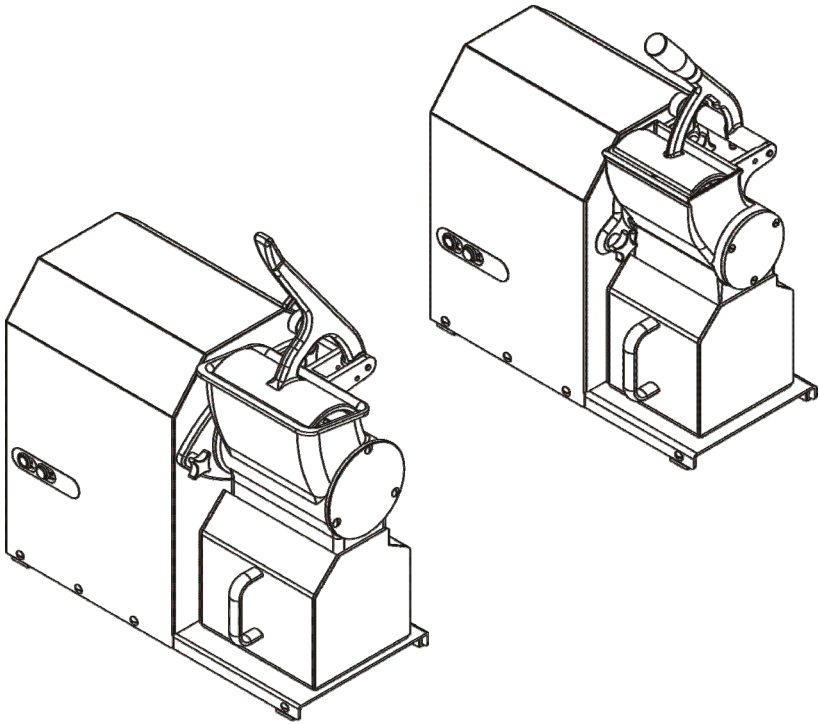


**HP 1,5**  
**HP 2**

**GRATERS**



ed.10.2024 - ver.003

**USER AND MAINTENANCE MANUAL**



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# 1 Delivery and warranty

## 1.1 - Foreword

### **WARNING!**

*The symbols used in this manual draw the reader's attention to points and operations that are hazardous to the operator's personal safety or that risk damaging the machine. Do not use the machine unless you have read and properly understood these notes.*

### **WARNING!**

*For reasons of clarity, some of the illustrations appearing in this manual show the machine or parts of it with its panels or guards removed. Never use the machine in this condition; only use it when it is fully equipped with the guards and in good working order.*

The manufacturer forbids the reproduction, even partial, of this manual or the use of its contents for purposes other than those expressly allowed. Any breach in this regard shall be punishable by law.

## 1.2 - Storing and using this manual

This manual uses text and illustrations to familiarise users with the machine and explain the instructions and essential criteria for its transport, handling, use and maintenance. Read this manual carefully before using the machine.

Store this manual with care near the machine so that it can be readily available for future reference.

If the manual is lost or damaged, you can request a copy from your dealer or directly from the manufacturer.

If the machine is transferred to a new owner, the latter's identification and contact details must be notified to the manufacturer.

The manual reflects the state of knowledge at the time of sale of the machine, and cannot be considered inadequate in the light of more recent experience and updates.

The manufacturer reserves the right to update the products and manuals without being obliged to update previous products and manuals, except in exceptional circumstances. In case of doubt, contact your local service centre or the manufacturer.

The manufacturer is committed to continuously improving its products.

To this end, the manufacturer is glad to receive any reports or proposals relating to the improvement of the machine and the manual.

The machine is delivered to the customer with the warranty conditions applicable at the time of sale.

Please contact your dealer for any further information.

## 1.3 - Warranty

The user is not authorised to tamper with the machine in any way.

Contact the manufacturer if you encounter any anomalies. Any attempt by the user or unauthorised persons to disassemble, modify or tamper with any part of the machine immediately voids the Declaration of Conformity pursuant to Directive 2006/42/EEC, voids the warranty and relieves the manufacturer of any liability for damage or injury resulting from such action.

The manufacturer is also relieved of all liability for the consequences of:

- incorrect installation;
- improper use of the machine by inadequately trained personnel;
- use of the machine in breach of local regulations;
- lack of or negligent maintenance;
- use of non-original spare parts, not specified for the model in question;
- total or partial failure to follow the instructions.

#### **1.4 - Machine description**

The grater you have purchased is a straightforward, compact machine guaranteeing powerful operation and high performance.

- Since it is used to grate food products, all the components that may come into contact with such products, have been
- accurately chosen to ensure maximum hygiene.
- The base is made of AISI 304 satin-finish stainless steel.
- The G-AlMg3 aluminium mouth has been processed with a brightening treatment in order to make it easier to clean.
- The roller is made of AISI 304 stainless steel in order to ensure maximum durability and hygiene.
- The motor has a self-ventilation system to ensure constant performance during prolonged use of the machine.
- The extractable sieve (optional) is made of AISI 304 stainless steel and is used to grate dry bread uniformly.

The models appearing in this manual are manufactured in conformity to Directive 2006/42/EEC and subsequent amendments.

If any accident occurs, the manufacturer shall not be held liable if the machine was modified, tampered with, with its safety guards removed or used for purposes other than the intended use specified by the manufacturer.

#### **1.5 - Intended use**

The machine is designed to grate matured cheese, dry bread (only if provided with a sieve) and/or similar products.

The machine must be used in a professional setting by qualified operators who work in the sector and have read and understood this manual.

Use the machine exclusively when it is securely placed on a solid worktable. The size of the product to be grated must be suitable with the size of the mouth of the machine.

#### **1.6 - Improper use**

The machine must be used only for its intended purpose, as expressly indicated by the manufacturer. Specifically:

- Do not use the machine to grate food products other than matured cheese, dry bread (only if provided with a sieve) and similar.
- Do not use the machine unless it has been properly installed with all its guards in good working order and correctly fitted, to prevent the risk of serious injury.

- Do not access any of the electrical components without having first disconnected the machine from the mains power supply: **risk of electric shock.**
- Do not process products that are too large to be fully contained in the loading mouth.
- Do not wear clothing that fails to comply with the accident-prevention regulations. Consult your employer for information on the applicable safety regulations and personal protective equipment to be worn.
- Do not start the machine if it has a fault.
- Before using the machine, make sure that any potentially hazardous conditions have been adequately eliminated. If you notice anything unusual in its operation, shut down the machine and inform the maintenance supervisors.
- Do not allow unauthorised persons to intervene on the machine.

In case of injury caused by electric shock, the first thing to do is to detach the injured person from live conductors (as the person will probably be unconscious).

This is highly hazardous.

In this instance, the injured person is also a live electrical conductor; touching them directly would mean suffering electric shock.

It would be better to disconnect the mains power supply, or if this is not possible, move the injured person away using non-conductive materials (a rod made of wood or PVC, fabric, leather, etc.).

First-aid medical assistance should be requested promptly and the injured person should be taken to hospital.

### **1.6.1 - Lighting**

The machine must be installed in a place that ensures adequate natural and artificial lighting as required by local regulations.

In any case, the lighting must be uniform and ensure a good visibility of every part of the machine and it must not create dangerous reflections.

Lighting must ensure clear reading of the control panels and the emergency buttons must be clearly identifiable.



### **1.7 - Specific equipment details**

Citing the "Model", "Serial number" and "year of manufacture" of the machine will help our technical assistance service to respond to your requests rapidly and effectively. We recommend citing the model of the machine and its serial number whenever you contact the technical assistance service.

This information appears on the rating plate shown in Fig. 1.7.1.

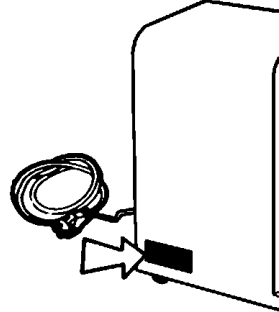
As a reminder, we suggest writing the data of the machine you have purchased in the table below.

Machine model.....  
 Serial no. ....  
 Year of manufacture.....  
 Type.....

MOD:   A    
 VOLT:   B   WATT:   C    
 HZ:   D   KG:   E    
 AMPS:   F   ANNO:   G    
 SERIAL NO: \_\_\_\_\_  
  I     
   L  

- A = Model
- B = Power supply
- C = Motor power
- D = Motor frequency Hz
- E = Weight
- F = Amperage
- G = Year of manufacture
- H = Serial no.
- I = Manufacturer
- L = Barcode

Fig. 1.7.1



**WARNING!**

*Do not alter the data on the rating plate for any reason.*

**1.7.1 - Warning and danger signs (Fig. 1.7.2)**

**WARNING!**

*Do not intervene on the electrical components when the machine is connected to the mains power supply. You risk getting an electric shock.*

**Observe the warnings signalled by the signs.**

**Failure to do so could lead to personal injury.**

*Make sure that the signs are always present and legible.*

*If they are not, apply or replace them.*

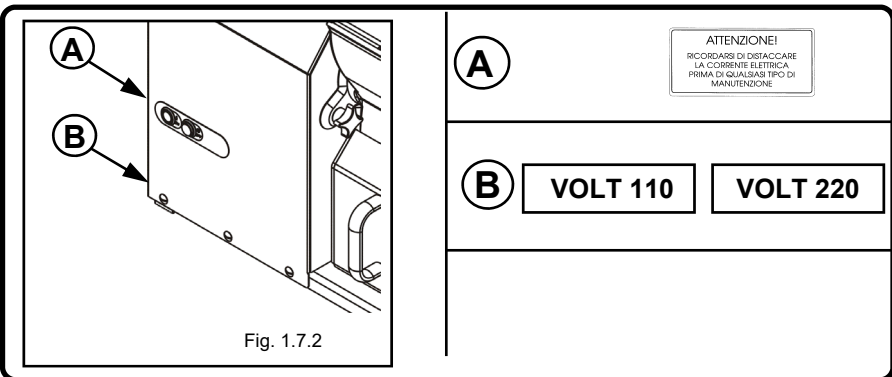


Fig. 1.7.2



## 1.8 - Guards and safety devices

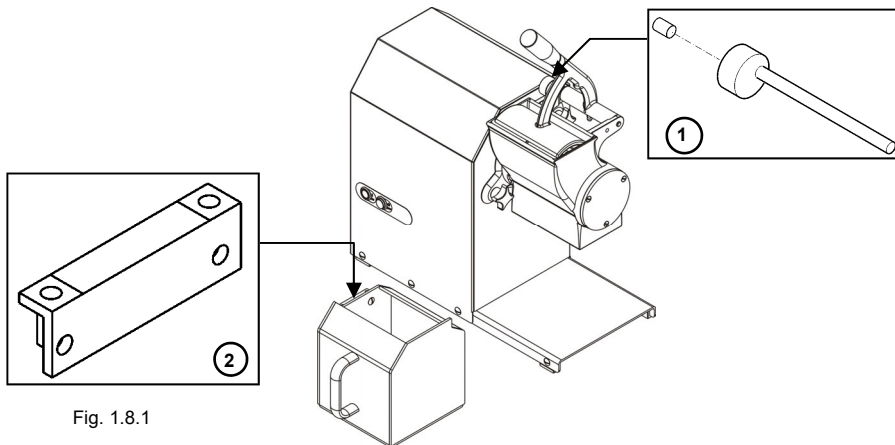


Fig. 1.8.1

### **WARNING!**

*Before using the machine, make sure that its safety devices are properly positioned and in good working order.*

*Check that they are present and work properly at the start of each shift. If not, notify the maintenance supervisor.*

### **1. Micro-switch on the lever**

The machine is provided with a micro-switch on the lever of the mouth. This triggers the locking the machine when the lever is up or the mouth is completely disassembled.

### **2. Micro-switch on the bowl**

The machine is provided with a micro-switch on the plexiglass bowl. When the bowl is removed, the machines stops Fig. 1.8.1.

### **WARNING!**

*Do not tamper with the safety devices for any reason.*

## 1.9 - Work position

To optimise work on the machine, the operator should assume the position shown in Fig. 1.9.1.

## 1.10 - Vibrations

The vibrations which the machine transmits to the work surface are negligible.

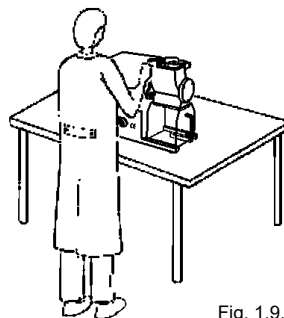


Fig. 1.9.1

## 2 Technical specifications

### 2.1 - Main parts

To aid comprehension of the manual, the main components of the machine are listed below and shown in Fig. 2.1.1 and 2.1.2.

1. Machine body in AISI 304 stainless steel
2. Grating roller in AISI 304 stainless steel
3. Bowl in plexiglass (optional in AISI 304)
4. Grater mouth in polished GAISI4.5Mg aluminium
5. Mouth lever in polished GAISI4.5Mg aluminium
6. Buttons
7. Circuit breaker with manual reset (back)

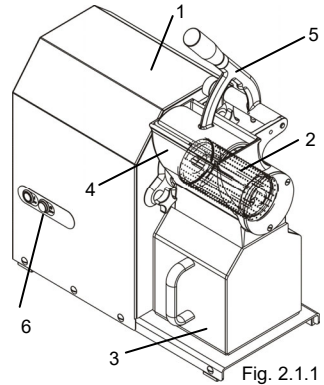


Fig. 2.1.1

### 2.2 - Technical specifications

MODEL		HP 1,5	HP 2
Motor	Hp	1,5	2
Power source	V	110V/60Hz	110 or 220V/60Hz
Rev. roller	R.P.M.	1.680	1.680
Dim. mouth	mm	140 x 80	190 x 95

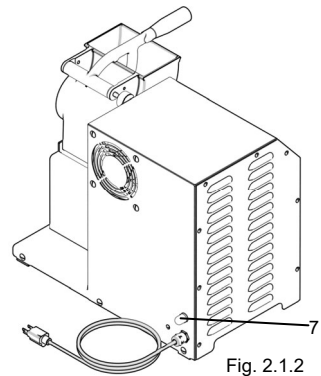


Fig. 2.1.2

### 2.3 - Machine dimensions and weight

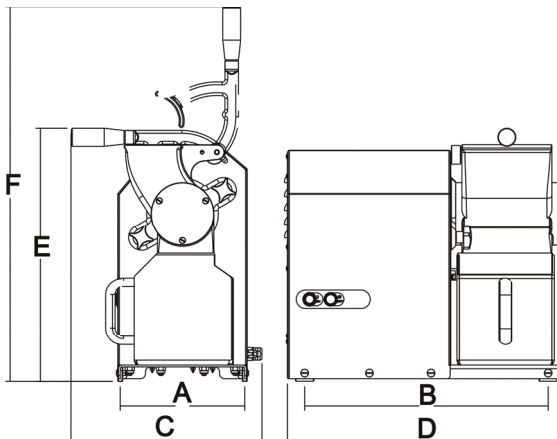


Fig. 2.3.1

		HP 1,5	HP 2
A	mm	260	280
B	mm	395	475
C	mm	360	380
D	mm	448	528
E	mm	412	520
F	mm	610	730
Net weight	kg	25	35

## 2.4 - Wiring diagrams

### 2.4.1 - Single phase wiring diagram 110 V - 60 Hz

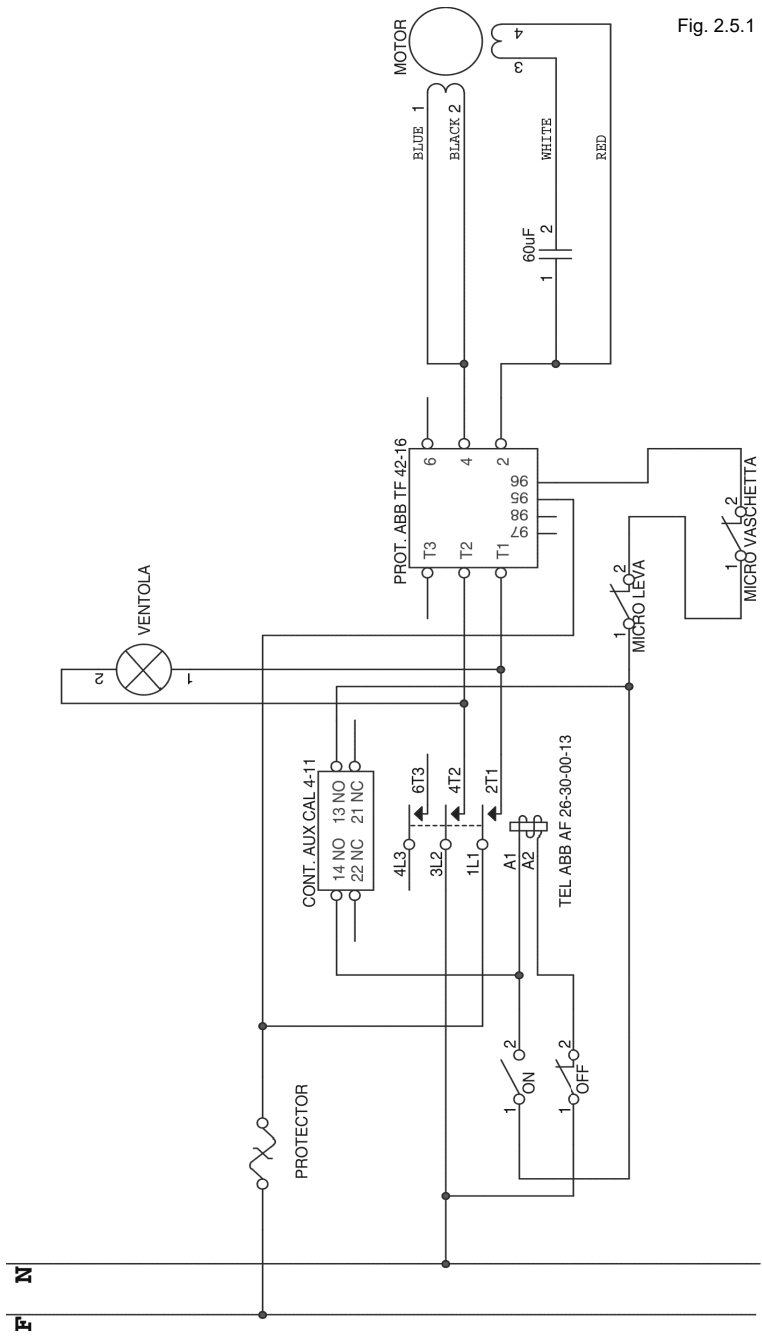
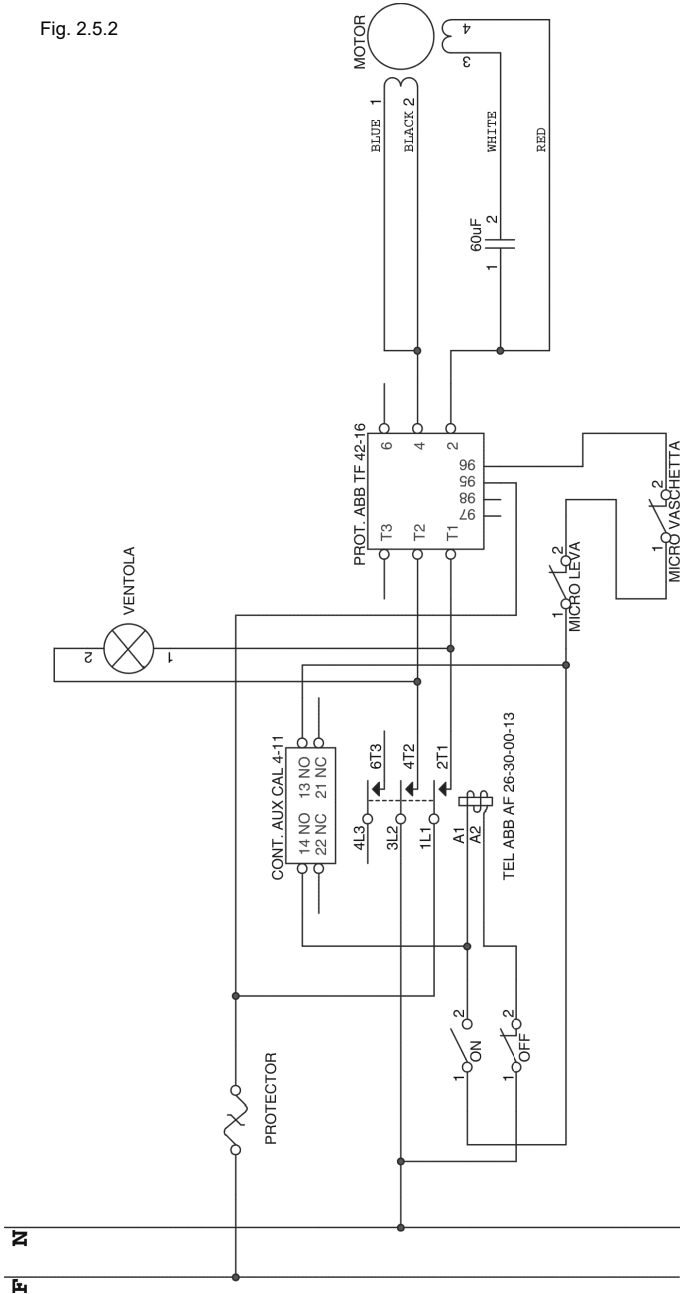


Fig. 2.5.1

## 2.4.2 - Single phase wiring diagram 220 V - 60 Hz

Fig. 2.5.2

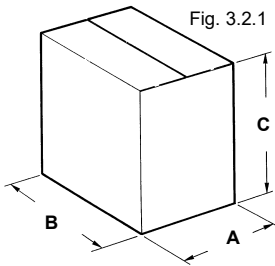


## 3 Factory testing, shipping, delivery and installation

### 3.1 - Factory testing

The machine you have purchased has been tested at our plants to verify its correct operation and proper adjustment.

### 3.2 - Delivery and handling



Shipping (mm)		
	HP 1,5	HP 2
A	660	800
B	470	600
C	610	520

Gross weight (Kg)	
HP 1,5	HP 2
30	39

All shipped material is carefully checked prior to being handed over to the shipping agent. Unless otherwise agreed with the Customer, and unless the shipping conditions demand special packaging, the machine is wrapped in nylon and cardboard.

The dimensions of the package are given in Fig. 3.2.1.

When you receive the machine, check the condition of its packaging. If you notice any damage to the packaging, sign the delivery note with the following wording: "Goods accepted with reservation..." and the reason.

If you notice any damage to the components of the machine after opening the package, report it to the shipping agent within three days from the date shown on the documents.

### 3.3 - Installation

#### **WARNING!**

*The intended installation area of the machine must be flat and solid.*

*Moreover, the machine must be placed where there is ample space around it.*

*This will ensure greater manoeuvrability during work phases and easy access for subsequent maintenance operations. Provide adequate lighting around the machine to ensure good visibility for the operator using it.*

#### 3.3.1 - Disposing of packaging material

The packaging materials (cardboard, nylon, wood, etc.) can be regarded as solid urban waste. As a result, they can be disposed of freely.

Nylon is a polluting substance that releases toxic fumes when burnt. Do not burn or dump it, but dispose of it according to the law.

If the machine is delivered to a country where special regulations apply, dispose of the packaging accordingly.

#### 3.3.2 - Handling the machine

##### **WARNING!**

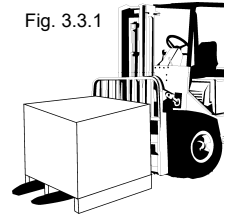
Lift the machine up using a forklift truck with an adequate capacity. Check the stability and position of the load on the forks, particularly along uneven, slippery or inclined surfaces.

When moving the load, keep it as low as possible in order to ensure better stability and

visibility.

Widen the forks on the forklift truck in order to stabilise the grip as much as possible.

Fig. 3.3.1



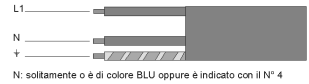
### 3.4 - Electrical connections

**WARNING!** Check that the power supply line has the same specifications as those shown on the rating plate of the machine. All interventions must be carried out solely by specialised personnel expressly authorised by the relevant supervisor.

Make the connection to a power line equipped with an efficient earthing socket.

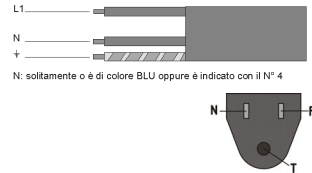
#### 3.4.1 - 220 V-60 Hz single-phase machine

In this configuration, the machine is supplied with a power cable with 3 x 1.5 mm gauge. This cable is connected to a single-phase plug with three pins. Attach the cable to the 220 V-60 Hz single-phase power supply line by installing a 16 A residual current circuit breaker in between.



#### 3.4.2 - 110 V-60 Hz single-phase machine

In this configuration, the machine is supplied with a power cable with 3 x 1.5 mm gauge. This cable is connected to a single-phase plug with three pins. Attach the cable to the 110 V-60 Hz single-phase power supply line by installing a 16 A residual current circuit breaker in between.



## 4 Controls

### 4.1 - List of controls

#### 1 - Stop button

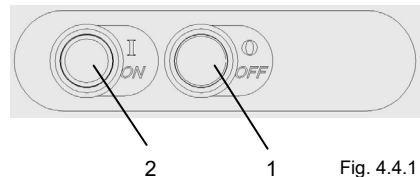
- Raised stop button:
- Press to stop the machine

#### 2 - Start button

- Luminous start button:
- Press to start the machine

#### 3 - Luminous indicator

- Green.
- It comes on when the start button is pressed and indicates that the machine is operating.



## 5 Start-up and shutdown

### 5.1 - Verification of the correct electrical connection

#### WARNING!

Check that the power supply line has the same specifications as those shown on the rating plate of the machine and that it is equipped with efficient earthing.

- 1 Plug the cable into the power socket.
- 2 Set the residual circuit breaker to "I".
- 3 Press the start button "2" Fig. 4.1.1.  
The luminous indicator "3" will come on Fig. 4.1.1.  
Check the direction of rotation of the roller.
- 4 Press the stop button "1", Fig. 4.1.1.  
The luminous indicator "3" will switch off Fig. 4.1.1.

**Note** The presser must be in low position.

**The rotation direction of the roller must match the direction shown by the arrow Fig. 5.1.1.**

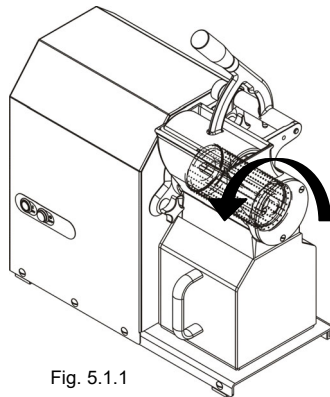


Fig. 5.1.1

### 5.2 - Verification of the presence and efficiency of guards and safety devices

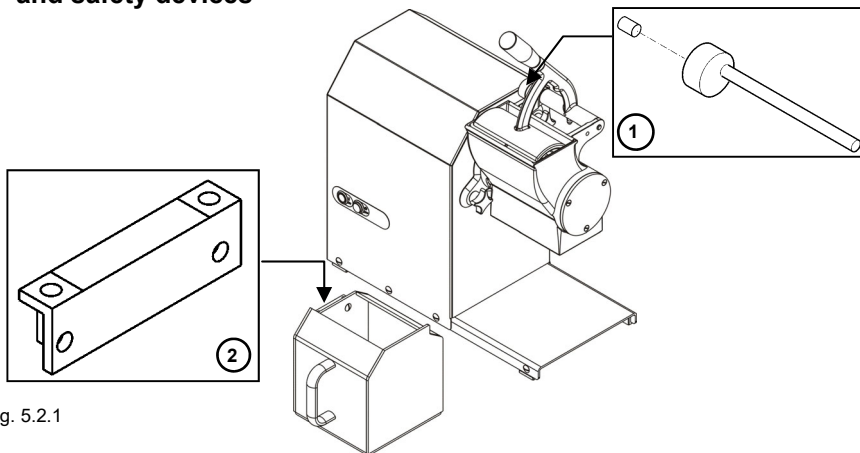


Fig. 5.2.1

#### 1. Micro-switch on lever

With the machine running, lift the presser until the micro-switch intervenes and the machine stops.

Keep the presser still in the position in which the micro-switch activated and check that the space between the loading mouth and the presser is insufficient to put your fingers through. If it is not so, please contact the Authorised Retailer or the manufacturer.

#### 2. Micro-switch on the bowl

With the machine running, remove the plexiglass bowl and check that the machine stops.

### 5.3 - Verification of the efficiency of the emergency stop button

(Fig. 4.1.1)

With the machine connected to the mains power supply and the accessory tool moving, press button “2” Fig. 4.1.1. The appliance must stop.

### 5.4 - Start-up

- Set the residual circuit breaker, upstream of the machine, to “1”.
- Press the start button “2” (Fig. 4.1.1) to start the machine.

The luminous indicator “3” will come on Fig.4.1.1.

**Note** *If the presser is in the “open” position, the machine will not start. Therefore you must lower it.*

### 5.5 - Shutdown

- Press the stop button “1” Fig. 4.1.1 to stop the machine operation; the luminous indicator “3” will switch off Fig. 4.1.1.
- Set the residual circuit breaker upstream of the machine to “0”, thus disconnecting the machine.

**Note** *At the end of a work cycle, and if you intend leaving the machine unused, the circuit breaker must be kept in the “0” position.*

## 6 Use

### 6.1 - Safety instructions

**WARNING!** *Only authorised personnel may intervene on the machine.*

*Before using the machine, the operator must ensure that all guards are in place and that the safety devices are present and working efficiently. If this is not the case, switch the machine off and contact the maintenance supervisor.*

### 6.2 - Using the sieve

The extractable sieve “1” in AISI 304 stainless steel, ensures a uniform grated product, without the need to sieve it afterwards.

**You can request it when ordering the machine.**

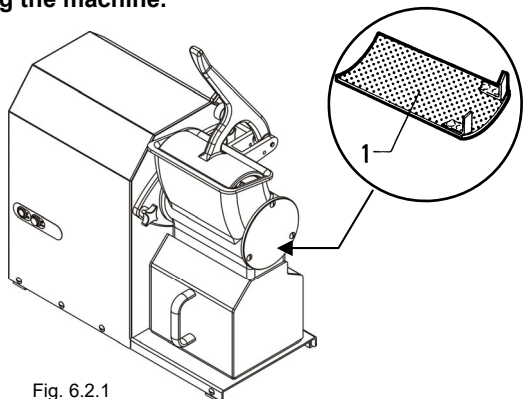


Fig. 6.2.1



## 7 Maintenance

### 7.1 - Safety instructions

#### **WARNING!**

*Maintenance and cleaning must always be carried out with the grater at a standstill and disconnected from the mains power supply.*

*Always keep the maintenance zone clean and dry.*

*Do not allow unauthorised persons to intervene on the machine.*

*Any replacements of parts must be performed using original spare parts at authorised service centres, or directly by the manufacturer.*

#### **WARNING!**

Disconnect the machine from the mains power supply before cleaning it.

Do not clean the machine using a water jet. Only use non-toxic detergents formulated for cleaning components used with foodstuffs.

### 7.2 - Removing the Spout

The spout can be removed for cleaning purposes. To remove the spout, proceed as follows:

- Turn off the machine
- Remove the tray (ref 1 fig. 7.2.1)
- Unscrew the 3 knobs (ref 2 fig. 7.2.1)
- Pull out the spout (fig 7.2.2) with caution, as the spout assembly weighs 6 kg

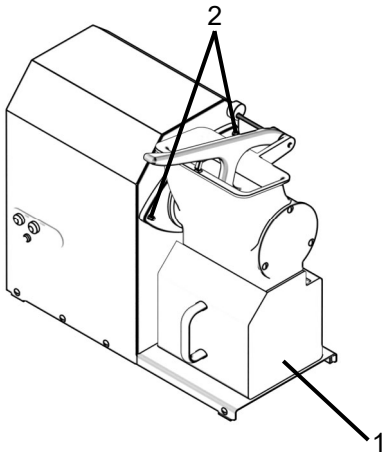


Fig. 7.2.1

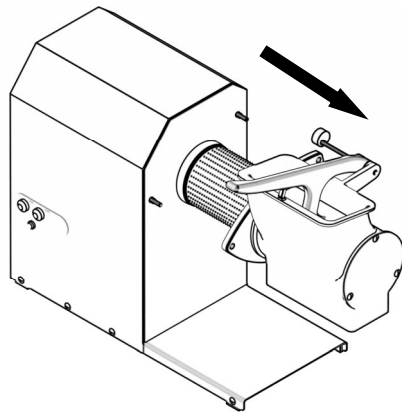


Fig. 7.2.2

## 8 Malfunctions and remedies

### 8.1 - Malfunctions: causes and remedies

<b>Issue</b>	<b>Causes</b>	<b>Remedies</b>
The machine does not start	The residual current circuit breaker is set to "0"  The presser is in its up position  The circuit breaker on the underside of the machines isn't tripped  The bowl is not inserted in the machine  The micro-switches on the mouth of the grater and/or for the bowl are not working  The start button does not work  Faulty electrical motor or electronic board	Set the switch to "1"  Lower the presser  Restore it  Insert the bowl in its operating position  Contact the technical assistance service  Contact the technical assistance service  Contact the technical assistance service



**AUTHORISED RETAILER**