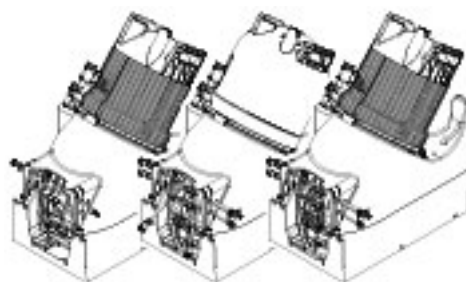
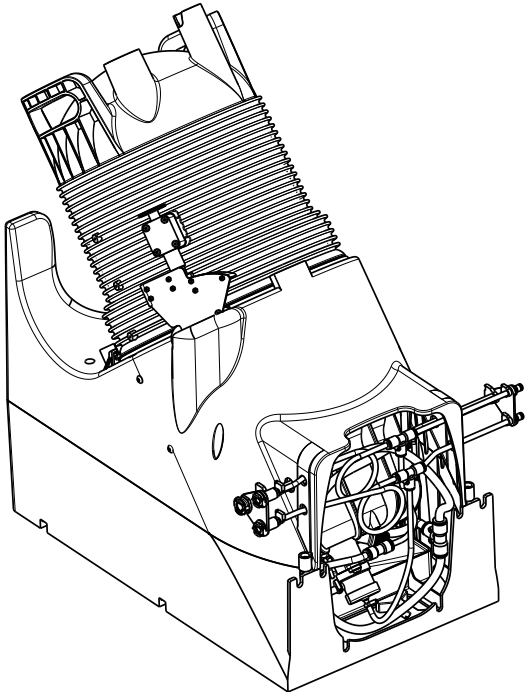
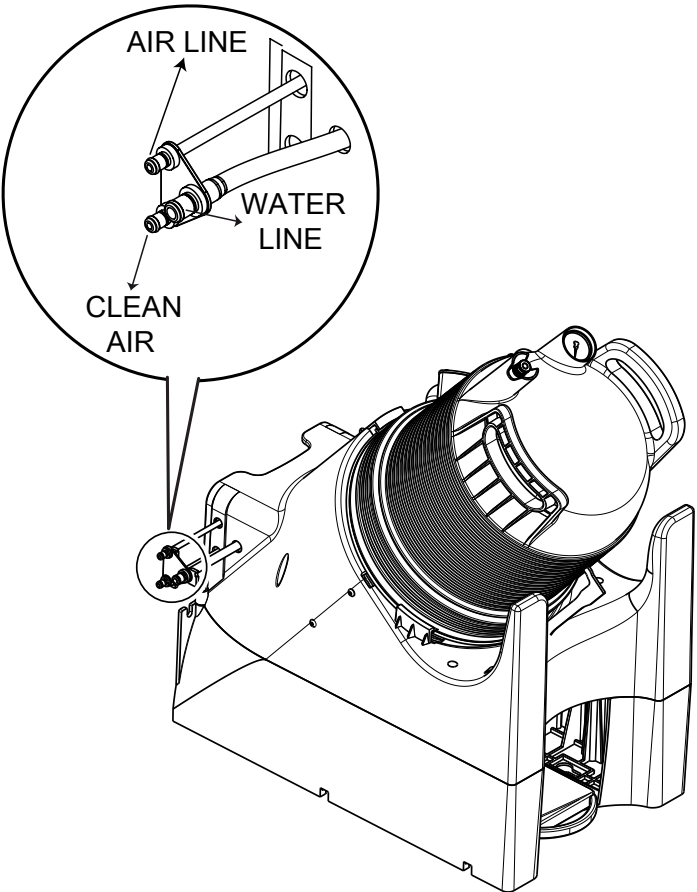
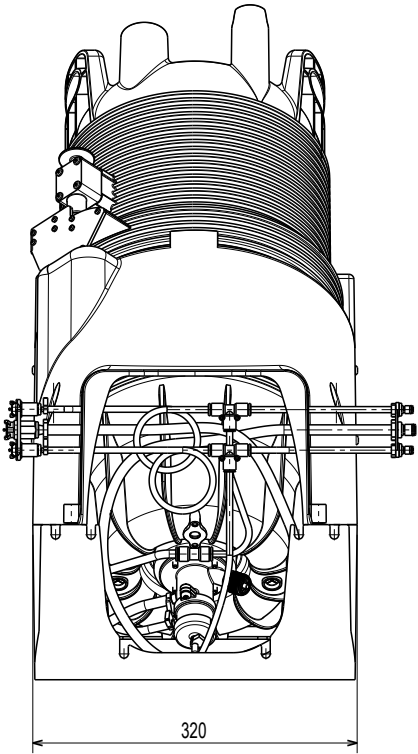
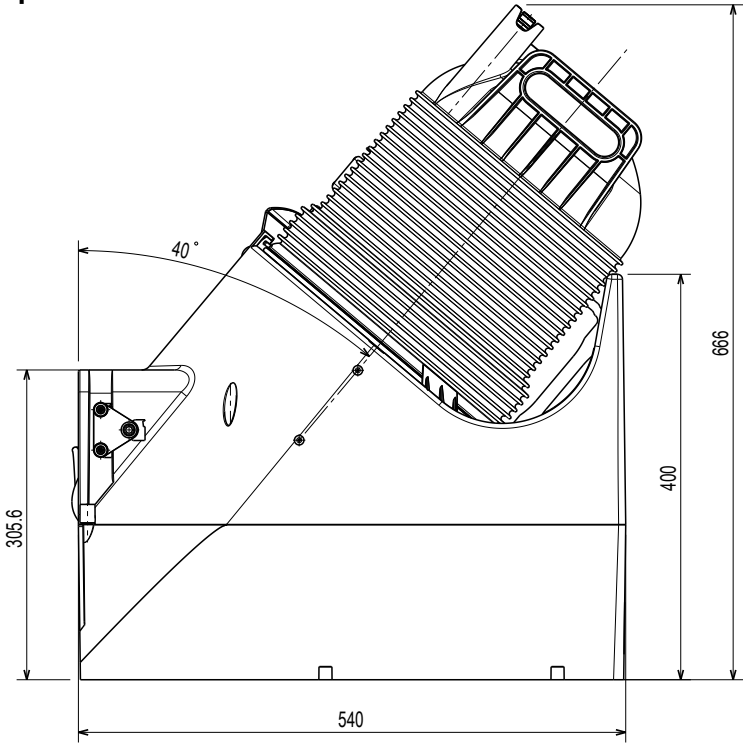


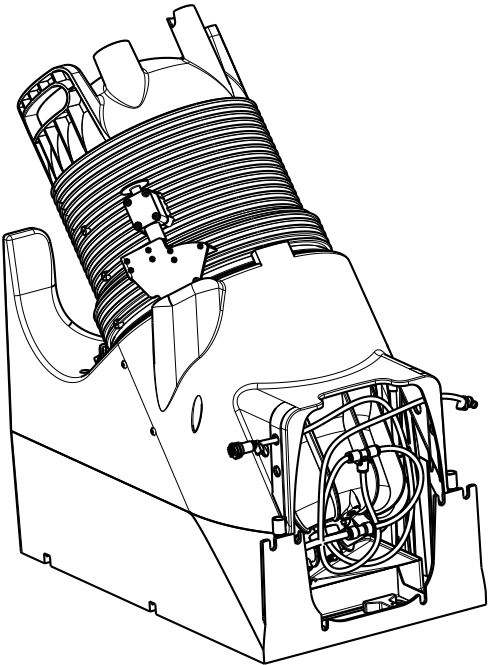
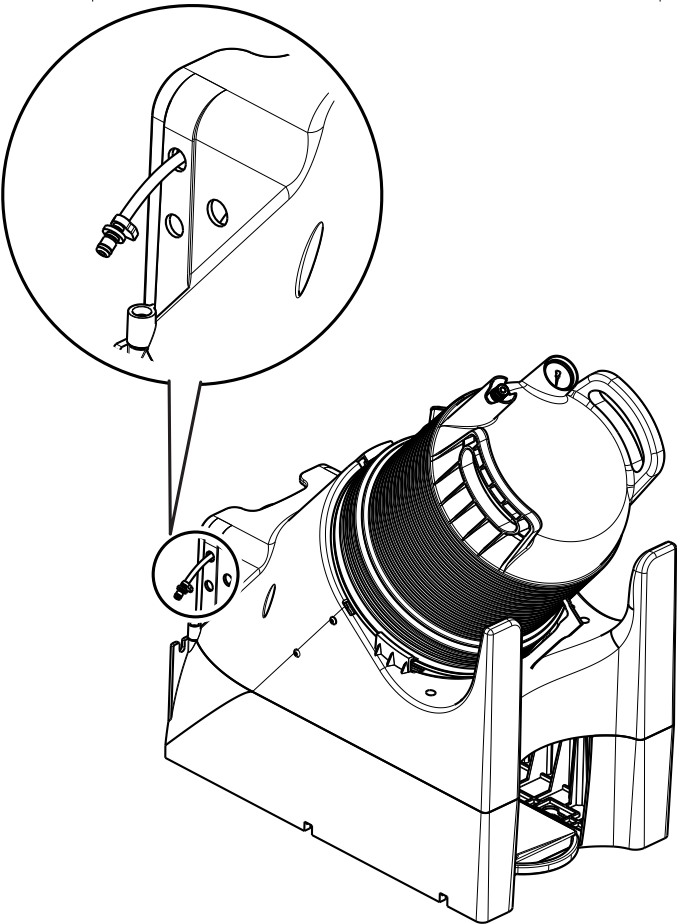
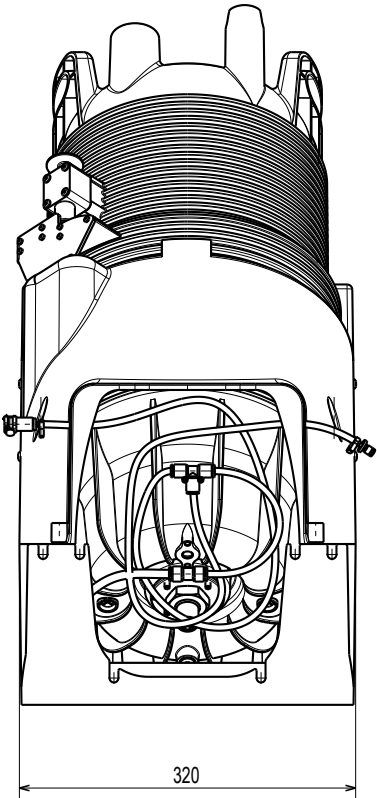
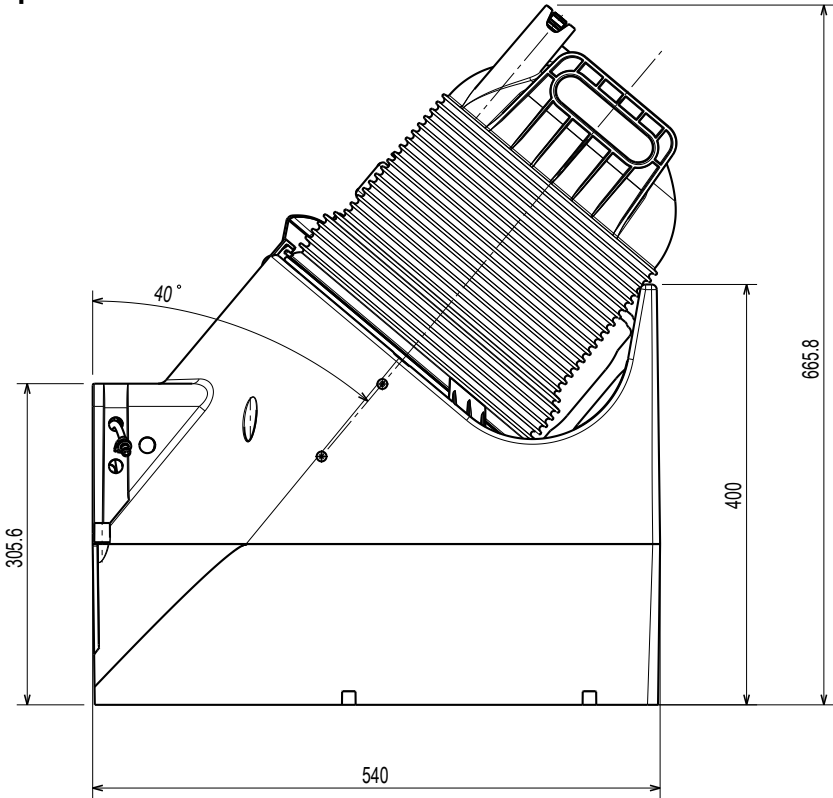
“DM Modular 20” keg module



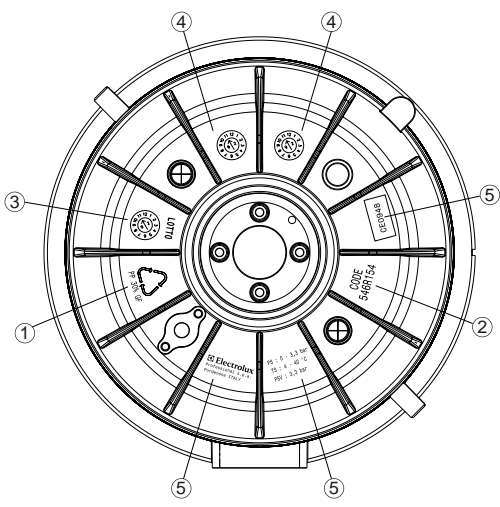
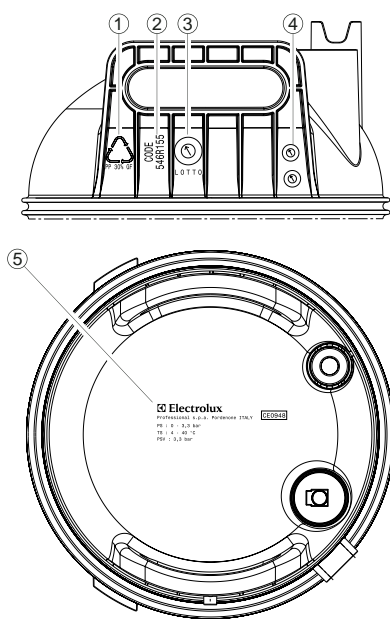
EN Installation and operating manual *







Lid - Cylinder fixed data



1 = Material
2 = Component factory code
3 = Lot

4 = Date stamp
5 = Lid/Cylinder technical data

Foreword



The installation, use and maintenance manual (hereinafter Manual) provides the user with information necessary for correct and safe use of the machine (or “appliance”).

The following must not be considered a long and exacting list of warnings, but rather a set of instructions suitable for improving machine performance in every respect and, above all, preventing injury to persons and animals and damage to property due to improper operating procedures.

All persons involved in machine transport, installation, commissioning, use and maintenance, repair and disassembly must consult and carefully read this manual before carrying out the various operations, in order to avoid wrong and improper actions that could compromise the machine's integrity or endanger people. Make sure to periodically inform the user regarding the safety regulations. It is also important to instruct and update personnel authorised to operate on the machine, regarding its use and maintenance.

The manual must be available to operators and carefully kept in the place where the machine is used, so that it is always at hand for consultation in case of doubts or whenever required.

If, after reading this manual, there are still doubts regarding machine use, do not hesitate to contact the Manufacturer or the authorised Service Centre to receive prompt and precise assistance for better operation and maximum efficiency of the machine. During all stages of machine use, always respect the current regulations on safety, work hygiene and environmental protection. It is the user's responsibility to make sure the machine is started and operated only in optimum conditions of safety for people, animals and property.



IMPORTANT

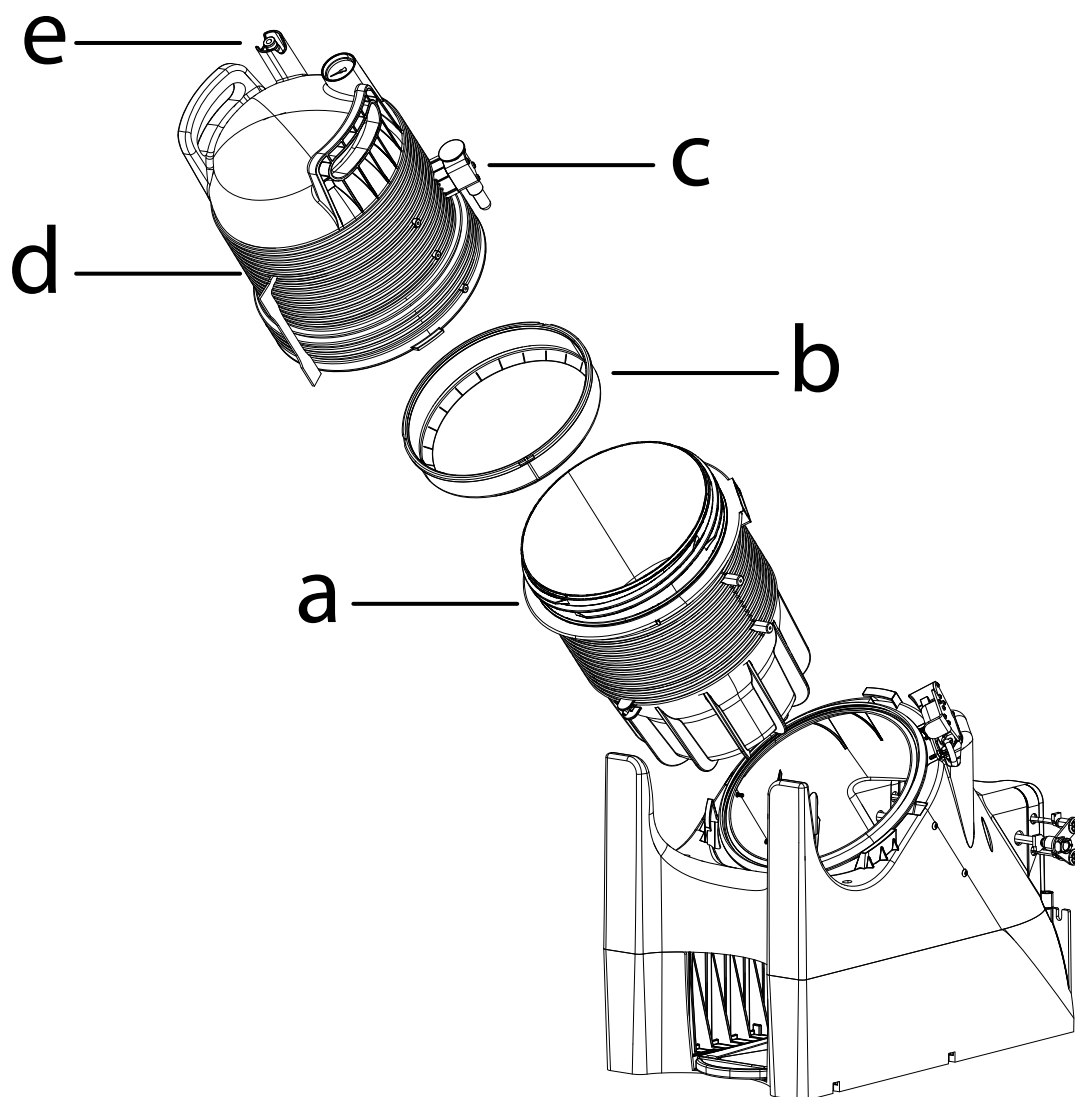
- The manufacturer declines any liability for operations carried out on the appliance without respecting the instructions given in this manual.
- The manufacturer reserves the right to modify the appliances presented in this publication without notice.
- No part of this manual may be reproduced.
- This manual is available in digital format by:
 - contacting the dealer or reference customer care;
 - downloading the latest and up to date manual on the web site;
- The manual must always be kept in an easily accessed place near the machine. Machine operators and maintenance personnel must be able to easily find and consult it at any time.

For more information refer to: www.draughtmaster.com/en/ce-marking

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A APPLIANCE DESCRIPTION



A	Cylinder
B	Bumper ring
C	Three way valve
D	Lid
E	Safety valve

B INTENDED USE AND RESTRICTIONS

- The DM Modular 20 - Keg Module is designed for dispensing approved draught beverages; an average use (dispensing) of 2 kegs a day (730 cycles per year) is foreseen. Any other use is deemed improper.
- This appliance is intended to be used in professional areas (e.g. bar, canteen, kitchen etc) by a trained operator.
- The DM Modular 20 - Keg Module is a pressurised unit installed inside an approved beverage dispensing system, also comprising a remote compression and pumping (air and water) system, a cooler for approved beverage and pipes under pressure.
- The owner of the system is responsible for application of the installation and operating safety regulations in force in the country of installation.
The owner of the system must comply with the current national regulations regarding periodical checks.

- The appliance is not suitable for installation outdoors and/or in places exposed to atmospheric agents (rain, direct sunlight, etc.).
- The manufacturer declines any liability for improper use of the product.

C WARNING AND SAFETY INFORMATION

C.1 General information

To ensure safe use of the appliance and a proper understanding of the manual it is necessary to be familiar with the terms and typographical conventions used in the documentation. The following symbols are used in the manual to indicate and identify the various types of hazards:



WARNING

Danger for the health and safety of operators.



CAUTION

Risk of damage to the appliance or the product.



IMPORTANT

Important instructions or information on the product



Read the instructions before using the appliance








Clarifications and explanations






- This appliance is not intended for use by persons (including children) with reduced physical, sensor or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of appliance by a person responsible for their safety.
 - Do not let children play with the appliance.
 - Keep all packaging and detergents away from children.
 - Cleaning and user maintenance shall not be made by children without supervision.
- When scrapping the appliance, the marking must be destroyed.
- Save these instructions carefully for further consultation by the various operators.

C.2 Personal protection equipment

Summary table of the Personal Protection Equipment (PPE) to be used during the various stages of the appliance's service life.

Stage	Protective garments	Safety footwear	Gloves	Glasses	Safety helmet
					
Transport	—	●	○	—	○
Handling	—	●	○	—	—
Unpacking	—	●	●	—	—
Installation	—	●	○ ¹	—	—
Normal use	—	—	—	—	—

Summary table of the Personal Protection Equipment (PPE) to be used during the various stages of the appliance's service life. (cont'd.)

Stage	Protective garments	Safety footwear	Gloves	Glasses	Safety helmet
					
Routine cleaning	●	●	● ¹⁻²	●	—
Extraordinary cleaning	●	●	● ¹⁻²	●	—
Maintenance	●	●	●	●	—
Dismantling	●	●	●	●	—
Scrapping	○	●	○	—	—
Key:					
●	PPE REQUIRED				
○	PPE AVAILABLE OR TO BE USED IF NECESSARY				
—	PPE NOT REQUIRED				

1. During these operations, gloves must be cut-resistant.
2. During these operations, gloves must be suitable for contact with chemical substances used (refer to the safety data sheet of the substances used for information regarding the required PPE). Failure to use the personal protection equipment by operators, specialized technician or users can involve exposure to chemical risk and cause possible damage to health (depending on the model).

C.3 General safety information

- The appliances are provided with electric and/or mechanical safety devices for protecting workers and the appliance itself.
- Do not make any modifications to the parts supplied with the appliance.
- Do not remove, tamper with or make illegible the safety, danger and instruction signs and labels on the appliance.
- Several illustrations in the manual show the appliance, or parts of it, without guards or with guards removed. This is purely for explanatory purposes. Do not use the appliance without the guards or with the protection devices deactivated.

C.4 Transport, handling and storage

- Transport (i.e. transfer of the appliance from one place to another) and handling (i.e. transfer inside workplaces) must occur with the use of special and adequate means.
- The appliances can be stacked on top of each other during transport, handling and storage; max stack level is 2.
- Do not stand under suspended loads during loading or unloading operations. Unauthorized personnel must not enter the work area.
- The weight of the appliance alone is not sufficient to keep it steady.
- For appliance lifting and anchoring, do not use movable or weak parts such as: casings, electrical raceways, pneumatic parts, etc.
- Do not push or pull the appliance to move it, as it may tip over. Use proper tool to lift the appliance.
- Arrange a suitable area with flat floor for appliance unloading and storage operations.
- Appliance transport, handling and storage personnel must be adequately instructed and trained regarding the safely use of lifting systems and personal protection equipment suitable for the type of operation carried out.

C.5 Installation and assembly

Introduction

- Appliance installation and assembly operations must only be carried out by specialised technician provided with all the appropriate personal protection equipment (safety shoes, gloves, glasses, overalls, etc.), tools, utensils and ancillary means, with adequate enclosure of the assembly area to keep out unauthorised persons.
- The operations described must be carried out in compliance with the current safety regulations, regarding the equipment used and the operating procedures.
- At first use of the appliance the specialised technician must fill in the “Commissioning and periodical maintenance check list “ (Annex1).

Ambient temperature and space limit

- Operating temperature must be strictly mandatory below 40°C.
- Make sure to position the appliance at least 50 mm from any other appliances present in the room, also taking into consideration the space necessary for keg change operations. For the installation of the module inside a compartment (e.g. undercounter) refer to the paragraph G.2 *Space limits*.

Positioning

- Install the appliance, taking all the safety precautions required for this type of operation, also respecting the relevant fire-prevention measures.
- The packing materials can be the cause of hazards and risk of suffocation, and therefore must be kept out of the reach of children.
- The appliance MUST NOT be exposed to direct sunlight (it is only designed for indoor use), atmospheric agents or indirect light (e.g. opposite a window where light enters from directly above the appliance).

Connections

- The Air/Water connection and the connection of the appliance with “Cooling Jacket“ must be carried out by the specialised technician.
- The appliance has a safety valve (set at 3.3 bar) which must not be tampered with in any way.
- The appliance remote compression and pumping system must be provided with its own overpressure protection (the owner of the dispensing system's responsibility).

C.6 Normal Use

Electrical safety rules

- There are no electrical parts.


Design data


Design standard	EN 13121-3:2010
Fluid	Air
Volume	25 litres
Design pressure	3,3 bar
Operational pressure	2,8 ÷ 3,0 bar
Calibration pressure	N.A.
Maximum operational pressure	3,3 bar
Design temperature	+40°C
Operational temperature	+4 ÷ +40°C

Protection devices installed on the appliance

- The lid has a safety valve which opens, depressurising, in safety, the tank in case of pressures above 3.3 bar. The valve closes automatically for pressures below 3 bar.

Safety signs to be placed on the appliance or near its area:

Prohibition	Meaning
	do not remove the safety devices

Danger	Meaning
	Attention! Pressurized devices



CAUTION

- The empty beer keg must not be filled with other types of beverages;
- Only use authorised beer kegs;
- Do not use deformed beer kegs;
- Do not use beer kegs which do not easily enter the pressurized cylinder (do not force entrance) or which prevent the correct lid closure;
- In case of doubt that the beer keg was forced in too hard or possible damage to the lid and cylinder, have the equipment checked by the specialized technician;
- The temperature of the beer keg is strongly recommended to NOT exceed 35°C;
- Lid must be operated exclusively by hand only (without tools);
- Do not use the appliance without the bumper ring in the proper position inside the cylinder;
- The safety valve must not be used to depressurize the system;

Instructions for use and maintenance

- Risks mainly of a mechanical and pressure nature exist in the appliance. Where possible the risks have been neutralised:
 - directly, by means of adequate design solutions.
 - indirectly by using guards, protection and safety devices.
- During maintenance several risks remain, as these could not be eliminated, and must be neutralised by adopting specific measures and precautions.
- Workers must be informed of this prohibition by means of clearly visible signs.
- To guarantee appliance efficiency and correct operation, periodical maintenance must be carried out according to the instructions given in this manual.
- Repair and extraordinary Maintenance have to be carried out by specialised authorised technician provided with all the appropriate personal protection equipment, tools, utensils and ancillary means.
- Never operate the appliance, removing, modifying or tampering with the guards, protection or safety devices.
- Before carrying out any operation on the appliance, always consult the manual which gives the correct procedures and contains important information on safety.

Reasonably foreseeable improper use

Improper use is any use different from that specified in this manual. During appliance operation, other types of work or activities deemed improper and that in general can involve risks for the safety of operators and damage to the appliance are not allowed. Reasonably foreseeable improper use includes:

- lack of appliance maintenance, cleaning and periodical checks;
- structural changes or modifications to the operating logic;
- tampering with the guards or safety devices;
- failure to use personal protection equipment by operators, specialised technician and maintenance personnel;
- failure to use suitable accessories;
- keeping combustible or flammable materials, or in any case materials not compatible with or pertinent to the work, near the appliance;
- wrong appliance installation;
- placing in the module any objects or things not compatible with the dispensing of approved beverage, or that can damage the appliance, cause injury or pollute the environment;
- climbing on the appliance;
- non-compliance with the requirements for correct appliance use;
- other actions that give rise to risks not eliminable by the Manufacturer.

The previously described actions are prohibited!

Residual risks

- As with any pressurized appliance, also for DM Modular 20 - Keg Module there are always some residual risks that can not be completely eliminated by the design and construction.

Nevertheless, through this manual the Manufacturer has taken steps to inform operators of such risks, carefully indicating the personal protection equipment to be used by them. Sufficient spaces are provided for during the appliance installation stages in order to limit these risks.

To preserve these conditions, the areas around the appliance must always be:

- kept free of obstacles (e.g. ladders, tools, containers, boxes, etc.);
- clean and dry;
- well lit.

For the Customer's complete information, the residual risks remaining on the appliance are indicated below: such actions are deemed improper and therefore strictly forbidden.

Residual risk	Description of hazardous situation
Breakage or bursting of lid/cylinder	Accidental dropping/impacts during appliance handling and carrying which could cause cracking of the material.
	Stockage of the appliance in a heavy condition of temperature and humidity which may cause a partial deterioration of the material.
	Installation of the appliance outdoors in a place not protected against sun, rain, dirt and mechanical shock.
	Use of compression system with non-conforming performance (pressure and delivery) and type of fluid.
	Accidental knocking of the lid on the cylinder and/or dropping of the lid when changing the keg (possible cracking of the material).
	Use of equipment such as ladders to reach something high up.
	Clean the appliance with scouring pads, brushes, scrapers and improper chemicals that could damage surfaces and materials.
	Lack of maintenance as provided for in chapter I <i>cleaning and ROUTINE maintenance</i> .
	Parts subject to wear not checked and/or replaced.
Dropping the appliance and/or breakage or bursting of the lid/cylinder.	Support structure fixed to the wall and not resting on the floor.
Lid expulsion/thread stripped.	Opening the lid without operating the cylinder venting lever.
	Opening the pressurized container even if not completely emptied.
	Jamming of vent valve with venting lever correctly operated (the lid is freed).
Incorrect appliance operation.	"Wash" and "dispensing" air connections inverted.



IMPORTANT

The appliance is made of plastic parts which must be managed with care. In case of damages, cracks, etc. the operator must immediately depressurize and deactivate the appliance and contact the local assistance. In case of accidental dropping/knocking of the lid verify the presence of cracks and, if present, replace the lid.

C.7 Appliance cleaning and maintenance

- Do not remove the safety guards.
- Use suitable personal protection equipment.
- Appliance extraordinary maintenance, checking and overhaul operations must only be carried out by specialised technician, provided with adequate personal protection equipment, tools and ancillary means.
- Put the appliance in safe conditions before starting any maintenance operation.
- Respect the requirements for the various routine and extraordinary maintenance operations. Non-compliance with the instructions can create risks for personnel.

Ordinary maintenance

- The appliance is not suitable for installation in areas exposed to water sprays, therefore do not clean it with jets of water.

Cleaning the appliance and accessories

- Pay attention to the selection and use of cleaning products in order to maintain proper appliance performance and safeness.
- Before using the appliance, clean all the internal parts and accessories with lukewarm water and neutral soap, or products that are over 90% biodegradable (in order to reduce the emission of pollutants into the environment), then rinse and dry thoroughly.
- Do not clean the appliance with scouring pads, brushes and scrapers that could damage by scratching surfaces.
- Stop immediately using those chemicals that results in any visual (for example colour change) or tactile characteristic (for example sticky surface).
Rinse with water, stop immediately using the appliance and contact technical service.
- Appliance is made in components in rubber, plastic and metal. Use proper chemicals to clean it (e.g. metal suitable chemicals for metal components). More specifically safety valve, lid and cylinder must be exclusively cleaned with a cloth moistened with warm water.

Precautions in case of long idle periods

- Before serving approved beverage, make sure only beverage is present in the circuit.

Periodic Maintenance

- Preventive Maintenance reduces downtime and maximizes appliances efficiency. Specialised technician can provide advice on the best maintenance plan based on the intensity of use and the age of the equipment.

Repair and extraordinary maintenance

- Repair and extraordinary Maintenance have to be carried out by specialised authorised technician. The manufacturer declines any liability for any failure or damage caused by the intervention of an unauthorized technician by the Manufacturer and the original manufacturer warranty will be invalidated.
- The specialised authorised technician must make sure to note down any maintenance operations.

Parts and accessories

- Use only original accessories and/or spare parts. Failure to use original accessories and/or spare parts will invalidate the original manufacturer warranty and may render the appliance not compliant with the safety standard.

C.8 End of use

- When the appliance is no longer to be used, make it unusable by removing the air and water connections.

C.9 Appliance disposal



IMPORTANT

Lid, cylinder, safety valve must be scrapped after 10 years from the production date indicated on labels placed on both lid and cylinder.

- Dismantling operations must be carried out by specialised technician.

D APPLIANCE AND MANUFACTURER'S IDENTIFICATION DATA

A reproduction of the marking or dataplate on the appliance is given below (the plates with the permissible operating conditions are placed on the external frame of the appliance, lid and cylinder):

F.Mod.	XXXXXXXX	Comm. Mod.	XXXXXXXX	DM MODULAR 20	mm-yyyy
PNC	XXXX XXXXX	Ser.Nr.	XXXXXXXX		
W.Tot.		Volt		Total Current	A
Design Temperature (TS)°C min.	14	max	40	Pressure Safety Valve (PSV) bar	3.3
Design Pressure (PS) bar	3.3	max		Design N°	832R085
MODULAR 20 - KEG MODULE V.2012					
Electrolux Professional SPA - Viale Treviso, 15 - 33170 Pordenone (Italy)					
Ser.No.			Ser.No.		
Design N°			Design N°		
Prod. Date			Prod. Date		

The data plate gives the appliance identification and technical data.

The meaning of the various information given on it is listed below:

F.Mod.	factory description
Comm.Model	commercial description
PNC (to state on the main- tenance chart)	production number code
Ser.No. (to state on the main- tenance chart)	serial number
Design Temperature (TS)	temperature range
Design Pressure (PS)	max. working pressure
Pressure safety valve (PSV)	safety valve pressure
Design N°	design n°
CE	CE marking
Electrolux Profession- al SpA Viale Treviso 15 33170 Pordenone Italy	manufacturer

E GENERAL INFORMATION



WARNING

Refer to "*Warning and Safety Information*".

E.1 Introduction

Given below is some information regarding the intended use of this appliance, its testing, and a description of the symbols used (that identifies the type of warning), the definitions of terms used in the manual and useful information for the appliance user.

E.2 Additional indications

The drawings and diagrams given in the manual are not in scale. They supplement the written information with an outline, but are not intended to be a detailed representation of the machine supplied.

The numerical values given on the appliance installation diagrams refer to measurements in millimeters and/or inches.

E.3 Testing and inspection

Our appliances have been designed and optimized, with laboratory testing, in order to obtain high performance and efficiency.

The appliance is shipped ready for use.

Passing of the tests (visual inspection - electrical test - functional test) is guaranteed and certified by the specific enclosures.

E.4 Definitions

Listed below are the definitions of the main terms used in the manual. It is advisable to read them carefully before use.

Operator	appliance installation, adjustment, use, maintenance, cleaning, repair and transport personnel.
Manufacturer	The manufacturer of the product called "DM Modular 20 - Keg Module", Electrolux Professional SpA.
Owner	The manufacturer and owner of the approved beverage dispensing system, Carlsberg Breweries A/S.

User	The end-user of the approved beverage dispensing system. Also, the end-user is informed and trained regarding the tasks and hazards involved in normal machine use.
Specialised technician appointed by the owner	an operator instructed/trained by the Manufacturer and who, based on his professional and specific training, experience and knowledge of the accident-prevention regulations, is able to appraise the operations to be carried out on the appliance and recognise and prevent any risks. His professionalism covers the mechanical, electrotechnical and electronics fields etc.
Danger	source of possible injury or harm to health.
Hazardous situation	any situation where an operator is exposed to one or more hazards.
Risk	a combination of probabilities and risks of injury or harm to health in a hazardous situation.
Protection devices	safety measures consisting of the use of specific technical means (guards and safety devices) for protecting operators against risks.
Guard	an element of a machine used in a specific way to provide protection by means of a physical barrier.
Safety device	a device designed to protect pressure equipment against the allowable limits being exceeded.

E.5 Copyright

This manual is intended solely for consultation by the operator and can only be given to third parties with the permission of Electrolux Professional SpA.

E.6 Keeping the manual

The manual must be carefully kept for the entire life of the machine, until scrapping. The manual must stay with the machine in case of transfer, sale, hire, granting of use or leasing.

E.7 Recipients of the manual

This manual is intended for:

- the carrier and handling personnel;
- installation and commissioning personnel;
- the employer of appliance users and the workplace manager;
- operators for normal appliance use;
- specialised technicians - After-Sales Service (see service manual).

E.8 Fixed data

For details regarding the fixed data on the lid and cylinder, refer to the diagrams given in first part of this manual.

E.9 Responsibility

The Manufacturer declines any liability for damage and malfunctioning caused by:

- non-compliance with the instructions contained in this manual;
- repairs not carried out in a workmanlike fashion, and replacements with parts different from those specified in the spare parts catalogue (the fitting and use of non-original spare parts and accessories invalidates the warranty);

- operations by non-specialised technicians;
- unauthorized modifications or operations;
- inadequate maintenance (refer to the section);
- improper appliance use;
- unforeseeable extraordinary events;
- use of the appliance by uninformed and / or untrained personnel;
- non-application of the current provisions regarding safety, hygiene and health in the workplace, in the country of use;
- improper installation;
- use of unsuitable accessories.

The manufacturer declines any liability for damage caused by arbitrary modifications or conversions made by the user or Owner.

The employer, workplace manager or service technician are responsible for identifying and choosing adequate and suitable personal protection equipment to be worn by operators, in compliance with the regulations in force in the country of use.

Electrolux Professional SPA declines any liability for inaccuracies contained in the manual, if due to printing or translation errors.

Any supplements to the installation, use and maintenance manual the Customer receives from the Manufacturer will form an integral part of the manual and must be kept together with it.

F TRANSPORT, HANDLING AND STORAGE



WARNING

Refer to “Warning and Safety Information”.

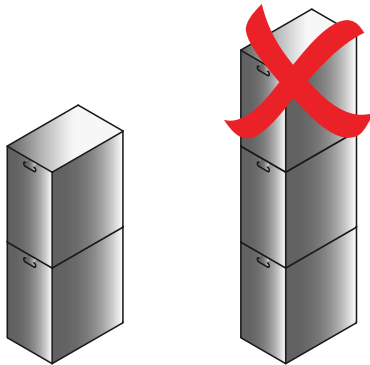
F.1 Handling

The appliances can be stacked on top of each other during transport, handling and storage.



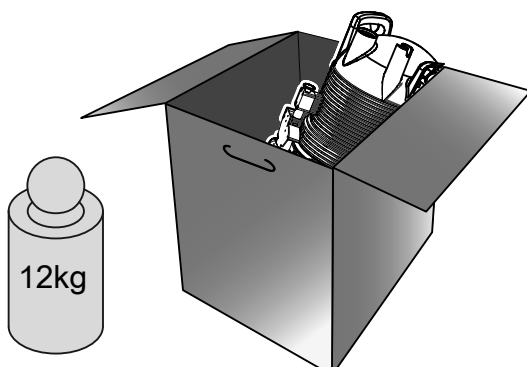
CAUTION

Maximum stack level is 2.



F.1.1 Procedures for handling operations

For correct and safe lifting operations, refer to the following indications regarding weight:



Before lifting:

- send all operators to a safe position and prevent persons from entering the handling area;
- make sure the load is stable;
- make sure no material can fall during lifting.
- Manoeuvre vertically in order to avoid impacts;
- handle the appliance, keeping it at minimum height from the ground.

F.1.2 Placing the load

Before placing the load, make sure the floor is flat and can take the load.

F.2 Unpacking



IMPORTANT

Immediately check for any damage caused during transport. Inspect the packaging before and after unloading.

Remove the packaging. Take care when unpacking and handling of the appliance to not cause any shocks on itself.



NOTE!

- The forwarder is responsible for the goods during transport and delivery.
- Make a complaint to the forwarder in case of visible or hidden damage.
- Specify any damage or shortages on the dispatch note.
- The driver must sign the dispatch note: the forwarder can reject the claim if the dispatch note is not signed (the forwarder can provide the necessary form).





Unpack the appliance carrying out the following operations:

- remove the staples closing the cardboard box;
- open the box;

F.2.1 Disposal of packing

The packing must be disposed of in compliance with the current regulations in the country where the appliance is used. All the packing materials are environmentally friendly.

They can be safely kept, recycled or burned in an appropriate waste incineration plant. Recyclable plastic parts are marked as follows:

	Polyethylene • Instructions bag
	Cardboard • outer packing
	Polystyrene foam
	Metal • outer packing staples

The parts in plastic and cardboard can be disposed of respecting the regulations in force in the country where the appliance is used.

F.3 Storage

The appliance and/or its parts must be stored and protected from damp, in a non-aggressive place, free of vibrations and with room temperatures between -10°C [14°F] and 50°C [122°F].

The place where the appliance is stored must have a flat support surface to avoid deforming the appliance or damage to the support feet.



CAUTION

The appliance must be levelled, otherwise its operation could be affected.

G INSTALLATION AND ASSEMBLY



WARNING

Refer to “*Warning and Safety Information*”.

G.1 Introduction

To ensure correct operation of the appliance and maintain safe conditions during use, carefully follow the instructions given below in this section.



WARNING

- The appliance must be installed in a restricted area where only trained staff can operate (avoiding direct contact with public);
- For showcase or equivalent installations, proper guards must be considered;
- Undercounter and inside compartment installations are suggested to avoid accidental operator interaction.



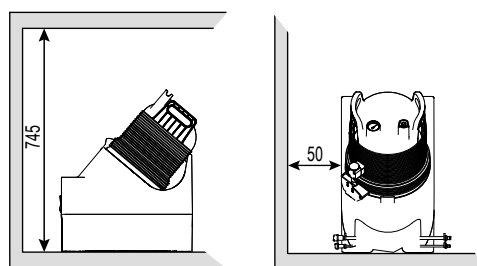
NOTE!

At first use of the appliance the specialised technician must fill in the “Commissioning and periodical maintenance check list” (Annex1).

G.2 Space limits

A suitable space must be left around the appliance (for operations, maintenance, etc.). This space must be increased in case of use and/or transfer of other equipment and/or means or if exit routes are necessary inside the workplace. Take into account the space necessary for keg change operations. Place the appliance at a distance of at least 50 mm from any other appliances in the room; make sure not to place the appliance near devices that reach high temperatures (such as ovens or radiators).

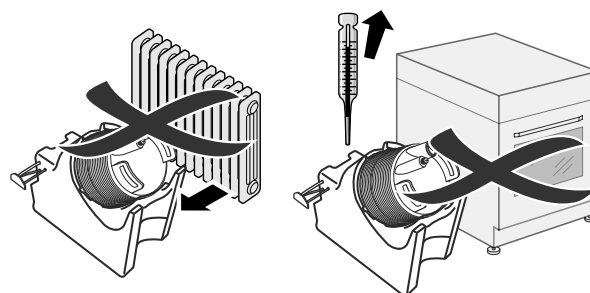
If installing the appliance inside a compartment (e.g. under-counter), respect the following distances:



G.3 Positioning

Install the appliance, taking all the safety precautions required for this type of operation, also respecting the relevant fire-prevention instructions.

Position the appliance in a ventilated place, away from heat sources such as radiators, central heating apparatus, etc.



The appliance **MUST NOT** be exposed to direct sunlight (it is only designed for indoor use), atmospheric agents or indirect light (e.g. opposite a window where light enters from directly above the appliance).



It is highly recommended to not install the appliance in harsh environments (presence of sand, saltiness, etc.). In case the appliance must be installed in such ambients increase the

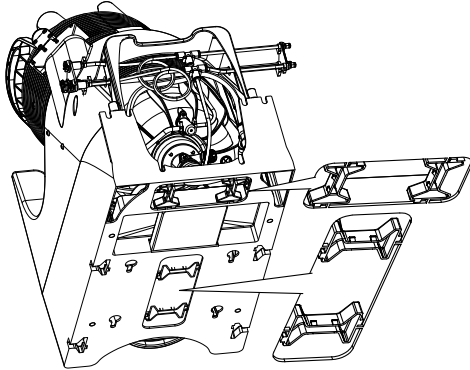
frequency of routine maintenance in order to keep the appliance always clean and efficient.
The temperature range in which the appliance can work is +4°C/+40°C.

Arranging the appliance:

- position the appliance in the required place;

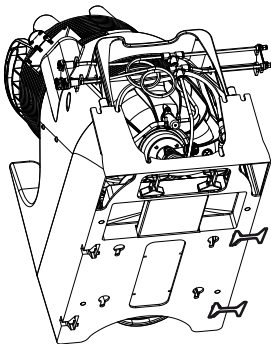
The appliance must be levelled, otherwise its operation could be affected.

The appliance is provided with 4 plastic hooks located in the bottom part, as shown in the following figure



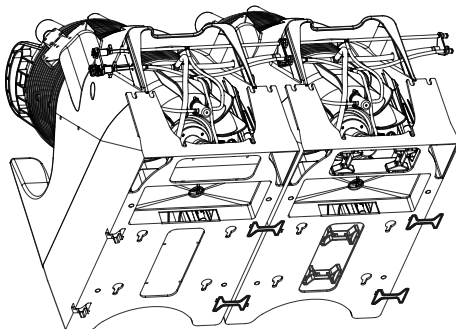
these act as connectors in the appliance hooking stages:

- only 2 hooks will be used to connect the appliance to the cleaning module:



- all 4 hooks will be used to connect the appliance to the cleaning module on one side and to another appliance (when placing 2 or more appliances next to the existing one) on the other side.

Coupling must be carried out as shown below:



G.4 Connections

This appliance requires 2 connections: air and water.

• air connection:

- max. pressure 3 bar;
- connect to a compressed air supply, which must be clean, oil-separated and free of impurities (max. impurity 10 microns);
- quick connector DN6;
- max. flow rate 10 ÷ 15 l/min.

• water connection:

- max. pressure 4.8 bar;
- DN10 quick connector;
- max. flow rate 2 l/min;
- only detergent solutions envisaged for the cleaning module are allowed.

The keg coupler is designed for the flow of approved beverage and the liquid for washing, carried out with suitable detergent.

The remote compression and pumping system (water and air) is not supplied with the DM Modular 20 - Keg Module. This remote system must be purchased by the customer and must be approved for use with the DM Modular 20 - Keg Module. For the instructions, refer to the documentation supplied with this system.

G.4.1 “Tropical” model arranged with “cooling jacket”



CAUTION

The installer must make sure to use plastic pipes and fittings and cover them with insulating material.

The appliance with “Cooling Jacket” is designed to ensure the good quality of the beverage in the pressurized container, when the ambient temperature is above 32°C.



NOTE!

The “Cooling Jacket” is arranged to keep the temperature of the beverage below 30°C, and not to cool it.



CAUTION

Frequently empty the condensate tray placed at the bottom of the appliance.
For emptying, refer to paragraph I.1.1 *Cleaning the appliance and accessories* and respective images.

H NORMAL USE



WARNING

Refer to “Warning and Safety Information”.

H.1 Characteristics of personnel trained for normal use

The Owner must make sure that personnel for normal use are adequately trained and skilled in their duties, as well as ensuring their own safety and that of other persons.

The Owner must make sure his trained personnel have understood the instructions received and in particular those regarding work hygiene and safety in use of the appliance.

H.2 Characteristics of personnel enabled to operate on the appliance

The Owner is responsible for ensuring that persons assigned to the various duties:

- read and understand the manual;
- receive adequate training and instruction for their duties in order to perform them safely;
- receive specific training for correct appliance use.

H.3 Operator qualified for normal appliance use

Must have at least:

- knowledge of the technology and specific experience in operating the appliance;
- adequate general basic education and technical knowledge for reading and understanding the contents of the manual, including correct interpretation of the drawings, signs and pictograms;
- sufficient technical knowledge for safely performing his duties as specified in the manual;
- knowledge of the regulations on work hygiene and safety.

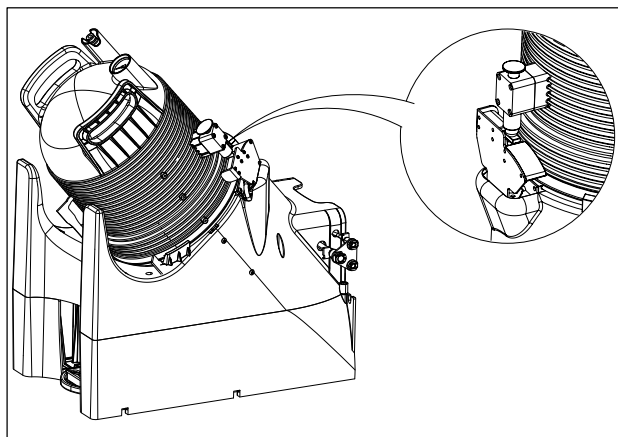
In case of a significant fault, consult the manual relevant to the cleaning module.

The operator for normal appliance use must:

- immediately deactivate the cleaning module.

H.4 Replacement the approved beverage keg

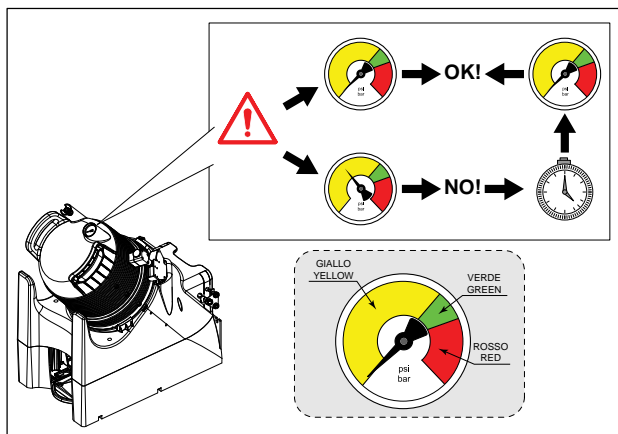
1. Eliminate pressure from the keg by pulling the pin upwards to the automatic stop; make sure the pin is in the position shown in the detail.



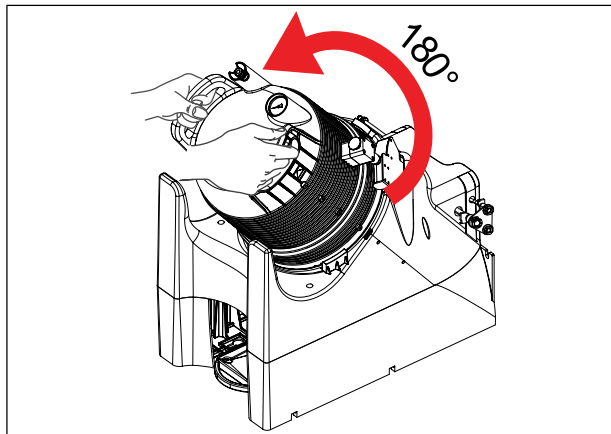
CAUTION

The safety valve must not be used to depressurize the system.

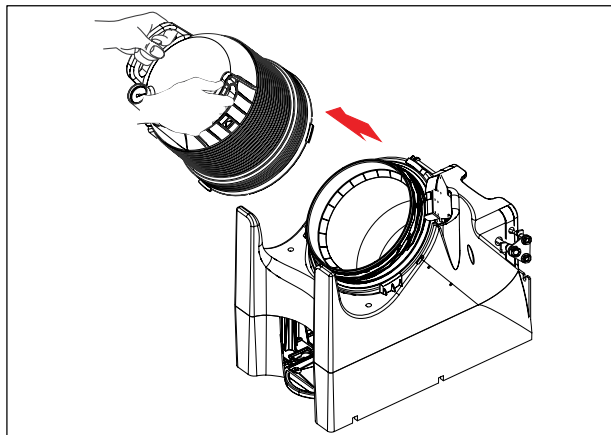
2. Check depressurisation of the system before opening the lid.



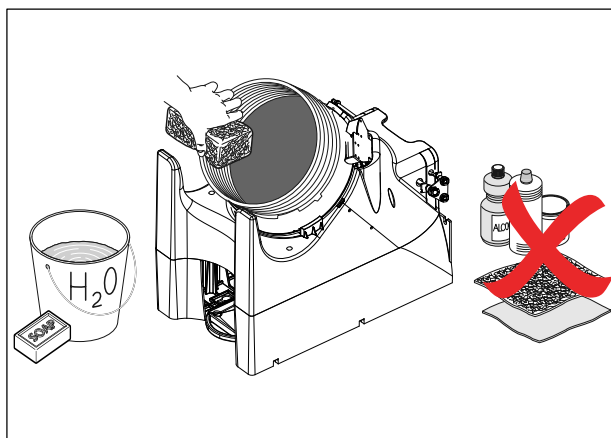
3. When depressurised, turn the lid anticlockwise ½ a turn



4. and remove it from its seat.

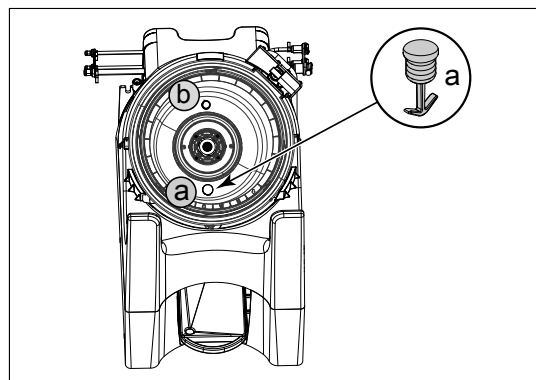


5. During the replacement of the kegs, if necessary, clean the inside of the cylinder with water and neutral soap.



NOTE!

In case of liquid stagnation in the bottom of cylinder, remove the lower drain rubber cap "a".



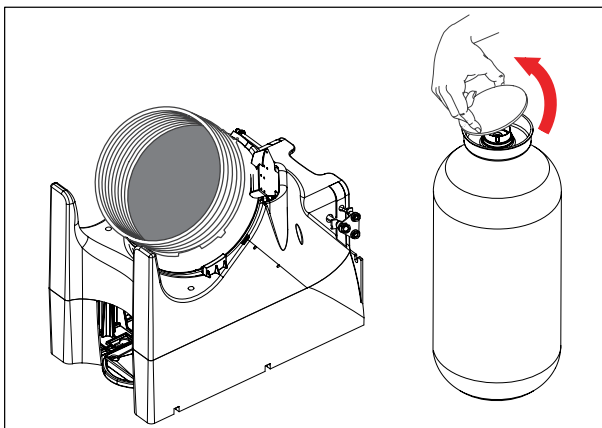
IMPORTANT

Do not lose the drain rubber cap "a".

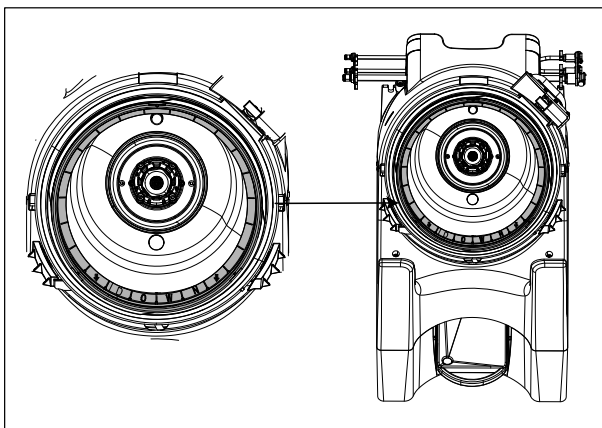
**CAUTION**

DO NOT remove the upper rubber cap “b”.

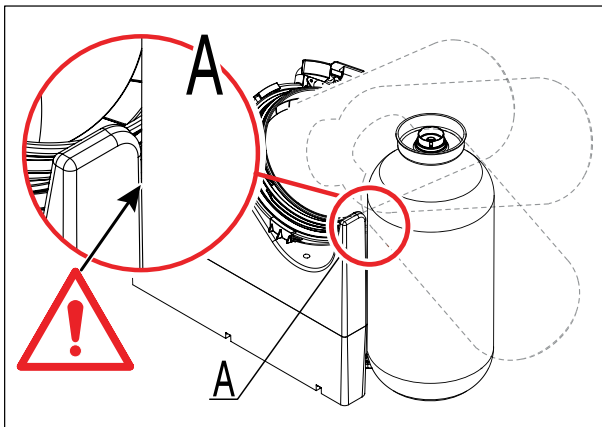
6. Take a new keg and remove the plastic cover.

**IMPORTANT**

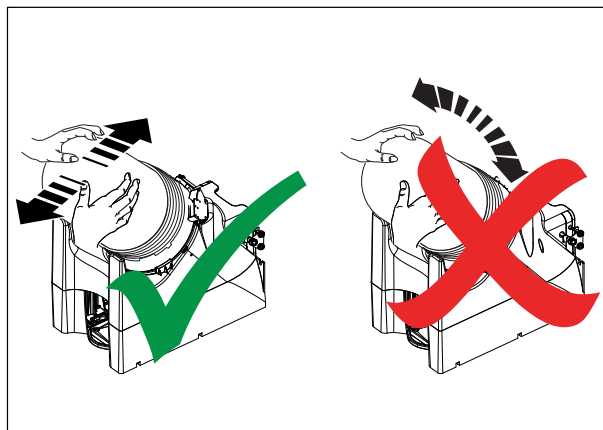
Check the presence and the proper position of the bumper ring inside the cylinder.



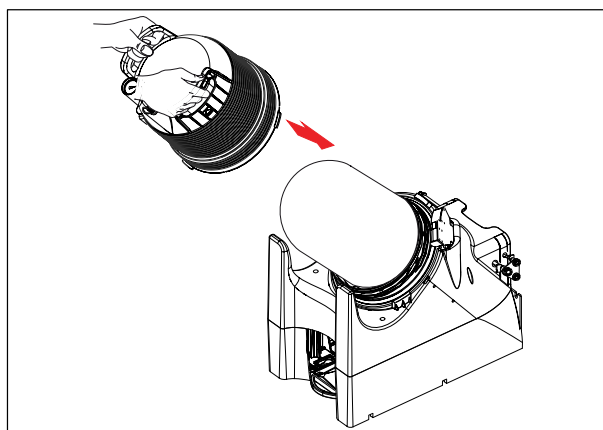
7. Position it making sure it is resting against the appliance as shown in the figure (see detail A): turn and carefully slide it inside the cylinder.



8. To make sure of the correct keg centering, gently move it back and forth, as shown. DO NOT ROTATE THE KEG FOR ANY REASON! The new keg is now positioned.



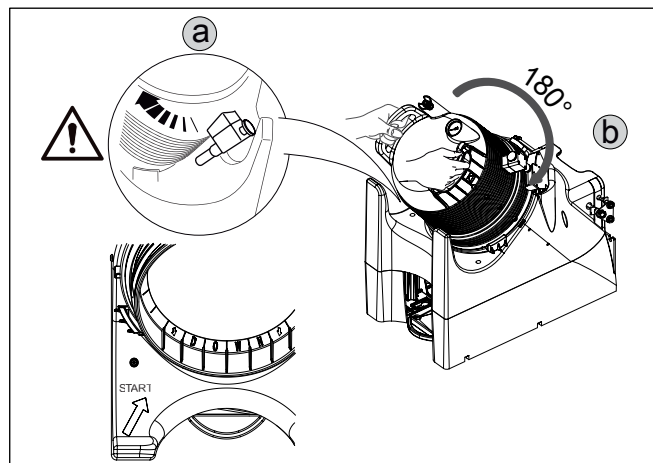
9. Now take the lid and replace it in its seat,



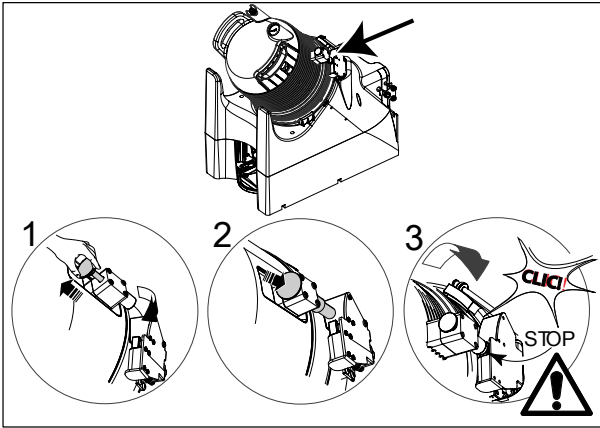
10. turning it clockwise $\frac{1}{2}$ a turn.

**NOTE!**

Pay particular attention to the initial position for starting the lid closing operation.



11. Pull the pin upwards to the three way valve's entrance (as shown in the figure), to facilitate the closure of the lid. The lid will be properly closed when a click is heard and the closing device has returned to its initial position.



The appliance will now automatically reach the working pressure.



CAUTION

DO NOT close the lid without the keg inside.

The approved beverage will be ready for dispensing when 2.5 bar is reached.

I CLEANING AND ROUTINE MAINTENANCE



WARNING

Refer to “Warning and Safety Information”.

I.1 Routine maintenance

Routine maintenance operations can be carried out by **USER**, carefully following the instructions given below.

The Manufacturer declines any liability for operations carried out on the appliance without respecting these rules.

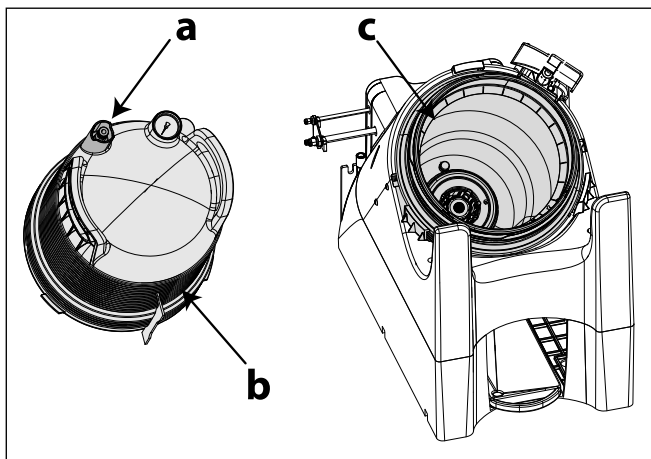
I.1.1 Cleaning the appliance and accessories

Clean the appliance daily, using lukewarm water and neutral soap or products that are over 90% biodegradable (in order to reduce the emission of pollutants into the environment), then rinse and dry thoroughly.



CAUTION

Do not clean the appliance with scouring pads, brushes and scrapers that could damage by scratching surfaces. Appliance is made in components in rubber, plastic and metal. Use proper chemicals to clean it (for example metal suitable chemicals for metal components). Do not place the lid in a dishwasher! More specifically safety valve (a), lid (b) and cylinder (c) must be exclusively cleaned with a cloth moistened with warm water.

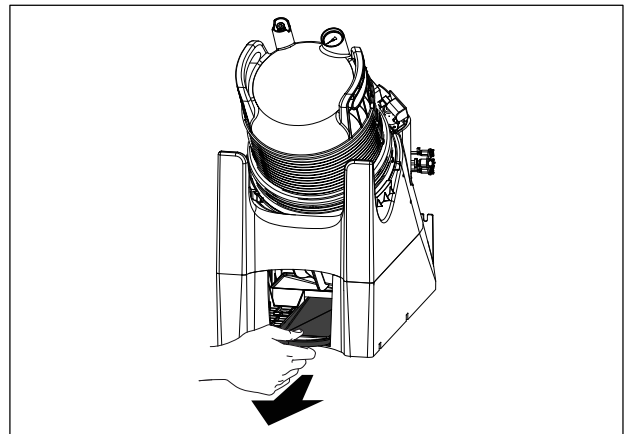


IMPORTANT

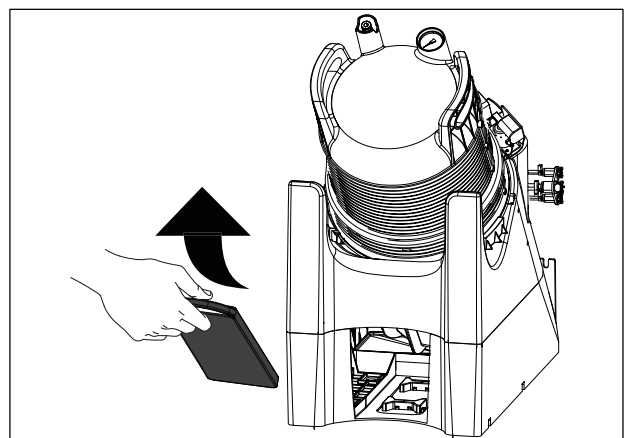
Clean the internal part of the cylinder, during the replacement of the keg, if necessary.

The appliance has a collection tank for any liquids resulting from cleaning. The tank, located in the lower part of the appliance, must be periodically emptied. The following images show the operations to be carried out for emptying:

1. remove the tank by pulling it outwards;



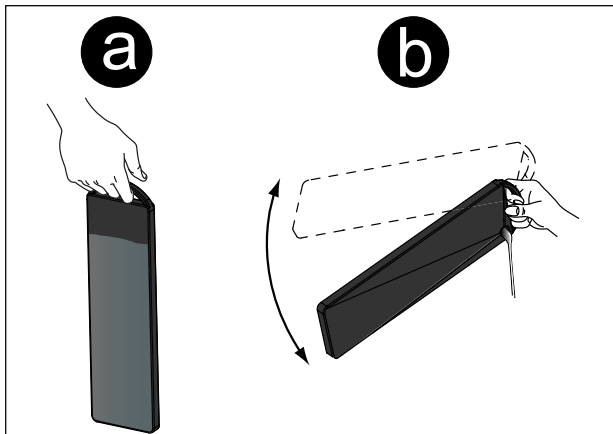
2. turn and put it in the upright position;



NOTE!

Be careful not to spill liquid from the tank.

- turn it again and shake to empty all the liquid inside;



- refit the tank.

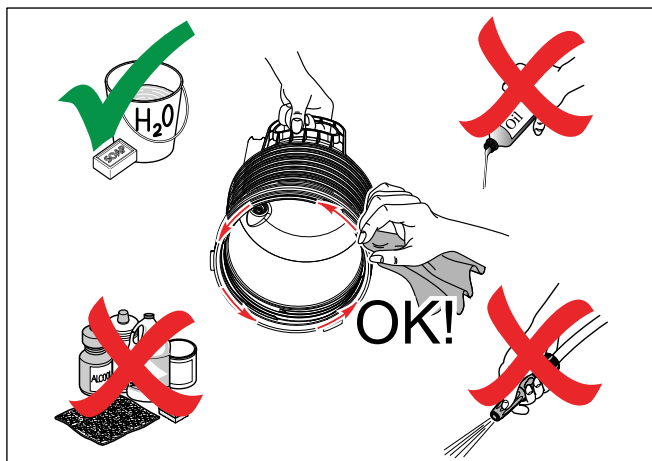
When replacing the keg, make sure the inside of the pressurised container is clean.

Clean the buffer located inside the cylinder and the cylinder external and internal seals at least once a month.

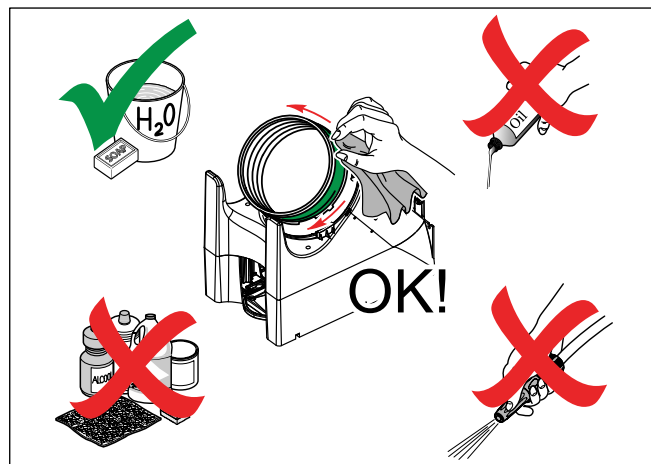


NOTE!

When cleaning the container, if the lid was placed on the floor or on an unclean surface, to avoid transferring any residual dirt to the appliance make sure to clean the rim before refitting it.



Check the seal of the container and, if necessary, clean it as shown in the figure:



IMPORTANT

The beverage “keg” must be filled only with approved beverages.

I.1.2 Precautions in case of prolonged idle periods

- Whenever the appliance is not going to be used for a certain period of time, make sure to start a wash cycle and empty the system.
- Remove the approved beverage “keg” from the cylinder.
- Clean the appliance and accessories (following the instructions given above).
- Leave the lid partly screwed (fixed) in order to avoid damages to the gasket and the development of mould inside the cylinder.



CAUTION

The empty cylinder must not be used to store food or other materials!



IMPORTANT

Do another wash cycle, in any case, when using the appliance again.

After carrying out maintenance make sure the appliance is able to work safely and, in particular, that the protection and safety devices are efficient.

J EXTRAORDINARY MAINTENANCE



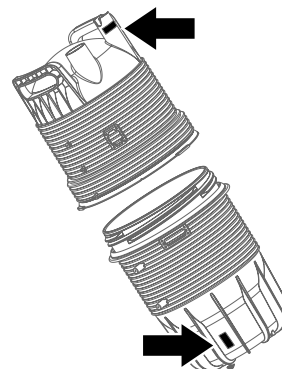
IMPORTANT

Extraordinary maintenance must be carried out by the **SPECIALISED TECHNICIAN**, who will follow the instructions in the complete installation and user manual on the [web site](#).

J.1 Periodical inspection

Lid, cylinder, safety valve must be scrapped after 10 years from the production date indicated on labels placed on both lid and cylinder.

The following image shows the exact location of the labels placed on the lid and cylinder:



EVERY 12 MONTHS:

Check the safety valve by external visual verification confirming its good condition, free of oxidation, erosion, with the exhaust slots free of obstructions, shutter and movable parts without incrustations.

Perform safety valve functional test manually without using tools and following this procedure: when the appliance is in working condition, pull for few seconds the valve lifter and check that the air blows out; releasing the lifter, check that the air flow immediately stop.

EVERY 12 MONTHS: (cont'd.)

Check the presence of cracks and/or deep scratches, particularly in cylinder and lid (for example threads, edges) and safety valve area.

Check the presence of the bumper ring inside cylinder and verify its good condition; replace it in case of damages.

J.2 Maintenance intervals

The inspection and maintenance intervals depend on actual appliance operating conditions and ambient conditions. To minimise interruption of service, it is advisable to carry out thorough and periodic maintenance of the appliance as indicated in the table below:

YEARLY CHECKS AND EXTRAORDINARY MAINTENANCE

Check the CYLINDER GASKET and replace it in case of: breakage, irregular deformation, incorrect fixing.

Check the MANOMETER functionality and coloured sticker placed in the proper position.

Check the KEG GASKET and replace in case of: breakage, irregular deformation, incorrect fixing.

BEER COUPLER GASKET and replace in case of: breakage, irregular deformation, incorrect fixing.

Check the integrity of the FAST CONNECTIONS (air and water) and verify if they work properly:
o-ring in male and female connections; "T" connections, etc.

Check water and air PIPING:

deformation, wearing or colour changing on the same pipe and/or presence of water on air pipes.

Check if all screws are properly tightened.

Check the proper closing of the lid with the cam and three-way valve lever: perform test with and without pressurized air.

Check there are not leakages of air/ beer/water from beer coupler.

Check there are not leakages of air/ beer/water from all connections.

Press the three-way valve to make sure there are no obstructions in the air system.

Press the three-way valve and check that the keg coupler pin goes to the dispensing (draft) position. The pin must return to the closed position when released.

Clean the internal cylinder bottom and check the black drainage plug.

Overall controls of the appliance (breakage, scratches etc.).

In case of heavy use of the product (harsh environments), increase the frequency of periodical inspections and extraordinary maintenance to keep the appliance always safe, clean and efficient.

K QUICK TROUBLESHOOTING GUIDE

In some cases, faults can be eliminated easily and quickly by following a brief troubleshooting guide:

The appliance does not reach the working pressure:

- make sure the lid is properly;
- make sure the keg is present inside the cylinder when the lid is closed ;
- make sure the cleaning module is connected and works properly;
- check correct insertion of the quick connectors;
- make sure there are no impurities in the appliance circuit and system;

If the fault persists after carrying out the above checks, contact Service, remembering to specify:

- A. the type of fault;
- B. the appliance PNC (production number code);
- C. the Ser. No. (appliance serial number).



NOTE!

The appliance PNC and serial number are essential for identifying the type of appliance and date of manufacture.

L MACHINE DISPOSAL



WARNING

Refer to "*Warning and Safety Information*"

L.1 Waste storage

At the end of the appliance's life-cycle, make sure it is not dispersed in the environment.

SPECIAL waste materials can be stored temporarily while awaiting treatment for disposal and/or permanent storage. In any case, the current environmental protection laws in the user's country must be observed.

L.2 Procedure regarding appliance dismantling macro operations

Before disposing of the appliance, make sure to carefully check its physical condition, and in particular any parts of the structure that can give or break during scrapping.

The appliance's parts must be disposed of in a differentiated way, according to their different characteristics (e.g. metals, oils, greases, plastic, rubber, etc.).

Different regulations are in force in the various countries, therefore comply with the provisions of the laws and competent bodies in the country where scrapping takes place.

In general, the appliance must be taken to a specialised collection/ scrapping centre.

Dismantle the appliance, grouping the parts according to their chemical characteristics, remembering that the components of the appliance are special waste assimilable with urban waste.



The symbol on the product indicates that this product should not be treated as domestic waste, but must be correctly disposed of in order to prevent any negative consequences for the environment and human health. For further information on the recycling of this product, contact the local dealer or agent, the after-sales service or the local body responsible for waste disposal.



NOTE!

When scrapping the appliance, any marking, this manual and other documents concerning the appliance must be destroyed.

