

Professional Cleaning Machines Since 1968

## USE and MAINTENANCE

Machine complying with the ATEX 2014/34/UE DIRECTIVE intended for dust vacuuming in potentially explosive atmospheres, classified Z22





Carefully read this manual and the documentation enclosed. Understanding and following the herein instructions is essential to correctly operate the vacuum and execute maintenance operations in safety conditions

This manual provides all the information needed to use and service your vacuum cleaner. Good operation and durability depend on proper maintenance and careful use.

Before leaving the factory, this particular model has undergone stringent tests to ensure utmost reliability. Always check however to make sure the vacuum cleaner has not been damaged during transport in such a way as to affect operation and safety.

This manual should be considered an integral part of the vacuum cleaner and must be kept together with the unit until this is scrapped. In case of loss of or damage to the manual, ask **GHIBLI&WIRBEL** for a new copy.

The technical details contained in this manual are the property of *GHILI&WIRBEL* and should be deemed of a confidential nature.

Even partial reproduction of the graphic project, the text and the illustrations is legally forbidden.

Some details shown in the illustrations in this manual may be different from those of your vacuum cleaner. Some component parts may have been removed for greater clarity.

For easier reference, this manual is split into sections, identifiable by specific graphic symbols.

The subjects dealt with in this manual are those expressly required by "*Machine Directive 2006/42/CE*" and the *"ATEX 2014/34/EU Directive"*, the technical details shown are those provided by the manufacturer at the time of compilation.

This manual must be kept in a place accessible to all the personnel charged with operating and servicing the vacuum cleaner.

In case of any doubts, always immediately phone the *After-Sales Service*.

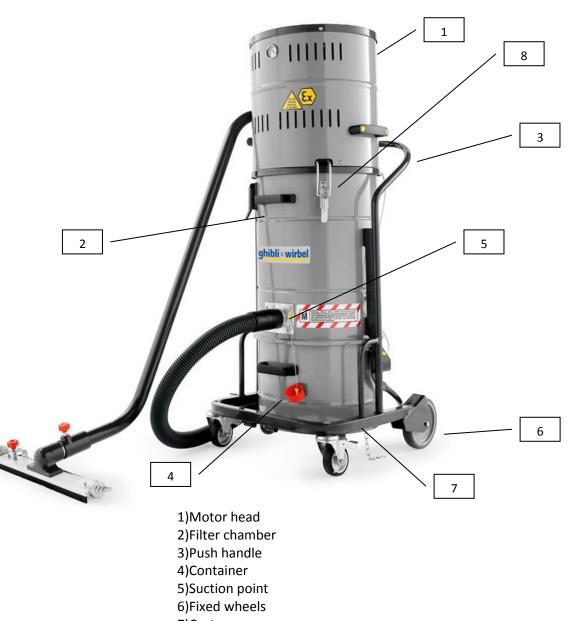
# ghibli <u>« wirbel</u>

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## 1.1 Identification of main parts



- 7)Castors
- 8)Release fastener



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## 1.2 Accessories provided



**2512716 -** D. 340x350H "M" CAT.FILTER CARTRIDGE FILTER FOR AX20 (ONLY SPARE PART)

Remark: these filters must be checked every six months. In case they are worn it will be necessary to replace them with new ones, to be requested as spare parts to GHIBLI&WIRBEL Srl.

GHIBLI&WIRBEL Srl will accept no responsibility in case of use of NON-ORIGINAL filters.

### 1.3 Identification details of manufacturer

### Ghibli & Wirbel S.p.A.

Via Circonvallazione 5 - 27020 Dorno -PV- Italy Cod.Fisc. e Part. IVA 03976160287 - C.C.I.A.A. Pavia n. 248193

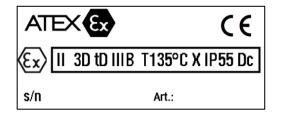
Tel.+39.0382.848811 –Fax +39.0382.84668 info@ghibliwirbel.com http://www.ghibliwirbel.com

### 1.4 Marking plate

In compliance with the *Machine Directive 2006/42/CE* on vacuum cleaners, the machine is fitted with *CE* plates.

When contacting the manufacturer or dealer, always quote the details shown on the vacuum cleaner plate.





#### 1.5 Intended uses

This particular model has been designed, constructed and equipped with safety devices for solid dust and debris vacuuming applications only. The machine is provided with appropriate specific anti-static filters to operate in explosive atmosphere areas (Z22 CLASSIFIED AREA, according **ATEX 2014/34/EU** Directive).

## Warning!

Always use specific filters for the type of dust or materials to be vacuumed.

Any other use is considered *IMPROPER*.

The vacuum cleaner is in any case intended for professional industrial use.

### 1.6 Allowed environmental conditions

To ensure the correct operation of the vacuum cleaner, this must be positioned protected against atmospheric agents (rain, hail, snow, fog, dusts in suspension, etc.) with an environmental running temperature between 5 °C and 45 °C and relative humidity not above 70%.

### 1.7 Noise level

Noise level readings were taken in accordance with the provisions of *Machine Directive 2006/42/CE* standards.

Sound tests performed on this specific vacuum cleaner model have been taken from a distance of 1 meter and from a height of 1,60 meters, showing an acoustic pressure no higher than:

#### 75 dB (A)

The vibrations transmitted by the machine are lower than 2,5 m/s<sup>2</sup>.

#### Attention!

Pursuant to articles L.D. 81/08, workers exposed to sound pressure levels above 85 dB (A) must be protected by special individual protection devices.

It is therefore necessary, if such working conditions exist, to provide workers with such approved individual protection devices and to inform them of the risks relating to noise exposure.

### 1.8 Storage

Remove the filter and clean it, empty the container and store the vacuum cleaner in a place protected against atmospheric agents with a temperature between 0 °C and 40 °C. Cover with a nylon sheet to prevent accumulation of dust.

### 1.9 Scrapping

In case of scrapping, all the component parts of the vacuum cleaner will have to be disposed of through adequate disposal channels in accordance with applicable legislation.

Before scrapping, all plastic and rubber parts will have to be separated from the electrical material. Parts made of plastic, aluminium and steel only may be recycled if collected by special centres.



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1.10 Technical de	tails	Power Indust	Power Indust
		AX20 SP Z22	AX20 TP Z22
Power	kW	1,8	1,8
Voltage	Volts	230	400
Max. vacuums rate	mm H₂O	2.300	2.300
Max. air flow rate	m³/h	250	250
Noise level	dB(A)	75	75
Filter type		Polyester antistatic cat M	Polyester antistatic cat M
Filter surface	cm²	30.000	30.000
Container Capacity It		20	20
Suction inlet	Ø	50	50
Dimensions	ст	52 X 48 X 120	52 X 48 X 120

### 2.1 Safety details

The person in charge of safety shall be responsible for informing workers about the risks associated with vacuum cleaner operation.

The obligation also exists of training workers so they are able to protect themselves and others.

Failure to observe basic safety regulations and Warnings could cause accidents during vacuum cleaner operation, maintenance and repair. Accidents can often be avoided by recognising potentially dangerous situations before these occur. Operators should be aware of potential hazards and be trained and skilled enough. They should also have the tools necessary to perform these duties properly.

**GHIBLI&WIRBEL** shall under no circumstances be deemed liable for accidents or damage caused by use of the vacuum cleaner by personnel not properly trained or who use it in an improper manner, as well as by even partial failure to comply with the safety regulations and intervention procedures indicated in this manual.

The safety Warnings and warning notices are indicated in this manual and on the product.

Unless these hazard messages are heeded, the operator could become involved in accidents with serious consequences for him/herself and for other people.

The safety messages are highlighted by the following symbols:

#### Attention!

Unless these messages are heeded, operator injuries could occur.

Warning! Unless these messages are heeded, vacuum cleaner damage could occur.

**GHIBLI&WIRBEL** cannot foresee all possible circumstances capable of representing a potential hazard. The warnings in this manual and on the products should not therefore be deemed exhaustive. In the event of tools, procedures, work or machining methods being used that are not explicitly recommended by **GHIBLI&WIRBEL**, make sure no hazards exist for operators and others.

## Only ever use original GHIBLI&WIRBEL spare parts.

GHIBLI&WIRBEL declines all liability in the event of non-original spare parts being used.

### 2.2 Safety precautions

#### Warning!

The instructions prescribed herein cannot preserve you from any danger in connection with the vacuum use and service. To prevent injury, it is necessary to operate with care and competence, relying on experience.

In addition to the following instructions, specific safety warnings for the different operations are reported in each section.

Maintenance operations must always be executed after unplugging the machine.

In compliance with the applicable laws and regulations in force, the employer must ensure that the workers and staff using the equipment are properly trained and informed.

Before operating this equipment, carefully read the herein manual as a preliminary personal training step. Untrained or unauthorized people must be forbidden to operate this machine.

Connect the grounding clamp with a conductive surface connected with the earth.

Do not manumit the vacuum/pressure relief valve.

All maintenance operations must be executed in non-classified atmosphere.

Do not vacuum incandescent or burning material.

The operator must always wear antistatic cloths and shoes. The floor of the area to be vacuumed must be antistatic.

The opening of the dust collection container must be executed in non-classified atmosphere area, after having disconnected and unplugged the machine and only after 10 minutes from unplugging.

It is prohibited to vacuum toxic substances unless the machine is provided with the necessary specific filters for the type of dust to be vacuumed. Such specific filters must be expressly required by the Customer for supply.

Do not vacuum flammable or explosive substances gases or liquids (fuels, solvents etc.).

Do not vacuum corrosive substances unless the machine is equipped with suitable containers (*Stainless-steel AISI 304*).

If the filters are correctly fitted, the machine will not release any collected substance into the environment.

In case the machine is used to vacuum toxic-harmful substances, the emptying of the collection container as well as the filter cleaning operations must be execute using the appropriate safety devices required to protect the operator from the collected substances.

Do not lay any object or material on the horizontal guards.

The machine case containing mobile parts must not be removed by the operator.

Mind other people, especially children, when operating the vacuum.

Handle the machine carefully, especially on slopes or ramps.

Do not turnaround the machine on slopes.

Set on the wheel brake to ensure that the machine position is stable.

Cleaning, maintenance and part replacement operations must always be executed after having switched off and unplugged the machine.

Repair operations must be executed by qualified personnel only.

Be careful not to damage or squash the supply cable (cord) when operating the machine.

Check the supply cable on regular basis. Do not use the machine if the cable is damaged.

In case of cable, tap or connector replacement, ensure protection against water and check mechanical strength.

Do not drag the machine pulling the supply cable and the suction hose.

The final user must provide for the collected substances waste disposal in compliance with the applicable laws and regulations in force.

Machine overhaul is recommended after 10 years of life. The overhaul should be performed by *GHIBLI&WIRBEL Srl*, the manufacturer.

The manufacturer will not be liable for any damage which may occur in connection with the use or service of vacuum supplied in case it is utilized with tools or accessories that have not been provided by *GHIBLI&WIRBEL Srl.* Without prejudice for the above, it is recommended to keep the machine construction complying with the safety standards prescribed by the *2006/42/CE Machine Directive*.

Keep the vacuum clean and free of any contamination material such as dust, debris or oil. Moreover, keep it away from tools or other objects which may affect the machine efficiency and cause damage and/or injury.

Do not use flammable or toxic solvents, such as gasoline, benzene, ether and alcohol for cleaning.

Avoid long-time exposure to solvents and inhalation of solvent vapours. Do not use solvents in presence of heat or fire sources.

Never use the vacuum without filter.

Do not suck lighted cigarettes, cigarette stubs or incandescent materials. Do not collect gasoline, fuel or other flammable liquids.

Ensure that all shields and protections are put in place and that all safety devices are available and efficient.

Do not wear loose clothes or accessories such as ties, scarves or torn clothes which may be caught or sucked by the vacuum.

Do not open the collection container when the vacuum is working.

The "*Operating and maintenance manual*" must always be readily available for consultation, in order to be able to ascertain the correct working procedures in case of doubts. Should this manual get lost or damaged, please ask *GHIBLI&WIRBEL Spa* for another copy.

Structural damages, modifications, improper changes or repair may affect the vacuum safety and therefore annul the herein certification. Any modification required should be authorized and executed by **GHIBLI&WIRBEL** engineers only.

During maintenance operations it will be necessary to affix a warning sign on the vacuum with the following indication: "*MAINTENANCE, DO NOT START THE MACHINE*".

Do not get on the vacuum.

Do not touch wires, switches and switch-buttons with wet hands.

Before plugging the vacuum, ensure that power supply voltage and frequency meet the specifications required and reported on the machine plate.

Connect the machine to an electrical system outlet with efficient earth.

In case it is necessary to use an extension, check that the extension is in perfect conditions, *CE* marked and that the extension cable cross section area is suitable for the vacuum electrical input.

To recover the vacuum original working conditions after maintenance, the operators must check that the machine protections, particularly safety devices and guards, have been put back in place ensuring safety working conditions.

The vacuum must be operated by adults only.

Before executing vacuuming operations, always set on the vacuum wheel brake provided to ensure that the vacuum position is stable.

#### 2.3 Safety plates and symbols

Plates with safety warnings and/or signs are applied on the vacuum.

#### Caution!

Ensure that all safety warning plates are readable.

Wipe the plates with a damp cloth using water and detergents. Do not use any solvents, NAFTA or gasoline. Damaged plates must be replaced with new ones, available upon request to GHIBLI&WIRBEL S.r.l.

In case of safety warning plates applied on vacuum components to be replaced, ensure that warning plates will be applied on the new replaced parts as well.

#### Caution!

*Carefully read the "Operating and Maintenance Manual" before using the vacuum or executing maintenance operations.* 

### Caution!

Be careful not to get your hands squashed when positioning and securing the vacuum collection container.

#### Caution!

*Never put your hands between the collection container and the vacuum when positioning and securing the collection container.* 

Never put your hands on the collection container edges nearby the check pins when executing the aforesaid operation, which must be performed throughout the coupling side levers and using BOTH YOUR HANDS to control them.

### Caution!

Do not vacuum incandescent material.

Caution!

Do not vacuum sources of ignition



### Specific sign of conformity with the ATEX 2014/34/UE DIRECTIVE.



CAUTION: this machine contains harmful vacuumed dust. Emptying operations, including the removal of the collection container after due waiting time must only be executed by qualified operators wearing the appropriate safety devices.

Do not use the vacuum without filtering systems.



This plate is applied to the vacuum when the machine is equipped with a C CLASS anti-static filter (max. efficiency: 1 micron)



CAUTION: this machine contains harmful vacuumed dust. Emptying operations, including the removal of the collection container after due waiting time must only be executed by qualified operators wearing the appropriate safety devices.

Do not use the vacuum without filtering systems.

This plate is applied to the vacuum when the machine is equipped with a C CLASS anti-static filter and the absolute (HEPA) filter (99,995%. efficiency)





#### 2.4 Outstanding risks

Accurate risk analysis carried out by the manufacturer and filed in the technical documentation of reference, brought to the elimination of the majority of risks in connection with the use of the GHIBLI&WIRBEL vacuum.

The manufacturer recommends all users to strictly follow the herein instructions, procedures and warnings and to comply with all applicable laws and safety regulations, including utilization of the safety devices prescribed, whether installed on the vacuum or to be used or worn by the operator for personal safety.

The residual risks in connection with the GHIBLI&WIRBEL vacuum are the following:

#### *Risks arising from the need to operate with Low voltage.*

Complying with the Italian **D.Lgs.81/08**, Low voltage operations can only be executed by qualified and trained personnel, after providing efficient double earth insulation.

#### *Risks arising from improper machine utilization in presence of flammable or explosive substances.*

The vacuum must not be used in workplaces or environment with dangerous substances such as flammable dust and/or gas and/or liquids, which may evaporate at ambient temperature and therefore contaminate the environment.

#### *Risks arising from the vacuum storage and use in a wet/damp environment.*

In order not to compromise the vacuum efficiency, t is necessary to respect the storage and operating limits prescribed in the herein section 1.6 "*Environmental conditions*".

### Risks arising from misinterpretation of the safety warnings and signs.

With regard to the residual risks and the risk identification, the Manufacturer installs safety markings on the machines, complying with the laws ruling the signs and symbols to be used.

The user must immediately replace the safety warning signs as they become unreadable or damaged.

#### Caution!

It is absolutely prohibited to remove the safety warning plates from the vacuum. The manufacturer declines any responsibility on the vacuum safety in case of failure to respect this warning.

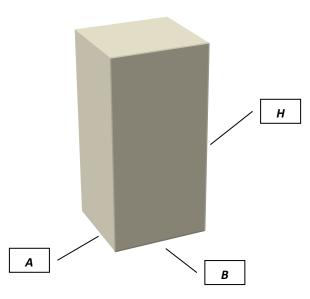
### 2.5 Applied directives

The vacuum described in the herein manual complies with the following directives:

- > 2006/42/CE Machine Directive
- > 2014/30/EU Electromagnetic Compatibility (EMC) Directive
- > 2014/34/UE ATEX Directive



#### 3.1 Handling



	A (cm)	В (ст)	Н (ст)	Weight (package included) Kg
Power Indust AX20 Z22	57	67	115	45

The machine is delivered in a robust carton box package, secured with straps.

Handling must be executed throughout a forklift having appropriate carrying capacity, after checking the package positioning and stability on the forks.

Before executing handling operations, ensure that the forklift working area is clear and that no objects are laying on the package.

During handling operations, keep the forklift position low for major stability and safety.

Once in use, the vacuum should be handled normally, riding it on its own wheels.

It is expressly prohibited to lift the vacuum using hoisters or forklifts or other equipment.

In case it is necessary to lift the vacuum for any reason, the final user shall be responsible for this operation as the manufacturer will accept no liabilities in connection thereto. It is recommended to properly handle and secure the package during such eventual lifting operations, to ensure safe handling and transport.

#### 3.2 Installation

#### Warning!

Before proceeding with installation it is necessary to visually inspect the vacuum first, checking for any damages which may have occurred during transportation.

In case damages or faults are detected on one or more components, it will be necessary to suspend installation and notify the manufacturer about the failure. Remedy and actions to be taken shall be agreed with the manufacturer.

The vacuum filter is already placed inside the machine.

Fit the accessory required for the type of vacuuming operation on the opposite end of the hose.



**Note:** No standard accessories (reducers, hoses, nozzles) are included with the vacuum; accessories must be specified and ordered separately.

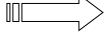
Contact your dealer for information relating to the different types of OPTIONAL accessories available for this specific vacuum cleaner model.

Fit the supplied pipe on the connector.



Make sure the power supply corresponds to the voltage and frequency indicated on the vacuum cleaner plate.



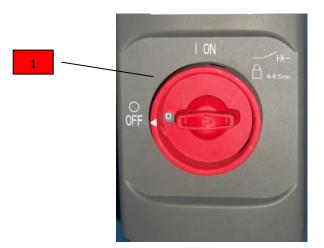


## Warning! Do not fit the plug in the power socket with wet hands.

In the event of an extension being used, make sure this is in perfect condition, in compliance with *CE* standards and with cable cross section suitable for the power input of the vacuum cleaner.



### 4.1 Description of controls



## 1) MAIN SWITCH ON/OFF

- When the main switch is turned to **"ON"** position, voltage feed is provided to the vacuum.
- > Feed is cut out when the main switch is turned to the **"OFF"** position.
- After turning the main switch to the "OFF" position it is possible to execute maintenance operations inside the electrical control box.

#### 4.2 Work cycle

#### Caution!

Ensure that power supply meets the voltage and frequency specifications as indicated on the vacuum marking plate and control panel.

## Caution!

Operations permitted within Z22 class areas, with potentially explosive atmosphere.

### Caution!

The operator using the vacuum must always wear anti-static cloths and antistatic shoes. The working environment and the floor must comply with antistatic standards.

- Ensure that the supply cable tap is correctly plug in the current outlet having the voltage required and indicated on the vacuum control panel.
- > Ensure that the flexible hose is duly fitted and locked in the specific suction plug.
- > Ensure that the supply cable (cord) and the eventual extension are in perfect conditions.
- Set on the wheels brake to ensure that the machine is stable.



- > Hold the flexible hose end with the fitted accessory required.
- > Turn on the main switch to the "ON "position.

## Caution!

Do not vacuum flammable or incandescent substances.

> Turn the main switch to the "OFF" position to disconnect the vacuum.

### Warning!

Before turning the vacuum on again, make sure the engines have stopped completely.

- Solution Once work cycle has been completed, disconnect and unplug the machine.
- Shift the vacuum using the provided handle, as shown in the picture.



Caution!

The vacuum can be shifted manually on flat grounds only.

The vacuum heavy weight may not allow the operator to shift it safely on slopes as it would be difficult to handle and control the machine avoiding dangerous collision which may cause damages and injury.

#### 4.3 Releasing and removing the removable container

Stop the vacuum motors by turning the main switch on the "**0**" position.

#### Warning!

Disconnect the plug from the power socket.

#### Caution!

Collection container release and withdrawal must only be executed in non-classified atmosphere, which means in an area with non potentially explosive atmosphere.

> Lift the lever located in the bottom part of the cleaner to release and remove the container.



Remove the container



Empty the contents of the container into a special waste disposal container in accordance with laws applicable in the country where the vacuum cleaner is used.

## Warning!

While performing these operations, it is best to wear a dust protection mask.

To prevent having to use a dust protection mask and for greater convenience, before starting vacuuming operations, it is best to fit a nylon bag inside the container and to fasten this in place with the special accessory available on request.

#### Warning!

*Perform the container release operation by means of the levers located on the sides or on the handle with BOTH HANDS!* 

Danger of crushing upper limbs when fitting and locking the container on the vacuum cleaner.

### 4.4 Filter cleaning system DUSTOP

When the orange indicator light is on, or the suction efficiency has lowered, or after having vacuumed a considerable quantity of material, a filter cleaning cycle is necessary. The filter cleaning system is best operated every time before use and after prolonged operation.

First of all, disconnect all the accessories (flex hose, hose connector, etc.) from the vacuum cleaner.



Turn on both motors and then proceed to close the suction inlet with the cap attached to the suction inlet itself, assuring that there is no air flow through the filtering chamber.



Open the flap as indicated in the picture below allowing the air to flow into the filtering chamber thus providing a counter air flow that passes through the filter. Repeat this operation for at least 5 times.





- Once the cleaning process has finished, remove the cap from the suction inlet and connect the accessories to continue the vacuum process.
- If the orange light indicator is still on, repeat the filter cleaning process. If after this second cleaning process the orange light is still on, replace the filter with a new one.

Warning! During vacuuming, avoid rolling up or twisting the flexible hose

Warning! Never use the machine with the filter blocked.

### 5.1 Informative notes

Ordinary maintenance and checking operations required to ensure the vacuum efficiency are described in this section.

Any intervention, other than ordinary maintenance operations described herein, which may be necessary to eliminate faults or failure must be expressly authorized by the manufacturer, to whom the user must apply always specifying the vacuum identification data.

In case of problems requiring a broaden repair operation, it is recommended to take the vacuum to the authorized dealer whose qualified personnel, relying on expertise and knowledge of the OEM's construction technology, will always be available to timely and properly provide service and assistance.

## 5.2 General safety precautions

Maintenance operations must only be executed by qualified and trained engineers operating in the specific fields required for this machine, as follows:

- Mechanical maintenance
- Electrical maintenance

The person responsible of safety must verify the professional skills and competence of the aforesaid engineers in-charge of maintenance.

Before authorizing any maintenance operations to start, the person responsible of safety must:

- Clear the workplace from unauthorized people;
- Ensure that all necessary tools are in good conditions and readily available to the maintenance operator;
- > Check that lighting is appropriate and, if necessary, provide for supplementary portable 24 Volt lamps;
- Ensure that the maintenance operator is provided with all homologated personal safety devices required to safely execute the scheduled operation/s (gloves, goggles, safety shoes and so on);
- Ensure that the maintenance operator has carefully read the herein instruction manual and perfectly knows the vacuum working system.

Before starting any maintenance operation, the maintenance engineer must:

- Unplug the machine;
- Execute such operation in NON CLASSIFIED atmosphere, which means in an area with non potentially explosive atmosphere.

Any operation on the vacuum engine or other electrical components shall only be executed by the electrical maintenance engineer, who must be trained for this task and shall also be authorized by the person responsible of safety.

Always use the specially provided tools for the operation to be executed and check that such tools are in perfect conditions. Using unsuitable or inefficient or defective tools may cause serious damages and injury.

#### 5.3 Maintenance operations

#### Caution!

All the operations described here following must be executed after unplugging the machine. Before starting any maintenance or cleaning operation, wear the appropriate personal safety devices such as goggles, gloves and dust mask suitable to protect the operator from breathing particles of the substance to be vacuumed and to safely perform the work required.

To ensure the vacuum efficiency, it is recommended to check the machine on regular basis as follows:

## Every day

- Check that the collection container is not full; it is recommended to empty the collection container when the collected material fills ¾ of its maximum capacity.
- Check the conditions of the suction flexible hose and of the accessories to be used. Any hole, crack or fissure in the flexible hose will reduce suction power and disperse the vacuumed dust into the environment.

### Every week

- Clean the vacuum regularly, removing dust deposits. The thickness of the deposited dust must not exceed 2mm.
- Remove any layers of dust on the wheels.

### Every 6 months

- Check that the head basement sheath, the filter holding ring sheath and the collection container sheath are hermetic.
- > The electrical units (plugs, switches, cables and so on) must have no faults or defects.
- Screws and nuts must always be tightened.
- Clean the deflector inside the suction hose on regular basis to prevent dust accumulation inside the suction unit.
- Remove the side carters protecting the turbine and vacuum any dust deposit within the suction unit.
- Check the filter conditions.
- > The filter must not be too breathable.
- There must be no cuts and holes and the sewing must not be worn. Check that the filter holding ring is tightened. In the event any of the aforesaid circumstances occur, replace the filter as indicated in section 5.

#### Warning!

To ensure the vacuum efficiency and safety, GHIBLI&WIRBEL Srl recommends an overhaul at the Manufacturer's technical service workshop every 24 months.

## Warning!

In case of dust outflow from the engine, turn off the vacuum immediately and call the authorised service centre applying for assistance.

Warning!

Any maintenance and repair operation not included in the above mentioned ones must be executed by the Manufacturers technical service workshop or by GHIBLI&WIRBEL authorised service centres.

#### 5.4 Replacing the filters

To replace the filters, proceed as follows:

- > Turn off the vacuum cleaner by turning the main switch to the "OFF" position
- > Disconnect the vacuum cleaner plug from the power socket.

Important!	
Wear individual protection devices.	

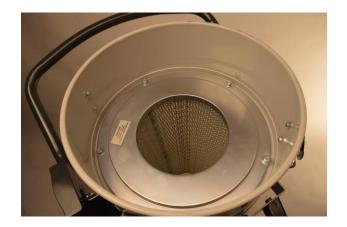
Release the two retainers that hold the motor head in place. Lift the motor head and rest this on a flat surface being careful not to damage the power cable.



Warning! To lift the head, two people are required.



➢ Loosen the screw.



Remove the filter.



Important!

All the material trapped by the filter and the filter itself must be disposed of through authorised channels in the country where the vacuum cleaner is used.



## 5.5 Troubleshooting

Fault found	Possible fault	Recommended remedy
The cleaner fails to start	No power	Check the power mains supply Check the integrity of the plug and power cable
	Thermal magnetic switch tripped	Reset the thermal magnetic switch
	Perforated vacuum pipe	Replace the pipe
Dust is leaking out	Filter unsuitable for type of job	Fit a suitable filter for the type of material to be vacuumed
	Pipe perforated or blocked	Check the pipe and, if necessary, replace it
	Container full	Empty container
The vacuum cleaner does not work as it	Filter blocked	Clean the filter and if necessary change it.
should	Seals worn	Check the seals and, if necessary, replace it
	Air leak	Check for any air leaks out of closing fasteners, tightening screws, container or filter chamber
Motor very noisy.	Contact GHIBLI&WIRBEL after-sales	

## Warning!

For any other problems, contact the GHIBLI&WIRBEL after-sales service.



## 6.1 Recommended spare parts

Code	Description
2512716	D340X350H "M" CARTRIDGE FILTER
2502420	MTL 202 DS BASE PLATE GASKET
7500303	10x22 ADHESIVE MOUSSE GASKET

