



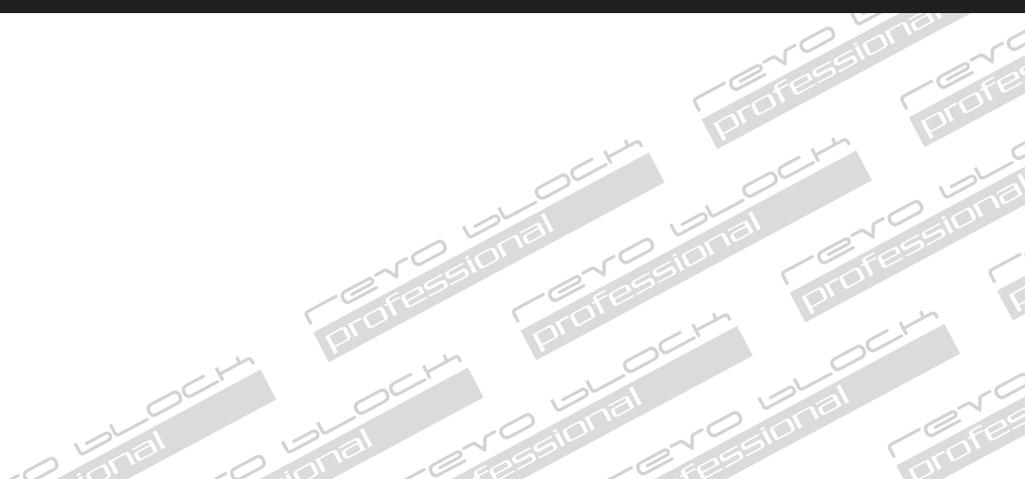
SISTEM·AIR
CENTRAL VACUUM SYSTEMS

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TECHNICAL MANUAL



REVO BLOCK
professional



- Type: industrial vacuum cleaner
- Model: Revo Block Professional
- Revision 1.0.0

INDEX

GENERAL INFORMATION	4
1 HOW TO USE THE MANUAL	4
2 DESCRIPTION OF THE CENTRAL VACUUM CLEANER	4
2.1 Distinctive product features	5
3 TECHNICAL FEATURES	6
4 CONSTRUCTION FEATURES	8
5 SAFETY FEATURES	9
5.1 IP protection degree	10
5.2 Electric insulation degree	10
5.3 Declaration of absence of dangerous substances	10
5.4 Fixed closure safety guards	10
5.5 Movable closure safety guards	10
5.6 Identification plate	11
6 CORRECT USE OF THE VACUUM CLEANER	12
7 INCORRECT USE OF THE VACUUM CLEANER	12
8 EQUIPMENT AND ACCESSORIES	13
9 INSTALLATION	14
9.1 Recommended Installation	14
9.2 Transport and unpacking	15
9.3 Positioning of the vacuum cleaner	18
9.4 Transforming DX version (outlet pipes fitted on the right) into SX version (outlet pipes fitted on the left)	18
9.5 Fixing the system to the wall	19
9.5.1 Connection to the piping network	19
10 STARTING THE VACUUM CLEANER	19
10.1 Control board	19
10.2 Electric connection	20
10.2.1 Testing the correct motor spin direction for the model Revo 700	20
11 USE OF THE VACUUM CLEANER	21
11.1 Switching the vacuum cleaner on	21
11.2 Using the vacuum cleaner	21

- Type: industrial vacuum cleaner
- Model: Revo Block Professional
- Revision 1.0.0

INDICE

11.3 Programming and use of the computer for controlling the central unit	22
11.3.1 Main screen display	22
11.3.2 Programming the start up	23
11.3.3 Main Menu	25
11.3.3.1 Depression set point	26
11.3.3.2 Alarm info	26
11.3.3.3 Menu for setting date and time	30
11.3.3.4 Menu for setting machine stop	30
- Dust alarm	31
- Maintenance alarm	32
- Filter alarm	33
- Autocleaner alarm	34
11.3.3.5 Installation parameters menu	35
11.3.3.6 Data transmission menu	38
11.3.3.7 Parameters reset Menu	38
11.3.3.8 Check and test Menu	39
- Installation testing	39
- Suction inlet test	41
- Autocleaner test (only active if Autocleaner is connected to the machine – see paragraph 11.3.5)	42
- Electronics test	44
11.4 Screen displays during machine functioning	45
11.5 Examples of alarm screen displays	47
11.5.1 Inverter alarm	47
11.5.2 Autocleaner system's alarms	48
11.5.3 Ethernet alarm	49
11.5.4 Filter alarm	49
11.5.5 Maintenance alarm	50
11.5.6 Dust alarm	51
12 MAINTENANCE	52
12.1 Programmed routine maintenance	52
12.2 Extraordinary maintenance	52
12.3 Cleaning the vacuum cleaner body (cylinder)	53
12.4 Emptying the dust bin	53
12.5 Replacing the filter cartridge	55



Line

Revo Block Professional

INSTRUCTION MANUAL

- Type: industrial vacuum cleaner
- Model: Revo Block Professional
- Revision 1.0.0

12.6	Regeneration of the filter cartridge	57
12.7	Cleaning of the external body	57
13	REPAIRS AND SPARE PARTS	57
13.1	Intervention criteria	57
13.2	Recommended spare parts	58
13.3	Putting the vacuum cleaner out of service (general rules)	58
14	SOUND EMISSION	59
15	IDEAL LOCATION OF THE VACUUM CLEANER TO REDUCE SOUND EMISSION	59
16	VIBRATIONS	59
17	TROUBLESHOOTING	60
	APPENDIX A - CONNECTION TO THE AUTOCLEANER APPLIANCE (optional)	61
A.1	Positioning of the Autocleaner	61
A.2	Pneumatic connection	62
A.3	Electric connection	62

INTRODUCTION

Dear Customer,

TECNOPLUS S.r.l., owner of the SISTEM AIR Trademark would first of all like to thank you for having chosen to buy the new vacuum cleaner of the Revo Block Professional Line. We are sure that the characteristics described in this manual will satisfy your needs.

Revo Block Professional has been designed and produced in strict compliance with the Machinery Directive 2006/42/CE (transposed into Italian Legislation by Decree Law 17/10), Low Tension Directive 2006/95/ CE, and Electromagnetic Compatibility Directive 2004/108/CE. The system has been manufactured with top quality materials and with particular care paid to reducing as much as possible the risk of injury.

We have therefore written this manual in order to provide adequate instructions for the correct use and maintenance of the system which are crucial to ensure the user's safety, the correct functioning and the long working life of the vacuum cleaning unit.

Read the entire manual carefully, follow the instructions precisely, and above all, for safety reasons, do not intervene in any way if not specifically indicated.

For the best results, we suggest to use SISTEM AIR original accessories and materials. The SISTEM AIR Trademark is a registered trademark and is property of TECNOPLUS S.r.l.

GENERAL INFORMATION

1. How to use the manual

The instruction manual has been written by the manufacturer and is an integral part of the vacuum cleaner. If the system is resold, given or hired out to others, the manual must be handed over to the new user or owner.

We recommend using and storing it carefully for the entire working life of the vacuum cleaner. This manual explains how to use the equipment correctly in order to obtain the best performance while maintaining optimal working and safety conditions.

It is strictly forbidden to reproduce, copy or disclose any part of this document by any means without prior written consent of TECNOPLUS s.r.l. which is the owner of the SISTEM AIR Trademark. TECNOPLUS s.r.l. reserves the right to upgrade or modify this manual or the vacuum cleaner itself at anytime without giving any prior notice to third parties.

2. DESCRIPTION OF THE VACUUM CLEANER

Constant research applied to central vacuum cleaners and advanced electronic technology have allowed TECNOPLUS S.r.l. to create Revo Block Professional.

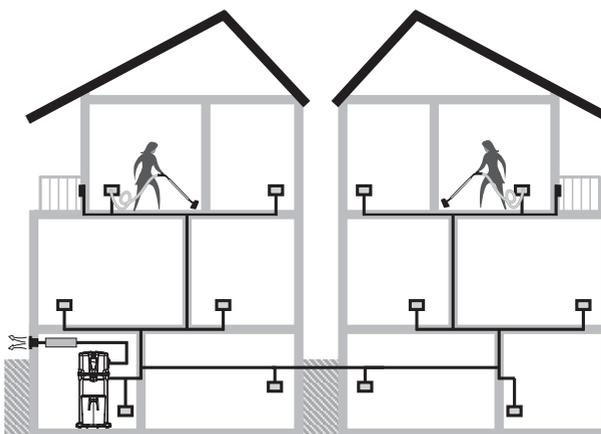
The central vacuum cleaner, suitable for any type of residential building (private houses, offices, hotels, service sector), consists of a network of PVC trace pipes, housed in walls or in false ceilings running through the various rooms; at the end of the pipes are positioned the suction sockets.

The SISTEM AIR vacuum cleaner is usually placed in a utility room, garage or other storeroom and connected to the suction pipes network.

The system is switched on by inserting the sleeve coupling of the flexible vacuum cleaning hose in any of the suction sockets.

If the piping network doesn't feature any electrical power supply, the system can be switched on and off by means of a remote control device (optional accessory).

The Revo Block Professional vacuum cleaner features innovative characteristics which make it more suitable for professional applications (small hotels, offices, sports centres, beauty shops) with reduced encumbrance. The Revo Block Professional vacuum cleaner is run by a second-generation electronic system that Sistem Air applies to its vacuum cleaners to allow a simplified management of the cleaning unit.



Main features of the Revo Block Professional unit:

- Opportunity of contemporary use by three operators depending on the models (see table below).

MODEL	USERS	Ø PIPING NET
Revo Block 500		50 mm
Revo Block 700		50 mm
Revo Block 1000		63 mm
Revo Block 1200		63 mm
Revo Block 1500		63 mm
Revo Block 1800		80 mm

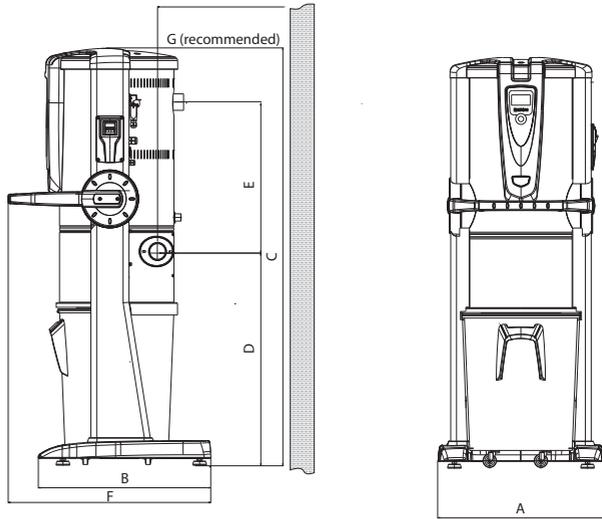
2.1 DISTINCTIVE PRODUCT FEATURES

- High-performing professional motor group with side-channel blow made of light alloy, no maintenance need, compliant with CE regulations, IP55 class, provided with integrated silencer;
- Motor noise dB(A): from 60 db (50 Hz), to 72 db (60 Hz);
- The range presents different versions with single-phase and three-phase current supply;
- Pressure transducer;
- Electronic speed converter with current reduction (inverter);
- Board computer with specific control and maintenance software;
- Base coated with shockproof material to protect the vacuum unit;
- Class 1 isolation;
- Left or right connection to the pipe dust inlet and to the air exhaust;
- Wheeled machine body coated with epoxy-powders with large-capacity dustbin (l 62/106);
- Fastening and release of the dustbin with Soft-Touch-grip handle, reducing the effort when opening the bin;
- Possibility to combine the Autocleaner filter self-cleaning system even afterwards (see page 64);
- Bag with bag-stretcher in the dust container in order to dispose of the vacuum-cleaned material in a quick and hygienic way;
- Suction inlet's power supply with 12 V dc tension;
- Certificated L-class polyester filter cartridge, washable with water (filtering surface 17000/17800 cm²);
- Mechanical vacuum breaker valve for air-flow regulation;
- Exclusive automatic suction power regulation system by Sistem Air.

The machine adopts an innovative control and routine maintenance system based on an electronic control board with microchip connected to pressure sensors and programmed to easily and immediately interact with the user. Maintenance can be individually programmed by the user who will receive messages about the machine status directly on a user-friendly graphic display, as well as suggestions about actions to be taken in case of malfunctioning.

Moreover Sistem Air made a software, which displays all the information about system functioning, once it is installed on a personal computer through the connection of an ethernet net cable and its interface board (on request).

3- TECHNICAL FEATURES



Revo Block Professional model

Control board (PLC)

1

Speed Electronic converter

2

On-board computer

3

Bin release handle

4

Filter protection

5

Filter

6

Dust container

7

Wheels

8

9 Cover

10 Air exhaust

11 Blowing motor group

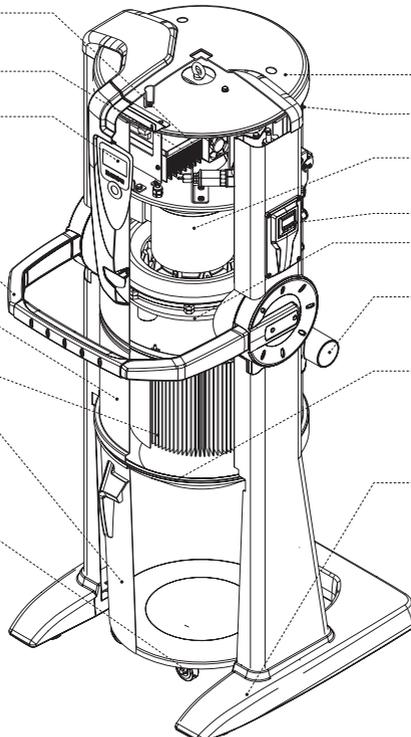
12 Main switch

13 Pressure transducer

14 Dust inlet

15 Conveyor cone

16 Base



Revo Block Professional							
Model Item		Revo Block 500	Revo Block 700	Revo Block 1000	Revo Block 1200	Revo Block 1500	Revo Block 1800
		3201.1B	3201.2B	3201.3B	3201.4B	3201.5B	3201.6B
	Maintenance Computer		YES	YES	YES	YES	YES
Suction connection	Ø mm	63	80	80	80	80	80
Air exhaust	Ø mm	63	63	63	63	63	80
Protection degree	IP	20	20	20	20	20	20
Power supply	V ac	220/240	400	220/240	400	400	400
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Motor power	kW	1,5	2,2	2,2	2,2	4	4
Absorption	A	5,7	5,1*	8,8	5,1	9,2	9,2
Socket power supply	V dc	12	12	12	12	12	12
Speed electronic converter		YES	NO	YES	YES	YES	YES
Maximum air flow	m ³ /h	265	304*	366	366	471	570
Filtering surface	cm ²	17000	17800	17800	17800	17800	17800
Dust bin capacity	l	62	106	106	106	106	106
Air exhaust		YES	YES	YES	YES	YES	YES
Air exhaust silencer		YES	YES	YES	YES	YES	YES
Weight	kg	75	95	95	95	105	115
A Size	mm	615	750	750	750	750	750
B Size	mm	633	633	633	633	633	633
C Size	mm	1515	1616	1616	1616	1616	1616
D Size	mm	773	773	773	773	773	773
E Size	mm	542	642	642	642	642	642
F Size	mm	750	750	750	750	750	750
G Size	mm	500	500	500	500	500	500
Motor sound level	dB(A)	60÷80					

*With power supply frequency 50 Hz.

N.B.: Nominal sound level values. The values can vary depending on the speed of use, on the installation environment of the vacuum unit, as well as on the installation type.

4 - CONSTRUCTION FEATURES

The vacuum cleaners belonging the Revo Block Professional line feature a motor group / side channel pump with intervention modes depending on the use of the electronics installed, based on the number of operators using the vacuum system. Thanks to this electronics, installation is very simple: it is sufficient to set the vacuum value and the suction unit regulates automatically all the parameters while working thanks to the pressure transducer in order to obtain the vacuum performance set. This way testing becomes exactly as simple as on a domestic vacuum cleaner.

Maximum surface	MODEL	Item	Maximum users number	Self-cleaning prearrangement	Motor power kW	Phase power Supply -Volt ac	Speed electronic converter	Maximum air flow m ³ /h	Filtering surface cm ²	Container capacity litres
up to 500 m ²	Revo Block Professional 500	3201.1B	1	SI	1,5	2-220/240	SI	265	17000	62
up to 700 m ²	Revo Block Professional 700	3201.2B	1	SI	2,2	3-400	NO	304	17800	106
up to 1000 m ²	Revo Block Professional 1000	3201.3B	2	SI	2,2	2-220/240	SI	366	17800	106
up to 1200 m ²	Revo Block Professional 1200	3201.4B	2	SI	2,2	3-400	SI	366	17800	106
up to 1500 m ²	Revo Block Professional 1500	3201.5B	2	SI	4	3-400	SI	471	17800	106
up to 1800 m ²	Revo Block Professional 1800	3201.6B	3	SI	4	3-400	SI	570	17800	106

Revo Block Professional vacuum cleaners are designed and manufactured in compliance with all the criteria imposed by the current regulations and European directives while carefully paying attention to crucial elements like performance, power and operating capacity.

The main technical characteristics are the following:

- Cylindrical body made of metal coated with epoxy powder;
- Base coated with shockproof material to protect the unit;
- Metal bin for dust collection (62/106 litres capacity) equipped with wheels for handling;
- Dust bag and bag-stretcher for dust collection, to ensure quick and healthy disposal operations of the material collected;
- Possibility to connect pipes both on the left and on the right;
- Motor group pump with side channel;
- Vacuum breaker valve to ensure the motor is not operating in critical conditions;
- Electronic converter (inverter) to reduce electrical absorption;
- Suction sockets supplied with 12 V dc voltage;
- Polyester filter cartridge with L-class certificate, washable in water (filtering surface: 17000/17800 cm²);
- Metal filter protection to prevent accidental breakage;
- On-board computer to control the maintenance cycles with warnings for full dust bag replacement, filter cartridge cleaning, motor maintenance;
- Prearrangement of a connection to an auxiliary remote signal for maintenance notice (optional);
- Liquids suction through optional accessory;
- Electrostatic material suction after prior grounding of the metal piping net installation;
- Possibility to combine the Autocleaner filter self-cleaning system even afterwards.

5 - SAFETY FEATURES

It is recommended to read carefully all the installation, use and maintenance instructions detailed in this manual.

Furthermore, the following WARNINGS should always be observed:

- Never use the machine for improper purposes;
- Keep children away from the vacuum cleaner when functioning. Children should not play with the machine nor with the suction sockets;
- This equipment should not be used by persons (including children) with reduced psychic, sensory or mental capacities or by persons with no experience or knowledge of the system, unless under the guidance or instructed to use the machine by persons responsible for their safety;
- Children must always be supervised to ensure they do not play with the machine;
- Immediately disconnect from power supply if:
 - the electric cable is damaged or worn;
 - the vacuum cleaner has been exposed to rain or excessive humidity;
 - the vacuum cleaner has been knocked or the outer body has been in any way damaged;
 - you think the system requires maintenance or repair;
- Wear protective gloves and mask to carry out maintenance, to empty the dust bin or replace and clean the filter;
- Only use original spare parts and accessories;
- Do not suction clean fabrics, heavy materials, ashes or hot embers;
- Never suction clean liquids;
- Do not use the system without a filter cartridge;
- Do not block the exhaust air pipes or the motor cooling intakes;
- No part of the body should come into contact with the suction accessories;
- Use only one suction socket at a time;
- Do not leave the system switched on when not using it and disconnect it from power supply when the system is not to be used for a long period of time;
- Do not suction clean building materials (concrete, lime wastes, plaster dust, etc.) once the installation is completed. This will quickly clog the filter cartridge.
- **Do not vacuum any material which may cause electrostatic charges in the piping system, if not previously communicated to the constructor.**

Finally, remind that pictograms or danger and warning signals can be found on those parts of the equipment where, if not strictly followed, potential risky situations may occur.

WARNING: TECNOPLUS S.R.L. declines any form of responsibility or guarantee if the purchaser, or anyone in his stead, makes even the slightest modification or adjustment to the purchased product. The unit has been designed to satisfy at best the present needs of the domestic central vacuum cleaners market, both in terms of quality and operating capacity.

All materials and components used to manufacture this product comply with CE safety regulations. All relevant certifications are held at TECNOPLUS S.R.L. headquarters.

5.1 IP Protection Degree

IP 20: The appliance features a protection against solid objects having a size exceeding 12 mm. The appliance is not protected against water penetration.



5.2 Electric insulation degree

CLASS I: the appliance features basic electrical insulation.

It must be connected to the grounding circuit through the main electric wiring.



5.3 Declaration of absence of dangerous substances

TECNOPLUS S.r.l. declares that its products and appliances have been manufactured with materials which comply with the restrictions established by the health and environment protection regulations in force and do not contain SVHC-classified substances (Substance of Very High Concern) in compliance with CE regulation 1907/2006 (REACH: i.e. Registration, Evaluation, Authorization and Restriction of Chemical Substances). Although these substances have not been used during the processing cycles of raw materials and during the manufacturing cycles of our products, their presence in p.p.m. (parts per million) cannot be completely excluded due to micro-pollution of raw materials.

5.4 Fixed closure guards safety

The access to the electric parts is protected by a cover which can only be removed by unscrewing the Torsen screws used to fix the soundproofing dome of the housing where the suction motors are assembled.

Every intervention on the control board and on the motors must be carried out by qualified personnel only after disconnecting the electrical power supply and by removing the electric plug from the electric socket.

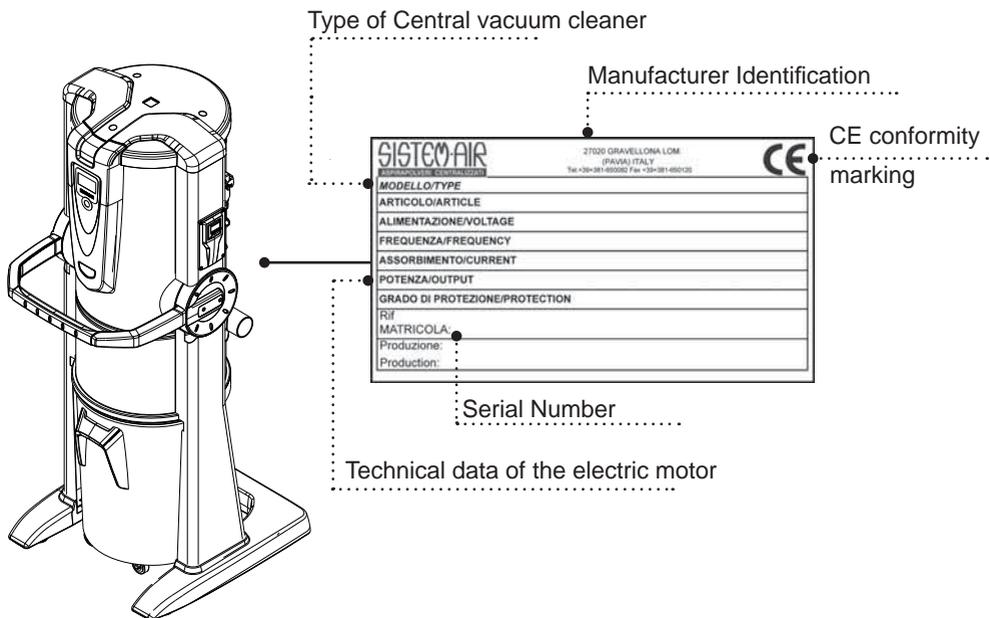
5.5 Movable closure guards safety

There are no movable closure guards assembled on the appliance. Every guard assembled is considered a fixed guard and is fastened with special screws.

TECNOPLUS s.r.l. will immediately suspend the product guarantee in case of machine tampering carried out by the Customer.

5.6 Identification plate

The CE identification plate is assembled on the side of the connection to the pipe network. This should not be removed or damaged.



6 - CORRECT USE OF THE VACUUM CLEANER

The Revo Block Professional vacuum cleaner has been designed exclusively to vacuum clean dust, very small-size solids and dry materials.

The use of the central vacuum cleaner is authorised for household and civil uses, and connected to a wall traced pipe network and to a standard home electrical wiring.

The vacuum cleaner can be installed either in big domestic dwellings or in buildings with extended surface of the tertiary sector or requiring a continual and hard use presenting the following characteristics:

- maximum recommended surface to be cleaned 1800 m²
- piping network set up with pipes with 63/80 diameter and Ø 63/80 mm inlet coupling to the vacuum cleaner
- 220/240 V ac and 400 V ac single-phase power supply
- air exhaust conveyed to the outside
- the system can be used simultaneously by 3 operators (only if it has been suitably dimensioned).

7 - INCORRECT USE OF THE VACUUM CLEANER

It is extremely important NOT to use the system in the following circumstances which are considered to be inappropriate and dangerous:

- The system must not be used to vacuum clean fabrics, heavy or hot/burning materials.
- The system must not be used to vacuum clean liquids.

Furthermore the system has not been designed for use in environments with risk of explosion, and therefore:

- it is forbidden to suction clean materials with high explosion risk (gunpowder) or materials which are individually inert but that, once collected and mixed in the dust bin, could provoke dangerous chemical reactions.
- It is absolutely forbidden to use the vacuum cleaner in explosive atmosphere or outside the standard temperature, pressure and humidity levels.
- **Do not vacuum any material which may cause electrostatic charges in the piping system, if not previously communicated to the constructor.**

Any use of the appliance other than those specified above is forbidden.

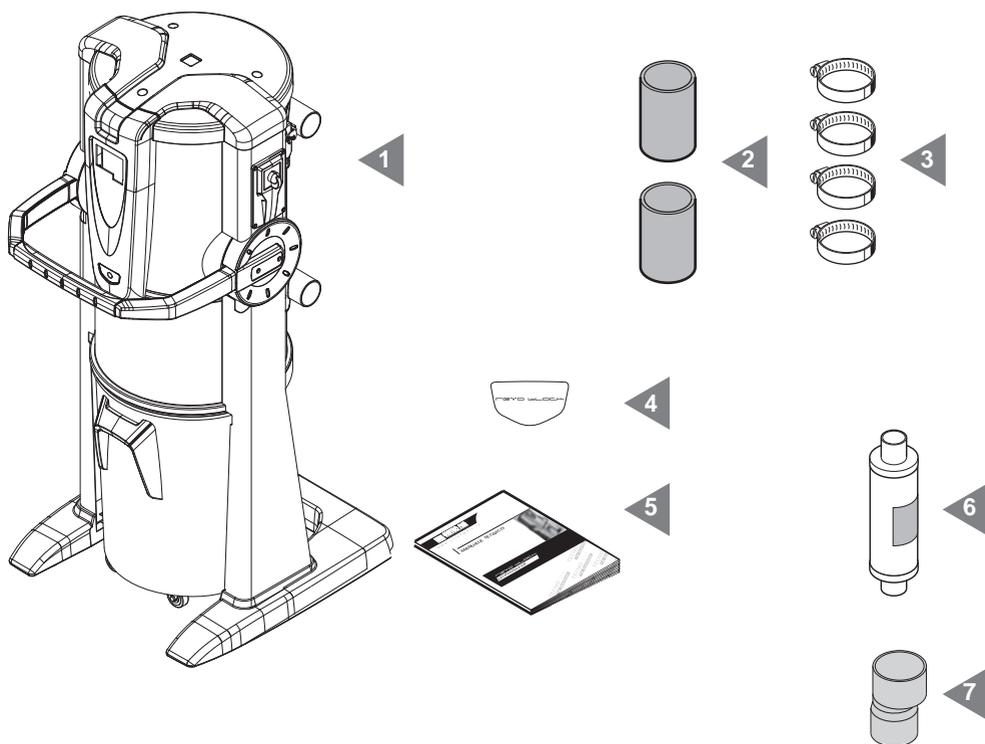
Any change or modification made to the system in order to suction clean a particular type of material must obtain the prior written approval of the manufacturer.

The use of the system for purposes other than those for which it was manufactured, represents an irregular condition which can cause damage to the product and seriously compromise the operator's safety.

8 - EQUIPMENT AND ACCESSORIES

The packaging of the vacuum cleaner also includes a series of accessories as detailed below:

- 1) N°1 Revo Block Professional vacuum cleaner
- 2) N°2 rubber sleeves for the connection to the suction piping network
- 3) N°4 metal clamps to fix the sleeves
- 4) N°1 adhesive label detailing the system model
- 5) N°1 installation, use and maintenance manual
- 6) N°1 silencer
- 7) N°1 eccentric extension 80/63



Check that the system, the accessories and the kit correspond to the products ordered and that they have not been evidently damaged during transport.

In case of problems contact your Retailer immediately.

9 - INSTALLATION



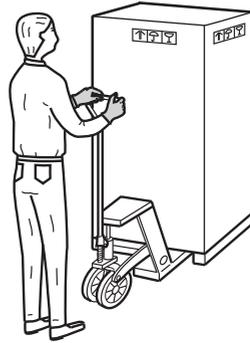
**- WARNING -
THESE PROCEDURES MUST BE CARRIED OUT
BY QUALIFIED STAFF**

9.1 Recommended installation

The Revo Block Professional vacuum cleaner must be connected to an exhaust air pipe, crucial for discharging outside the micropowders that the filter cartridge cannot retain. The vacuum cleaner must be installed in service rooms (e.g. garage, store room etc) protected from bad weather, dampness and excessive temperature variations (Working environment temperature “-5 ÷ 45°C”, relative humidity 20 ÷ 85% without condensation or freezing). Install the unit in a place far from heat sources such as stoves and radiators. (N.B: the unit features IP 20 protection degree).

During the set up phase, we suggest to always carefully check that the unit is positioned in the most suitable location selected for the system. Check also that sufficient space has been left for installation, use and maintenance purposes and for an optimal recirculation of the air around the vacuum cleaner. Construction features allow the vacuum cleaners to be connected to the pipe system with pipes coming either from right or left sides. In case of multi-storey vacuum cleaning system, we suggest you to install the unit on the lowest available floor.

9.2 Transport and unpacking

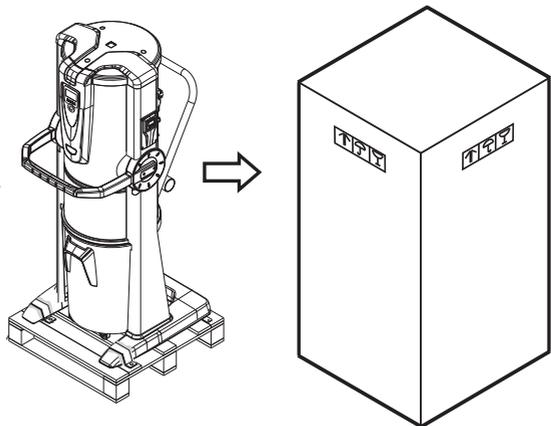


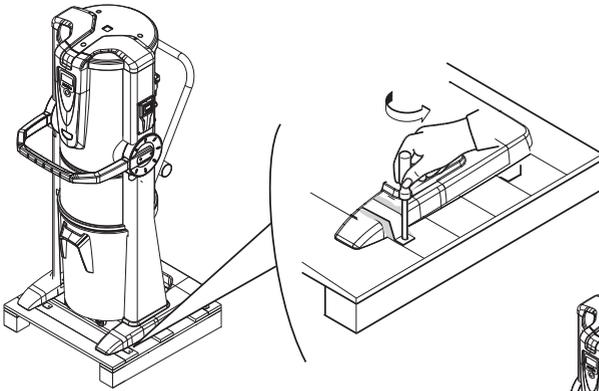
1

Use a transpallet or a fork-lift truck for transport and handling; always maintain the system inside its own packaging until it reaches the place of installation.

Remove the protective cardboard box.

2



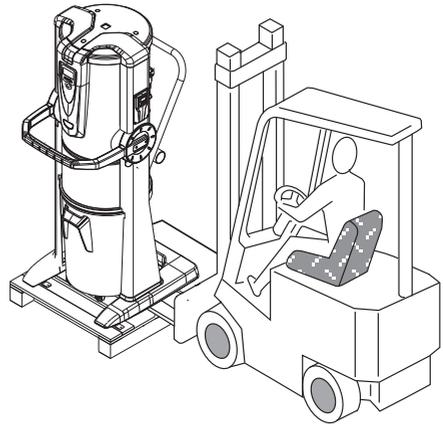


3

Remove the brackets that fix the unit to the pallet.

Remove the unit from the pallet.

4

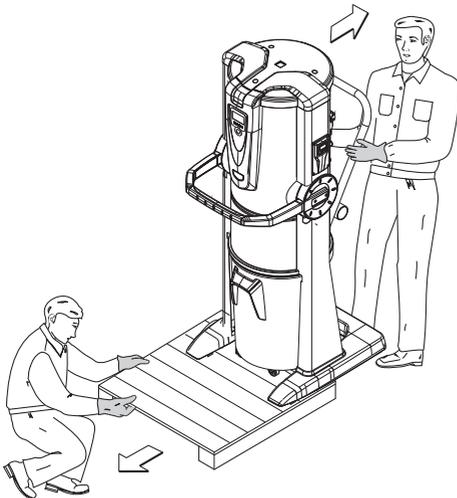


5

If no suitable fork-lifts are available, remove manually the unit from the pallet (see picture).

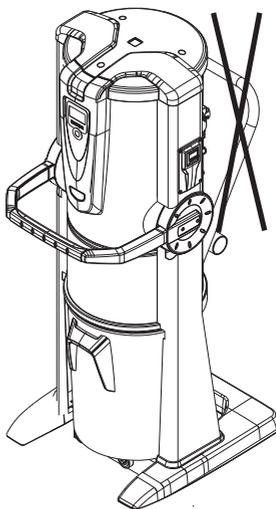
In this case, at least two strong persons are needed to slide the unit while a third person removes the pallet.

WARNING: do not tilt the unit more than 15° so to avoid dangerous unbalances.



Remove all the accessories and dispose the cardboard box according to the regulations in force. 6

Remove the handle. 7



9.3 Positioning of the vacuum cleaner

For a correct use and to facilitate maintenance it is advisable to keep a minimum distance of 60 cm on three sides around the appliance (excluding the side on which it is fixed to the wall).

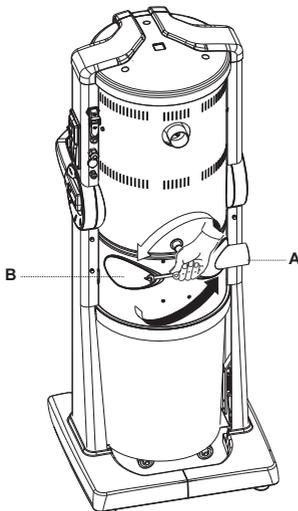
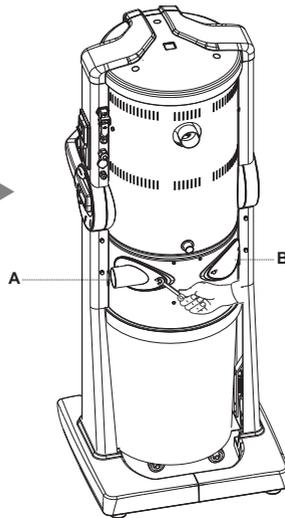
9.4 Transforming DX version (outlet pipes fitted on the right) into SX version (outlet pipes fitted on the left)

Vacuum cleaners are generally supplied with suction and exhaust pipes on the right side (RIGHT version). If needed, the system can be transformed so to have both suction and exhaust pipe connections on the left side (LEFT version).

To do this:

Disassemble the intake of the "A" suction pipe and the "B" closing plate by removing the screws.

1



2

After exchanging their housings, reassemble the intake of the "A" suction pipe and the "B" closing plate by fastening the screws.

Now rotate by 180° the intake of the suction pipe as shown in the picture.

9.5 Fixing the vacuum cleaner

The unit does not need any special fixing device. For a correct and safe positioning, it is however necessary to check that the location selected for installing the unit features the following min. requirements:

- a solid, perfectly flat and horizontal bearing surface;
- the surface must not vibrate. Furthermore it is of utmost importance to avoid any unevenness of the bearing surface that could make the unit unstable.

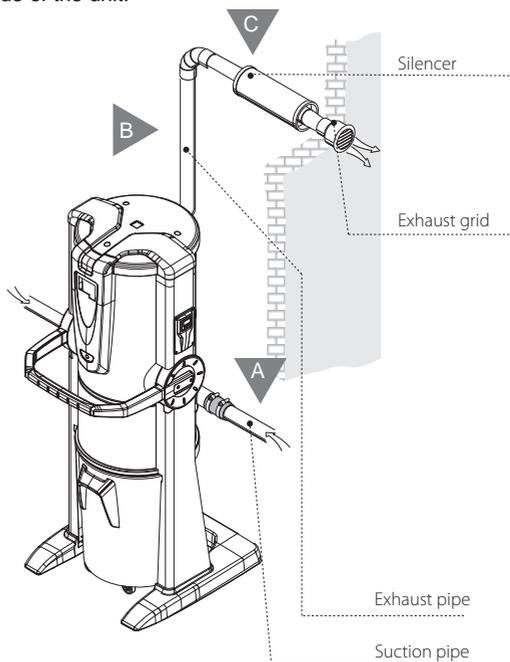
9.5.1 Connection to the piping network (see picture)

The intakes for the connection to the suction pipes network and to the pipes exhausting the air outside can be assembled either on the right or left side of the unit.

A Using the eccentric extension 80/63, the sleeve and the metal clamps delivered with the vacuum cleaner, connect the unit to the air suction pipe.

B Using the sleeve and the metal clamps delivered with vacuum cleaner, connect the unit to the exhaust pipe.

C Assemble a silencer on the exhaust pipe; position the silencer near the exhaust grid.



10 STARTING THE VACUUM CLEANER

10.1 Control board

The Revo Block Professional vacuum cleaner features a control board from which the appliance functions can be programmed by means of a simple operator's interface display with 6 function keys.

From the control board (display) it is possible to control and set the routine maintenance operations; the vacuum cleaning sockets are distributed in the various rooms and connected through the piping network. For this reason, the operator is never directly in contact with the appliance while the system is working, apart from starting operations (see paragraph 11.3.2) and use of the vacuum cleaner (see paragraph 11).

10.2 Electric connection



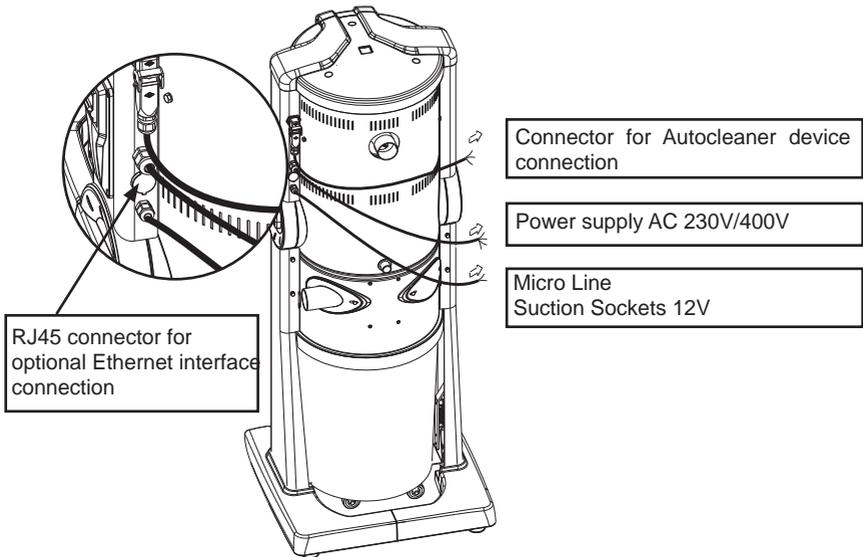
WARNING: the electric connection must be carried out ONLY by qualified personnel.

Before connecting the system to the electrical power supply check that the supply voltage corresponds to that required by the vacuum cleaner (see identification plate).

The manufacturer declines any responsibility for damages to persons and/or objects due to a connection to a non-complying electric wiring.

Follow the instructions (see picture) detailed below to carry out the operation:

- Connect the input signal cable (MICRO LINE) to the suction socket;
- Check that the electric installation is made according to the electric regulations in force;
- It is not recommended to supply the vacuum unit with tension coming from temporary power panels (for example building sites' power panels) in order to avoid possible damages of electronic parts.



10.2.1 Testing the correct motor spin direction for the model Revo 700

Concerning the Revo Block Professional 700 vacuum unit, on occasion of first start it is necessary to check if the dust suction inlet has a vacuuming effect. If not it means that the motor spins in the opposite sense. In order to correct the mistake it is necessary to exchange the position of the two power supply cables of the vacuum cleaner.

11 USE OF THE VACUUM CLEANER

Once the **Revo Block Professional** vacuum cleaner has been connected to the power supply, it can be started every time a flexible hose is plugged into any of the suction sockets installed in the different rooms.

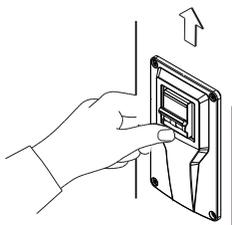
The vacuum cleaning is started thanks to an electric contact assembled directly in the socket which, once activated, allows the start of the suction motor of the vacuum cleaning unit.

The specifically-designed electronics applied to **Revo Block Professional** vacuum cleaners is based on a sophisticated software designed exclusively for Sistem Air, which alerts the operator, by means of a dedicated messaging package, when routine maintenance should be carried out.

Such maintenance involves the dust bin to be emptied and the filter cartridge to be regularly cleaned.

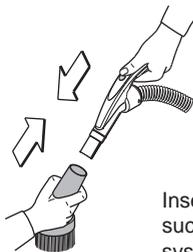
Any time the computer shows an alarm notice, the flexible hose must be removed and plugged in, in order to start suction again.

11.1 Switching the vacuum cleaner on



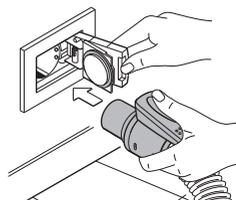
- 1 Position the main switch assembled on the right side on the appliance on «I-ON» position. The display will switch on to indicate the unit is connected to the power supply.

11.2 Using the vacuum cleaner



- 1 Fix the cleaning accessory most suitable for the desired task to the grip handle of the flexible hose. Select the accessories according to the required use, to the type of dirt and area to be cleaned, etc.

Insert the other end of the flexible hose in the suction socket on the wall. This will switch the system suction motors on by activating the electric signal in the suction socket.



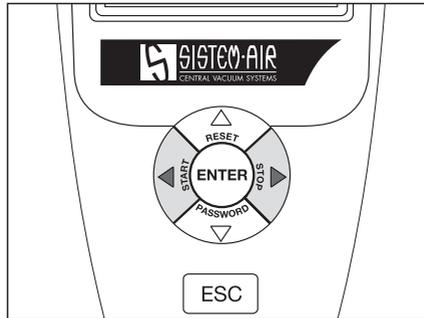
Once you have carried out the cleaning operations, remove the flexible hose from the suction socket by gently accompanying the closing flap until it reaches its housing. If the flap is left to close by itself, it will violently hit the suction socket because the suction system is still working and the vacuum will pull the flap powerfully against the suction frame.

The vacuum cleaner is programmed to take a few seconds before switching off to ensure that the suction action has been completed throughout the pipe network.

11.3 Programming and use of the computer for controlling the central unit

The Revo Block Professional vacuum cleaner is provided with a practical display with membrane keyboard as shown below.

The use of this display and of the membrane keyboard allows the operator sending the inputs to the computer of the central unit in order to select the various functions, programme the routine maintenance and upload specific data.



The data uploading is carried out as follows:

- Press the upper  and lower arrow  to scroll the display screen
- Press ENTER  to save data or confirm the selection
- Press the Right (dx)  and Left (sx)  arrows to change the values on the display
- Press ESC  to exit the display screen or save the option selected

11.3.1 Main Menu

28/11/11 10:42
SUCTION OFF DEPRESSION 0 mBAR
^ v

More precisely:

- Suction OFF:** it indicates whether suction is active or not
- Depression:** it indicates the detected depression level of the installation
- MBAR:** value of suction power expressed in Millibar
- D MAX:** it indicates that the maximum suction power of the machine has been reached

11.3.2 Programming the start up

Here are the main Menu screens for the start up

<p>WELCOME</p> <p>SELECT YOUR LANGUAGE</p> <p>ENGLISH</p>
<p>Press ENTER ^ v</p>

- 1** Screen display which appears when first switching the system on. Select the language to appear on the display using the **Up** and **Down** arrows. Press **ENTER** to move onto the next screen display.

<p>LANGUAGE OK</p> <p>PLEASE WAIT</p>

<p>ENTER DATE AND TIME</p> <p>30/11/11 10:41</p>
<p>< > Press ENTER ^ v</p>

- 2** Set the date and the time using the **up**, **down**, **Right (dx)** and **Left (sx)** keys. Press **ENTER** to move onto the next screen display.

<p>Enter name</p> <p>installer</p> <p>-----</p> <p>_ABCDEFGHIJLMNOP</p>
<p>< > CONFIRM ^ v</p>

<p>Enter phone no.</p> <p>installer</p> <p>-----</p> <p>0123456789/+</p>
<p>< > CONFIRM ^ v</p>

- 3** This and the successive screen displays allow saving the data of the Installer and of the Technical Service. Press **Right** and **Left** arrows to scroll the letters. Press **ENTER** to select the letters. To move onto the next screen display press the down arrow until "**confirm**" is selected on the screen and press **ENTER**.

Enter name SERVICE		

ABCDEFGHIJLMNOP		
< >	CONFIRM	^ v

Enter phone no. SERVICE		

0123456789/+		
< >	CONFIRM	^ v

SELECT FILTER CLEANING MODE		
MANUAL		
AUTOCLEANER (OPTION)		
PRESS ENTER		^ v

Autocleaner system's control activation (accessory on request):

4

MANUAL: the Autocleaner system is not connected to the vacuum cleaner (filter alarm is enabled – see page 33);

AUTOCLEANER (OPTION): the Autocleaner system is connected to the vacuum cleaner (Autocleaner system management is enabled – see page 34).

ELECTRONIC MOTORS		
1		
0	8	
min----max		
PRESS ENTER		^ v

5

For the central vacuum unit **Revo Block 700** select 0;

For all other models of the central unit **Revo Block** select 1;

Press **Enter** to confirm the data and move on to the next screenful.



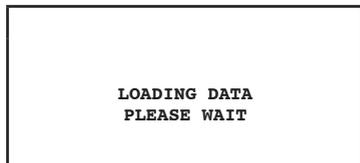
ELECTRIC MOTORS		
1		
1	8	
min----max		
PRESS ENTER		^ v

6

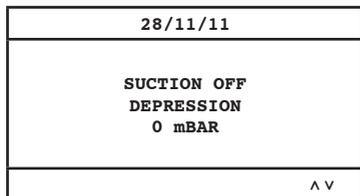
REVO 700 Only

Select 1 and press **Enter** to confirm the data and complete the procedure.





7 Machine default data are loaded.



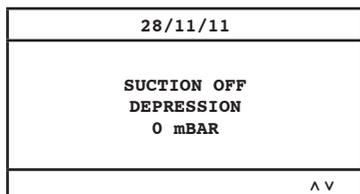
8 Main Menu.
The management electronic system completed the machine configuration.

More precisely:

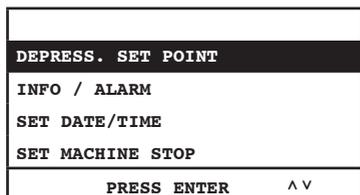
- Suction OFF:** It indicates whether suction is active or not
- Depression:** It indicates the detected depression level of the installation
- MBAR:** Value of suction power expressed in Millibar
- D MAX:** It indicates that the maximum suction power of the machine has been reached

11.3.3 Main Menu

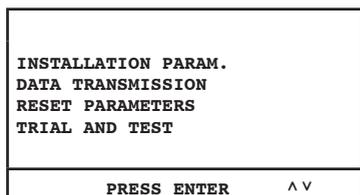
From this menu it is possible to change the machine default settings.



1 From the main display screen press down arrow to move onto the **Main Menu**.



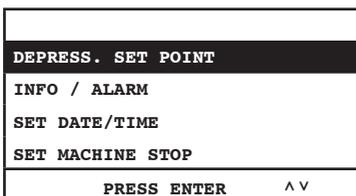
2 List of **Main Menu** settings.



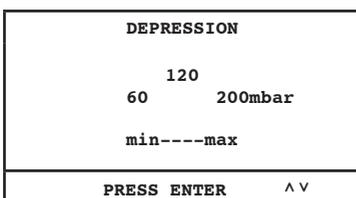
11.3.3.1 Depression set point

From this menu it is possible to change the value of the machine suction power (expressed in mbar).

This operation can be carried out only when suction is not working (suction OFF). This menu is not active for the Revo Block Professional 700 model - item 3201.2B.



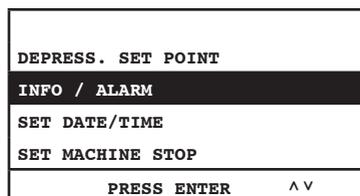
- 1 Press **Enter** to move onto the selected submenu;
Use the **up** and **down** arrows to scroll the menu;
Press **ESC** to exit the menu.



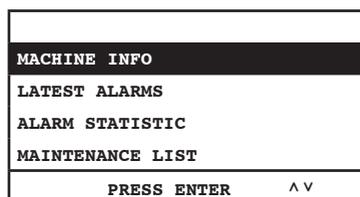
- 2 Press **Enter** to save the data;
Use the **up** and **down** arrows to scroll the menu;
Press **ESC** to exit the menu.

11.3.3.2 Alarm info

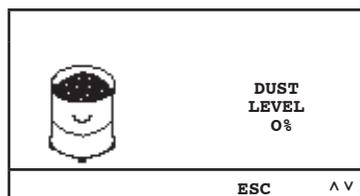
From this menu it is possible to display all the information concerning the use and maintenance of the machine.



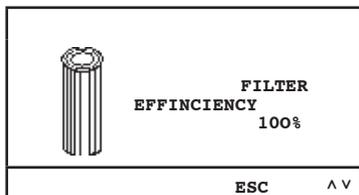
- 1 Press **Enter** to move onto the selected submenu.



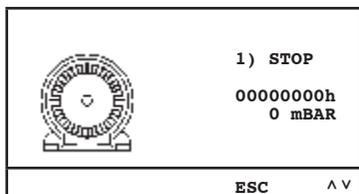
- 2 **Machine info:** information menu for machine use.



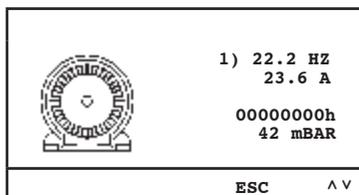
- 3 **Dust level:** it indicates the dust level inside the dust bin;
Use the **up** and **down** arrows to move onto the next screen display.
Press **ESC** to go back to the previous menu.



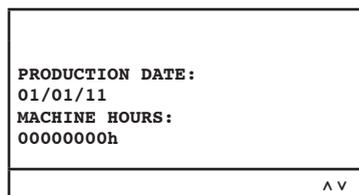
- 4 **Filter efficiency:** it indicates the filter obstruction level. Use the **up** and **down** arrows to move onto the next screen display. Press **ESC** to go back to the previous menu.



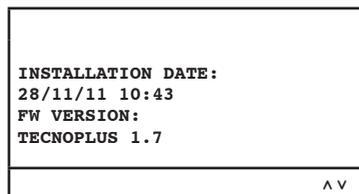
- 5 This screen display shows the information concerning the motor group;
Stop: suction is not working;
h: hours of active suction;
mbar: installation suction power value.
 Use **up** and **down** arrows to move onto the next screen display. Press **ESC** to go back to the previous menu.



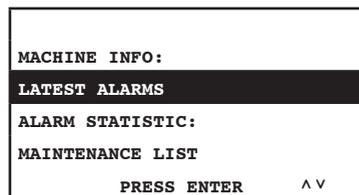
- 5a **HZ:** frequency of the vacuum system in function;
A: current absorbed by the vacuum system;
h: hours of active suction;
mbar: installation suction power value;



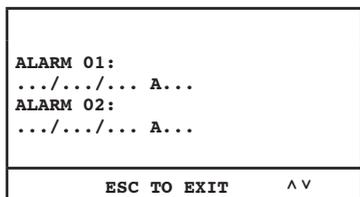
- 6 **Production date:** it indicates the production date of the vacuum cleaner.
Machine hours: it indicates the number of hours of machine electric supply.
 Use the **up** and **down** arrows to move onto the next screen menu.
 Press **ESC** to go back to the previous menu.



- 7 **Installation date:** it indicates the date of machine installation (**firmware version** of the system).
 Use the **up** and **down** arrows to move onto the next screen display.
 Press **ESC** to go back to the previous menu.



- 8 **Latest alarms:** this menu displays the latest 16 inverter alarms stored by the control computer reporting their display date.


9

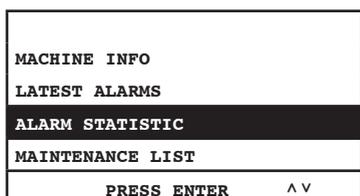
Sequential list of the **latest 16 alarms** stored by the control computer reporting their display date.

For coding refer to the table below.

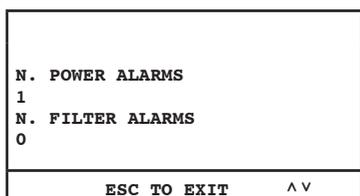
ALARM CODING TABLE

All these alarm types imply to make reference to the Technical Service of Sistem Air.

CODE	MEANING	DESCRIPTION	INTERVENTION PROCEDURE
A00	Data	The control board detects an incongruity between the stored data and the check-sum	Call Technical Service
AXX-01	Overvoltage	Inverter: bus upper tension limit exceeded	Extend deceleration time
AXX-02	Undervoltage	Inverter: bus lower tension limit exceeded	Check supply tension
AXX-03	Temperature	Inverter: bus temperature limit exceeded	Check inverter ventilation
AXX-04	Overcharge	Inverter: high-limit of logical current exceeded	Extend acceleration time and/or Decrease depression set point
AXX-06	Current	Inverter: high-limit of physical current exceeded	Decrease depression set point
AXX-07	Motion ART data	The control board detects an incongruity between the stored data and the check-sum	Call Technical Service
AXX-10	Flash	Inverter: incorrect physical access to the data	Call Technical Service
AXX-16	Serial communication	Inverter: communication with control board interrupted	Call Technical Service
AXX-98	Serial communication	Wrong connection between the electronic board and the inverter	Check the patch cable used for the serial connection
A09	Filter alarm	Filter cartridge is dirty	Clean filter cartridge
A10	Dust alarm	Dust container full	Empty dust container
A11/A12	Maintenance alarm	Supplementary maintenance required	Call Technical Service
A13	Transducer alarm	Transducer does not communicate with control board	Call Technical Service
A14	Pressure switch alarm	Autocleaner system is not working	Call Technical Service


1

Alarm statistic: this menu displays the total number of alarms divided by type. Press **Enter** to access the menu. Use the **up** and **down** arrows to move onto the next screen display. Press **ESC** to go back to the previous menu.


2

Power alarm: it indicates how many times the machine was electrically turned on and off.

Filter Alarm: it indicates how many times the manual filter cleaning was required.

```

N. AUTOCL. ALARMS
0
N. DUST ALARMS:
0
ESC TO EXIT   ^ V

```

- 3 **Autocleaner alarms:** alarm not used.
Dust alarms: it indicates how many times the dust container emptying was required.

```

N. MAINT. ALARMS 1:
0
N. MAINT. ALARMS 2:
0
ESC TO EXIT   ^ V

```

- 4 **Maintenance alarms 1:** it indicates how many times a level-1 maintenance was required.
Maintenance alarms 2: it indicates how many times a level-2 maintenance was required .

```

N. INVERTER ALARMS:
22
N. DATA ALARMS:
0
ESC TO EXIT   ^ V

```

- 5 **Inverter alarms:** it indicates how many times the electronic converter showed some form of alarm.
Data alarms: it indicates how many times serial communication problem occurred.

```

N. TRANSDUCER ALARMS
0
N. PRESSURE ALARMS
0
ESC TO EXIT   ^ V

```

- 6 **Transducer alarms:** it indicates how many times the transducer did not communicate with the control board.
Pressure-switch alarms: it indicates how many times the Autocleaner system's pressure switch did not work properly.

```

N. COMMUNIC. ALARMS:
0
N. TIMER ALARMS:
0
ESC TO EXIT   ^ V

```

- 7 **Communic. alarms:** it indicates how many times the display did not receive the data from the control board.
Clock alarms: it indicates how many times the system's clock did not work properly (i.e. low battery).

```

MACHINE INFO
LATEST ALARMS
ALARM STATISTIC
MAINTENANCE LIST
PRESS ENTER ^V
    
```

8 **List of maintenances:** this menu displays the supplementary maintenance interventions, which were carried out by qualified personnel.

```

INTERVENTION 01:
28/11/11 C01
INTERVENTION 02:
00/00/00 C00
ESC TO EXIT ^V
    
```

9 **Intervention xx:** consecutive number of supplementary maintenances carried out with reference to the date, which they were displayed on the control computer on.
For coding contact Sistem Air's qualified personnel.

11.3.3.3 Menu for date and time setting

```

DEPRESS. SET POINT
INFO / ALARM
SET DATE/TIME
SET MACHINE STOP
PRESS ENTER ^V
    
```

1 Press **Enter** to access the **submenu**.

```

ENTER DATE AND TIME
28/11/11 11:20
< > PRESS ENTER ^V
    
```

2 Set date and time, using the **up**, **down**, **right** and **left** arrows.
Press **Enter** to save the parameter.

11.3.3.4 Menu for setting machine stop

Through this menu it is possible to activate or disable the machine stop in case of routine maintenance alarm.

```

DEPRESS. SET POINT
INFO / ALARM
SET DATE/TIME
SET MACHINE STOP
PRESS ENTER ^V
    
```

Dust alarm

DUST ALARM	
MAINTENANCE ALARM	
FILTER ALARM	
AUTOCLEANER ALARM	
PRESS ENTER ^ v	

DUST TIMER	
15	
1	20h
min----max	
PRESS ENTER ^ v	

DUST ALARM	
ACTIVATE MACHINE STOP?	
YES	NO
< > PRESS ENTER	

ARE YOU SURE?	
YES	NO
< > PRESS ENTER	

1 From this menu it is possible to change the intervention settings linked to the "dust alarm", which refers to the emptying request of the dust container.

2 **Dust timer:** time in hours for the relative alarm display.
Press **Enter** to save the selected data.
Press the **up** and **down** arrows to change data.

3 Through this screen display it is possible to choose to stop or not to stop the machine when the alarm appears.
The machine stop will occur only 15 minutes after alarm display. In case the stop option was chosen, after cancelling the alarm on the control computer, it will be necessary to remove and plug in the flexible hose again in the socket.

Maintenance alarm

DUST ALARM	
MAINTENANCE ALARM	
FILTER ALARM	
AUTOCLEANER ALARM	
PRESS ENTER	^ v

MAINTENANCE TIMER 1	
50	
1	100h
min----max	
PRESS ENTER	^ v

MAINTENANCE TIMER 2	
150	
1	200h
min----max	
PRESS ENTER	^ v

ARE YOU SURE?	
YES	NO
< >	PRESS ENTER

DUST ALARM	
ACTIVATE MACHINE STOP?	
YES	NO
< >	PRESS ENTER

ARE YOU SURE?	
YES	NO
< >	PRESS ENTER

1 Through this menu it will be possible to change the setting of routine maintenance to be carried out with the help of Sistem Air's authorised personnel. Press **Enter** to access.

2 **Maintenance 1 timer:** time in hours for the relative alarm display. Press **Enter** to save the data. Press **down** arrow to move onto the next screen display. Press **ESC** to exit the menu.

3 **Maintenance 2 timer:** time in hours for the relative alarm display. Press **Enter** to save the data. Press **down** arrow to move onto the next screen display. Press **ESC** to exit the menu.

4 Through this screen display it is possible to choose to stop or not to stop the machine when the alarm appears. **The machine stop will occur only 15 minutes after alarm display. In case the stop option was chosen, after cancelling the alarm on the control computer, it will be necessary to remove and plug in the flexible hose again in the socket.**

Filter alarm

DUST ALARM
MAINTENANCE ALARM
FILTER ALARM
AUTOCLEANER ALARM
PRESS ENTER ^ v

SET AUTOCLEANER
ESC TO EXIT

FILTER CLEANING TIMER
1
1 10h
min----max
PRESS ENTER ^ v

FILTER ALARM
ACTIVATE MACHINE STOP?
YES NO
< > PRESS ENTER

ARE YOU SURE?
YES NO
< > PRESS ENTER

1 From this menu it is possible to change the intervention settings of the “**filter alarm**” relative to filtering efficiency reduction (if selected manually see par. 11.3.3.5);
Press **Enter** to access.

2 This notice appears when the Autocleaner system is connected to the machine. Follow the instructions in paragraph 11.3.5.

3 **Filter cleaning timer:** time in hours for the relative alarm display.
Press **Enter** to save the selected data.
Press the **up** and **down** arrows to change data.

4 Through this screen display it is possible to choose to stop or not to stop the machine when the alarm appears.
The machine stop will occur only 15 minutes after alarm display. In case the stop option was chosen, after cancelling the alarm on the control computer, it will be necessary to remove and plug in the flexible hose again in the socket.

Autocleaner alarm

Through this menu it is possible to change the settings for automatic management of the optional Autocleaner system.

DUST ALARM
MAINTENANCE ALARM
FILTER ALARM
AUTOCLEANER ALARM
PRESS ENTER ^ v

1 Press **Enter** to access the menu.

AUTOCLEANER ABSENT
ESC TO EXIT

2 This notice appears when the Autocleaner system is not connected to the machine. Therefore it is not possible to carry out any setting. To activate the procedure it is necessary to follow the instructions contained in paragraph 11.3.3.5, in case the Autocleaner was connected after the machine start up.

AUTOCLEANER TIMER
4
1 40h
min----max
PRESS ENTER ^ v

3 **Autocleaner Timer:** time in hours for the suction use, after that the Autocleaner starts automatically; use the **up** and **down** arrows to change the data; Press **Enter** to access the next screen display.

N. AUTOCL. CYCLES
6
1 10
min----max
PRESS ENTER ^ v

4 **Nr. of Autocleaner cycles:** Set number of activations of the Autocleaner system in a continual and automatic way. Use the **up** and **down** arrows to change the data. Press **ENTER** to move onto the next screen.

ACTIVATION
AUTOCLEANER
DAYTIME
DAILY TIME
PRESS ENTER ^ v

5 **Daytime:** permission to activate the Autocleaner system from 8 to 20.
Dayly time: permission to activate the Autocleaner system 24/7

ACTIVATION
AUTOCLEANER
DAYTIME
DAILY TIME
PRESS ENTER ^ v

- 6 If **"daytime"** was selected the following screen display is active. Through this it is possible to change the Autocleaner system's functioning time period.

DAYTIME
08:00 20:00
begin----end
PRESS ENTER ^ v

- 7 Use the **up** and **down** arrows to change the data;
Use the **right** and **left** arrows to change hours and minutes;
Press **Enter** to access the following screen display.

AUTOCLEANER ALARM
ACTIVATE MACHINE
STOP?
YES NO
< > PRESS ENTER

- 8 Through this screen display it is possible to choose to stop or not to stop the machine when the alarm appears.

The machine stop will occur only 15 minutes after alarm display. In case the stop option was chosen, after cancelling the alarm on the control computer, it will be necessary to remove and plug in the flexible hose again in the socket.

ARE YOU SURE?
YES NO
< > PRESS ENTER

11.3.3.5 Installation parameters menu

Through this menu it is possible to change the parameters set during machine start up (see paragraph 11.3.1).

INSTALLATION PARAM.
DATA TRANSMISSION
RESET PARAMETERS
TRIAL AND TEST
PRESS ENTER ^ v

- 1 Press **Enter** to access the selected submenu.
Use the **up** and **down** arrows to scroll the menu;
Press **ESC** to exit the menu.

```

WELCOME

SELECT YOUR LANGUAGE

  ENGLISH

PRESS ENTER      ^ V
    
```

```

Enter name
installer

  ROSSI
_ABCDEFGHILMNOP

< > CONFIRM      ^ V
    
```

```

Enter phone no.
installer

0000000000
0123456789/+

< > CONFIRM      ^ V
    
```

```

Enter name
SERVICE

  BIANCHI
_ABCDEFGHILMNOP

< > CONFIRM      ^ V
    
```

```

Enter phone no.
SERVICE

1111111111
0123456789/+

< > CONFIRM      ^ V
    
```

```

SELECT FILTER
CLEANING MODE

  MANUAL

AUTOCLEANER (OPTION)

PRESS ENTER      ^ V
    
```

2 From this screen display it is possible to change the language previously chosen.

Choose the language appearing on the display by using the **up** and **down** arrows. Press **Enter** to confirm language and move onto the next screen display.

3 This screen display and the following ones allow to change the data relative to the installer and to the technical service. Press the **right** and **left** arrows to scroll the letters, press **Enter** to select the types.

To move onto the next screen use the **down** arrow, select "confirm" and press **Enter**.

4 Activation of the Autocleaner system's control (accessory on request):

MANUAL: the Autocleaner system is not connected to the vacuum unit;

AUTOCLEANER (OPTIONAL): the Autocleaner system is connected to the vacuum unit.

<p style="text-align: center;">SELECT SUCTION CONTROL MODE</p> <p style="text-align: center;">TRANSDUCER</p> <p style="text-align: center;">RESISTIVE DIVIDERS</p>
<p style="text-align: center;">PRESS ENTER ^ v</p>

<p style="text-align: center;">ELECTRONIC MOTORS</p> <p style="text-align: center;"> 1</p> <p style="text-align: center;">0 8</p> <p style="text-align: center;">min----max</p>
<p style="text-align: center;">PRESS ENTER ^ v</p>

<p style="text-align: center;">ELECTRIC MOTORS</p> <p style="text-align: center;"> 1</p> <p style="text-align: center;">1 8</p> <p style="text-align: center;">min----max</p>
<p style="text-align: center;">PRESS ENTER ^ v</p>

<p style="text-align: center;">DATA LOADING PLEASE WAIT</p>

5 From this screen display it is possible to select the control mode of the motor group.

Transducer: command and automatic management of the suction power through the transducer.

Resistive dividers: suction power management by means of the electric connection of the suction inlets with the item 3301.4.

6 For the central vacuum unit **Revo Block 700 select 0;**

For all other models of the central unit Revo Block select 1;

Press **Enter** to confirm the data and move on to the next screenful.



7 **REVO 700 Only**
Select 1 and press **Enter** to confirm the data and complete the procedure.



11.3.3.6 Data transmission menu

From this menu it is possible to activate the Ethernet communication for the optional interface board.

INSTALLATION PARAM.
DATA TRANSMISSION
PARAMETERS RESET
TRIAL AND TEST
PRESS ENTER ^ v

1 Press **Enter** to access the submenu.

ENTER IP ADDRESS ETHERNET CARD 192.168.000.080
< > PRESS ENTER ^ v

2 Through this screen display it is possible to enter the IP address, which allows to connect the Ethernet card (optional) to your wired net, by using the **up**, **down**, **right** and **left** arrows.
Press **Enter** to confirm the data.

11.3.3.7 Parameters reset menu

This menu allows the user to reset the default parameters set by the manufacturer.

INSTALLATION PARAM.
DATA TRANSMISSION
RESET PARAMETERS
TRIAL AND TEST
PRESS ENTER ^ v

1 Press **Enter** to access the submenu.

RESET DEFAULT DATA
YES NO
< > PRESS ENTER

2 Use the **right** and **left** arrows to make the selection.
Press **Enter** to confirm the selection.

11.3.3.8 Check and test Menu

This menu allows to check the correct suction system's functioning.

INSTALLATION PARAM.
DATA TRANSMISSION
RESET PARAMETERS
TRIAL AND TEST
PRESS ENTER ^ v

1 Press **Enter** to access the submenus.

INSTALLATION TRIAL
SUCTION INLET TEST
AUTOCLEANER TEST
ELECTRONICS TEST
PRESS ENTER ^ v

2 Use the **up** and **down** arrows to select the menu.
Press **Enter** to access.

Installation check

This menu is to be used to calibrate the vacuum breaker valve with reference to the nominal current of the motor group used depending on the machine model.

INSTALLATION TRIAL
SUCTION INLET TEST
AUTOCLEANER TEST
ELECTRONICS TEST
PRESS ENTER ^ v

1 **IT IS RECOMMENDED NOT TO CARRY OUT ANY OPERATION INSIDE THIS MENU, UNLESS YOU ARE ASSISTED BY AUTHORISED SYSTEM AIR'S PERSONNEL** 
All the **Revo Block Professional** machines are optimised for their use.

INSTALLATION TRIAL
ACTIVATE PROCEDURE
YES NO
< > PRESS ENTER

2 Use the **right** and **left** arrows to make the selection.
Press **Enter** to confirm and move onto the next screen display.

INSTALLATION TRIAL
CLOSE ALL
SUCTION INLETS

PRESS ENTER

3

Follow the instructions on the display.

INSTALLATION TRIAL
TO START
SUCTION

PRESS ENTER

4

Follow the instructions on the display.

INSTALLATION TRIAL
NOMINAL CURRENT
+12.0 A
OPEN VACUUM
BREAKER VALVE

5

Follow the instructions on the display.

INSTALLATION TRIAL
NOMINAL CURRENT
+12.3 A
CLOSE VACUUM
BREAKER VALVE

6

Follow the instructions on the display.

INSTALLATION TRIAL
NOMINAL CURRENT

7

Follow the instructions on the display.

Suction inlet test

This menu is to be used to make an electric test of the suction inlets through the use of a flexible hose.

INSTALLATION TRIAL
SUCTION INLET TEST
AUTOCLEANER TEST
ELECTRONICS TEST
PRESS ENTER ^ v

1 Press **Enter** to access the submenu.

SUCTION INLET TEST
ACTIVATE PROCEDURE
YES NO
< > PRESS ENTER

2 Use the right and left arrows to make the selection;
Press **Enter** to confirm and access the next screen display.

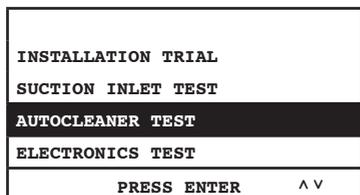
SUCTION INLET TEST
SUCTION HOSE PLUGGED IN
ESC TO EXIT

3 In order to check the electrical installation's functioning of the suction inlets, plug in and remove the flexible hose from any of the suction inlets and check on the computer that the notice displayed changes.

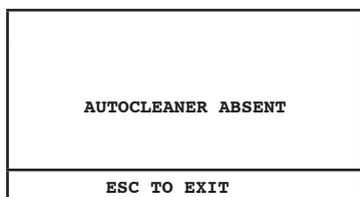
SUCTION INLET TEST
SUCTION HOSE UNPLUGGED
ESC TO EXIT

⚠ Autocleaner test (only active if Autocleaner is connected to the machine – see par. 11.3.3.5)

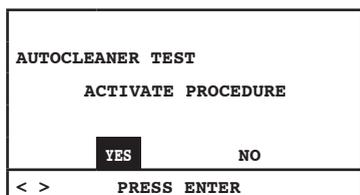
Through this menu it is possible to carry out manual cycles of the Autocleaner system to check if the system is working properly. The test ends with a series of functioning tests of the system. Should not one of those be successful, contact the authorised Sistem Air's personnel.



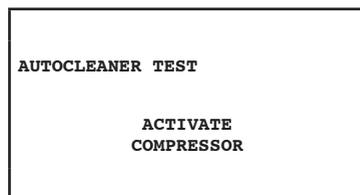
1 Press **Enter** to access the submenu.



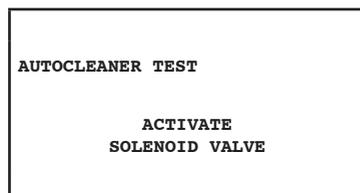
2 A notice informs that the Autocleaner system is not present on the machine. Otherwise the next screen display appears immediately.
 In order to enable the Autocleaner system see par. 11.3.3.5.



3 Use the **right** and **left** arrows to make the selection.
 Press **Enter** to start the procedure.



4 Follow the instructions on the display.



5 Follow the instructions on the display.

AUTOCLEANER TEST	
COMPLETED	
< >	PRESS ENTER

6 Follow the instructions on the display.

1st CHECK

CHECK	
COMPRESSOR WAS	
ACTIVATED	
YES	NO
< >	PRESS ENTER

7 Follow the instructions on the display.

AUTOCLEANER TEST	
FILTER CLEANING	
DONE	
YES	NO
< >	PRESS ENTER

8 Follow the instructions on the display.

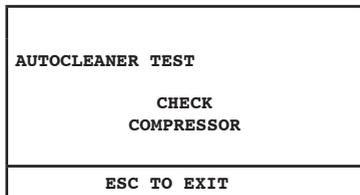
AUTOCLEANER ANALYSIS	
COMPLETED	
ESC TO EXIT	

9 Follow the instructions on the display;
Press **ESC** to go back to the Main Menu.

2nd CHECK

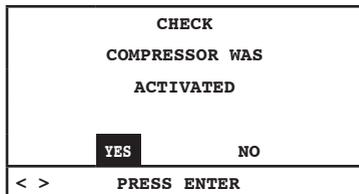
CHECK	
COMPRESSOR WAS	
ACTIVATED	
YES	NO
< >	PRESS ENTER

10 Follow the instructions on the display.

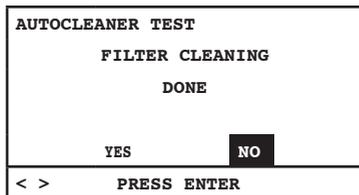


- 11 Follow the instructions on the display.
Press **ESC** to go back to the Main Menu.

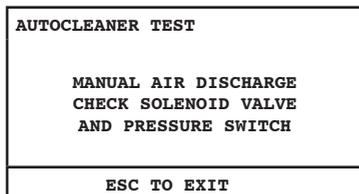
3rd CHECK



- 12 Follow the instructions on the display.



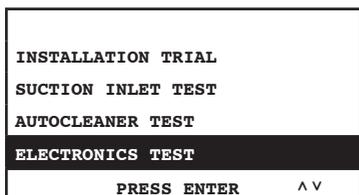
- 13 Follow the instructions on the display.



- 14 Follow the instructions on the display.
Press **ESC** to go back to the Main Menu.

Electronics test

Through this menu it is possible to carry out a manual test of the electronic parts inside the machine.



ELECTRONICS TEST	
ACTIVATE PROCEDURE	
YES	NO
< >	PRESS ENTER

- 1 Use the **right** and **left** arrows to make the selection;
Press **Enter** to start the procedure.

ELECTRONICS TEST	
PLEASE WAIT	

ELECTRONICS TEST	
OK	
ESC TO EXIT	

- 2 Press **ESC** to go back to the Main Menu.
Should not the test be successful, contact the Sistem Air's qualified and authorised personnel.

11.4 Screen displays during machine functioning

In this paragraph you will find some illustrative screens appearing while the vacuum system is active. Remember that in this case it is not possible to access all the menus contained in the Main Menu (see par.11.3.3).

28/11/11 11:44
SUCTION ON DEPRESSION 51 mBAR
^ v

- 1 Suction **ON**: suction is active
Depression 51 mbar: depression value (suction power) present in the installation.

DEPRESS. SET POINT
INFO / ALARM
SET DATE/TIME
SET MACHINE STOP
PRESS ENTER ^ v

- 2 This menu is accessible only in display mode but it is not possible to modify it while suction is active.

```

DEPRESSION

      120
60    200 mbar

min----max

PRESS ENTER  ^ V
    
```

3 To change the data it is necessary to stop suction.

```

DEPRESS. SET POINT
INFO / ALARM
SET DATE/TIME
SET MACHINE STOP

PRESS ENTER  ^ V
    
```

4 This menu is accessible even while suction is active.

```


1) STOP

00000000h
122 mBAR

ESC  ^ V
    
```

5 Suction to end.

```


2) 49.1 HZ
6.1 A

00000000h
122 mBAR

ESC  ^ V
    
```

6 Suction on.

```

DEPRESS. SET POINT
INFO / ALARM
SET DATE/TIME
SET MACHINE STOP

PRESS ENTER  ^ V
    
```

7 This menu is not accessible while suction is active.

```

stop suction

ESC TO EXIT
    
```

8 This notice informs the user to stop suction in order to access the selected menu.

11.5 Examples of alarm screen displays

In this paragraph you will find some illustrative screen displays of possible suction system's alarms. It is recommended to contact always the Sistem Air's authorised personnel for the solution of the problem found.

11.5.1 Inverter alarms

28/11/11 10:42
!!WARNING!! INVERTER 1-A98
^ v

1 See coding on page 28 – alarm coding table.

ALARM INVERTER 1 - A2
ESC TO EXIT

2 See coding on page 28 – alarm coding table.

ALARM INVERTER 1 - A98
ESC TO EXIT

3 See coding on page 28 – alarm coding table.

ALARM INVERTER ROSSI 0000000000
ESC TO EXIT

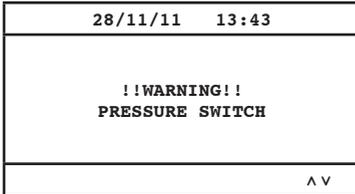
4 This screen display shows also the reference person and telephone number to call in case of alarms that can be solved only through the intervention of Sistem Air's authorised personnel.

This screen display selection is only active if the requirements shown in the start up menu have been filled out (paragraph 11.3.3.5).

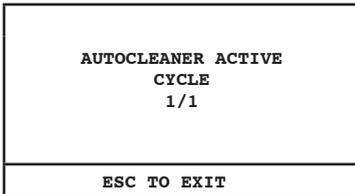
11.5.2 Autocleaner system's alarms



- 1** Alarm relative to the automatic functioning of the Autocleaner system. Contact the Sistem Air's authorised personnel.



- 2** Alarm relative to the automatic functioning of the Autocleaner system. Contact the Sistem Air's authorised personnel.



- 3** This screen display indicates that the Autocleaner system is working.

11.5.3 Ethernet alarm

28/11/11 10:45
!!WARNING!! REQUEST IP ADDRESS
^ v

- 1 If at the end of the start-up procedure the following alarm notice appears, it means that the machine has been connected to the optional Ethernet board and therefore the management system requires to enter the IP address.

INSTALLATION PARAM.
DATA TRANSMISSION
RESET PARAMETERS
TRIAL AND TEST
PRESS ENTER ^ v

- 2 To effect this setting, carry out the operations described in the following screen displays. Access the Main Menu and select “**data transmission**”.

ENTER IP ADDRESS ETHERNET CARD
192.168.000.080
< > PRESS ENTER ^ v

- 3 Change the IP address using the **up**, **down**, **right** and **left** arrows and press **Enter** to save the data.

11.5.4 Filter alarm

The system requires filter cleaning. If the active machine stop was selected, suction will stop 15 minutes after that the warning notice has been displayed.

28/11/11 13:48
!!WARNING!! CLEAN FILTER CARTRIDGE
^ v

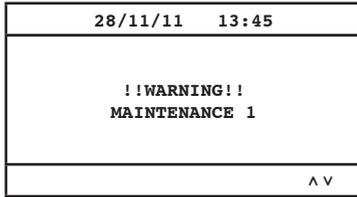
- 1 First warning notice, suction does not stop.

ALARM FILTER CLEAN FILTER CARTRIDGE
ESC TO EXIT

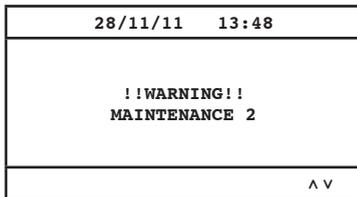
- 2 Second warning notice, suction stops if the machine stop was activated; press ESC to cancel the alarm. To start suction again the flexible hose must be removed and plugged in again.

11.5.5 Maintenances alarm

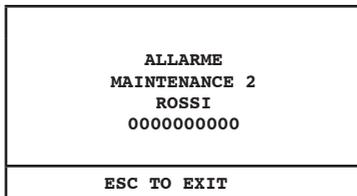
The system requires supplementary maintenance. If the active machine stop was selected, suction will stop 15 minutes after that the warning notice has been displayed.



3 First warning notice, suction does not stop.



4 Second warning notice, suction stops if the machine stop was activated; press **ESC** to cancel the alarm. To start suction again the flexible hose must be removed and plugged in again.

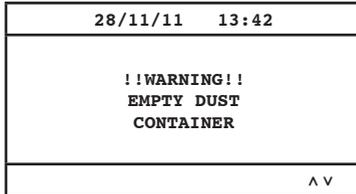


Level 1 maintenance: it is required to check if the filter is damaged or worn out and if air exhaust is clogged.

Level 2 maintenance: the checks described in level 1 maintenance are carried out on the blowing motor.

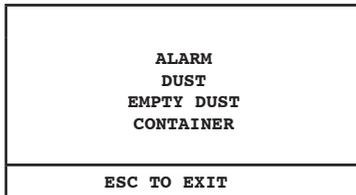
11.5.6 Dust alarm

The system required the dust container to be emptied. If the active machine stop was selected, suction will stop 15 minutes after that the warning notice has been displayed.



1

First warning notice, suction does not stop.



2

Second warning notice, suction stops if the machine stop was activated; press **ESC** to cancel the alarm. To start suction again the flexible hose must be removed and plugged in again.

12 - MAINTENANCE



BEFORE CARRYING OUT ANY MAINTENANCE OPERATION, IT IS MANDATORY TO UNPLUG THE POWER SUPPLY CABLE FROM THE POWER SUPPLY SOCKET

PROTECTIVE MASK AND GLOVES MUST ABSOLUTELY BE WORN

12.1 Programmed routine maintenance

Maintenance should be carried out according to the effective running time of the system so to ensure efficient performance and avoid serious mechanical damages.

The Revo Block Professional vacuum cleaners are controlled by a computer which also checks the routine maintenance cycles:

- Emptying the dust collection bin
- Manual/automatic cleaning of the filter (Autocleaner system)

On the dust-level gauge of the dust collection bin the user can choose to keep the maintenance parameters set by the manufacturer in the computer or change them to better suit to specific needs.

It is also possible to save telephone numbers to be dialled in case technical assistance is needed.

Furthermore, when the alarm signals the need for routine maintenance (dirty filter, full dust bag, and full dust bin) the operator can decide whether to switch off the system immediately and satisfy maintenance requirements or finish his job.

The unit can gauge:

- the level of filter efficiency (i.e. dirty filter alarm)
- the depression level in the system
- the need to carry out extraordinary maintenance (two levels)

12.2 Extraordinary Maintenance

The unit features a special display which signals the need for extraordinary maintenance, to be carried out with the help of qualified and/or authorized staff.

Two levels of extraordinary maintenance have been programmed:

Level 1/Maintenance 1 Alarm:

- check of filter wear and/or relevant replacement
- blockage of the air exhaust

Level 2/Maintenance 2 Alarm:

- check the functioning of the motor group's impeller (dust inside it)
- everything mentioned in level 1

Also in this case the operator can decide whether to switch the system immediately off and satisfy maintenance requirements or finish his job.

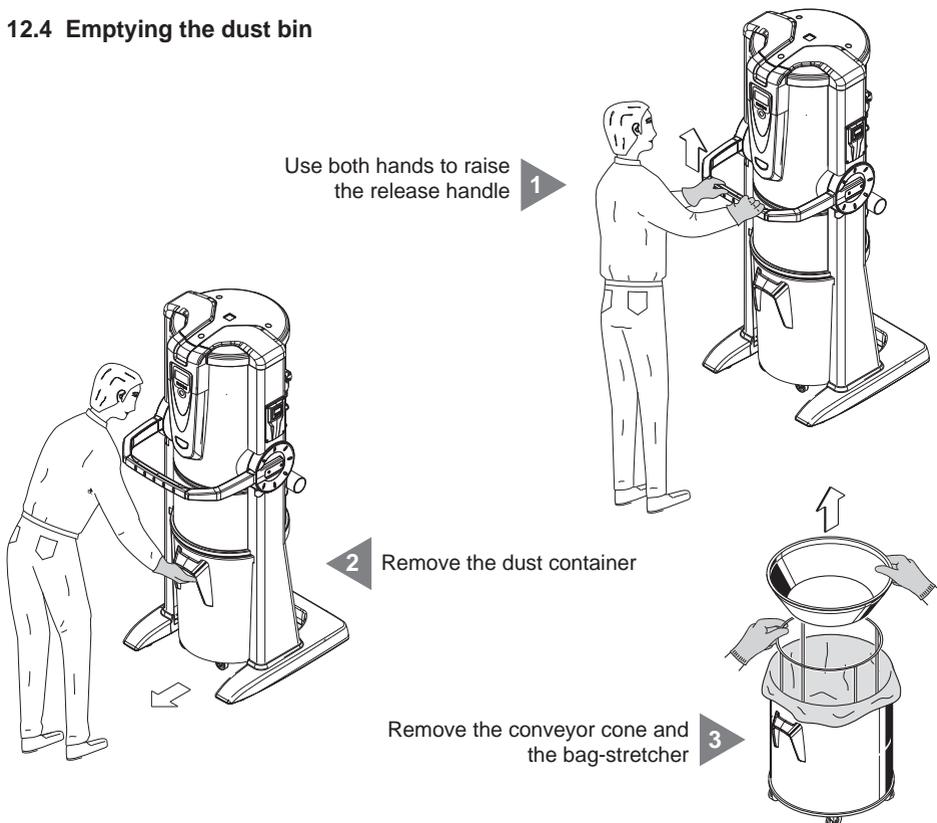
12.3 Cleaning the vacuum cleaner body (cylinder)

Periodically clean the outside casing of the appliance using a soft damp cloth with water and neutral soap.

Important: only use water or neutral soap and water to clean the appliance. The use of other solvents or alcohol can entail damages.

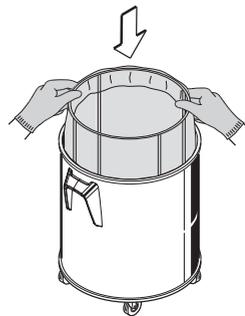
Check the system surface is completely dry before switching it back on.

Always use a suitable mask to protect against airborne dust and wear latex gloves to protect the skin of your hands.

12.4 Emptying the dust bin



4 Tie up the dust bag and remove it from the container

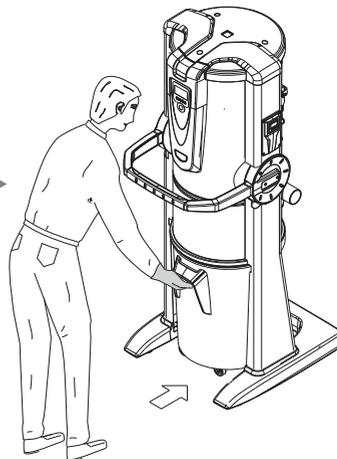
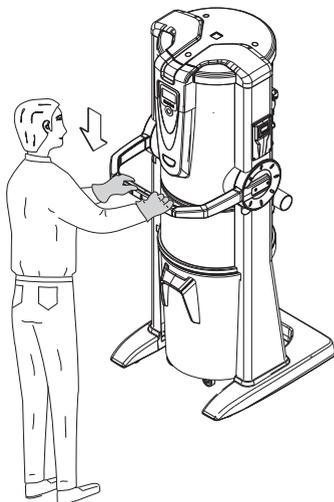


5 Introduce a new dust bag and the bag-stretcher



6 Assemble the conveyor cone

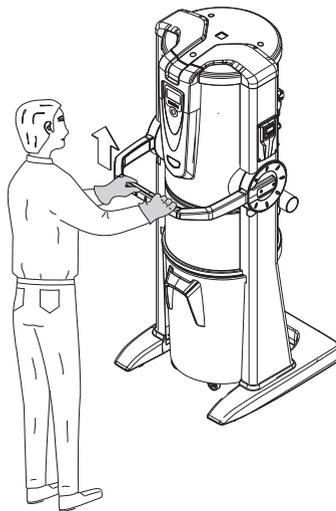
7 Put the dust container back in its position



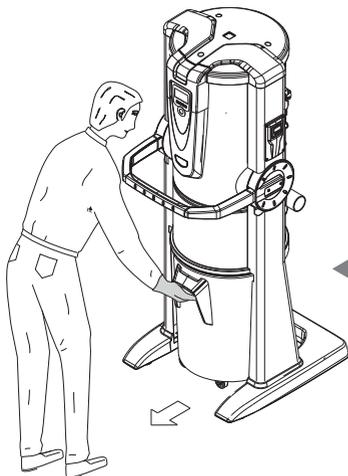
8 Use both hands to lower the clip handle

12.5 Replacing the filter cartridge

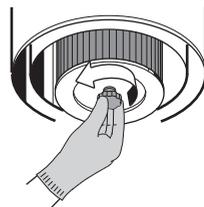
Lift the release handle using both hands **1**



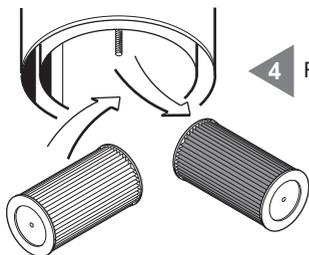
2 Remove the dust container



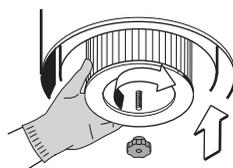
Unscrew the blocking knob **3**



4 Replace the filter cartridge

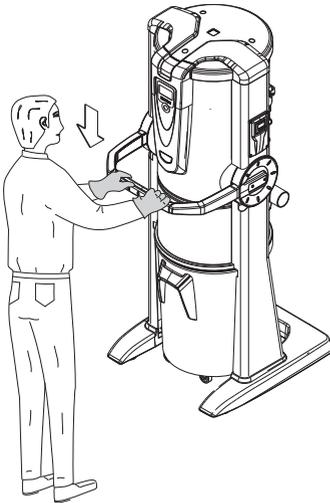
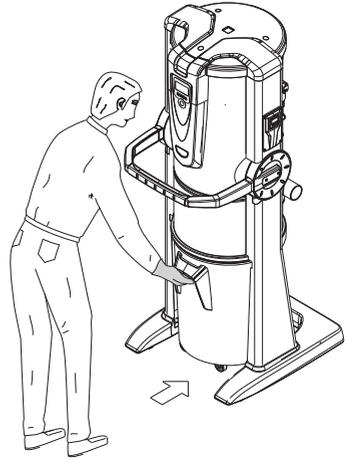


Screw the blocking knob **5**



Reassemble the dust container in its position

6



7

Use both hands to lower the clip handle

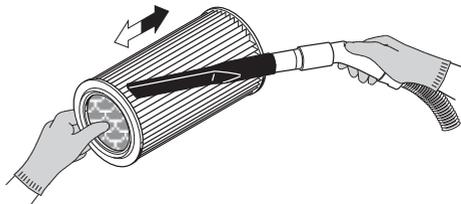
12.6 Regeneration of the filter cartridge



WARNING
DO NOT USE THE VACUUM CLEANER WITHOUT THE FILTER CARTRIDGE. ENSURE YOU HAVE REPLACED A SPARE FILTER CARTRIDGE BEFORE CARRYING OUT THIS OPERATION

The filter cartridge can be regenerated more times by vacuum cleaning the dirt on the filtering surface; use the vacuum cleaner and the straight nozzle.

1



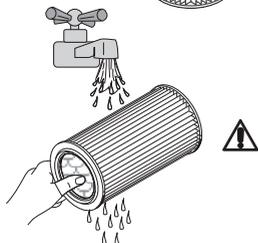
2

Check the filter surface is not cut. If this is the case, the cartridge should not be used again.



3

The filter cartridge can be washed under running water. **ATTENTION: Ensure the filter cartridge has completely dried before reassembling it.**



12.7 Cleaning of the external body

Periodically clean the outside casing of the vacuum cleaner using a soft damp cloth with water and neutral soap and let it completely dry.

Important: only use water or neutral soap and water to clean the vacuum cleaner. The use of other solvents or alcohol can entail damages. Ensure the system surface is completely dry before switching it back on.

13 - REPAIRS AND SPARE PARTS

13.1 Intervention Criteria

Any intervention on the vacuum cleaner for repairs and/or maintenance which are not expressly authorized in this manual is absolutely forbidden.

Any repair for breakage or malfunctioning must be carried out by qualified Technical Assistance personnel. Any intervention of non-authorized personnel will result in the invalidation of any guarantee of the product and the manufacturer will not be held responsible for any eventual damage to persons and/or objects due to such interventions.

13.2 Recommended spare parts

It is advisable to order in time those spare parts which need to be replaced most often.

In order to guarantee the optimal and long working life of the vacuum cleaner it is recommended to use only original SISTEM-AIR spare parts, as detailed below.

DESCRIPTION	SPARE PART	VACUUM CLEANER MODEL	
Filter cartridge	1610.7	Revo 500	
Filter cartridge	1610.7R	Revo 700/1000/ 1200/1500/1800	
Dustbag for dust collection in the bin	1614.2	Revo 500	
	1614.3	Revo 700/1000 1200/1500/1800	

13.3 Putting the vacuum cleaner out of service (general rules)

Should you decide to put the suction system out of service, this should be done with the utmost attention to everyone's health and environment.

You can get information about spaces and/or persons duly authorised for the collection and disposal of this product.

The disposal and/or recycling of any part of the system must be carried out in strict compliance with the regulations in force.

14 - SOUND EMISSION

A sound level measurement has been gauged by measuring the acoustic pressure and the sound level of the vacuum cleaner.

The test report is held at TECNOPLUS S.r.l. headquarters.

15 - IDEAL LOCATION OF THE VACUUM CLEANER TO REDUCE SOUND EMISSION

The following suggestions and measures will help reducing the sound emissions of the vacuum cleaner:

- You can use sound-absorbing materials on the two side walls if these are very close to each other; this will interrupt the sound wave and avoid resonance phenomena between the two waves which could reflect on the two opposite walls;
- You can possibly soundproof the ceiling.

16 - VIBRATIONS

There is no contact between the hand, arm or body of the operator and the machine when vacuum cleaning using the flexible hose.

For this reason there is no risk related to vibrations.

17 - TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
There is no suction from any of the suction sockets	Alarm signalled on the computer	RESET the alarm and carry out recommended maintenance; Remove and plug in the flexible hose to start suction (connect the power cable)
	The power cable is unplugged	Connect the power cable
	The micro line cable is not connected	Connect the activation cable (sensor)
There is no air suction from just one suction socket	The electric contacts are interrupted or the micro switch of suction socket is out of order	Call Technical Service
The air suction is weak	More than one socket is being used at the same time	Reduce the number of sockets used at the same time
	The flexible hose or the accessories are broken	Check the flexible hose and the accessory are not damaged (replace them if needed)
	Filter cartridge is dirty	Clean the filter cartridge
	The gasket of the dust bin is damaged	Check integrity
	Piping net is clogged	Call Technical Service
	Air exhaust is clogged	Call Technical Service
	Dust container is full	Empty dust container
The vacuum cleaner still works even if the suction inlets are closed	Failure of the electronic board	Call Technical Service

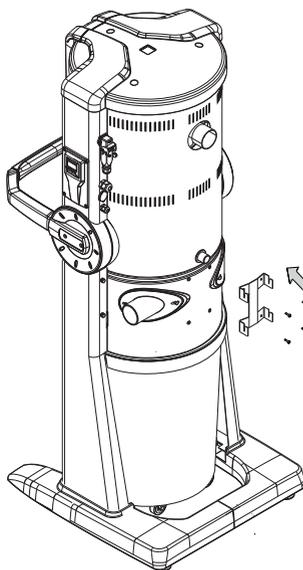
APPENDIX A - CONNECTION TO THE AUTOCLEANER APPLIANCE (OPTIONAL)

See Autocleaner Manual

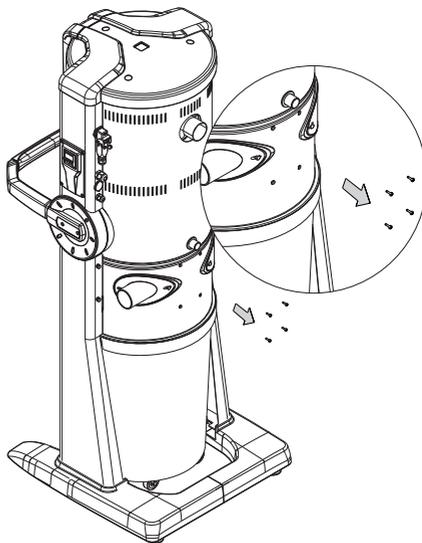
A.1 Positioning of the Autocleaner

Disassemble the 4 screws on the rear side of the cylinder and use them to fix the anchoring bracket provided with the Autocleaner system.

Loosen the Torsen screws to remove the cover made of thermoformed material.



1

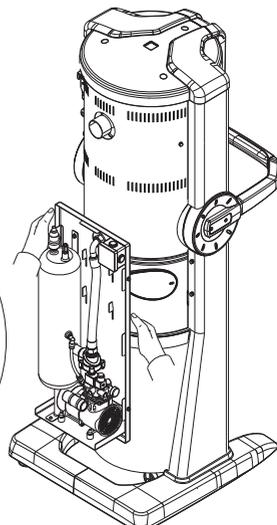
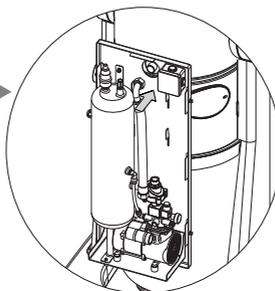


2

Fix the bracket to the appliance by means of the screws previously disassembled.

Hook the autocleaner frame to the anchoring bracket and slide the centering strips in the slotted holes on the frame.

3

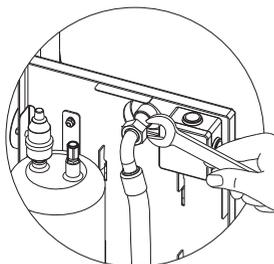
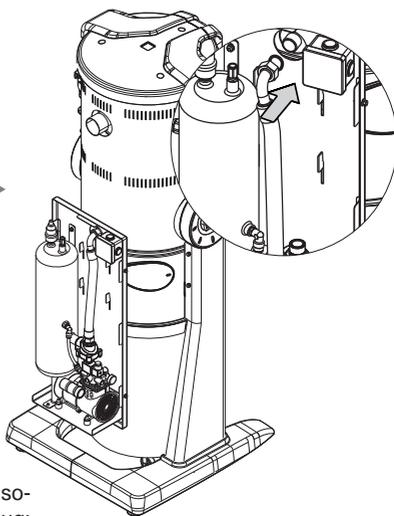


A.2 Pneumatic connection

Approach the pipe connection of the vacuum system to the inlet on the rear side of the appliance.

N.B.: check that the sealing gasket provided is correctly positioned between the suction socket and the suction plug.

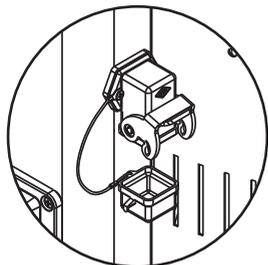
1



2

Screw the suction socket on the suction plug; check it has been firmly tightened.
Close the cover made of thermoformed material.

A.3 Electric connection

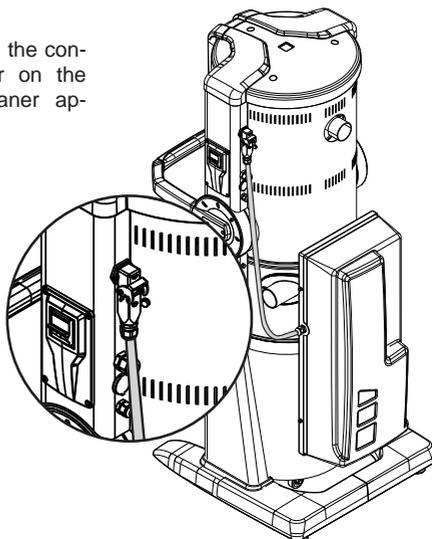


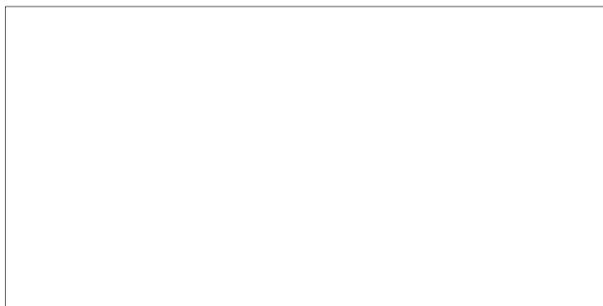
1

Disassemble the connector cover on the vacuum cleaner appliance.

Connect the multipolar connector of the Autocleaner system to the corresponding socket positioned on the appliance and lock the safety retainer to connect them.

2





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