**	250							
Dimensions	**mm**	1120x1590		1120x1790				960x1950	
Height	**mm**	3140		3530				3530	
Primary filter		Cartucce cilindriche							
Surface	**cm²**	90000		120000				180000	
Filter cleaning system		SP automatic cleaning							
Absolute filter H14* - surface	**cm²**	28000		110000					

(*) optional

1.10 WARRANTY

DEPURECO guarantees this vacuum cleaner model for a period of 12 months from the date of purchase, indicated on the fiscal document upon delivery of the product.

The guarantee shall be void if the vacuum cleaner has been repaired by unauthorised third parties or if equipment, accessories or components are used which have not been supplied or authorised by DEPURECO or for which the serial number has been found to have been removed (during the guarantee period).

DEPURECO undertakes to repair or replace free of charge those parts or components which prove to be defective from manufacture within the guarantee period.

The repair shall be carried out exclusively at our premises or at the service centre indicated by us and must be delivered carriage paid (transport costs to be borne by the user, unless otherwise agreed).

The guarantee does not cover the cleaning of working parts.

The purchase tax document must be shown to the authorised technical personnel carrying out the repair or must accompany the vacuum cleaner on shipment.

Defects that are not clearly attributable to the material or manufacture will only be examined at our premises or at the Technical Assistance Centre indicated by us.

Should the claim prove to be unjustified, all costs for repair and/or replacement of parts shall be charged to the purchaser.

In any case, the following are excluded from the guarantee: accidental damage due to transport, carelessness or inadequate treatment, improper use, not in accordance with the warnings given in this booklet or deriving from phenomena not dependent on normal use/operation of the vacuum cleaner.

DEPURECO declines all responsibility for any damage to persons or property caused by incorrect or improper use of the vacuum cleaner.

For any dispute, the Court of Turin (Italy) shall have jurisdiction.

If in doubt, do not interpret!

Call your dealer immediately.

To make use of the guarantee, photocopy the special form on the last page of this manual, fill it in completely (preferably in block letters), and fax it to DEPURECO at +39 011 9859 326

2 SAFETY SECTION

2.1 SAFETY INFORMATION

Pursuant to Legislative Decree 81/08 and subsequent additions and amendments, the Safety Officer is obliged to train, inform and instruct workers on the risks associated with the use of vacuum cleaners, so that they are able to protect their own and others' safety.

Failure to observe basic safety regulations or precautions could lead to accidents during use, maintenance and repair of the vacuum cleaner. An accident can often be avoided by recognising potential dangerous situations before they occur. Proper training is a prerequisite for this.

DEPURECO cannot under any circumstances be held liable for accidents or damage resulting from the use of the vacuum cleaner by personnel who have not been adequately instructed or who have used it improperly, as well as from the non-observance, even partial, of the accident prevention regulations and intervention procedures contained in this manual.

Safety precautions and warnings are given in this manual and on the product itself.

If these warning messages are not heeded, the operator may incur accidents with serious consequences for himself and others.

Security messages are highlighted with the following symbolism:

Caution!

These messages, if not observed, could cause damage to the operator.

Caution!

These messages, if not observed, could cause damage to the vacuum cleaner.

Warning!

These messages, if not observed, could cause damage to the environment.

DEPURECO carefully designs and manufactures the equipment and their accessories, identifying and compensating for all possible risks associated with their use. In the event that tools, procedures, working methods or techniques are used which are not explicitly envisaged by DEPURECO, it must be ascertained in advance that there is no danger to oneself or to others, with DEPURECO's liability remaining in any case excluded.

Only use original DEPURECO spare parts

We do not accept any liability for the use of non-original spare parts.

2.2 SAFETY RECOMMENDATIONS

Caution!

The instructions below play an important role in fully protecting against all hazards that may be encountered when working with the vacuum cleaner. However, they cannot be separated from the competence and common sense of the operator, as an overall framework for careful accident prevention.

In each section, further specific safety requirements are listed for different operations.

CAUTION!

- The use of this vacuum cleaner is only permitted for suitably trained adults.
- This vacuum cleaner is suitable for industrial use, for example: factories, warehouses, workshops.

- Make the electrical connection to an efficiently earthed network.
- This vacuum cleaner is not intended for use in corrosive or explosive environments.
- Keep the vacuum cleaner clean of foreign materials such as debris, oil, tools and other objects that could damage operation and cause personal injury. Avoid using flammable or toxic solvents such as petrol, benzene, ether and alcohol for cleaning.
- Avoid prolonged contact with solvents and inhalation of their vapours.
- Avoid use near open flames or heat sources; ensure adequate ventilation.
- Never use the vacuum cleaner without the mist filter.
- Do not inhale lit cigarette butts: you could ignite the safety filter.
- Do not inhale petrol or flammable liquids in general.
- Ensure that all guards and protections are in place and that all safety devices are present and efficient.
- Do not use the vacuum cleaner on uneven or sloping surfaces
- Do not wear loose or dangling items of clothing such as ties, scarves, torn clothing that could get caught or caught in the vacuum cleaner.
- Do not move the vacuum cleaner by pulling it by the power cable
- Extension lines, plug-in connection devices and adapters are not permitted.
- Do not remove the hopper cover when the vacuum cleaner is in operation
- It is forbidden to climb on the vacuum cleaner.
- Do not touch electrical wires, switches, buttons, etc. with wet hands
- Check the integrity of the power cable periodically.
- During use of the industrial vacuum cleaner, some components (motor terminal box, motor housing in particular) can reach high temperatures.
- During the operations to restore the original working conditions, the personnel in charge must check that at the end of the operating procedure, the normal safe operating conditions of the vacuum cleaner and in particular the safety devices and protective guards affected by the operation are again guaranteed.
- In case the Customer installs on the vacuum cleaner a tool not supplied by DEPURECO, it is necessary to check that the safety conditions, required by the Machine Directive 2006/42/CE, are maintained and in any case DEPURECO shall not be held responsible for any inconvenience resulting from the use of this part.
- Structural damage, modifications, alterations or improper repair may change the protective capabilities of the vacuum cleaner and therefore invalidate this certification and exclude any liability on the part of DEPURECO.

- This manual must always be at hand, for consultation on the planned operating cycle and whenever in doubt.
- If it is lost or damaged, a replacement copy must be requested from DEPURECO.

CAUTION!

This vacuum cleaner may contain dust that is harmful to health.

Emptying and maintenance procedures, including removal of dust containers, should only be carried out by trained personnel wearing appropriate protective equipment.

This manual must always be available for reference on the planned operating cycle and whenever in doubt.

If it is lost or damaged, a replacement copy should be requested from DEPURECO.

2.3 SAFETY PLATES AND SYMBOLS

Labels with symbols and/or safety messages are attached to the vacuum cleaner and packaging.

These indicate their exact location and the nature of the danger.

Caution!

Ensure that all safety messages are legible.

Clean them using a cloth, soap and water. Do not use solvents, naphtha or petrol.

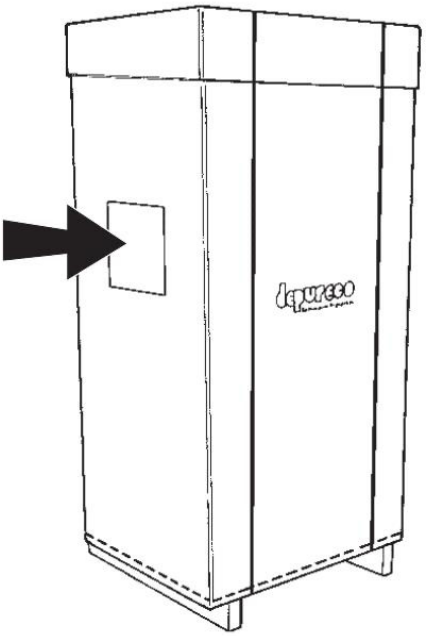
Replace damaged plates by requesting them from DEPURECO.

If a nameplate is on a part that is being replaced, ensure that a new nameplate is attached to the new part.

new part, ensure that a new name plate is attached to the new part.

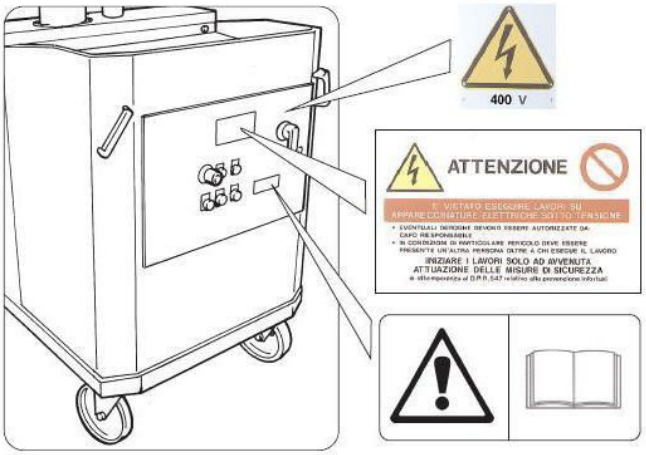
Caution!

Read the operating and maintenance manual carefully before using the vacuum cleaner or performing maintenance work.



Caution!

Read the instructions on the packaging carefully before handling and unpacking the vacuum cleaner.



2.4 RESIDUAL RISK

DEPURECO recommends strict adherence to the instructions, procedures and recommendations contained in this manual as well as to current safety regulations. In addition, DEPURECO recommends the use of the prescribed protective equipment, either integrated in the vacuum cleaner or individual.

With this in mind, the residual risks analysed that are present on the vacuum cleaner and/or its components may be:

Electrical risks in maintenance due to the need to work under voltage

According to Legislative Decree 81/08 - Art. 80 to 87 - it is forbidden to work under voltage, with the exceptions provided for in said decree.

Risk of improper use in the presence of liquid, deflagrating and flammable substances

The vacuum cleaner must not be used in an environment containing liquid substances or in the form of liquids that can vaporise at room temperature, flammable dusts, gases.

Risks of operation in a humid environment

Observe the limits given in this manual under 1.5 'Permissible environmental conditions'.

Risk of misinterpretation of safety pictograms

With reference to the analysis of risks and their identification, DEPURECO has installed hazard labels on the vacuum cleaner which are taken from the regulations on graphic symbols.

The user is obliged to immediately replace any safety labels that become illegible due to wear and tear or damage.

Caution!

It is absolutely forbidden to remove the safety labels on the vacuum cleaner and/or its components and packaging.

DEPURECO declines all responsibility for the safety of the vacuum cleaner if this prohibition is not observed.

2.5 APPLIED DIRECTIONS

The following guidelines apply to the vacuum cleaner described in this manual:

- 2006/42/CE Machinery Directive
- 2014/30/UE Electromagnetic Compatibility Directive
- 2011/65/UE – ROHS Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Regulatory references, including mandatory requirements, are managed in the Quality Management System and archived at DEPURECO.

ATEX SAFETY INSTRUCTIONS

Hexagon Ex - ATEX Directive 2014/34/EU

In this manual, the Ex hexagon is placed alongside the main safety instructions on explosion risk.

All personnel involved in the installation, operation and maintenance of the equipment and its components should receive technical training corresponding to the tasks to be performed, particularly for working in areas with a potentially explosive atmosphere.
Any modifications made to this equipment may invalidate its safety requirements. Always follow the manufacturer's instructions.

ZONE 22: An area in which an explosive atmosphere in the form of a combustible dust cloud is not likely to occur during normal operation and, if it does occur, is only of short duration.
It is forbidden to use the equipment in areas classified for the presence of gas as ZONE 0, 1 or 2.

The equipment is only suitable for working with dusts without ignition sources.

Combustible dusts with the following characteristics can be handled:Self - flammability in MIT cloud.	°C	> 215
Self-flammability in LIT layer	°C	> 215
Minimum Initiation Energy (MIE) at all operating temperatures	mJ	≥ 3

Extraction of chemically unstable dust is prohibited

It is the responsibility of the user to ensure that the equipment is used in a manner consistent with its intended use, in particular that it is used in ZONES classified as compatible with those for which the equipment is declared suitable by the manufacturer.

The device is designed to work under standard environmental conditions:

- - Temperature -15°C ≤ Tamb ≤ +40°C.
- Atmospheric pressure +0.8/1.1 bar
- The treated product must have a temperature not exceeding 40°C.

Any electrical or mechanical components to be installed on the equipment must be certified as suitable for use:

- 3D category (ZONE 22)

For maintenance or cleaning operations, the user must ensure that the equipment used (vacuum cleaners, portable lamps, etc.) is of a category suitable for the environment:

- 3D category (ZONE 22)

INSTALLATION - START-UP

Before installation and start-up, provide a visual check for possible transport damage.

The instruments used for installation must comply with standard EN 1127-1 in relation to the area of use.

As a preliminary operation, grounding must be carried out and its correct functioning checked. The earthing is visually indicated by a symbol in accordance with the European standard.

Perform the following checks during the Start-up phase:

- verify the correct earthing of the equipment and the condition of equipotentiality between the various parts of the equipment, in particular the moving parts;

- carry out a blank test with acoustic verification (abnormal noise): in case of problems stop the equipment and check the assembly of moving parts;

- Electrical wiring must be carried out by qualified personnel and in accordance with the wiring diagram.

Adequate training of the operator performing installation, start-up and normal operation of the equipment must be carried out during acceptance and handover.

The user must ensure that the plant in which the equipment is to be installed has been adequately secured, from the point of view of explosion risk, before it is started up, and that the "Explosion Protection Document" has been drawn up in accordance with the ATEX Directive 1999/92/EC (D.M. 81-2008).

THE INTRODUCTION (ASPIRATION) OF SOURCES OF INNOCENTATION FROM OUTSIDE, including those caused by self-ignition of dust or by embers combustion, IS FORBIDDEN.

In the case of suction of dust that may give rise to self-ignition, the collection bin must be emptied immediately after each activity.

This precaution must also be taken in the case of extraction of different types of dust whose mixture may give rise to exothermic reactions.

A periodic check of the equipotentiality conditions, in particular after maintenance operations, between the different metal parts of the equipment, in particular the moving parts and the handle baskets, must be carried out.

Strictly use antistatic/dissipative components to ensure electrical continuity

Installation, assembly and dismantling operations must be carried out on machines that are switched off and in the absence of a potentially explosive atmosphere.

The installer must check that the process specifications correspond to the equipment characteristics given on the rating plate (e.g. with reference to the maximum surface temperature).

In the case of material with incompatible product characteristics, use of the equipment is prohibited.

The manuals for the ATEX components mounted on the equipment are enclosed: the user must observe all safety instructions regarding the use of these components.

The equipment must be cleaned by the user to avoid the formation of combustible dust layers.

Do not use compressed air for cleaning the dust layers, but suitable suction systems for dealing with potentially explosive dust (ATEX-certified hoovers).

A specially trained operator must always be present during the operation of the equipment and must intervene immediately by stopping the equipment using the emergency button (where provided) or the emergency isolator switch in the event of malfunctions, e.g. due to abnormal noise (breakage of components), clogging of the inlet and vent pipe, breakage of the filter sleeves, suction of foreign bodies or sources of ignition.

When installing and maintaining electrical parts (e.g. cables, cable glands and terminals) always follow the instructions of EN 60079-14.

When opening the junction boxes (for inspections), check that the gaskets are in place when closing them again.

The plug is of the ATEX type: the user must connect the plug to a socket located in a SAFE PLACE

Hoses, suction nozzles and filter bags are of the antistatic type declared by their respective manufacturers.

It is forbidden to use other types of components.

Protection against atmospheric discharges must be present in the establishment where the equipment is used.

There must be no sources of ignition in the immediate vicinity of the device, for example:- fiamme;

- embers;

- hot surfaces;

- sparks (e.g. caused by metal cutting);

- stray currents and cathodic protection systems;

- electrical or mechanical equipment that is not ATEX certified;

- electrostatic charges carried by operators or mobile equipment;

- radio frequency (RF) and electromagnetic waves (104Hz to 3*1011Hz);

- electromagnetic waves (3x1011Hz to 3x1015Hz);

- ionising radiation;

- ultrasound.

3 UNPACKING, INSTALLATION AND HANDLING SECTION

3.1 HANDLING

Caution!

Instructions for the correct transport and unpacking of the vacuum cleaner are also given on the packaging.

The following instructions also indicate the steps to be taken if the vacuum cleaner has to be repacked or unpacked for later transport.

Lifting and consequent handling of the vacuum pool cleaner must only be carried out using a forklift truck of appropriate weight capacity.

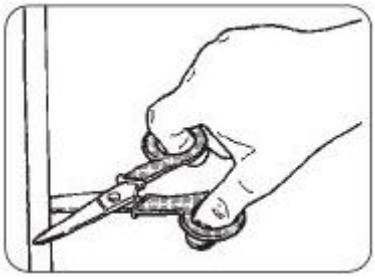
When moving with the forklift truck, lift the load 200 mm off the ground and swing it backwards.

When lifting loads, take into account the height of the environment in which you are working.

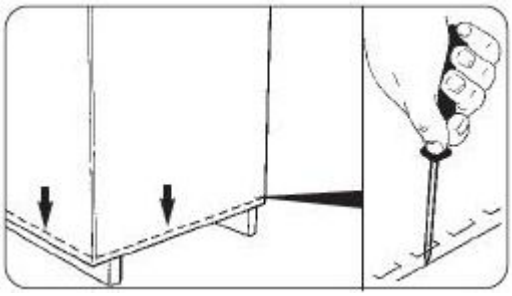
Before starting the movement, ensure that the passage area is clear and that there are no moving objects on the package. For lifting and handling, apply the applicable accident prevention laws and the normal forklift truck operating instructions.

3.2 UNPACKING

- Cut and remove the two packaging fastening strips



- remove, with the help of a screwdriver, the points that secure the cardboard packaging to the pallet (where provided)



- completely remove the cardboard (where applicable)

The cardboard packaging is recyclable and, in order not to create an environmental impact, it is recommended to take it to separate collection.

Caution!

Keep the pallet and fixing brackets.

For any subsequent transport, the vacuum pool cleaner must be anchored to the pallet using the same locking system.

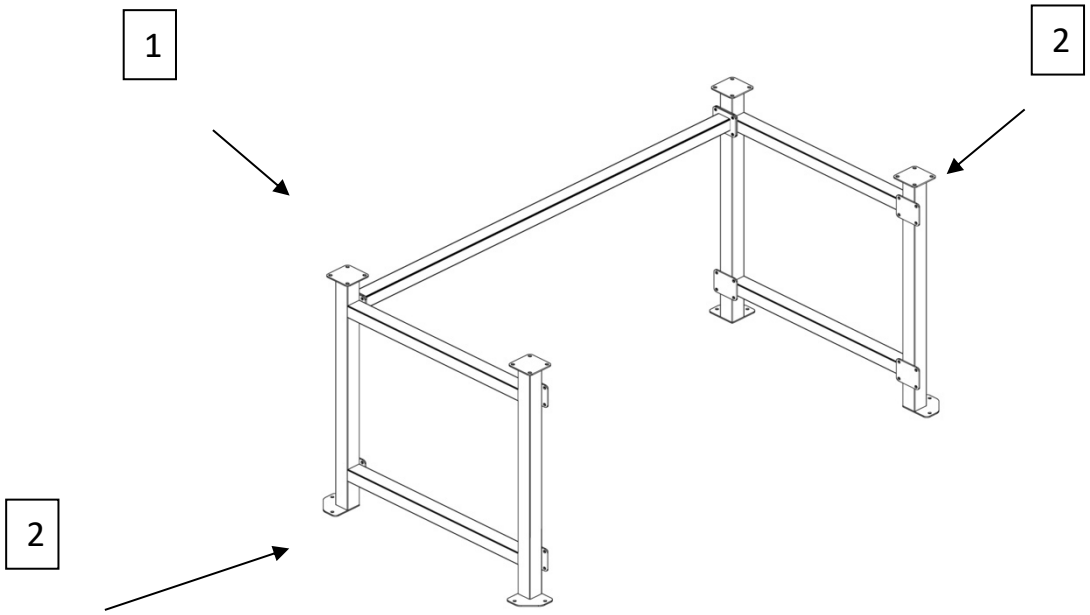
3.3 INSTALLATION

Warning!

Before installing the vacuum cleaner, it is necessary to carry out a careful prior visual inspection in order to detect any damage that may have occurred during transport phases.

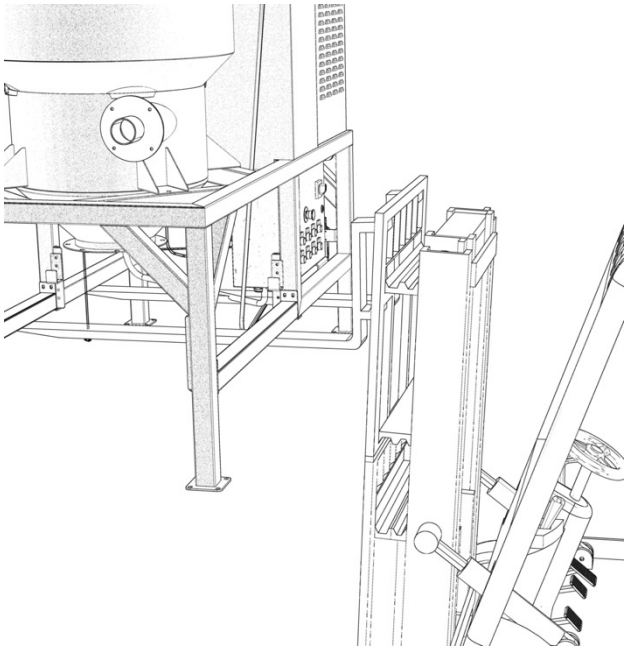
In the event that one or more components are damaged, it is essential not to proceed further with the installation and to inform DEPURECO of the anomaly detected, agreeing with them on the action to be taken. A suction filter is already fitted to the vacuum cleaner, which allows the suction of dry dust or debris only.

1. Use an appropriate forklift truck to move the machine from its end position
2. in the lower structure, where provided, fix the reinforcement bars (1) to the uprights of the support structure (2) at the fixing plates as shown in the picture below

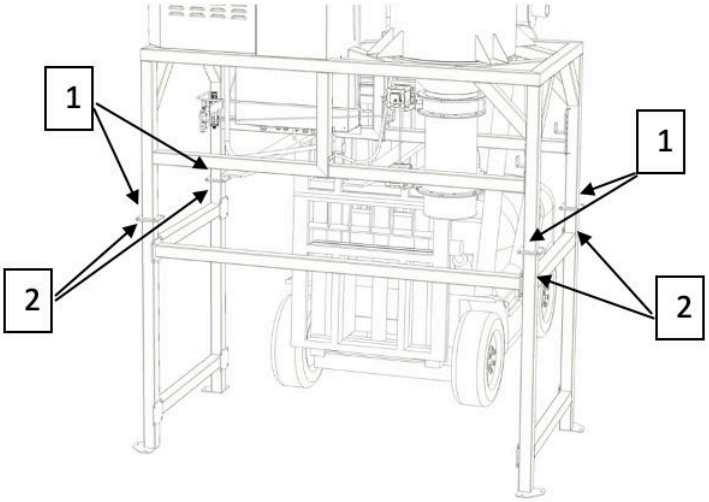


1. Fasten the backing plates firmly to the ground using appropriate dowels (dowels are not supplied by DEPURECO)

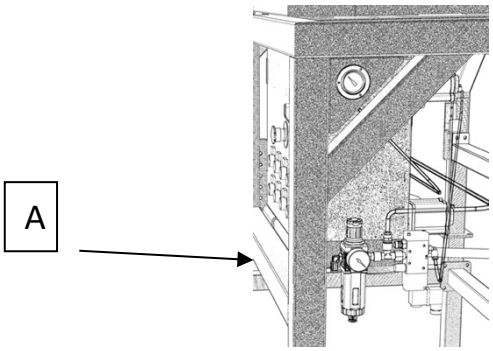
   Insert the forks of the forklift under the bars of the upper frame (as in the picture below) and lift it up to above the lower frame



Next, join the upper structure (1) to the lower structure (2) at the attachment plates as shown in the image below.



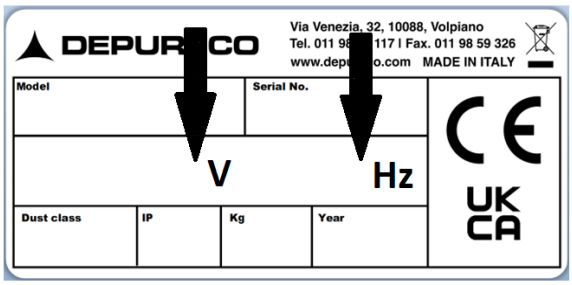
As previously mentioned, the frame connections (1) are to be made at the joint plates (2) by means of screws supplied with the extractor (3)



The following operations must be carried out by an electrician.

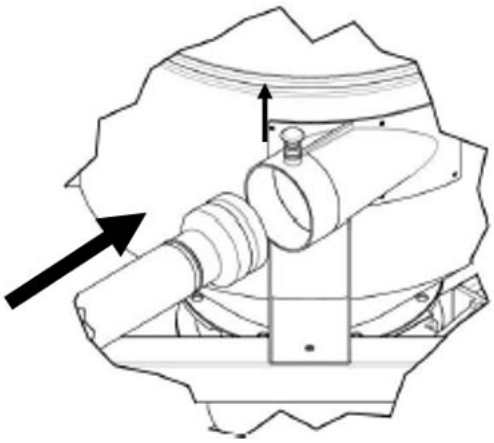
- Connect the connection shown in the figure with a suitable hose to the pneumatic network. The required pneumatic supply is max. 6 bar. To ensure correct operation over time, the air fed into the vacuum cleaner must be de-oiled.

- Check that the power supply line corresponds to the voltage and frequency indicated on the vacuum pool cleaner's nameplate and that it is efficiently earthed.



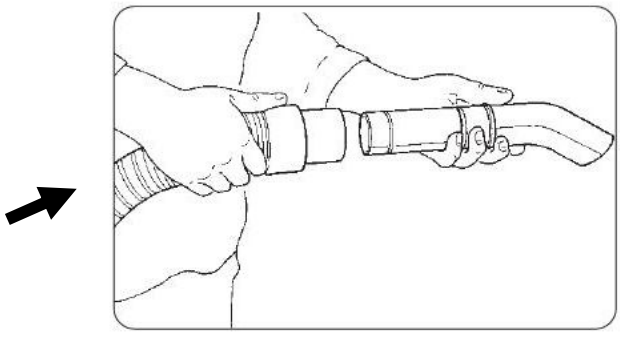
- The socket for supplying power to the vacuum pool cleaner must be protected by a mains disconnect switch in accordance with CE standards. Finally, insert the plug (not supplied as standard) into the socket.

Before switching on the vacuum cleaner, the machine's suction nozzle must be connected to a hose or to the system's mains.



On models where fitted, there is a knob on the suction nozzle for locking the tube. To fix the tube correctly, raise the knob (as shown in the picture above), insert the tube end into the suction nozzle and release the knob.

insert the desired accessory for the suction type on the opposite side of the hose



Note: the hose with its terminals and suction accessories are not included in the STANDARD equipment. Contact your dealer (or DEPURECO) for information on the different types of OPTIONAL accessories that can be used for this specific vacuum cleaner model.

Caution!

Do not insert the plug into the socket with wet hands.

The use of extension cords is not permitted.

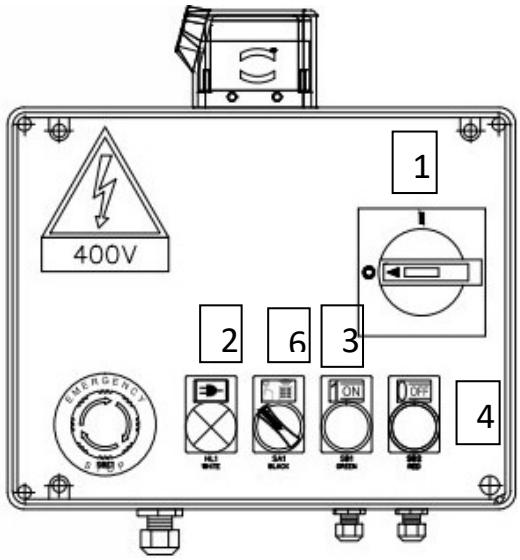
4 OPERATION SECTION

4.1 COMMAND DESCRIPTION

Caution!

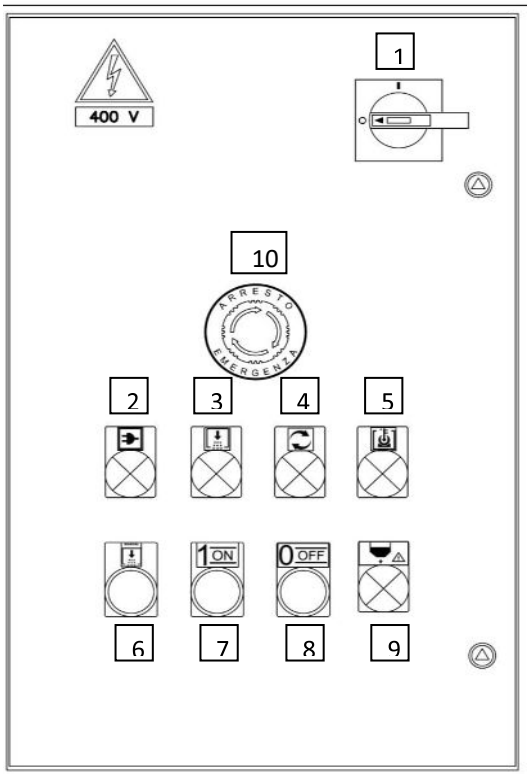
The vacuum cleaner may only be used by authorised personnel who have read these operating and maintenance instructions. The user of the appliance and the maintenance technician who carry out permitted work on the vacuum pool cleaner must receive appropriate education, information and training in accordance with the current occupational safety laws and use the prescribed personal protective equipment (PPE) for the various operations, such as safety footwear, gloves, protective goggles, mask, etc. The user must observe the regulations in force for sucked materials and their disposal.

HF 300:



1. Main switch ON/OFF
2. White indicator lamp: VOLTAGE PRESENCE
3. Green button: START SUCTION
4. Red button: Vacuum stop
6. Blue button: MANUAL START OF FILTER CLEANING

HF 5,5 – 7,5 – 10 – 15 – 18 – 20 – 25 – 30 – 35:



1. General ON/OFF switch
2. White indicator lamp: VOLTAGE PRESENCE
3. Green indicator light: FILTER CLEANING IN PROGRESS
4. Green indicator light: WORK CYCLE IN PROGRESS
5. Yellow warning light: SAFETY THERMAL SHOCKED
6. Blue button: MANUAL START OF FILTER CLEANING
7. Green button: START ASPIRATION
8. Red button: EXHAUST STOP
9. Red light: FAILURE DISCHARGES
10. Red button: EMERGENCY STOP

The configuration of the switchboards may vary according to customer-specific versions and/or requests

4.2 OPERATING CYCLE

Caution!

Before plugging in, make sure that the voltage of the supply line corresponds to that indicated on the vacuum cleaner's rating plate.

Ensure that the power cable is undamaged and in perfect condition.

Make sure that the power plug is correctly inserted into the socket and make sure that the white POWER INDICATOR light is on. If it is not lit, it means that the machine's electrical panel is not powered.

Before starting the machine, place a container (or bag) under the discharge area to collect the solid material sucked in and avoid its dispersion in the area where the machine operates.

Check that the maintenance hatch is closed correctly.

To start using the vacuum pool cleaner, turn the main switch to "I", then, on models where foreseen, press the green button (7) START ASPIRATION.

When the work is finished, to switch off the vacuum pool cleaner, turn the main switch to "0", while on models where it is foreseen, it is advisable to first press the red stop button (8) ARRESTO ASPIRAZIONE and then turn the main switch to "0".

Caution!

Before switching the vacuum cleaner on again, make sure that the turbine has stopped completely.

Caution!

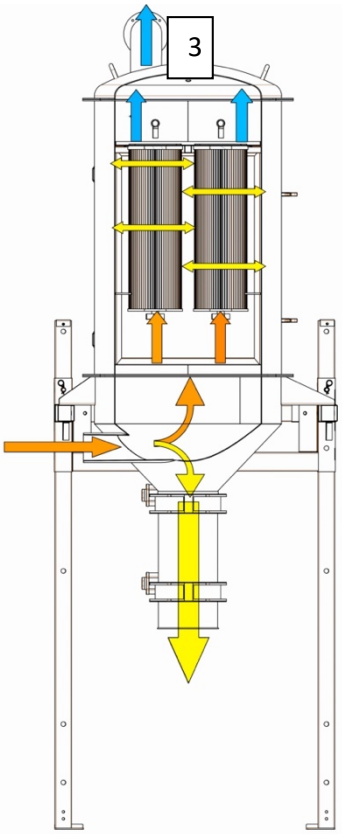
If dust escapes from the vacuum cleaner's silencer, the filter may have broken. In this case, stop the vacuum cleaner immediately and check the cause.

In an emergency, turn the main switch to '0'.

On some HF models, if the vacuum cleaner does not suck but blows, it means that the direction of rotation of the motor is not correct. To restore correct operation, simply, after switching off the machine and disconnecting it from the socket, insert a screwdriver into the notch on the inside of the power plug and reverse the two poles with a rotation of 180°.

Working cycle description:

1. Dust-laden air is drawn in through a tangential nozzle that ensures its uniform distribution within the hopper
2. Inside the filter chamber, the inhaled air abruptly reduces its velocity, assuming a spiral motion that causes the coarser particles to precipitate while the lighter particles follow the airflow reaching the filter elements.
3. The air flow is distributed over the surface of all filter elements (cartridges or bags) by passing through them from the outside to the inside. Next, the filtered, and now particle-free, air is directed to the outlet duct located on the top (lid) of the filter chamber
4. Vacuumed dust and particles settle on the outer surface of the filter elements, improving their filtering action but gradually increasing their pressure drop. Needing to contain the pressure drop, the filter elements are regularly subjected to a cleaning cycle using a strong jet of compressed air. This jet of air produces a pressure wave that removes dust and particles layered on the outer surface of the filter elements. As the material detaches from the filter elements, it falls by gravity into the hopper below
5. Material discharge depends on the solution chosen at the design stage



Filtered air Air with debris Waste material

Cautions!

If you notice a significant reduction in suction power, the filter is probably clogged. In this case, stop the machine and arrange for filter cleaning.

- **To clean the filter (with PSC cleaning), proceed as follows:**

- The vacuum cleaner must be connected to compressed air with a maximum pressure of 6 bar at the appropriate filter regulator (see section 3.3 of this manual).
- Turn off the vacuum cleaner
- Wait for the motor to come to a complete stop
- Press button 6 (p.36-37)

To clean the filter (with SP cleaning) proceed as follows:

The vacuum cleaner must be connected to compressed air with a maximum pressure of 6 bar at the appropriate filter regulator (see section 3.3 of this manual).

Cleaning of the filter cartridges will be done automatically during the vacuum cycle. Depending on the models, it is possible to manually operate the cleaning system directly from the appropriate button (6) located on the electrical panel. This operation can also be carried out when the vacuum cleaner is not in operation but always in the presence of voltage

Vacuum cleaner with manual cleaning system (HF 300)

- Turn off the vacuum cleaner
- Wait for the pump to completely stop
- Lift and lower the lever vigorously to shake the internal filter

Caution!

If the vacuum cleaner does not work properly after cleaning the filter, it is possible that the filter is clogged and needs to be replaced.

Caution!

Waste disposal must be in accordance with the laws in force in the country where the vacuum cleaner is used - for Italy D.Lgs 152/2006 as amended.

4.3 STORAGE – DECOMMISSIONING

Remove the filter and clean it, empty the debris container or remove the part of the bag with debris, and store the vacuum cleaner in a place sheltered from the weather with temperatures between 0°and 40°C, covering it with a nylon cloth so as to prevent dust accumulation

5 MAINTENANCE SECTION

Caution!

Extraordinary maintenance of the vacuum cleaner should be carried out only by specialized technicians recognized by the DEPURECO dealer.

5.1 INFORMATIVE NOTES

This section describes the routine inspection and maintenance operations that are essential to ensure the smooth operation of the vacuum cleaner.

Maximum vacuum cleaner reliability and minimum maintenance cost are the result of a planned maintenance and inspection program that is scrupulously followed throughout the life of the vacuum cleaner.

Strictly adhere to the established maintenance time intervals and cadence the interventions according to the specific needs in relation to the production cycle of the vacuum cleaner.

Always use tools that are in perfect condition and specially made for the operation to be performed; the use of unsuitable and inefficient equipment can cause serious damage.

Any other work that may be necessary to eliminate faults or malfunctions must be expressly authorized by the manufacturer.

In such cases always communicate the identification data of the vacuum cleaner-see Section 1.4 of this manual.

For major repairs, it is advisable to contact the authorized dealer whose specialized personnel, equipped with all the technological experience of the original factory construction, are always on call and can intervene promptly.

For maintenance by the user, it is necessary to disassemble, clean and service the vacuum cleaner, whenever possible, without leading to danger to maintenance personnel and third parties. Suitable precautionary measures include decontamination before disassembly, measures for filtered forced ventilation of the room where the unit is disassembled, cleaning of the maintenance area, and suitable personal protective equipment.

The manufacturer or qualified person must perform, at least once a quarter (or more frequently depending on the work cycle and conditions of use), an inspection to the filters checking that they are not damaged, also check the proper functioning of the control devices.

When maintenance or repair work is carried out, all contaminated items that cannot be satisfactorily cleaned shall be placed in impermeable bags and disposed of in accordance with applicable laws.

5.2 GENERAL SAFETY REGULATIONS

Cautions!

All operations described must be carried out with the plug disconnected from the power outlet.

Before starting any maintenance or cleaning operation, wear appropriate PPE (protective clothing, goggles and/or gloves, etc.) depending on the work to be performed.

Affix a sign on the vacuum cleaner indicating:

"MACHINE UNDER MAINTENANCE

DO NOT START."

Before resuming service, recheck the entire system in accordance with start-up procedures.

After each maintenance operation, perform a few test cycles to check the proper operation of the machine.

Failure to observe these precautions may result in serious injury to personnel.

Maintenance work must be performed by technicians who are skilled and trained in the specific areas, which for this machine are:

- Mechanical maintenance
- Electrical maintenance

It is the specific duty of the Safety Officer to ensure the professionalism and competence of the above persons.

Before starting any maintenance work, the Safety Officer must have the work area cleared of outsiders and:

- ☞ Make sure the necessary tools are within reach of the maintainer and are in good condition.
- ☞ Ensure that the maintenance worker has the necessary personal protective equipment for the specific operation (gloves, goggles, shoes, mask, etc.).
- ☞ Ensure that the maintainer has carefully read the instructions in this manual and is fully familiar with the operation of the vacuum cleaner and its components.
- ☞ Check that lighting is sufficient and provide 24-volt powered portable lamps if necessary

Before starting maintenance work, the Maintainer must disconnect all electrical supplies and put the vacuum cleaner in a safety lockout condition

Cautions!

If it is absolutely necessary to operate with the power on, when required by D. Lgs. 81/08, the maintainer must keep a safe distance, have stop buttons within reach, and never put his or her hands in the discharge volume.

Upon completion of the work and before resuming service, the maintainer must recheck the functionality of safety devices and the integrity of protections.

Work on motors or other electrical components should be carried out only by the specially trained Electrical Maintainer authorized by the Safety Officer.

Before each work shift

- Check that the power cord and plug are not damaged: replace it immediately if it shows signs of wear and tear, using a cord of the same type (information c/o DEPURECO) operation the sole responsibility of an electrician.
- Check the integrity of the safety symbols (pictograms) attached to the vacuum cleaner.
- Check the integrity of the suction hose and accessories to be used.

Cautions!

The hose, if punctured, decreases suction power and disperses liquids.

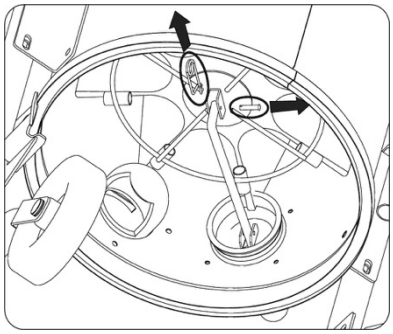
Cautions!

Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

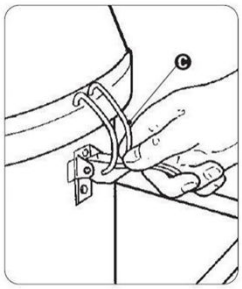
5.3 REPLACING THE FILTER

To replace the filter in the HF300 (with manual cleaning), proceed as follows:

- Turn off the vacuum cleaner by turning the main switch (1) to "o"
- Disconnect the vacuum cleaner from the power supply.
- Remove the hopper
- From the underside of the filter chamber, unhook the clip and pull out the pin securing the cage to the filter shaker lever



- Unlock from both sides the two locking hooks of the head base on the filter chamber (C)

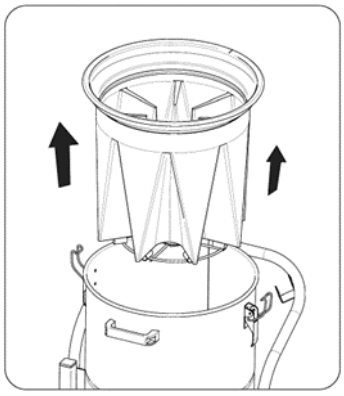


- Getting help from a second person, remove the head with its base

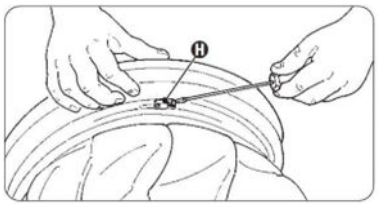
Caution!

The total weight of the head with its base is about 35kg

- Remove the HEPA filter (where provided) by releasing the two dedicated locking hooks.



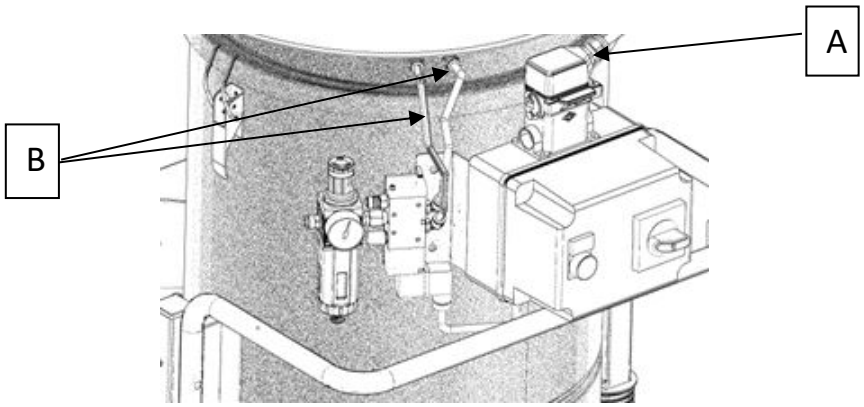
- Remove the filter and place it on a workbench.



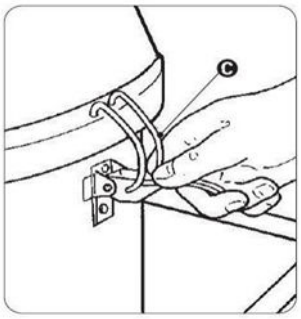
- Loosen the retaining clamp (H), remove the filter from its holder

To replace the filter in the HF300 (with PSC cleaning), proceed as follows:

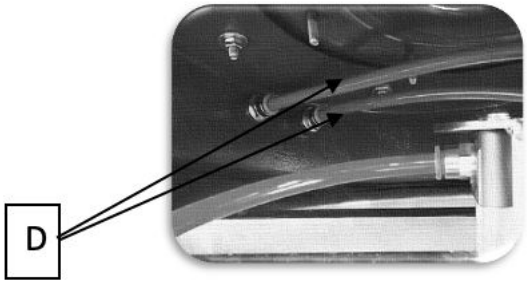
- Disconnect the vacuum cleaner from the power supply and compressed air supply.
- Disconnect the 2 hoses (B) of the compressed air from the head
- Disconnect the electrical connector (A)



- Unlock the two hooks (C) closing the canopy from both sides.



- Getting help from a second person, lift the head slightly taking care to disconnect the 2 compressed air hoses (D).

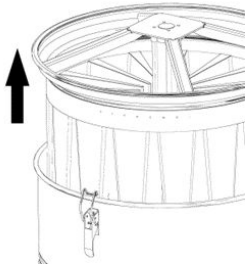


- Getting help from a second person, remove the head with its base

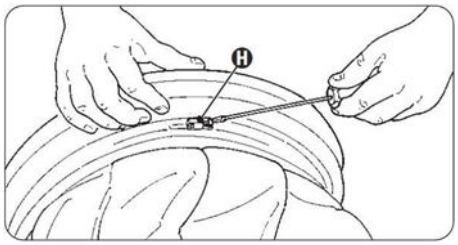
Caution!

The total weight of the head with its base is about 35kg

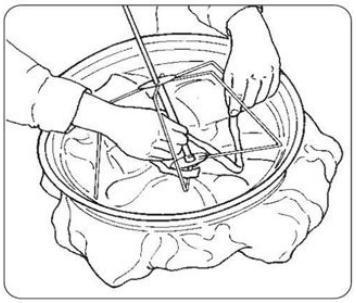
- Remove the filter (complete with holder and piston) and gently place it on a workbench



- Loosen the retaining strap (H), detach the filter from its holder.

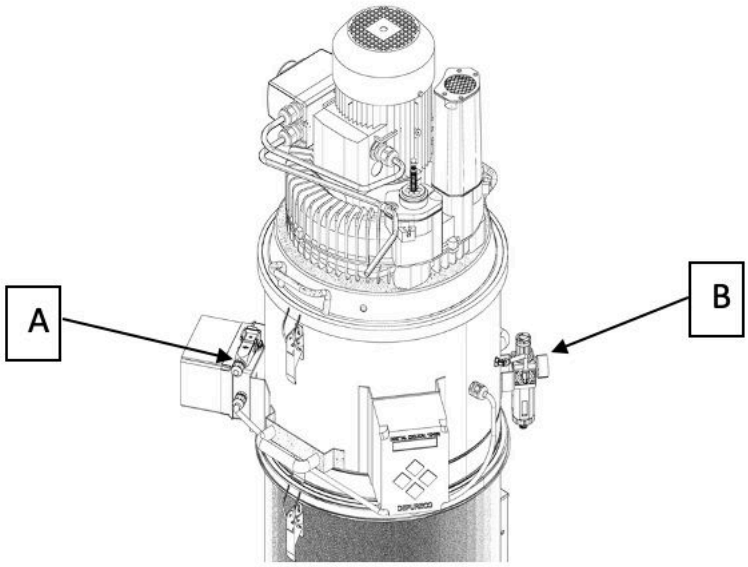


Slide out the filter and unfasten the tapes holding it to the cage.

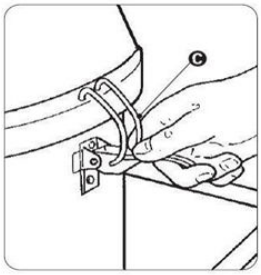


- **To replace the filter in the HF300 (with SP cleaning), proceed as follows:**

- Disconnect the vacuum cleaner from the power supply and compressed air supply.
- Disconnect the pipe (B) of the compressed air supply.
- Disconnect the electrical connector (A)



- Unlock the two hooks (C) closing the canopy from both sides.

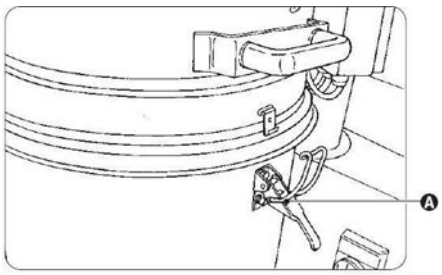


- Getting help from a second person, remove the head with its base

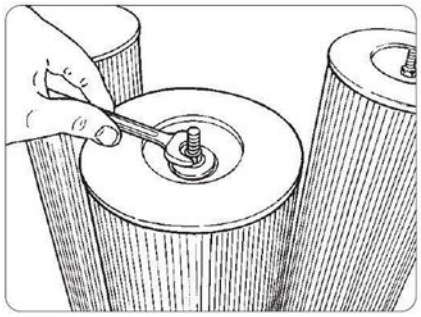
Caution!

The total weight of the head with its base is about 35kg

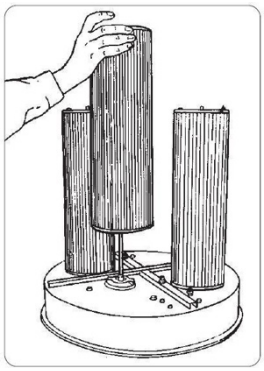
- Unlock the C.C.A. cleaning system from the locking hooks (A) and having a second person help you lift it out of the filter chamber, turn it upside down and place it on a workbench



- From the base of the cartridges, remove and unscrew the retaining nuts

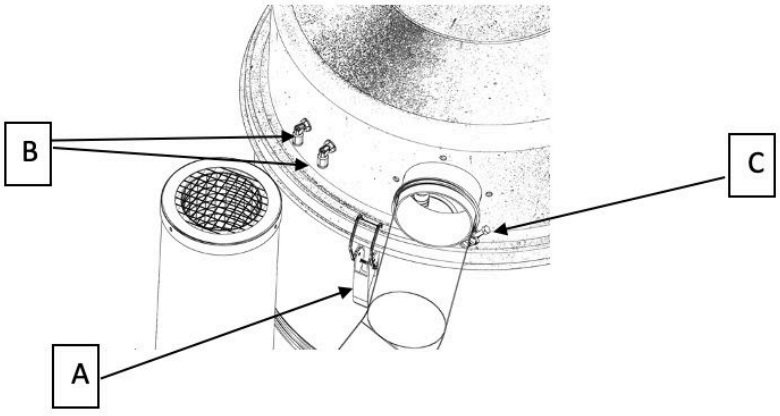


- Slide out and replace the filter cartridges.

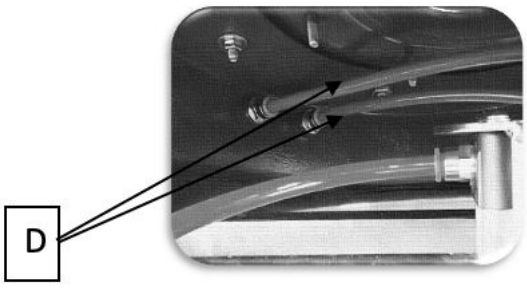


For filter replacement in HF 5.5 - 7.5 - 10 - 15 - 18 - 20 - 25 (with PSC cleaning) proceed as follows:

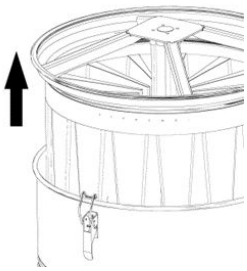
- Disconnect the vacuum cleaner from the power supply and compressed air supply.
- Disconnect the suction hose (C) by unscrewing the clamp with appropriate hex wrench
- Unfasten the hooks (A) closing the hood
- Disconnect the 2 hoses (B) of compressed air from the head



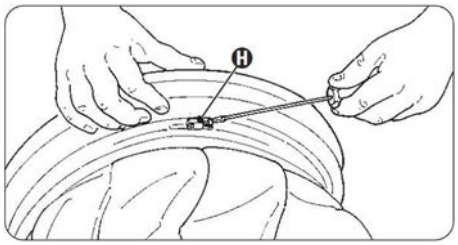
- Getting help from a second person, lift the head slightly taking care to disconnect the 2 compressair tubes (D) and remove it.



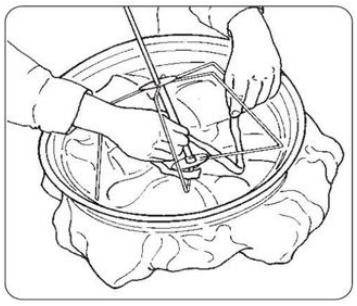
- Remove the filter (complete with support and plunger) and place it gently on a workbench



- Loosen the retaining clamp (H), detach the filter from its support



- Slide off the filter and unfasten the ribbons holding it to the cage



To replace the filter in HF 5.5 - 7.5 (with SP cleaning), proceed as follows:

- Disconnect the vacuum cleaner from the power supply and compressed air supply.

- Disconnect the suction hose (C) by unscrewing the clamp with appropriate hex wrench

- Unlock the hooks (B) closing the hood and remove it.

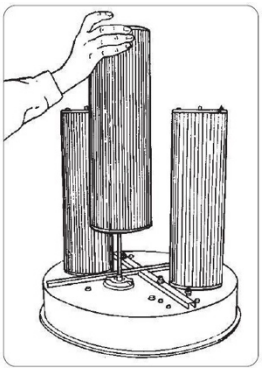
- Disconnect the pipe (D) of the compressed air supply.

- Disconnect the electrical connector (A)

  Unlock the C.C.A. cleaning system from the locking hooks (E) and with the help of a second person lift it out of the filter chamber, turn it upside down and place it on a workbench

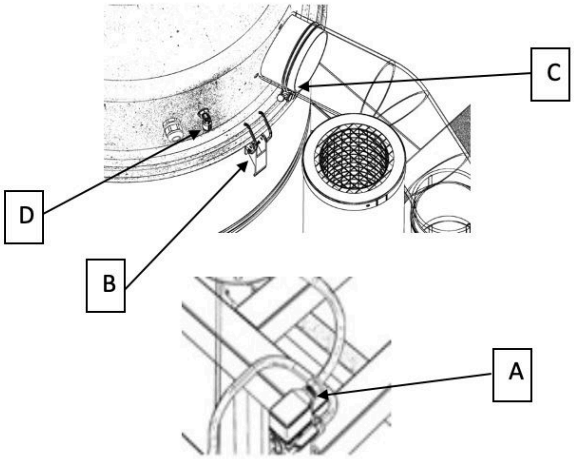
- From the base of the cartridges, remove and unscrew the retaining nuts

- Slide out and replace the filter cartridges.

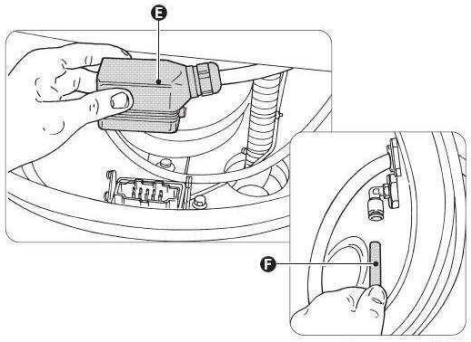


For filter replacement in HF 10 - 15 - 18 - 20 - 25 (with SP cleaning) proceed as follows:

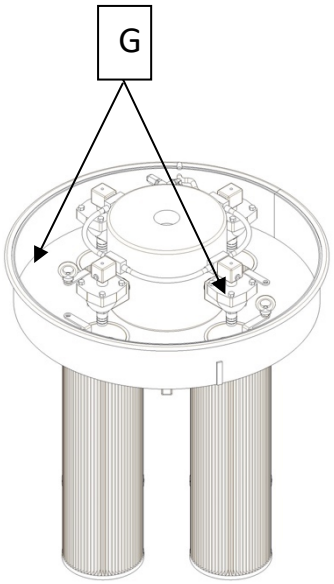
- Disconnect the vacuum cleaner from the power supply and compressed air supply.
- Disconnect the suction hose (C) by unscrewing the clamp with appropriate hex wrench
- Unfasten the hooks (B) closing the hood
- Disconnect the compressed air hose (D) from the head
- Disconnect the electrical connector (A)



With the help of a second person, lift the head slightly and, on the inside, disconnect the connector (E) and disconnect the pneumatic supply tube (F) from the air supply fitting. Remove the head and place it on a workbench.



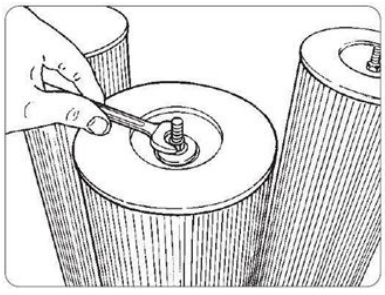
- Use No. 2 eyebolts F M8 [G] (not supplied) by screwing them onto the studs on the top of the pneumatics to lift and remove it



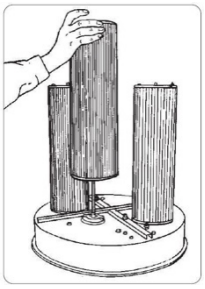
Caution.

The total weight of the pneumatics with its base is about 25kg

- From the base of the cartridges, remove and unscrew the retaining nuts



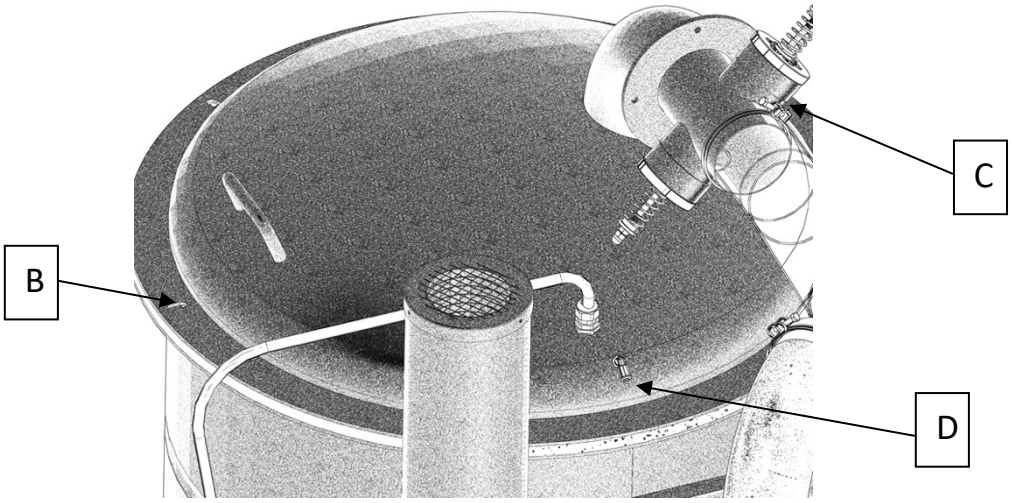
- Slide out and replace the filter cartridges.

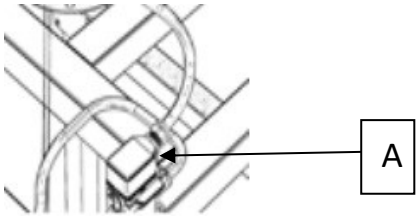


To replace the filter in HF 30 - 35 (with SP cleaning), proceed as follows:

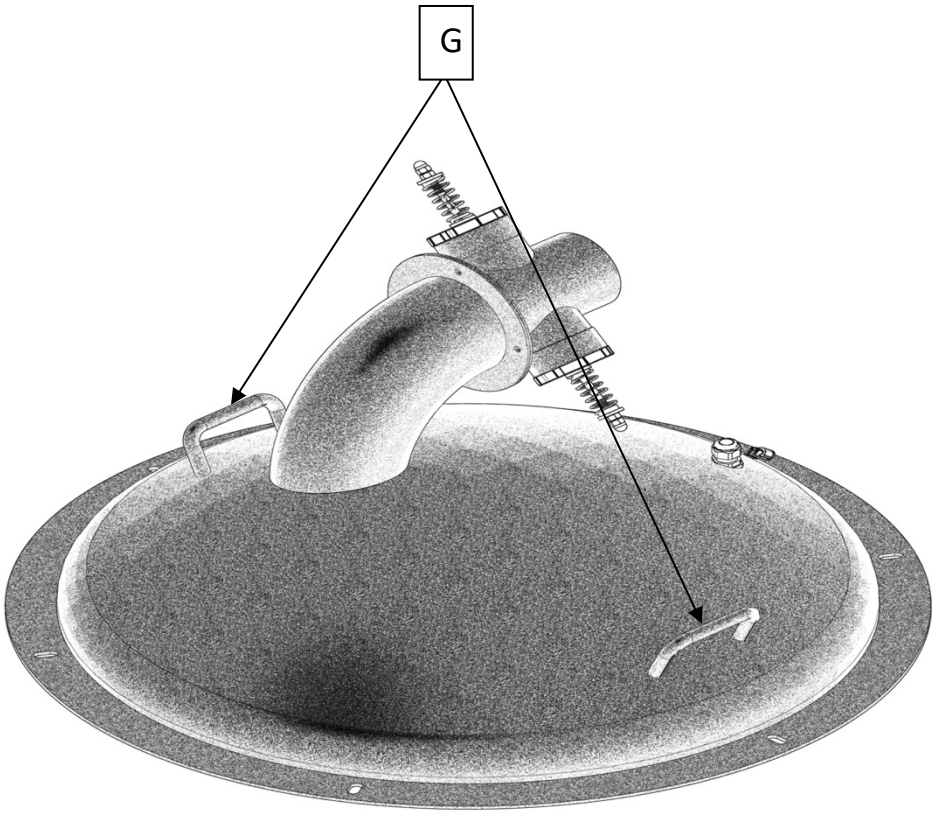
- Disconnect the vacuum cleaner from the power supply and compressed air supply.
- Disconnect the suction hose (C) by unscrewing the clamp with appropriate hex wrench
- Unscrew and remove the 6 bolts (B) closing the hood
- Disconnect the compressed air hose (D) from the head

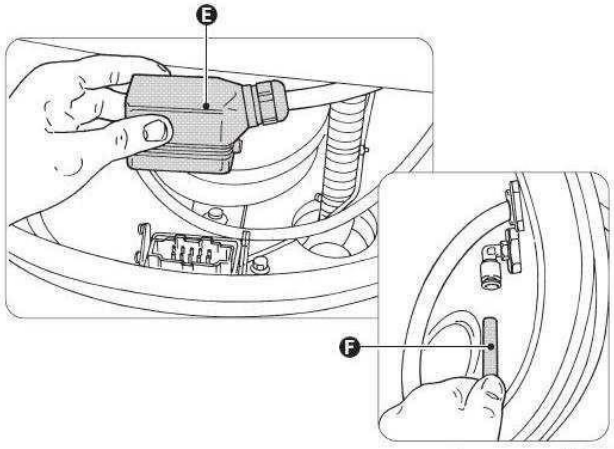
- Disconnect the electrical connector (A)





Hook 2 lifting ropes to the 2 handles (G) and by forklift/crane truck/crane lift the head slightly and, inside, disconnect the connector (E) and disconnect the pneumatic supply hose (F) from the appropriate fitting. Remove the head and place it on a workbench.

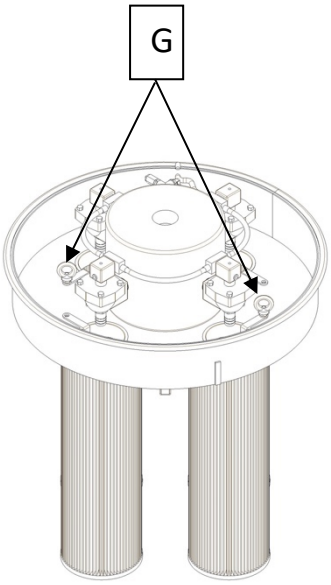




Warning.

The total weight of the head is about 25kg

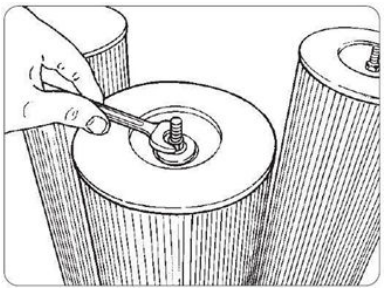
- Use No. 2 eyebolts F M8 [G] (not supplied) by screwing them onto the studs on the top of the pneumatics to lift and remove it



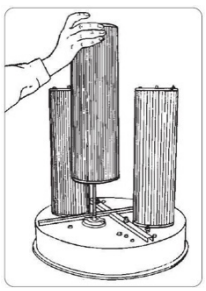
Attenzione!

Il peso complessivo della pneumatica col suo basamento è di circa 25kg

- Dalla base delle cartucce rimuovere e svitare i dadi di fissaggio



- Slide out and replace the filter cartridges.



TO REINSTALL THE FILTERS WORK BACKWARDS THROUGH THE ABOVE STEPS

Caution.

When replacing the filter, make sure that the equipotential bonding braid is properly connected

Remove the spent filter, place it inside a plastic bag, close it and dispose of it according to current laws for the type of material sucked in

USE ONLY ORIGINAL DEPURECO FILTERS

5.4 TROUBLESHOOTING

ANOMALY	POSSIBLE CAUSE	SUGGESTED REMEDY
insufficient suction	- Clogged filter	- Replace the filter
reduced filtering capacity	- Filter cartridges not properly fitted	- Check the assembly of the filter cartridges
Dust leakage from the vacuum cleaner	- Improperly closed maintenance hatch	- Check tailgate closure
	- Cracked filter	- Replace filter
	- Filter not suitable for the type of material sucked in	- Fit the filter suitable for the type of material to be vacuumed

ANOMALY	POSSIBLE CAUSE	SUGGESTED REMEDY
The vacuum cleaner does not start	- Power failure - Circuit breaker tripped	- Verify the presence of voltage in the socket - Check the integrity of the plug and power cable -Reset circuit breaker - Contact DEPURECO Technical Service
Irregular suction	- Clogged filter	Carry out a filter cleaning. If this is not sufficient, replace it.
	- Clogged suction pipe	- Check the suction pipe and clean it.
Excessively noisy engine	- Fan failure	- Contact DEPURECO Technical Service

5.5 SCRAPPING

This product falls within the scope of Directive 2012/19/EU re and electronic equipment (WEEE). The appliance must not be disposed of with waste d can be recycled at appropriate facilities. Inform yourself through the ecological platforms suitable to receive the product for disposal and its s purchase of equivalent equipment, the distributor is obliged to take it back free of charge potentially dangerous to human health and the environment, as it does not contain so abandoned in the environment impacts negatively on the ecosystem. Read att the first time. Absolutely do not use the product for electrical shock use if improperly used.

The symbol of the crossed-out wheelie bin on the label on the appliance indicates that electrical and electronic equipment is being disposed of. The abandonment of the equipment or law in the environment.

ISCRIZIONE AL REGISTRO RAEE N IT18090000010711

If in doubt, call your dealer immediately

DEPURECO INDUSTRIAL VACUUMS

INTERVENTION 1: DATE:

TECHNICAL ASSISTANCE:

TYPE OF INTERVENTION:

DEPURECO
INDUSTRIAL VACUUMS

MAINTENANCE INTERVENTIONS

INTERVENTION 2: DATE:

TECHNICAL ASSISTANCE:

TYPE OF INTERVENTION:

DEPURECO
INDUSTRIAL VACUUMS

MAINTENANCE INTERVENTION:

INTERVENTION 3: DATE:

TECHNICAL ASSISTANCE:

TYPE OF INTERVENTION: