



SISTEM·AIR

CENTRAL VACUUM SYSTEMS ByTecnoplus s.r.l.

www.systemair.com

Technical manual



TECNO R-evolution

Domestic

Domestic



Line

TECNO

INSTRUCTION MANUAL

- Type: domestic vacuum cleaner
- Model: TECNO
- Revision 1.0.0

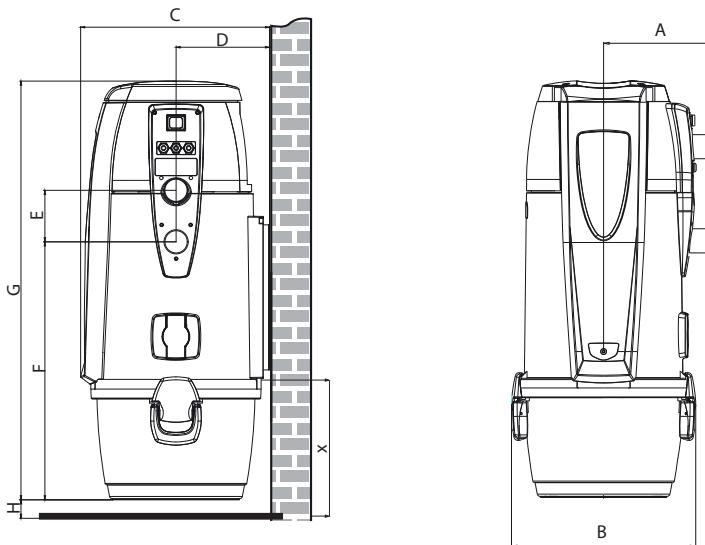
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1 - TECHNICAL DATA

Model Article	TECNO R-evolution				TECNO Style				
	Tecno R-evolution 150	Tecno R-evolution 250	Tecno R-evolution 350	Tecno R-evolution 450	Tecno Style MINI	Tecno Style 150	Tecno Style 250	Tecno Style 350	Tecno Style 450
	3110.2T	3112.2T	3113.3T	3115.3T	3107.1TER	3110.1TER	3112.1TER	3113.3TER	3115.3TER
Service inlet	YES	YES	YES	YES	NO	YES	YES	YES	YES
Computer maintenance	YES	YES	YES	YES	NO	NO	NO	NO	NO
Suction coupling	Ø mm	50	50	50	50	50	50	50	50
IP Protection Degree	IP	44	44	44	44	44	44	44	44
Powewr supply	V ac	220/240	220/240	220/240	220/240	220/240	220/240	220/240	220/240
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Motor power	kW	1,25	1,35	1,45	1,50	1,25	1,25	1,35	1,45
Absorption	A	5,5	5,8	6,3	6,5	5,5	5,5	5,8	6,3
Socket power supply	V dc	12	12	12	12	12	12	12	12
MAximum air flow	m ³ /h	200	234	240	180	200	200	234	240
Maximum vacuum	mbar	274	272	310	400	274	274	272	310
Filtering surface	cm ²	6700	6700	6700	6700	3100	6700	6700	6700
Dust bin capacity	l	21	21	21	21	15	21	21	21
Bi Vac dust bag capacity	l	18	18	18	18	-	-	-	-
Air venting	Ø mm	YES	YES	YES	YES	YES	YES	YES	YES
Air exhaust silencer (Ø 50 mm)	YES	YES	YES	YES	YES	YES	YES	YES	YES
Weight	kg	17	17	17	18	8,5	17	17	19
A Size	mm	230	230	230	230	210	230	230	230
B Size	mm	370	370	370	370	325	370	370	370
C Size	mm	380	380	380	380	345	380	380	380
D Size	mm	185	185	185	185	168	185	185	185
E Size	mm	108	108	108	108	108	108	108	108
F Size	mm	585	585	585	585	315	585	585	585
G Size	mm	915	915	915	915	650	915	915	915
H Size (min.)	mm	100	100	100	100	100	100	100	100
X Size (min.)	mm	500	500	500	500	350	500	500	500
Sound level below	dB(A)	70							

N. B: Levels of nominal noise. The levels can vary according to the environment where the central unit has been installed and the kind of installation.



2 - AUTHORIZED USE OF THE VACUUM CLEANER

The Tecno lines vacuum cleaner has been designed exclusively to vacuum clean house dust, very small-size solids and dry materials. The use of the central vacuum cleaner is authorized for household and civil uses, connected to a PVC wall-traced piping network and to a standard home electrical wiring.

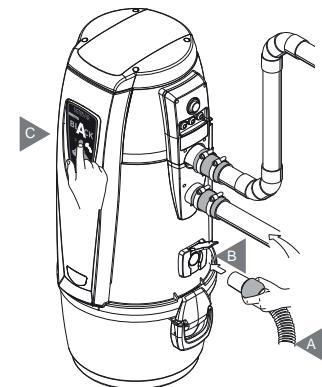
The vacuum cleaner can be installed in domestic dwellings with the following characteristics:

- Surface to be cleaned ranging from 30 to 450 m²
- Piping network featuring 50-mm diameter pipe
- 220/240 V ac power supply
- Air exhaust conveyed to the outside
- Suitable for a single-operator use
- Suitable for installation in domestic spaces such as store rooms, boiler rooms, garages and balconies.

2.1 Using the service socket

Insert the hose (A) directly in the service outlet (B - see the drawing), after lifting the cover.

2. Press the switch (C) on the frontal panel of the machine to start and stop suction.



3 - UNAUTHORIZED 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:

- Never use the machine for unauthorized purposes.
- Never vacuum clean liquids.
- Do not vacuum clean fabrics, heavy materials, ashes or hot embers.
- Do not suction cement, flour or similar materials, including the construction site dust (lime remains, plaster powder and so on) which may cause the reduction of the vacuumed air with a consequent damage of the motor.

The system has not been designed to be used in environments with risk of explosion, and therefore:

- it is forbidden to vacuum 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 vacuum 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.

4 - SAFETY FEATURES

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 the offices of TECNOPLUS S.R.L.

In compliance with safety regulations detailed in the Machinery Directive 2006/42/CE (transposed into the Italian Legislation by Decree Law 17/10), in the Low Voltage Directive 2006/95/CE, and in the Electromagnetic Compatibility Directive 2004/108/CE, the R-EVOLUTION system complies with the standard established for electrical appliances for household and similar purposes EN 60335-1 (2008) and with the Regulation C EN 60335-2-2 (2011), specially conceived for vacuum cleaners for household and similar purposes with rated voltage not exceeding 250 V.

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

4.1 WARNING

- Keep children away from the vacuum cleaner whilst in function. 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 nor knowledge of the system, unless they are 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.
- Switch off the power supply immediately 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 cover has been damaged in any way
 - 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 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.

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.

4.2 IP Protection Degree

IP44

IP 44: The appliance features a protection against solid objects having a size exceeding 1 mm and protection against splashes of water (splashes of water from any direction on the cover must not produce dangerous effects).

IP20

IP 20: Apparatus protected against solid parts larger than 12 mm but not protected against the infiltration of water.

4.3 Electrical insulation degree



CLASS I: the appliance features basic electrical insulation.

Must be connected to the ground circuit through the main electric circuit.

5.2 Electrical insulation degree



CLASS II: the appliance features double electrical insulation. They doesn't need a connection to the ground circuit through the main electric circuit.

4.4 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.

4.5 Fixed closure guards safety

The vacuum cleaner is delivered to the Customer with its main body completely assembled. Moving parts

(suction motor turbine blades) are protected by a protection grid directly assembled on the inlet of the suction motor compartment. This protection grid cannot be accessed by the operator. The operator also does not have access to the electrically-operated parts of the appliance which are 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.

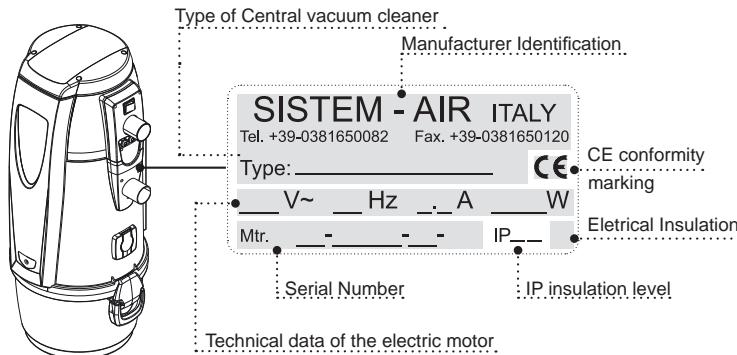
4.6 Movable closure guards safety

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. reminds you that it is absolutely forbidden to replace the screws used for the design and manufacture the appliances with screws that feature different characteristics.

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

5.7 Identification plate

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



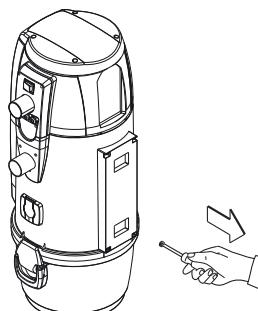
5 - Transforming DX version (outlet pipes fitted on the right) into SX version (outlet pipes fitted on the left)

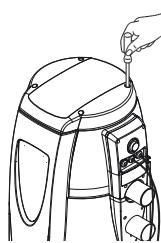
The TECNO Line vacuum cleaners are generally supplied with suction and exhaust pipes on the right side (RIGHT version). Upon request, the system can be transformed so to have the pipe connection on the left side (LEFT version).

To do this:

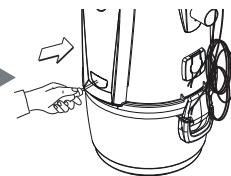
Unscrew the screws and remove the rear fixing plate.

1



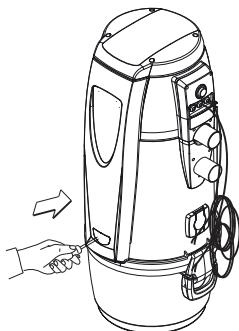


2 Unscrew the screws and remove the top cover.



Remove the plate, remove the screws underneath and remove the front panel.

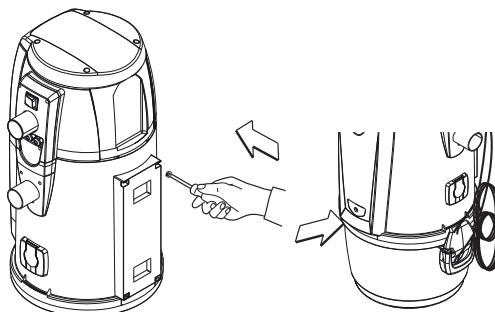
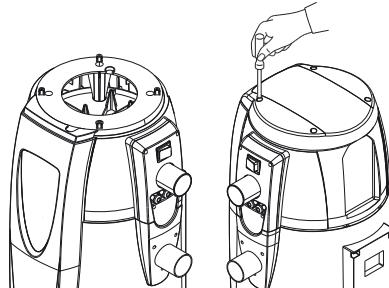
3



4 Replace the panel on the opposite side.

Replace the upper dome, position the electric cable in the special grooves and position again the dustproof sponge disk to completely close the hole of the cable outlet.

5



6 Replace the fixing plate, fix the adhesive label supplied and tighten the screws.

6 - INSTALLATION



- WARNING -
THESE PROCEDURES MUST BE CARRIED OUT
BY QUALIFIED PERSONNEL

6.1 Preliminary operations

The suction system is shipped to the customer completely assembled and packed.

Before switching the machine on, the following checks are advisable:

- Check that the packaging is intact.
- Check that the appliance has not been damaged in any way and in particular check that all the protruding parts are intact.
- Verify the correct tightening of the filter cartridge.
- Using the equipment list and the kit and accessories list, check that the equipment and the kit have been exactly and completely delivered.
- Check that the Guarantee Certificate has been provided.

If any damage or irregularity is found or if any accessory is missing, do not install the appliance and contact your Retailer.

6.2 Place of installation

The use of the vacuum cleaner requires a suction piping network installed by qualified personnel who has already selected the most suitable location.

Below you will find the main indications to be followed for a correct installation:

- If the appliance will be connected to a pipe network on more than one floor, we suggest you to install it in the lowest part of the building.
- install the system in service rooms (e.g. garage or store room) away from bad weather, dampness and excessive temperature variations.
- Choose a place far from heat sources such as stoves and radiators.
- Make sure that there is sufficient space around the system and that the surrounding area is well lit to facilitate the interventions for maintenance and repairs.

When the vacuum cleaner, for specific installation needs, is installed on the highest floors of the building with regard to the level where the pipe network is housed (attic, garret etc.), we suggest you to install a vacuum cleaner featuring a power category higher than the one needed to clean the desired surface.

For any further information, do not hesitate to contact the Manufacturer's Technical Service.

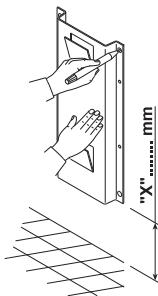
6.3 Fixing the vacuum cleaner to the wall

The vacuum cleaner must be securely and permanently fixed to a solid wall using the bracket provided and the suitable wall anchors or plugs taking into account that the total weight to be supported can be seven/eight times that of the system itself.

The system should be positioned high enough off the ground to allow the dust collection bin to be emptied and the filter to be replaced in a simple way.

Position the system so as to keep a minimum distance of 60 cm around the appliance for extraordinary maintenance.

To do this follow the instructions detailed below:



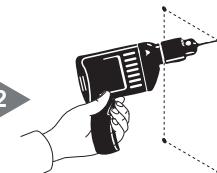
1

Trace the drilling position using the template provided (drilling template); if this has already been done, proceed to the next step.

NB: see page 2 for X measure

Drill the holes

2



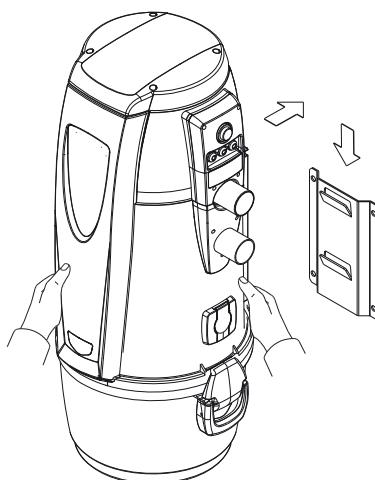
Tighten the screws in the wall plugs and check that the bracket is well anchored to the wall.

3



Hook the vacuum cleaner to the anchoring bracket by lifting it, leaning it against the wall and allowing it to slide down until it fits into the fixing plate.

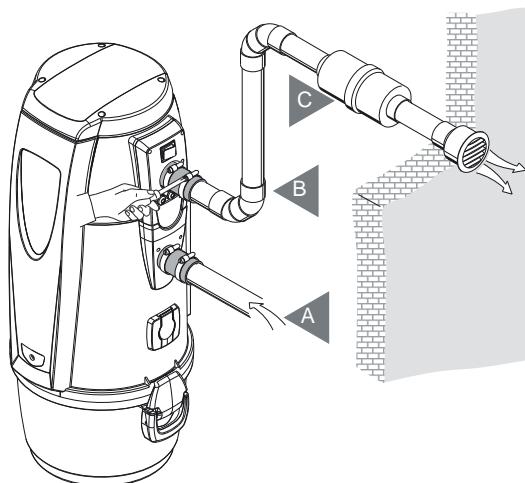
4



6.4 Connection to the piping network

1. Using the sleeve, connect the dust inlet coupling of the cyclonic vacuum cleaner, identified with (A) in the picture, to the suction pipe from the piping network.
2. By using the sleeve, connect the air outlet of the central vacuum unit, marked with (B), to the air outlet of the house.
3. Glue the silencer (C) on the exhaust pipe near the exhaust air grid.

N.B.: do not glue the pipe end of the network pipe to the dust inlet coupling or to the air exhaust coupling: always use the sleeves provided.



For the installation of the TECNO R-evolution unit with the bag filtration configuration see the integrative manual.

Should it be necessary to convey the air discharge to the outside, please follow the following instructions:

Maximum length of the discharge pipe:

Diameter of the outlet pipe for a length up to 4 m: 50 mm

Diameter of the outlet pipe for lengths from 4 to 6 m: 63 mm

Diameter of the outlet pipe for lengths from 6 to 8 m: 80 mm

Diameter of the outlet pipe for lengths from 8 to 10 m: 100 mm

It is not advisable to use an outlet pipe which is longer than 10 m, because this could damage the central vacuum unit.

6.5 Electrical connection



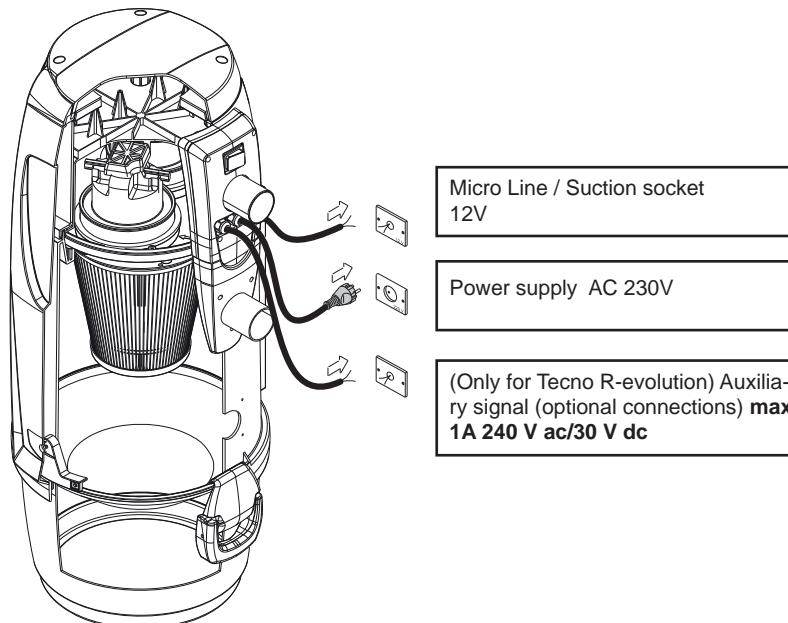
WARNING: the electrical connection must be carried out ONLY by qualified personnel.

Before connecting the system to the electrical power supply check that the supply voltage corresponds to that required by the vacuum cleaner (see the 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.
- Connect the output cable for the auxiliary maintenance warning signal. The use of this signal is OPTIONAL. N.B.: This signal is a normally open contact.
- Insert the plug of the power supply cable from the central system in the electric socket.
- Check that the electrical wiring of the house has been set up in compliance with the electrical regulations in force.
- Do not power the system with supply voltage from provisional or temporary switchboards (for example construction sites switchboards) to avoid possible damage to the electronic parts.
- Only for TECNO R-evolution units: connect the output cable for the auxiliary maintenance warning signal. The use of this signal is OPTIONAL. N.B.: This signal is a normally open contact.



7 - MAINTENANCE



BEFORE CARRYING OUT ANY MAINTENANCE OPERATION, IT IS MANDATORY TO UNPLUG THE POWER SUPPLY CABLE FROM THE POWER SUPPLY INLET. PROTECTIVE MASK AND GLOVES MUST ABSOLUTELY BE WORN

7.1 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.

Working time (h)	Maintenance	Executor
4	Filter cleaning	User
6	Dust bin emptying	User
32	Filter replacement	Technical assistance
54	Air exhaust blockage	Technical assistance
350	Motor carbons replacement	Technical assistance

7.2 Programmed routine maintenance (only for TECNO R-Evolution)

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 TECNO R-evolution vacuum cleaners are controlled by a computer which also checks the routine maintenance cycles:

- Emptying the dust collection bin (for configuration 1)
- Replacing the dust collection bag (for configuration 2)
- Cleaning the filter

In configuration 1, 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 dust level in the dust bag (when used, i.e. in BI-VAC configuration)
- the level of filter efficiency (i.e. dirty filter alarm)
- the vacuum level in the system
- the need to carry out extraordinary maintenance (two levels)

7.3 Extraordinary maintenance

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

Two levels of extraordinary maintenance have been programmed:

Level 1:

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

Level 2

- check of the wear of the suction motor carbons
- replacement of the suction motor carbons
- everything indicated in level 1

Also in this case the user can decide whether to stop the suction and perform the maintenance operations or to go on with the vacuuming activities and finish up.

7.4 Cleaning the suction container (cylinder)

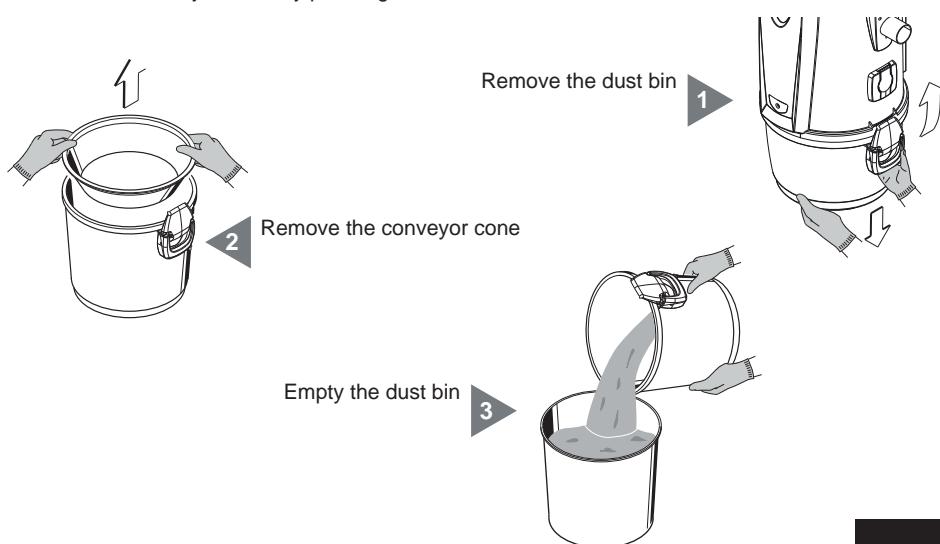
Periodically clean the outside casing of the vacuum cleaner with a soft damp cloth with water and neutral soap.

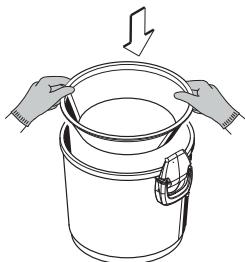
Important: only use water or neutral soap and water to clean the vacuum cleaner. The use of other solvents or alcohol can entail damages. Ensure the system surface is completely dry before switching it back on.

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

7.5 Emptying the dust bin (cyclonic suction)

Switch the suction system off by pressing the ON/OFF switch.





4

Put the conveyor cone back in position

Reassemble the dust bin inside its housing under the suction system and lock the closing handles. Switch the suction system on by pressing the ON/OFF switch.

After re-starting the system push the "RESET" button to reset the dust bin alarm.

Remember to take care when emptying the bin: if there is a huge quantity of dust, make sure you do not throw away the conveyor cone. Always check that the conveyor cone is still in place and correctly assembled in its housing inside the bin.

7.6 Disposal of the filter cartridge



ATTENTION

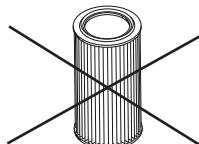
YOU SHALL ALWAYS CHECK THE RIGHT POSITIONING AND TIGHTENING OF THE FILTER CARTRIDGE. A WRONG POSITIONING OR A LOOSE FILTER CARTRIDGE MAY CAUSE A SERIOUS DAMAGE OF THE PRODUCT.

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

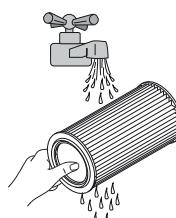
The filter cartridge can be reused after washing under running water.

ATTENTION: before replacing the filter cartridge back in the system after washing, ensure it has completely dried. DO NOT reassemble the filter cartridge if the surface is still wet or damp.

Before washing the cartridge it is always recommended to vacuum clean the dirty surface with an auxiliary suction cleaner or with the utility/service inlet, remembering to insert a spare cartridge in the system before use.



1



2

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

8 - REPAIRS AND SPARE PARTS

8.1 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.

8.2 Recommended spare parts

It is advisable to order in time those spare parts which need to be changed more 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 CODE	MODEL	
Filter cartridge	1610.0	STYLE 150 STYLE 250 STYLE 350 STYLE 450	
Filter cartridge	1610.5	STYLE MINI	
Filter cartridge	1610.0R	TECNO R-evolution 150 TECNO R-evolution 250 TECNO R-evolution 350 TECNO R-evolution 450	
Microfiber dust bag	1614.5	TECNO R-evolution 150 TECNO R-evolution 250 TECNO R-evolution 350 TECNO R-evolution 450	
Dust bag and bag-stretcher for dust collection in the bin	1614.4	ALL	

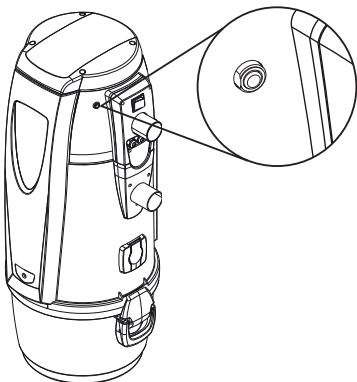
9 - TROUBLE SHOOTING

9.1 Thermal switch

The thermal switch prevents damages to the electric and electronic parts from power overloads and from short-circuits.

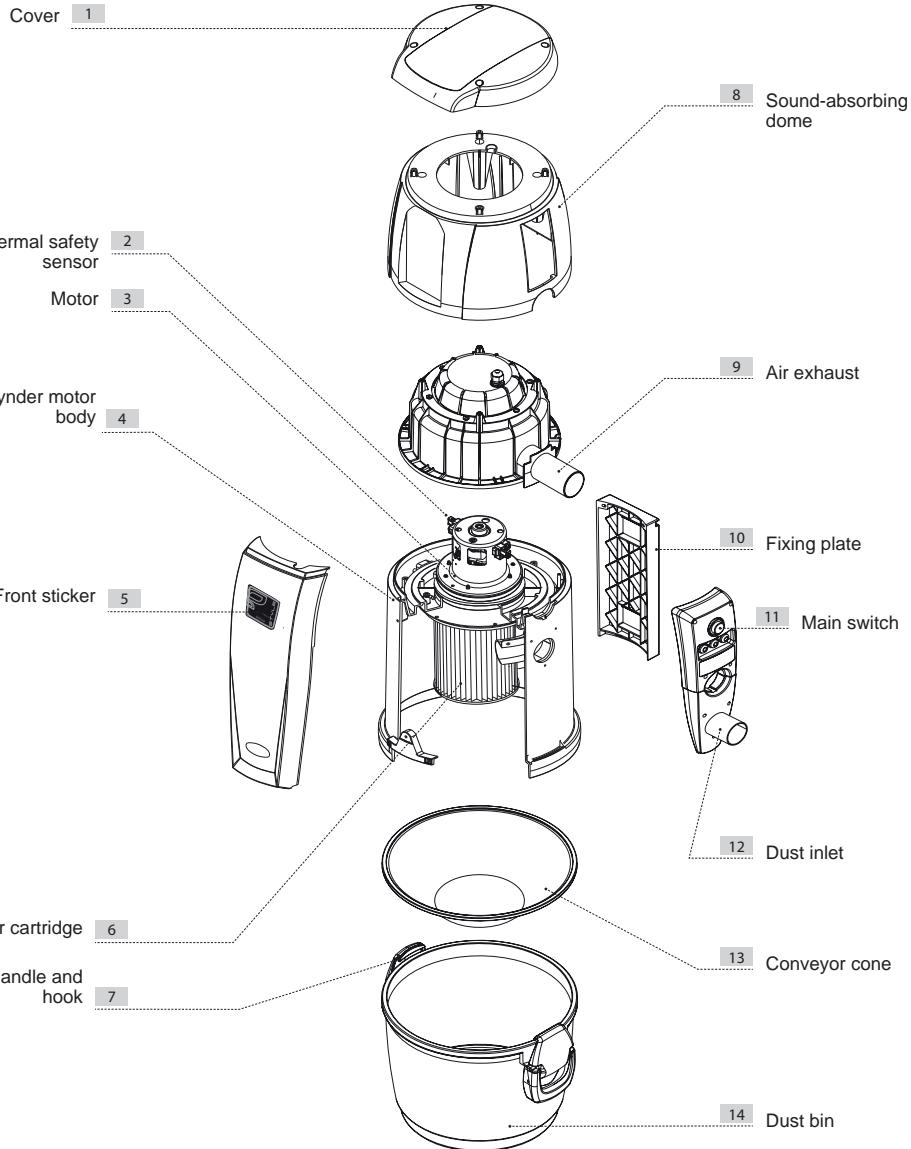
The switch button is located inside its lodging during the regular functioning of the machine, while in case of activated protection it will be out of its lodging.

The reactivation of the switch must be done manually by pushing the button back into its lodging. This operation will be effective only if the cause of the blocking has been fixed. If the blocking occurs regularly, it is advisable to let a specialized technician verify the correct functioning of the machine

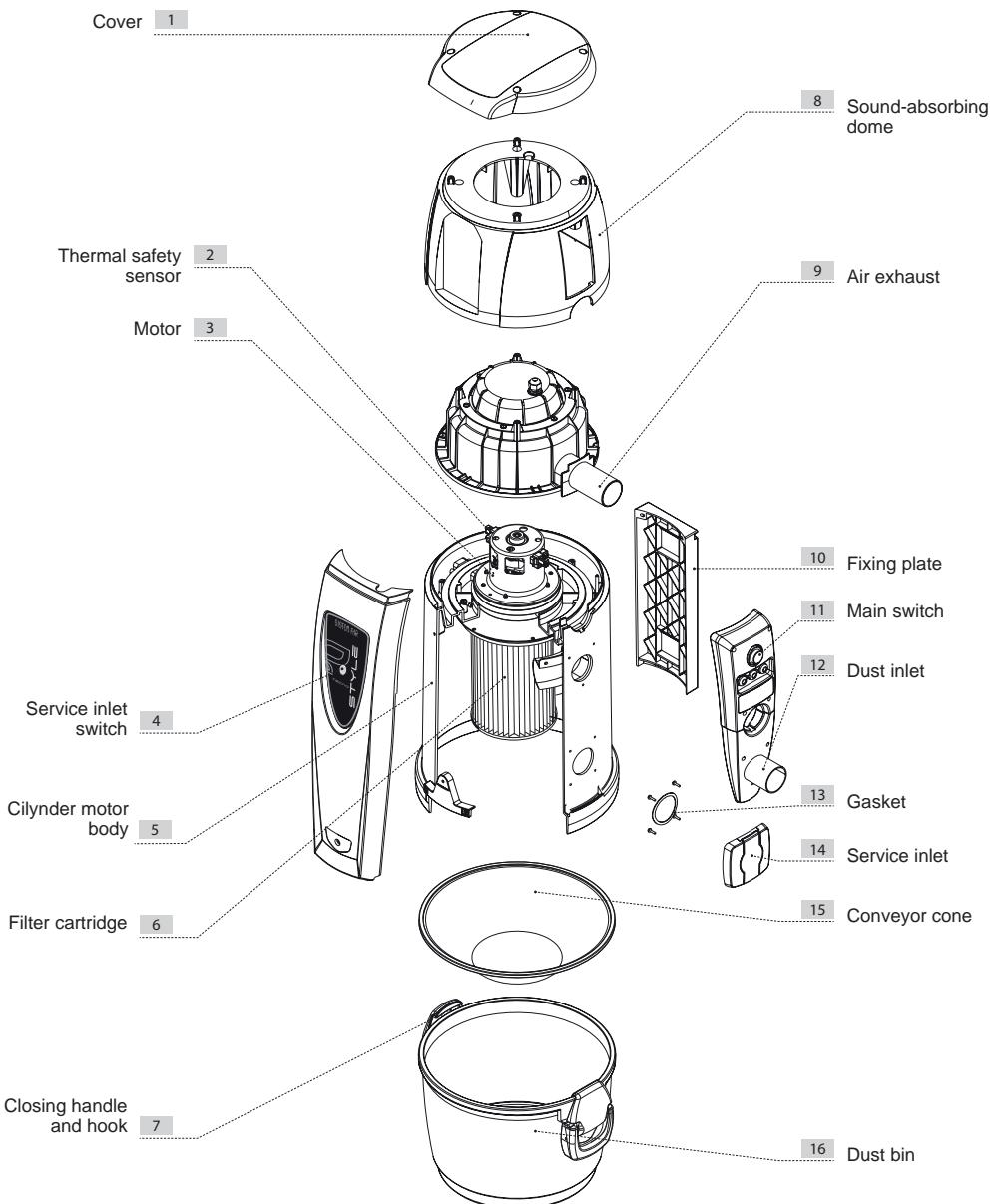


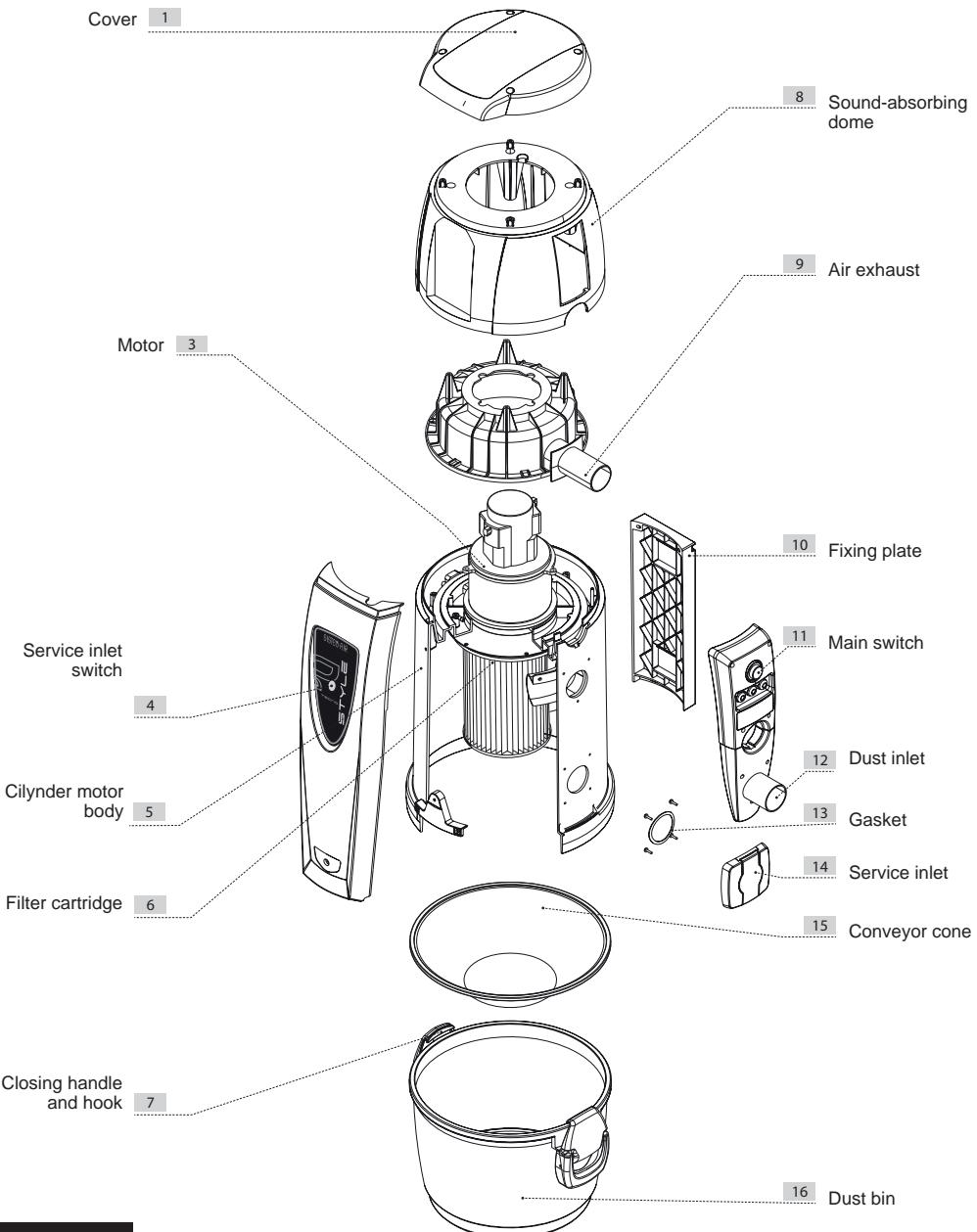
PROBLEM	CAUSE	SOLUTION
Only for TECNO R-evolution units		
There is no suction from any of the suction sockets	Alarm signalled on the display	Eseguire RESET dell'allarme
	The power cable is unplugged	Connect the power cable
	The start button is on OFF position	Press the Start button
	The micro line cable is not connected	Connect the activation cable (sensor)
	The thermal protection of the motor has intervened	Allow a few minutes stop for the motor to cool down
	The overcurrent circuit breaker has tripped	Proceed with the manual reset of the circuit breaker
There is no air suction from just one suction socket	The electric contacts are interrupted or the micro-switch of the suction socket is out of order	Call the Technical Service
Only for TECNO R-evolution units		
Filter alarm with clean filter cartridge	Depression of the system equal to or lower than 95 mbar	Check possible losses in the system Reduce the opening time of the vacpan inlet Call the Technical Service

PROBLEM	CAUSE	SOLUTION	
The air suction is weak	More than one suction socket is being used at the same time and/or the service suction socket is working	Use only one suction inlet at a time	
	The flexible hose or the cleaning accessories are broken	Check the flexible hose and the accessories are not damaged (change them if necessary)	
	The filter cartridge is dirty	Clean the filter cartridge	
	The sealing gasket of the dust bin is damaged	Check sealing gasket integrity	
	There is a clogging in the suction pipes of the pipe network	Call the Technical Service	
	The air exhaust outlet is blocked	Call the Technical Service	
	Only for TECNO R-evolution units		
The vacuum cleaner still works even when the suction inlets are closed	The dust bag is full	Replace the dust bag	
	Fault of the printed circuit board	Call the Technical Service	
The suction works intermittently with the hose inserted in the inlet.	Alarm "Thermal switch" on the display. (the displays TECNO R-evolution units gives the alarm "Terical motor")	Only for TECNO R-evolution units	
		RESET the alarm and/or wait for the automatic restoration	
		Check for a possible clogging in the piping network	
		Check for a possible clogging in the air discharge pipe	
		Remove the hose from the suction inlet and wait a couple of minutes to let the motor cool down	
		Call the Technical Service	

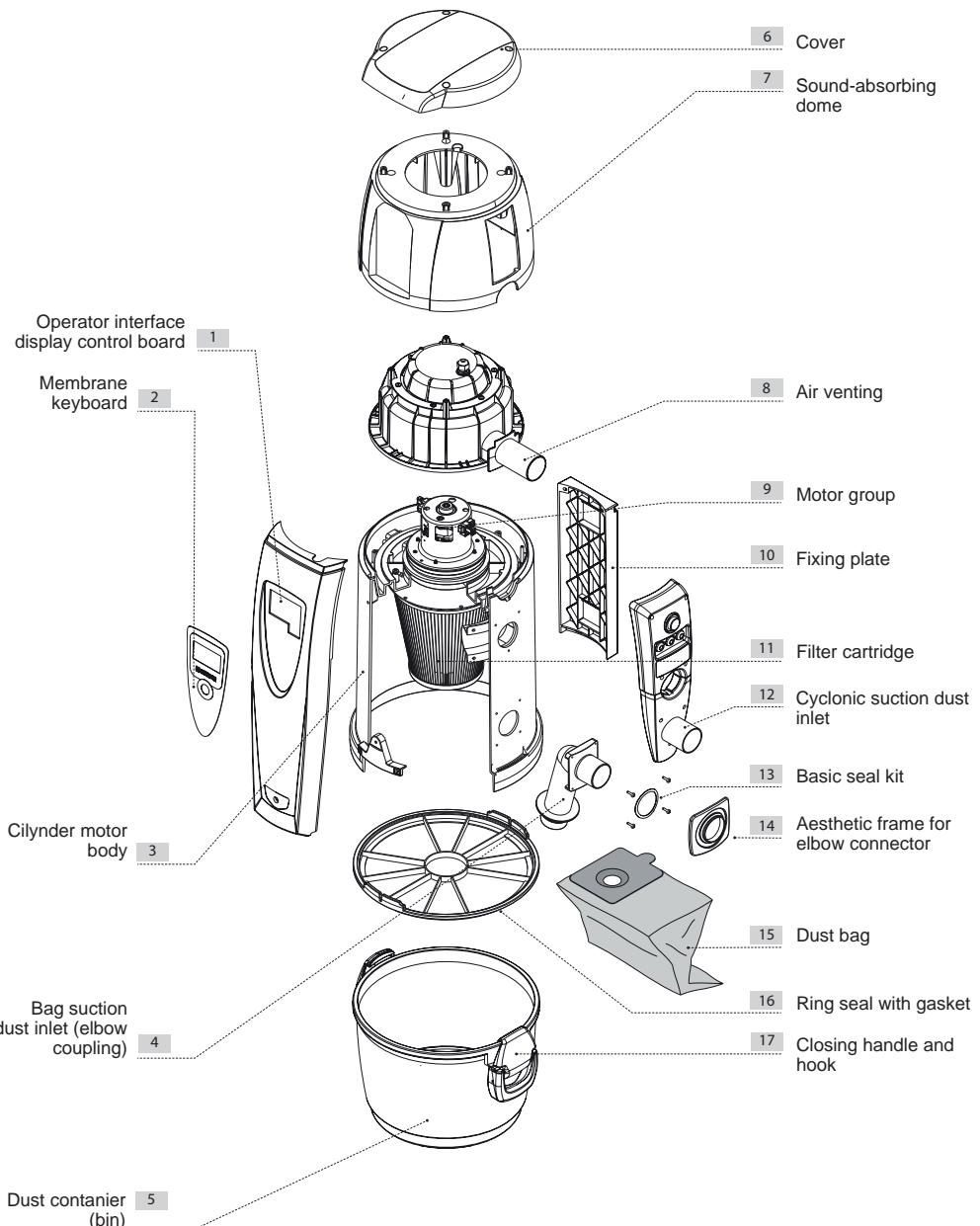
10 - EXPLODED VIEW DRAWINGS**TECNO Style mod. MINI**

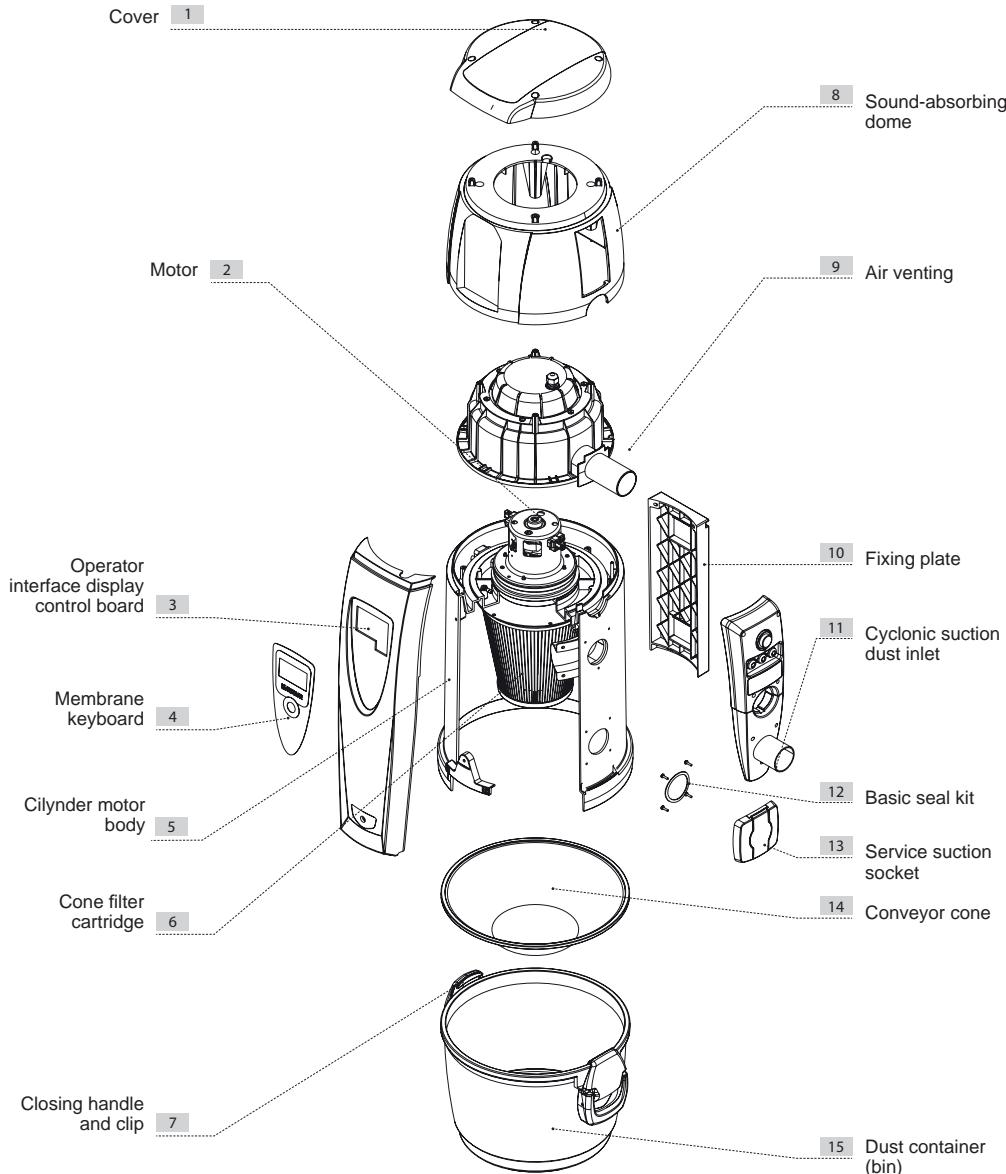
TECNO Style mod. 150/250/350



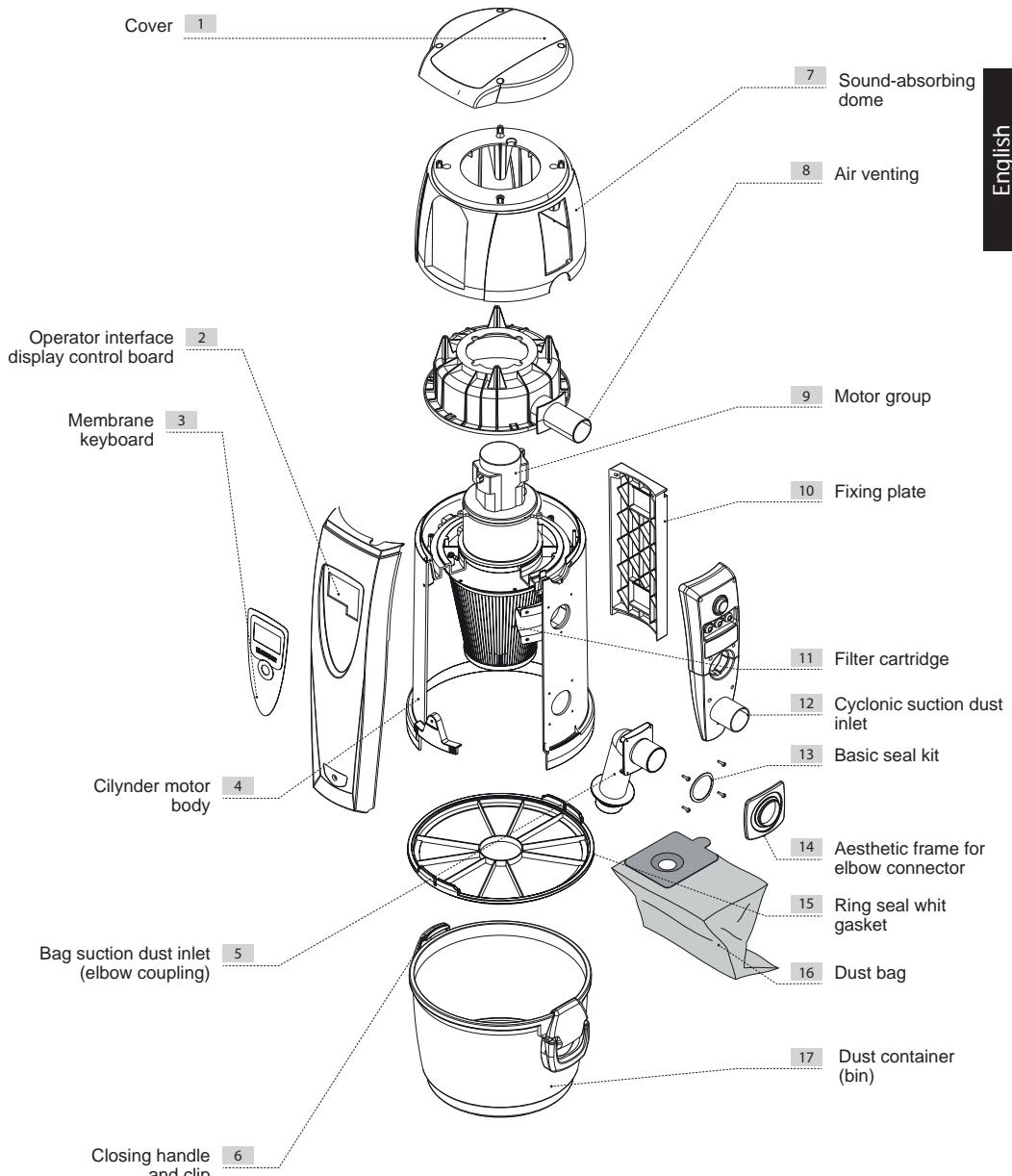
TECNO Style mod. 450

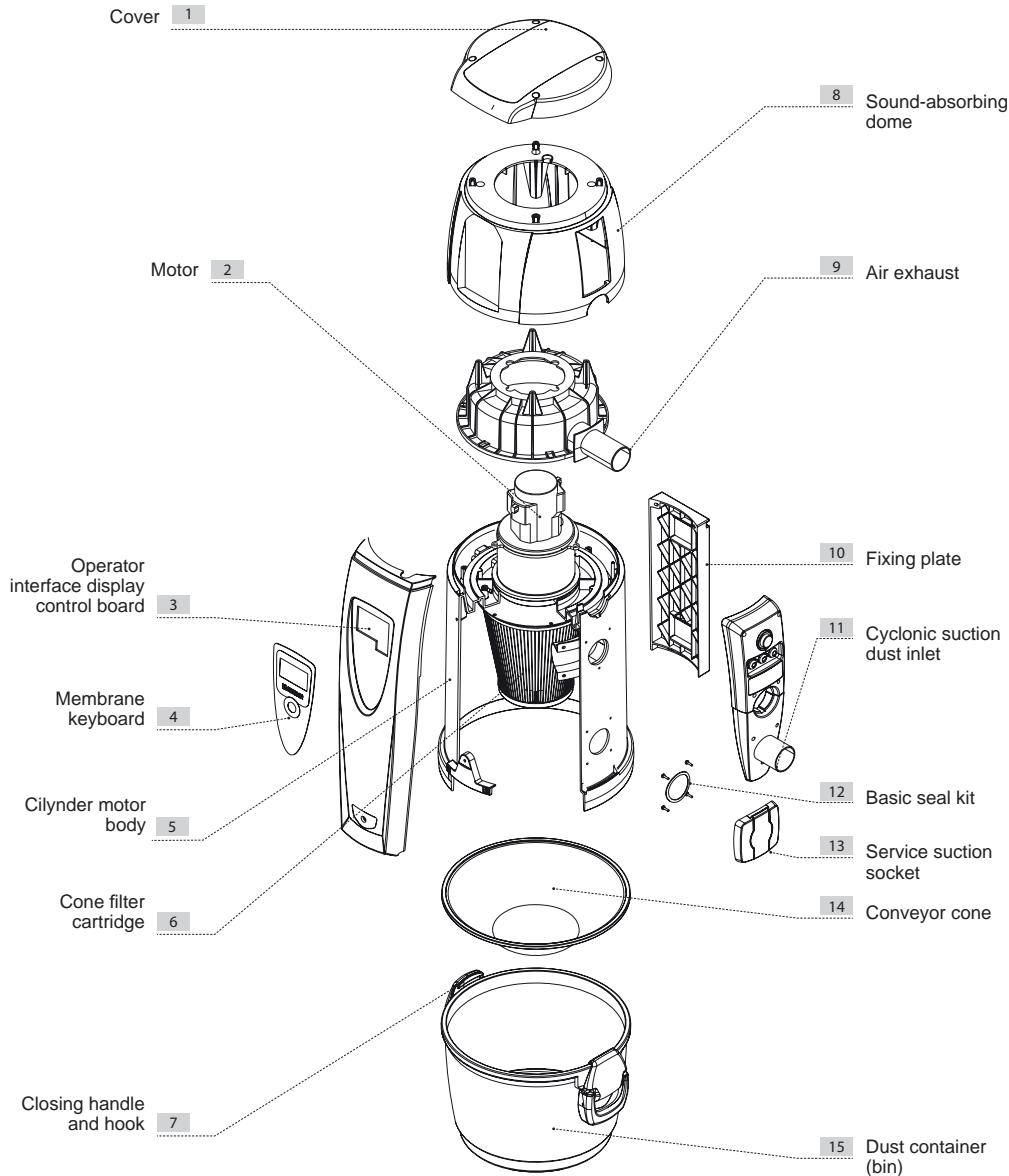
R-EVOLUTION kit mod. 150/250/350 with bag suction



R-EVOLUTION kit mod. 150/250/350 with cyclonic suction and service suction socket

4.3 R-EVOLUTION kit mod.450 with bag suction



R-EVOLUTION kit mod.450 with cyclonic suction and service suction socket



- Type: domestic vacuum cleaner
- Model: Tecno R-EVOLUTION
- Revision 1.0.0

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1 - Operating Configurations

Configuration 1 cyclonic (bagless) suction with service suction socket: the customer can choose to assemble the service suction socket directly on one side of the appliance which allows connecting a flexible suction hose rather than vacuum cleaning through the piping network. With no additional connection, the functioning of the socket is controlled by the computer of the central vacuum cleaner through two simple buttons. This allows an easy cleaning of the areas close to the central vacuum unit.

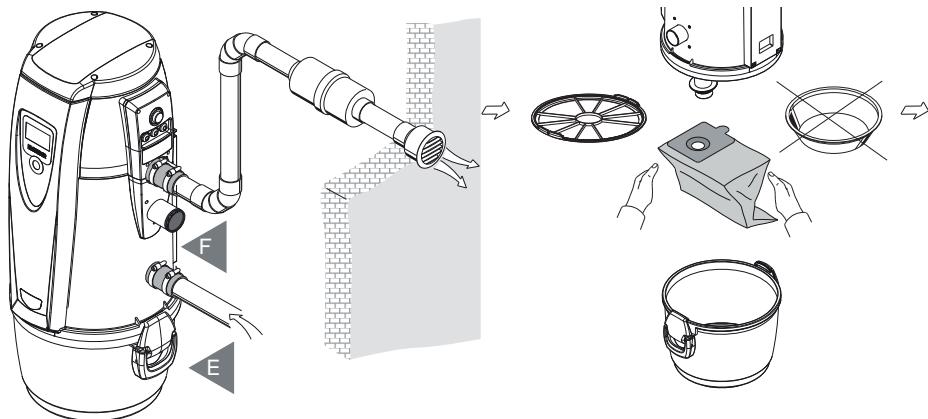
Configuration 2 bag suction the customer chooses to use the system with the bag suction option. In this configuration, the air is filtered through a microfiber bag featuring high-filtering performance and the system's filter does not need any maintenance. With this configuration, the connection to the standard dust collection socket of the piping network will be closed with a lid delivered with the equipment.

Together with the unit, delivered with this instruction manual, a BI-VAC configuration kit is supplied in the packaging; the kit allows the operator to choose between the dust being collected directly in the dust bin or in the special microfiber bag. The production configuration of the Tecno R-EVOLUTION system features a hole to be completed with the BI-VAC kit when installing the unit.

Components to be found in the kit	To be used for the configuration	Picture
Service suction socket with flap closure	1	
Elbow coupling to be fixed in the hole (bag suction dust inlet)	2	
Closing cover for dust suction inlet (to be assembled on the cyclonic suction dust inlet)	2	
Retaining-ring seal to hold the dust bag, which replaces the conveyor cone	2	
Microfiber dust bag	2	
N°4 fixing screws	1+2	
N°4 washers	1+2	
N°2 gaskets	1+2	
N°1 aesthetic frame for elbow connector	1	

2 - Connection to the piping network (bag suction)

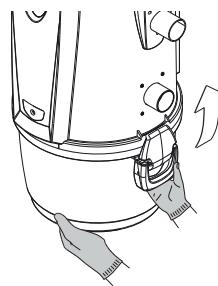
1. If the service suction inlet is already assembled on the body of the appliance remove it being careful not to damage the inserted gasket.
2. In case of first installation, the body of the vacuum cleaner body is completely disconnected; for this reason, install the elbow coupling, provided with the kit, in the lower hole, being careful to position the sealing gasket in the internal side between the coupling and the body.
3. By means of the screws and washers provided in the BI-VAC kit, screw the elbow coupling to the appliance body on the outer side of the cylinder.
4. Remove the conveyor cone from the dust collection bin.
5. Position the ring seal with gasket in the special housings in the internal sides of the machine body.
6. Insert the bag, being careful to put it at the bottom end of the elbow coupling.
7. Repeat the steps described in the previous paragraph being careful to connect the pipe coming from the pipe network to the end of the elbow coupling on the appliance body (E).
8. Place the closing cover (F) at the end of the coupling of the cyclonic dust suction inlet, (see the drawing) since it will be no longer used; leaving this open will break-off the system suction power.

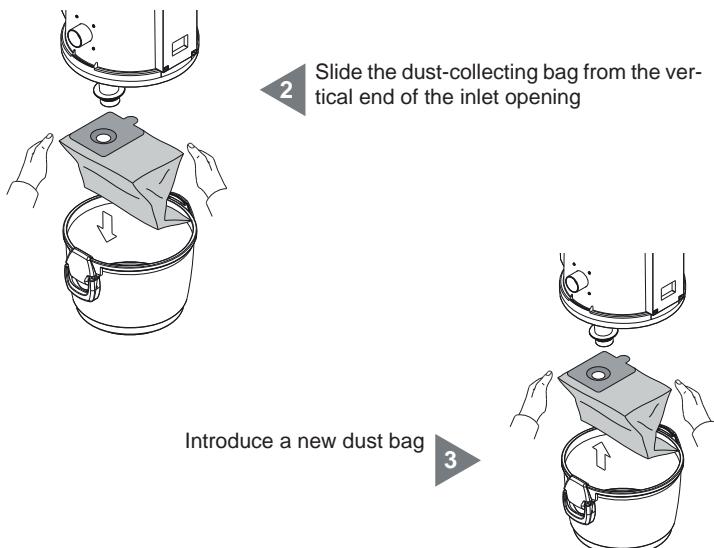


3 - Replacing the dust bag (bag suction)

Switch the vacuum cleaner off by pressing the ON/OFF switch.

Disassemble the dust container 

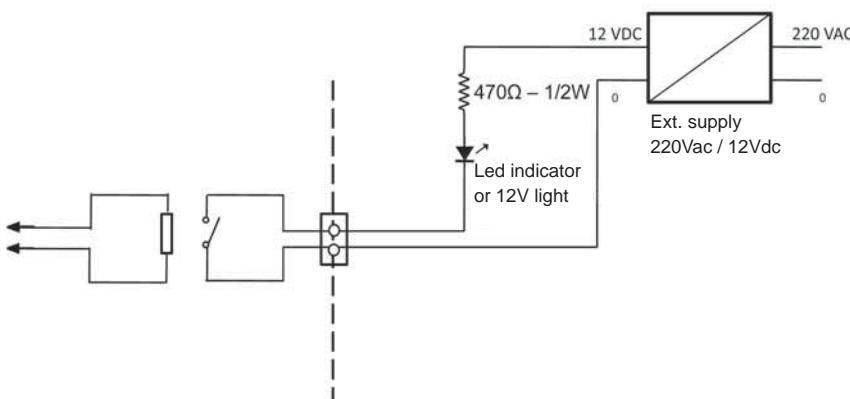




Reassemble the dust container in its housing under the vacuum cleaner and close it again. Switch the vacuum cleaner on by pressing the ON/OFF switch. After restarting the central vacuum unit, press RESET to cancel the alarm relating to the dust container (bag).

4 - Auxiliary connection signal

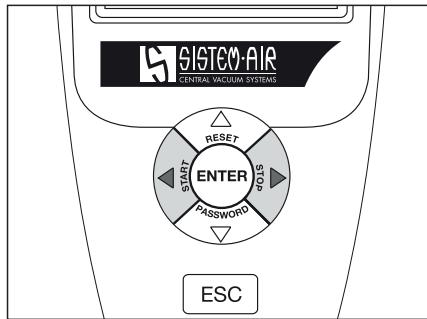
Example of connection of the auxiliary contact, normally open, which closes in case of alarms on the display.



5 - Programming and use of the computer for controlling the central unit

The Tecno R-Evolution vacuum cleaner is provided with a practical display with membrane keyboard as shown below.

The use of this display and 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 up and down arrows to scroll in the menu on the display and modify the value on the display.
- 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

5.1 Programming the start up

Here are the main Menu screens for the start-up



LANGUAGE SELECTION	
English	<input checked="" type="checkbox"/>
Italiano	<input type="checkbox"/>
Deutsche	<input type="checkbox"/>
Francais	<input type="checkbox"/>
Espanol	<input type="checkbox"/>

MODEL	
Revolution 150	<input checked="" type="checkbox"/>
Revolution 250	<input type="checkbox"/>
Revolution 350	<input type="checkbox"/>
Revolution 450	<input type="checkbox"/>
Dual Power	<input type="checkbox"/>

DATE/TIME	
01/01/2013 12:00	▲ ▼

1

Screen display which appears when first switching the system.
Press Esc to go to the next screen.

2

Select the language by pressing the arrows Up and Down.
Press Enter to select the language. Press Esc to confirm the selected language and go to the next screen.

Selection is active
 Selection is not active

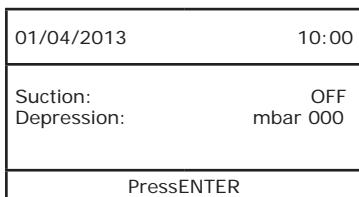
3

Select the model of the installed central vacuum unit by pressing the Up and Down arrows.
Press Enter to activate the model of central vacuum unit. Press Esc to confirm the selection and go to the next screen.

Selection is active
 Selection is not active

4

Set the date and time using the Up, Down, Left and Right arrows.
Press Esc to confirm the changes and go to the next screen.



More precisely:

Suction: shows whether suction has been activated or not
Depression: shows the vacuum gauged inside the unit

5 On this screen you will be able to save some information about the installation. Write the telephone number by pressing the Up, Down, Left and Right arrows. Press Esc to confirm the changes and go to the next screen.

6 On this screen you will be able to save the details of the Service. Write the telephone number by pressing the Up, Down, Left and Right arrows. Press Esc to confirm the changes and go to the next screen.

7 On this screen you will be able to select the kind of dust collection for your central vacuum unit (dust bin or Bi-Vac bag). Press the Left and Right arrow to select the kind of dust collection and press Enter to activate your choice. Press Esc to confirm the chosen option and go to the next screen.

- Selection is active
- Selection is not active

8 Main Screen Display

Press **ENTER** to pass onto the **Main Menu**.

5.2 Alarms

Below you will find the screens relating to the alarms which may appear on the display.

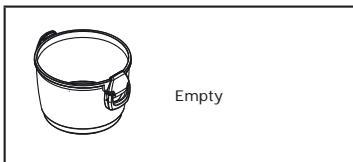
Press **RESET** to cancel the alarm and restore the suction if you activated the "Suction stop" option (see par. 11.4.2).



Clean

1 FILTER ALARM

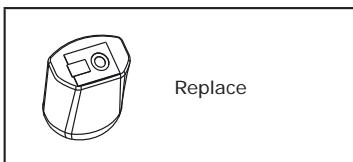
Filter efficiency 0%, clean the filter cartridge, see par. 12.7



Empty

2 DUST ALARAM (BIN)

Dust container level 100%, empty the dust container, see par. 12.4



Replace

3 DUST ALARAM (BAG)

Dust container level 100%, replace the dust bag, see par. 12.5



+390381650082

4 SERVICE ALARM 1/2

Extraordinary maintenance needed, see par. 12.2



Motor overheating

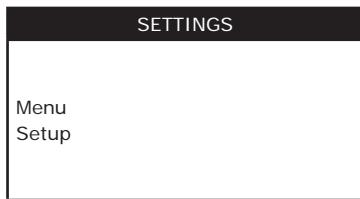
5 MOTOR TEMPERATURE ALARM

The motor's safety thermal switch intervened, see par. 17

5.3 Setting menu

01/04/2013	10:00
Suction:	OFF
Depression:	mbar 000
Premere ENTER	

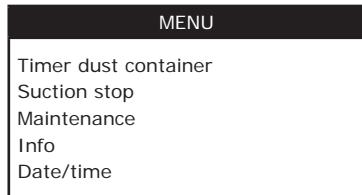
1 By pressing **Enter** when on the main screen, you go to the Setting menu



2 Press the **Up** and **Down** arrows to scroll in the menu.
 Press **Enter** to access the selected submenu.
 Press **Esc** to exit.

5.4 Menu

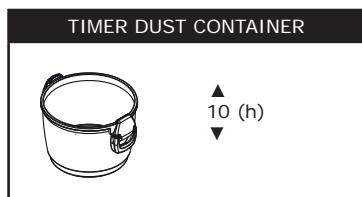
In this menu there's the possibility to modify the default parameters and to visualize the product information.



1 Press the **Up** and **Down** arrows to scroll in the menu.
 Press **Enter** to access the selected submenu.
 Press **Esc** to exit.

5.4.1 Menu timer of the dust container

In this menu you can modify the parameter relating to the Dust Alarm which refers to the dust container (bin) selected during the installation phase. The unit of measurement is expressed in hours.



1 Press the **Up** and **Down** arrows to modify the parameter.
 Press **Esc** to confirm the change and exit the menu

5.4.2 Menu suction stop

In this menu you can activate/deactivate the suction stop for the filter alarm, dust alarm and service alarm 1 and 2, each of them separately.

If this function is activated, the suction will stop within 15 minutes from the alarm.

CAUTION: To avoid malfunctions of the central vacuum unit it is advisable to always activate the suction stop when the unit displays an alarm.



1 Utilizzando i tasti **Su** e **Giù** si seleziona il tipo di allarme.
 Premendo il tasto **ENTER** si attiva/disattiva l'arresto dell'aspirazione:
 Premendo **Esc** si conferma la selezione e si esce dal menu

Selezione attiva
 Selezione non attiva

5.4.3 Maintenance menu

In this menu you can find all information regarding the filter efficiency, the level of dust in the dust container (bin) or in the Bi-Vac bag, the time to the next extraordinary maintenance operations level 1 (Service 1) and 2 (Service 2).

MAINTENANCE	
Filter efficiency	%100
Dust level	%000
Alarm Service 1	(h) 200
Alarm Service 2	(h) 400

1 Press ESC to exit the menu.

5.4.4 Menu info

In this menu you can find all information relating to the installation date, the operating hours, the energy consumption, the installer and the service, the alarm history and the maintenance operations performed by qualified personnel.

INFO	
Central unit	
Installer	
Service	
Last alarms	
Statistics Alarms	
Statistics Service	

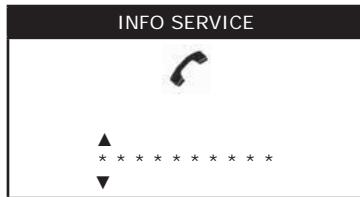
1 Press the **Up** and **Down** arrows to scroll in the menu.
Press **Enter** to access the selected sub menu.
Press **ESC** to exit.

INFO CENTRAL UNIT	
Installation date	01/04/2013
Hours central unit	999999 (h)
Hours motor 1:	999999 (h)
Hours motor 1:	999999 (h)
Absorption 1:	0.00 (A)
Absorption 2:	0.00 (A)

2 Press the **Up** and **Down** arrows to scroll in the menu.
Press ESC to exit.

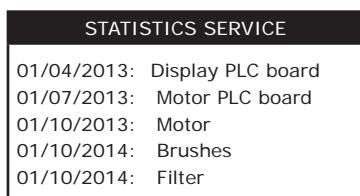
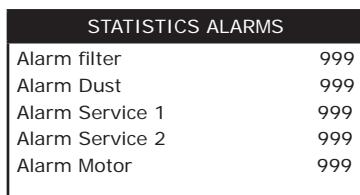
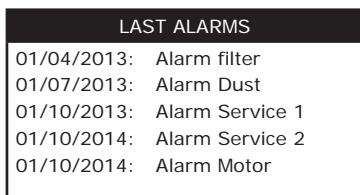
In detail:

System hours: Measure in hours during which the central vacuum unit is under tension.
Motor 1 hours: Measure in hours during which the suction was active
Motor 2 hours: This option is not active on this model.
Absorption 1: Information about the current absorbed by the central vacuum system in Ampere.
Absorption 2: This option is not active on this model.



In detail:

Installer: Telephone number of the installer of the central vacuum system.
Service: Telephone number of the authorized Service Center.



3

Press the Up, Down, Right and Left arrows to put the telephone number in. Press Esc to confirm the change and exit the menu.

4

List of the last alarms detected by the electronic control system with the reference of day, month and year. Press the **Up** and **Down** arrows to scroll in the menu. Press **ESC** to exit.

5

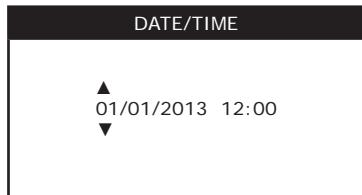
List of the kind of alarms with an indication about the number of occurrences on the display. Press the **Up** and **Down** arrows to scroll in the menu. Press **ESC** to exit.

6

List of the service operations (extraordinary maintenance) performed by qualified personnel, with the kind or repair. Press the **Up** and **Down** arrows to scroll in the menu. Press **ESC** to exit.

5.4.5 Menu date and time

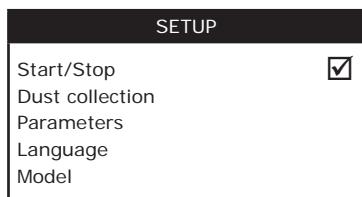
In this menu you can modify the date and time.



1 Set the date and time using the **Up**, **Down**, **Left** and **Right** arrows.
Press **Esc** to confirm the modification and exit the menu.

5.5 Setup

In this menu you can modify all parameters programmed during the installation phase and the parameters relating to the alarm functions.

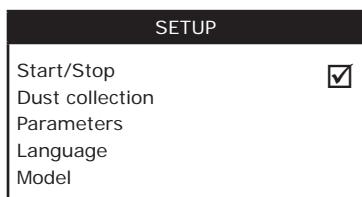


1 Press the **Up** and **Down** arrows to select the sub menus.
Press **Enter** to access the selected menu.
Press **Esc** to exit the menu.
 Selection is active
 Selection is not active

5.5.1 Setup start/stop

In this menu you can activate/deactivate the double function of the Right and Left arrows.

When this function is active, you can start the suction by pressing the Right/Start arrow and stop the suction by pressing the Left/Stop arrow. This function is useful when using the service inlet.



1 Press **Enter** to activate/deactivate the function.
Press **Esc** to confirm the choice and exit the menu.
 Selection is active
 Selection is not active

5.5.2 Set up dust collection

In this menu you can modify the kind of dust collection (dust bin or bag) used by the central vacuum unit.



1

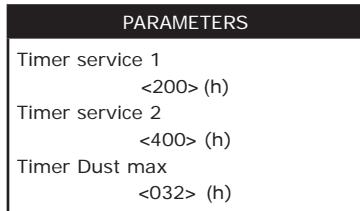
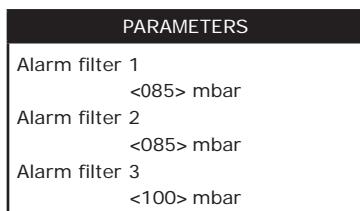
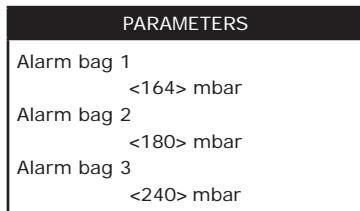
Press the **Right** and **Left** arrows to select the kind of dust collection and press **Enter** to activate the chosen function. Press **Esc** to confirm the choice and exit the menu.

- Selection is active
- Selection is not active

5.5.3 Set up parameters

In this menu you can modify the parameters relating to the functioning of the central vacuum unit set by the construction company.

CAUTION: These modifications may alter the correct functioning of the product. Therefore it is advisable to contact the construction company before modifying any parameter.



1

Press the **Up** and **Down** arrows to select the parameter. Press the **Left** and **Right** arrows to modify the parameter. Press **Esc** to confirm the modification and exit the menu.

PARAMETERS
Display stand by <005> min



Press the **Up** and **Down** arrows to select the parameter.
 Press the **Left** and **Right** arrows to modify the parameter.
 Press **Esc** to confirm the modification and exit the menu.

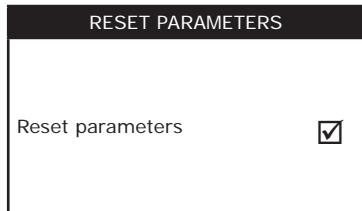
In detail:

PARAMETER	REFERENCE
Alarm bag 1	Set point depression alarm dust container (bag) Revolution 150/250
Alarm bag 2	Set point depression alarm dust container (bag) Revolution 350
Alarm bag 3	Set point depression alarm dust container (bag) Revolution 450
Alarm filter 1	Set point depression alarm filter Revolution 150/250
Alarm filter 2	Set point depression alarm filter Revolution 350
Alarm filter 3	Set point depression alarm filter Revolution 450
Timer service 1	Set point timer alarm extraordinary maintenance level 1 (Service 1)
Timer service 2	Set point timer alarm extraordinary maintenance level 2 (Service 2)
Timer dust max	Set point timer max alarm dust container (bin)
Standby display	Set point timer activation display standby

5.5.4 Set up reset parameters

In this menu you can reset all changes made on the parameters.

By activating this function all parameters will be brought back to the default values.



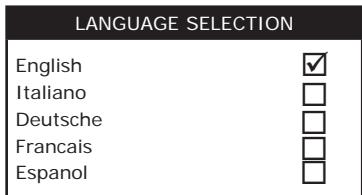
1 Press **ENTER** to activate the function. This way it is possible to restore all changes made to the default settings.

Press **Esc** to confirm and exit the menu.

Selection is active
 Selection is not active

5.5.5 Set up language

In this menu you can modify the language chosen during the installation phase.



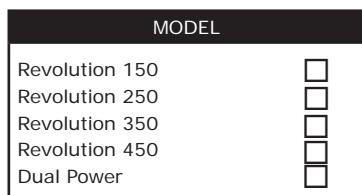
1 Press the **Up** and **Down** arrows to select the language

Press **Enter** to activate the language
 Press **Esc** to confirm your choice and go back to the previous menu

Selection is active
 Selection is not active

5.5.6 Set up unit model

In this menu you can modify the model of central vacuum unit selected during the installation phase.



1 Press the **Up** and **Down** arrows to select the language

Press **Enter** to activate the chosen language
 Press **Esc** to confirm your choice and go back to the previous menu

Selection is active
 Selection is not active

TECNO R-evolution

Domestic

