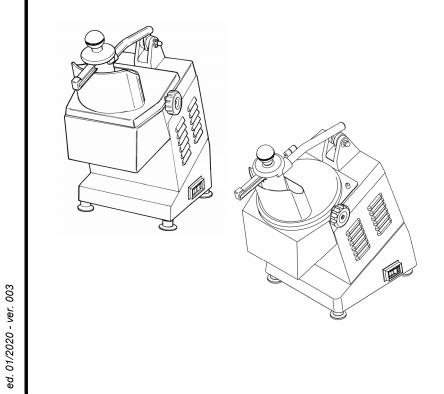
# SERVICE CENTRE AUTHORIZED DEALER

# **USE AND MAINTENANCE MANUAL**



VEGETABLE CUTTER

mod. TM E / TM A E / TM R E / TM R A E

ETL

# **CHAP.8** - SCRAPPING

## 8.1 - PUTTING THE MACHINE OUT OF SERVICE

If for some reason, you decide to put the machine out of service, make sure nobody can use it:

⇒ disconnect it from the mains and eliminate electrical connections.

## 8.2 - SCRAPPING

When the machine is out of service, it can be disposed of. To scrap the machine contact your local Specialised Waste Treatment Centre, separate components (refer to chap.1 § 2.2).

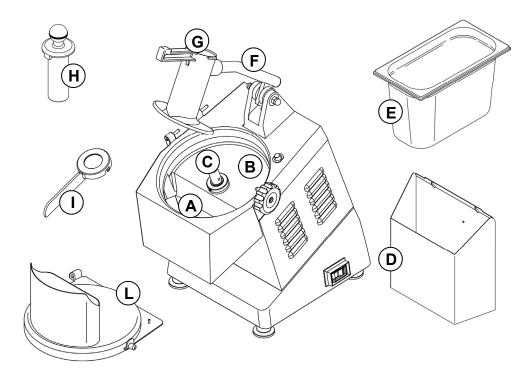


Fig. n°17 - View of the machine disassembled for cleaning.

- **A** MOUTH
- **B** OPERATING AREA
- C PIN
- **D** CHUTE
- **E** BOWL
- F PUSHER HANDLE

- **G** PRODUCT INLET CYLINDER
- **H** PESTLE
- I DISCHARGING SPATULA
- L LID

## **FOREWORD**

- This manual is meant to provide Customers with information on the machine and its specifications and the necessary operating and maintenance instructions in order to ensure machine performance and longevity.
- This manual is to be used by qualified and skilled operators with thorough knowledge of machine use and maintenance.

# **CONTENTS**

	1.1 1.2 1.2.1 1.2.2 1.3 1.3.1 1.3.2 1.4 1.4.1		INFORMATION ON THE MACHINE GENERAL PRECAUTIONS MACHINE DESCRIPTION General description Manufacturing features (materials used) SAFETY DEVICES General safety devices Electrical safety devices ACCESSORIES + TOOLS Accessories Standard accessories	page	5
CI	HAP.2	- T	ECHNICAL SPECIFICATION	page	10
2	2.1	-	OVERALL DIMENSIONS, WEIGHT, FEATURES		
;	3.1 3.2	- -	ECEIVING THE MACHINE DESPATCH OF THE MACHINE PACKAGE CHECK UPON RECEIPT PACKAGING DISPOSAL	page	11
4	4.1 4.1.1 4.2 4.2.1 4.3	- - - -	ISTALLATION SETTING UP OF THE MACHINE Collecting bowl ELECTRICAL CONNECTION Vegetable cutter TM (120 V. 60 Hz) WIRING DIAGRAM OF THE VEGETABLE CUTTE FUNCTIONAL CHECK	page R TM	12

CHAP. 5 - USE OF THE MACHINE	
------------------------------	--

5.1 - DISCS ASSEMBLY

5.2 - LOADING AND CUTTING THE PRODUCT

## **CHAP.6 - MAINTENANCE AND ADVICE**

page 16

page 14

6.1 - FOREWORD

6.1.1 - Belt

6.1.2 - Feet

6.1.3 - Power supply cable

6.2 - What to do if...

6.2.1 - The fixing of the discs is faulty

6.2.2 - The lid does not lock

6.2.3 - The product is not cut correctly

6.2.4 - The product does not go out correctly or is badly cut

6.2.5 - The machine locks

6.2.6 - The micro on the pusher handle and on the lid do not work

6.2.7 - The machine does not start

## **CHAP.7 - CLEANING OF THE MACHINE**

page 17

7.1 - FOREWORD

7.2 - CLEANING PRODUCTS

7.3 - HOW TO CLEAN THE MACHINE

#### **CHAP.8 - SCRAPPING**

page 19

8.1 - PUTTING THE MACHINE OUT OF SERVICE

8.2 - SCRAPPING

is the one indicated on the rating plate (Fig. n°11).

### 6.2.6 - The micro on the pusher handle and on the lid do not work:

Check that they are not dirty.

#### 6.2.7 - The machine does not start:

Check that all the safety devices are correctly installed (See Chapter about safety devices 1.3); that the plug and the switches are correctly connected.

## CHAP.7 - CLEANING OF THE MACHINE

#### 7.1 - FOREWORD

- The machine must be cleaned at least once a day. If necessary clean when required during the day.
- All the Vegetable cutter parts that come into contact directly or indirectly with the food product must be cleaned thoroughly.

## Before starting cleaning operations, it is necessary to:

 $\Rightarrow$  <u>disconnect the machine plug from the mains</u> to isolate it from the mains power supply.

Pay attention to hazards of injury caused by cutting and/or sharp machine components during cleaning o handling of discs.

#### 7.2 - CLEANING PRODUCTS - CAUTION!

The machine must be cleaned with a normal detergent at ambient temperature, with a wet cloth.

It must never be cleaned with pressurised water, water jets, do not use brushes or other tools or anything that could damage the machine.

# N.B. DO NEVER WASH THE MACHINE PARTS IN THE DISHWASHER.

#### 7.3 - HOW TO CLEAN THE MACHINE

Disconnect the machine from the power supply.

Remove the lid and the discs, the spatula, the pestle, the bowl and/or the chute (Fig.  $n^{\circ}17$ ). Clean accurately the inside of the mouth, the operating area and the disc support pin.

Moreover clean all the external surfaces and the pusher handle. Dry with a cloth and reassemble the machine.

D If you use the bowl, after 2-3 cutting cycles, empty it. The use of the machine with a full bowl, could block the discharge of the product in the working area, and cause a faulty cut, the machine lock or the motor failure.

## **CHAP.6 - MAINTENANCE AND ADVICE**

#### 6.1- FOREWORD

Before performing any maintenance operation, it is necessary to:

Disconnect the plug from the mains to isolate it from the mains power supply.

### 6.1.1 - BELT

The drive belt does not require adjustment. In general after 3-4 years, it must be replaced, in this case call the "SERVICE CENTRE".

#### 6.1.2 - FEET

Feet may deteriorate or lose elasticity, reducing machine stability. If support feet show signs of wear or damage, replace.

#### 6.1.3 - POWER SUPPLY CABLE

Periodically check for wear in the power supply cable. If the power supply cable shows signs of wear or damage call the "SERVICE CENTRE" for a replacement.

#### 6.2 - WHAT TO DO IF...

## 6.2.1 - The fixing of the discs is faulty:

Check that the discs and the disc support pin are clean.

## 6.2.2 - The lid does not lock:

Check that the lid is installed correctly and that it is clean.

## 6.2.3 - The product is not cut correctly:

Check that the blade is not worn.

## 6.2.4 - The product does not go out correctly or is badly cut:

Check that the discharging spatula has not been assembled with the discs to cut cubes; that the bowl is not full and that the exit opening is not obstructed.

#### 6.2.5 - The machine locks:

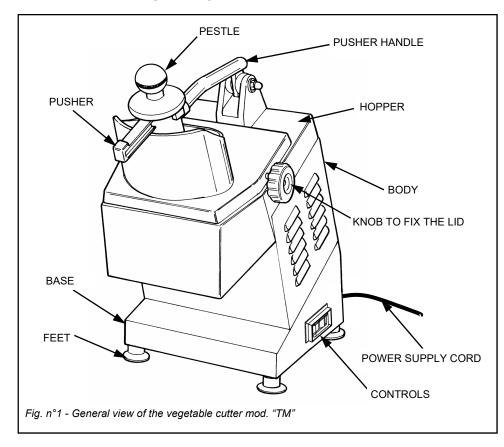
Check that the product is not frozen or too hard and that the power supply

## **CHAP.1** - INFORMATION ON THE MACHINE

#### 1.1 - GENERAL PRECAUTIONS

- The vegetable cutter must be operated only by highly qualified personnel who are fully aware of the safety measures described in this manual.
- In case of a personnel turnover, training is to be provided in advance.
- Although the machine incorporates safety devices and protections for dangerous parts, it is recommended not to touch the moving parts.
- Before starting cleaning and maintenance operations, disconnect the plug from the supply socket.
- To carry out cleaning and maintenance, assess the residual risks carefully (as protections are removed).
- Cleaning and maintenance require concentration.
- A regular check of the power supply cable is absolutely necessary; a worn-out or damage cord is very dangerous.
- If the machine malfunctions, it is recommended not to use it and do not try to repair it; please call the "Service Centre", contact details are provided at the end of this manual.
- Do not use the machine for processing frozen products, meat and fishes with bones or non food products.
- Do not repair the machine yourself but call the "Authorised Service Centre".
- Always use the pusher with the pestle to cut the food
- Do not fill too much the inlet cylinder and do not press too hard to avoid any problem .
- The manufacturer shall not be liable for damage to things or injury to persons in the event:
- ⇒ The machine or the safety devices and protections have been tampered with by non authorised personnel;
- $\Rightarrow$  Non original spare parts and discs are installed;
- ⇒ The instructions provided in this manual are not followed scrupulously;
- $\Rightarrow$  The machine surface is not cleaned with the right product .

#### 1.2 - MACHINE DESCRIPTION



#### 1.2.1 - GENERAL DESCRIPTION

The vegetable cutter TM has been designed and manufactured by our firm with the aim of ensuring:

- the highest degree of safety during use, cleaning and maintenance;
- the highest standard of hygiene due to a careful selection of materials which come into contact with food products, elimination of sharp edges in the machine structure that come into contact with the food product, facilitating and ensuring perfect cleaning, as well as facilitating machine disassembly and part removal;
- robust and stable components;
- a) reduced noise emission generated by the drive belt;
- b) practical and easy to move.

#### 5.2 - LOADING AND CUTTING THE PRODUCT

**CAUTION!** 

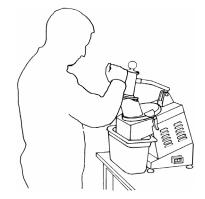


Fig. n°14 - Correct position.

When the machine is working, it is necessary to stand correctly to avoid accidents. The body must always be perpendicular to the working table (see Fig. n°18). Pay the maximum attention that no members of your body enter in contact with the machine.

**N.B.** The product has to be loaded in the Vegetable cutter TM when it is OFF.

#### Proceed as follows:

- A Load the product in the mouth of the lid (see Fig. n°15). If the product is small (i.e. carrots, baby marrows, etc.) put it in the inlet cylinder placed on the handle (see Fig. n°16). Turn on the machine and help the cutting by pressing slightly on the pusher handle or with the pestle if you use the inlet cylinder.
- B When the product is cut, lift the pusher handle, a safety device will stop the machine. Load another product and lower the handle, the machine will start automatically.
- C To replace the disc and change the type of cutting, proceed as described in point **5.1** "A". After this operation, an electronic device will lock the automatic restart of the machine; to restart the machine, it will be necessary to press pushbutton "I".



Fig. n°15 - Loading the product directly in the mouth



Fig. n°16 - loading the product through the product inlet cylinder

#### 4.4 - FUNCTIONAL CHECK

## To check the correct machine operation, proceed as follows:

- a) Turn ON pushbutton "I" and stop pushbutton "0" and check that the corresponding pilot lights turn on and off (Fig. n°13).
- b) Check that the motor stops and then turns on when you lift or lower the pusher handle.
- c) Check that the machine stops when your remove the lid and that it turns on by pressing pushbutton START "I" only if the lid is correctly installed.

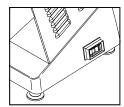


Fig. n°13 - Control panel.

## **CHAP.5** - USE OF THE MACHINE

## 5.1 - DISCS ASSEMBLY - CAUTION!

- A Choose one disc to cut; remove the steel or aluminium lid, and place the disc on the shaft. Rotate the disc until it is fixed. Replace the lid fastening it with the specific knob.
- B (TO CUT CUBES)
  - Choose a couple of discs. Place the first disc with the cavity turned on the right side placing yourself in front of the machine. Then install the other disc, proceeding as described in point "A" (see Fig. n°20).

# NB: NEVER USE THE DISCHARGING SPATULA WITH COUPLED DISCS TO CUT CUBES.

C The spatula must be assembled on the disc support pin before any other disc (see Fig. n°14). After having assembled the spatula, proceed as in point "A".

#### 1.2.2 - MANUFACTURING FEATURES (Materials used)

The vegetable cutter **TM** has been manufactured using materials with high resistance to mechanical worn and to corrosive agents present in the product.

More specifically:

- The hopper and the base are made of anodised aluminium to ensure the contact with food products (hygiene) and to ensure resistance to acids, salts and rust.
- The body, the lid, the pusher handle and the discs support are made of steel AISI 304.
- The pestle, the pusher, the bowl and the control panel are made of high resistant plastic, appropriate to enter into contact with food products.

### 1.3 - SAFETY DEVICES

#### 1.3.1 - GENERAL SAFETY DEVICES

The mechanical, electrical and hygienic safety devices installed on the vegetable cutter TM described in this manual complies with:

#### **UL 763 and NSF 8 Standards**

\*\* The vegetable cutter is fitted with electrical and mechanical safety devices for machine operation as well as cleaning and maintenance operations.

However, there are **RESIDUAL RISKS** which cannot be eliminated completely. These risks are listed in this manual under **WARNINGS**.

These risks are cutting dangers due to the machine handling during the disc substitution and/or cleaning.

#### 1.3.2 - ELECTRICAL SAFETY DEVICES

The vegetable cutter TM is fitted with microswithes:

A On the pusher lever, to stop the machine if the handle is lifted over the mouth of the lid and to enable to **turn on the machine automatically** when there is a dangerous situation (Fig. n°2).

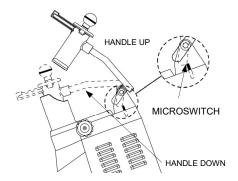


Fig. n°2 - Electrical safety devices

B On the hopper, to stop the machine if the lid is removed (i.e. to replace the discs) (Fig. n°3A), and to permit to start the machine voluntarily (by pressing pushbutton "I") only when the lid is closed, correctly locked by the knob lid (Fig. n°3).

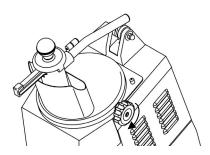


Fig. n°3 - Mechanical safety devices

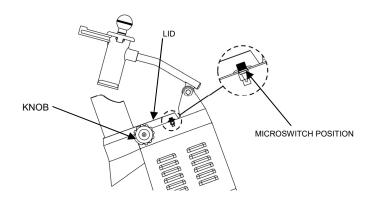


Fig. n°3A - Electrical safety devices

#### 4.2 - ELECTRICAL CONNECTION

## 4.2.1 - VEGETABLE CUTTER TM (120 Volt, 60 Hz)

The Vegetable cutter TM is equipped with a power supply cable with a SJT 16 AWG mm<sup>2</sup> section; length 1,6 m and a NEMA 5-15P plug.

Connect the Vegetable cutter to 120 Volt 60 Hz, by interposing a differential thermomagnetic switch 10 A  $\Delta I$  = 0,03 A.

Check correct machine earthing.

Moreover check that the specifications on the rating plate-serial number (Fig.  $n^{\circ}15$ ) correspond to the specifications provided in the consignment and delivery note.

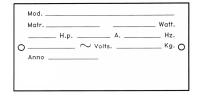


Fig. n°11 - Rating plate - serial number

#### 4.3 - WIRING DIAGRAMS OF THE VEGETABLE CUTTER TM

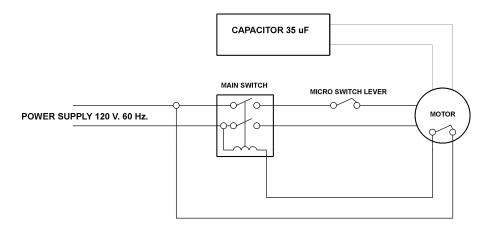


Fig. n°12 - Wiring diagram

#### 3.2 - PACKAGE CHECK UPON RECEIPT

Upon receipt of the package containing the Vegetable cutter TM, check accurately that the package has not been damaged during transport.

If the package shows signs of damage caused during transport, the carrier must be informed immediately; moreover a detailed report on the extent of the damage caused to the machine must be notified to the carrier within three days from the delivery date on the shipping documents. **DO NOT OVERTURN THE PACKAGE!!** When the package is transported, make sure the box is lifted by the 4 corners (parallel to the ground).

#### 3.3 - PACKAGING DISPOSAL

The components of the packaging (cardboard, pallet, plastic straps and polyurethane foam) are urban solid waste; therefore they can be easily disposed of.

If the machine has to be installed in countries where specific regulations are in force, packaging must be disposed of in compliance with such regulations.

# **CHAP.4** - INSTALLATION

#### 4.1 - SETTING UP OF THE MACHINE

The vegetable cutter must be installed on a suitable and adequate size work table refer to *Fig.n°8*, (and therefore sufficiently large); the machine must be solid, stable and fixed at a height of 80 cm from the ground. Moreover the machine must be installed in a room with max. 75% non saline humidity at a temperature between +5°C e +35°C; in a location and environment that does not provoke malfunctions or faults in the machine.

#### 4.1.1 - COLLECTING BOWL

If the Vegetable cutter TM is provided with a collecting bowl, place it under the mouth of the machine, so as to cover the product exit (Fig.  $n^{\circ}10$ ).

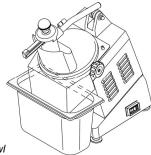


Fig. n°10 - Collecting bowl

#### 1.4 - ACCESSORIES + TOOLS

#### 1.4.1 - ACCESSORIES

The vegetable cutter TM is provided with many accessories. Some are supplied with the cutter, other must be requested by the Client.

#### 1.4.1.1 - STANDARD ACCESSORIES

<u>Pestle</u>: made of polyethylene for alimentary use, to facilitate the cutting of small product, it must be introduced in the product cylinder placed on the pusher ( $Fig. n^{\circ}4$ ).

<u>Collecting bowl</u>: made of polyethylene for alimentary use "GASTRONORM" of 1/3, h=200; equipped with microswitch (Fig. n°5).



Fig. n°4 - Pressing pestle for vegetables



Fig. n°5 - Bowl fitted with microswitch

<u>Discharging spatula</u>: made of steel AISI 304 installed on the disc support pin. It makes easier to discharge the product when cut. (Fig. n°6)



Fig. n°6 - Discharging spatula

<u>Discs holder</u>: made of plasticised steel for alimentary use, it is a useful collector for discs. (Fig.n°7).

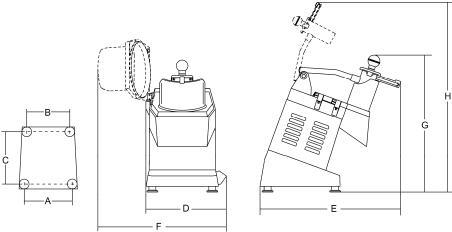


Fig. n°7 - Discs holder

# **CHAP.2** - TECHNICAL SPECIFICATIONS

## 2.1. - OVERALL DIMENSIONS, WEIGHT, FEATURES ...

Fig. n°8 - Overall and maximum dimensions



	u.m.	TM steel	TM aluminium
Power supply		120V / 60Hz	120V / 60Hz
Power	watt / Hp	550 / 0.75	550 / 0.75
Turns	R.P.M.	300	300
AxBxC	mm in	225 x 195 x 255 8- <sup>7</sup> / <sub>8</sub> x 7 x 10	225 x 195 x 255 8- <sup>7</sup> / <sub>8</sub> x 7 x 10
DxExG	mm in	280 x 510 x 510 11 x 20- <sup>1</sup> / <sub>8</sub> x 20- <sup>1</sup> / <sub>8</sub>	280 x 510 x 510 11 x 20- <sup>1</sup> / <sub>8</sub> x 20- <sup>1</sup> / <sub>8</sub>
FxExH	mm in	400 x 510 x 770 15-3/ <sub>4</sub> x 20-1/ <sub>8</sub> x 30 5/ <sub>16</sub>	400 x 510 x 770 15- <sup>3</sup> / <sub>4</sub> x 20- <sup>1</sup> / <sub>8</sub> x 30 <sup>5</sup> / <sub>16</sub>
Net weight	Kg / lbs.	22 / 48,4	23 / 50,6
Package Dim.	mm In.	720 x 350 x 500 28- <sup>3</sup> / <sub>8</sub> x 13- <sup>3</sup> / <sub>4</sub> x 19- <sup>3</sup> / <sub>4</sub>	720 x 350 x 500 28- <sup>3</sup> / <sub>8</sub> x 13- <sup>3</sup> / <sub>4</sub> x 19- <sup>3</sup> / <sub>4</sub>
Gross weight	Kg / lbs.	24 / 52,8	26 / 57,2
Noise level	dB	≤70	≤70

Machine electrical specifications are indicated on the rating plate affixed to the side of the grater; before connecting to power supply, please read § **4.2 Wiring.** 

# **CHAP. 3** - RECEIVING THE MACHINE

## **3.1 - DESPATCH OF THE MACHINE** (see Fig. n°9)

The vegetable cutter TM is accurately packed and then despatched from our warehouses. The package includes:

- a) a solid cardboard box;
- b) the machine;
- c) some elements to keep the machine stable;
- d) the bowl;
- e) the pestle;
- f) the manual.

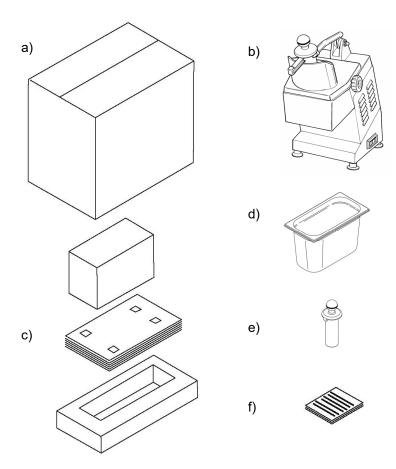


Fig. n°9 - Package description