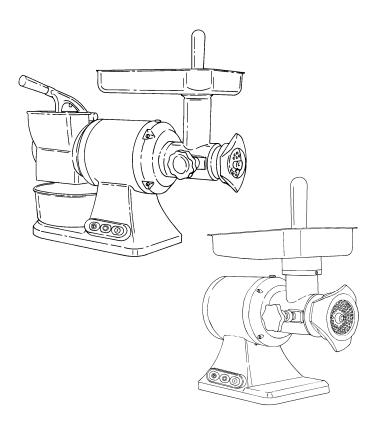
OPERATING AND MAINTENANCE MANUAL



TC/TCG 12E - 22E CE

SERVICE CENTRE AUTHORISED DEALER

Ed. 06/2009

INTRODUCTION

- This instruction manual gives the customer all the necessary information about the appliance and the manufacturing standards applied, as well as all instructions for use and maintenance so that the appliance can be used correctly maintaining its efficiency in time.
- This instruction manual is for the end user and for service personnel.

INDEX

CHAP. 1 - INFORMATION ABOUT THE APPLIANCE pag. 4

- 1.1 GENERAL WARNINGS
- 1.2 SAFETY FEATURES INSTALLED
- 1.3 APPLIANCE DESCRIPTION
- 1.3.1 general description
- 1.3.2 constructive characteristics
- 1.3.3 appliance elements

CHAP. 2 - TECHNICAL DATA

pag. 8

2.1 - OVERALL DIMENSIONS, WEIGHT, CHARACTERISTICS ...

CHAP. 3 - CONSIGNING THE APPLIANCE

pag. 9

- 3.1 TRANSPORTING THE APPLIANCE
- 3.2 CHECKING PACKAGING UPON CONSIGNMENT
- 3.3 DISPOSING OF PACKAGING

CHAP. 4 - INSTALLING THE APPLIANCE

pag. 11

- 4.1 APPLIANCE LOCATION
- 4.2 CONNECTING TO ELECTRICITY SUPPLY
- 4.2.1 TC/TCG with a single-phase motor
- 4.2.2 TC/TCG with a three-phase motor
- 4.3 WIRING DIAGRAMS TC/TCG 12-22E
- 4.3.1 wiring diagram for single-phase
- 4.3.2 wiring diagram for three-phase
- 4.4 FUNCTIONAL CHECK

CHAP. 5 - USING THE APPLIANCE

pag. 14

- 5.1 CONTROLS
- 5.1.1 controls for FRENCH KIT
- 5.2 SETTING UP THE TC/TCG FOR USE
- 5.3 FILLING THE MINCER WITH FOOD
- 5.4 FILLING THE GRATER WITH FOOD

CHAP. 7 - MAINTENANCE

7.1 - GENERALITIES

Before servicing the appliance you must disconnect the electricity supply plug isolating the appliance from the main power source.

7.2 - FOOT SUPPORTS

In time the foot supports can deteriorate causing instability. If this is the case replace them.

7.3 - POWER SUPPLY CABLE

Periodically check wear in the power cable and if necessary contact the "SERVICE CENTRE" for a replacement.

7.4 - PUSH BUTTON LABEL

In time the label on the could become marked or even damaged. If this should happen contact the "SERVICE CENTRE" for a replacement.

7.5 - DISK AND BLADE

Both the blade and disk can deteriorate in time. if this should happen contact the "SERVICE CENTRE" for original replacements.

CHAP.8 - SCRAPPING

8.1 - OUT OF SERVICE

If the appliance for some reason is to be put out of service, make sure it can no longer be used: disconnect and remove all electrical connections.

8.2 - WEEE Waste of Electric and Electronic Equipment

Directive 2002/95/EC, 2002/96/EC and 2003/108/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment, and waste electrical and electronic equipment.

This symbol, crossed out wheelie bin, on the product or on its packaging indicates that this product must not be disposed of with your other household waste.

Separate waste collection of this appliance is organised and managed by the manufacturer. It is the user's responsibility to contact the manufacturer and follow the waste treatment system the manufacturer has adopted for separate waste collection.

The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

N.B. to remount the TC/TCG follow the above diagrams:

1)mount the mincer block and block it in position using the knob (7); the pin on the knob must be inserted into the opening (9);

2)insert the screw feeder (4) into the mincer block (3) make sure it is positioned correctly;

3)mount the blade (5) onto the squre pin on the screw feeder and then mount the disk (6) maintaining the original coupling configuration.

4)Once all the components have been mouted secure by screwing the lock nut in place.

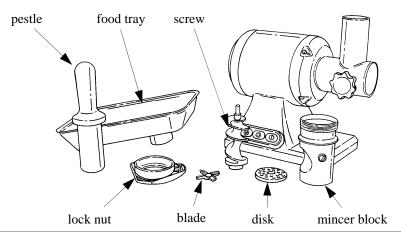


FIG. n°15 -diagram of TC stripped for cleaning

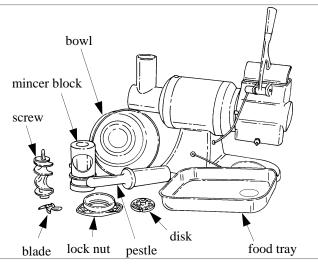


FIG. $n^{\circ}15a$ - diagram of TCG stripped for cleaning

CHAP. 6 - REGULAR CLEANING

pag. 17

6.1 - GENERALITIES

6.2 - PROCEDURE TO FOLLOW FOR CLEANING THE APPLIANCE

CHAP.7 - MAINTENANCE

pag. 19

7.1 - GENERALITIES

7.2 - FOOT SUPPORTS

7.3 - POWER SUPPLY CABLE

7.4 - PUSH BUTTON LABEL

7.5 - DISK AND BLADE

CHAP. 8 - SCRAPPING

pag. 19

8.1 - OUT OF SERVICE

8.2 - WEEE Waste of Electric and Electronic Equipment

CHAP. 1 - INFORMATION ABOUT THE APPLIANCE

1.1 - GENERAL WARNINGS

- The appliance must only be used by personnel who has carefully studied this manual and understood all the safety standards described herein.
- If there should be a turnover in personnel, it is necessary that this manual is carefully studied before using the appliance.
- Although safety devices are installed on the appliance, avoid touching the moving parts with your hands and avoid touching the appliance with wet hands.
- Before cleaning or servicing the appliance, disconnect the electricity power supply.
- When cleaning or servicing the TC/TCG (safety protections removed) take into consideration all possible hazards- Residual Risks.
- When servicing or cleaning the appliance always concentrate on what you are doing and avoid any possible distractions.
- Check the electricity power cable on a regular basis (to avoid electrical hazards and twists in the cable always completely unwind it); a worn or damaged cable causes a dangerous electrical hazard; avoid pressing the cable with weights or leaving it on heated or sharp cutting surfaces and avoid pulling the cable to remove the plug from the socket.
- If the TC/TCG has a presumed malfunction or does not work correctly, do not use it or repair it. Contact the "Service Centre".
- This appliance is designed for only mincing meat in the mincer and for grating cheese or bread in the grater. Do not use this appliance for frozen food or non-food products and do not insert any metallic objects into the grater or mincer.

• Do not grate nor mince without using the presser lever or pestle.

The manufacturer cannot be held responsible for the following situations:

- ⇒ if the appliance or safety devices are tampered with by unauthorised personnel
- \Rightarrow if **non original** spare parts are used;
- \Rightarrow if the instructions given in this manual are not carefully and correctly followed or respected;
- \Rightarrow if unsuitable cleaning products (inflammable, corrosive or toxic) are used to clean the appliance.

1.2 - SAFETY FEATURES INSTALLED

Safety features against electical hazards conform to directives 2006/95/CEE, whereas mechanical safety features conform to 2004/42/CEE.

ATTENTION!

The meat grinder has been exclusively designed to be used with less or equal than 8 mm hole plates in compliance with paragraph 5.2.4.2 of rule EN

CHAP. 6 - REGULAR CLEANING

6.1 - GENERALITIES

- the appliance must be cleaned at least once a day or if necessary more than once.
- scrupulously clean all the various components of the TC/TCG whether they
 come in direct contact with the food product or not.
- never clean the TC/TCG with a pressurised water-jet, industrial cleaners, brushes or any other type of cleaning utensil that could damage the surface of the appliance.
- Before cleaning you must remove the electricity supply plug isolating the appliance from the main power circuit.

6.2 - PROCEDURE TO FOLLOW FOR CLEANING THE APPLIANCE

(see FIG. $n^{\circ}14$)

CAUTION

- remove the pestle (1) and food tray (2);
- unscrew the lock nut (8) and remove the disk (6), blade (5) screw feeder (4) unscrew in the direction indicated by the arrow (a);
- unscrew the knob (7) and remove the mincer (3) always in the direction indicated by the arrow.

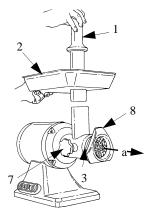
Now all the components can be washed (see FIG. $n^{\circ}15$ -15a) using warm water (50 C°) and a neutral detergent.

To clean the main structure use a damp cloth and remember to frequently rinse it with clean water.

The grater roller mounted on the TCG should be brushed cleaned.

CAUTION

Carefully clean the punched holes. Make sure all the components are completely dry before remounting them.



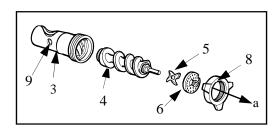


FIG. n°14 - removing components

5.4 - FILLING THE GRATER (see FIG. $n^{\circ}11$)

N.B. Fill the grater with the appliance off.

The procedure is as follows:

- 1. raise the presser lever;
- 2. fill the opening with the food product to be grated and then lower the lever. The presser lever must be able to close into position (1) so there is a contact between the magnet (2) and micro-switch (3).

This is important as the appliance will not work is there is no contact.

- 3. Always stand in the correct position to avoid accidents. Your body must be perpendicular to the work surface ($see\ FIG.\ n^{\circ}12$); do not put your hands into the grater when the appliance is working.
- 4. press the start button "I";
- 5. when you have finished grating press the stop button "0".

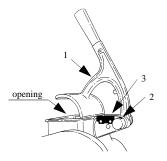


FIG. $n^{\circ}11$ - filling the grater

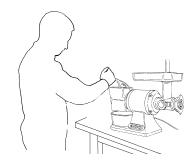


FIG. n°12 -Correct position



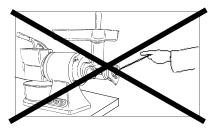


FIG. n°13 - Be careful not to ...

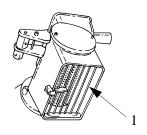
insert metallic objects or other than what is specified on page 4. para. 9 inside the mincer, grater and ring nut, and do not use clothes that could get caught up in the appliance when working

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The TC/TCG is fitted out with:

- relays in the command circuit for restarting the appliance if there is a power cut;
- protection grille (1) under the grater (*vedi FIG.* $n^{\circ}1$), to avoid any possible contact with the surface of the roller when grating;
- micro-magnet switch (2) automatically stops the appliance when the presser lever on the TCG is raised

The TC/TCG is fitted out with electrical and mechanical safety protections that conform to the standards in force. These protections are for when the appliance is working and when it is being cleaned or serviced. However, there are **RESIDUAL RISKS** that cannot be completely eliminated and are indicated by the wording **CAUTION** in this manual. These risks refer to the risk of being cut or injured when handling the blade or grater mounted on the TCG while cleaning.



2

FIG. n°1 - TC/TCG safety protections

1.3 - APPLIANCE DESCRIPTION

1.3.1 -General Description

- We have designed and manufactured the TC/TCG guaranteeing:
- the maximum of safety when using, cleaning and servicing;
- the maximum of hygiene thanks to a meticulous selection of the materials that come in contact with the food product, and thanks to the elimination of any sharp and rough edges that come in contact with the product, cleaning is easy and thorough;
- the appliance can be easily stripped
- robust and stable components and structure
- maximum reduced noise level thanks to the geared transmission and oil bath;
- easy to handle.

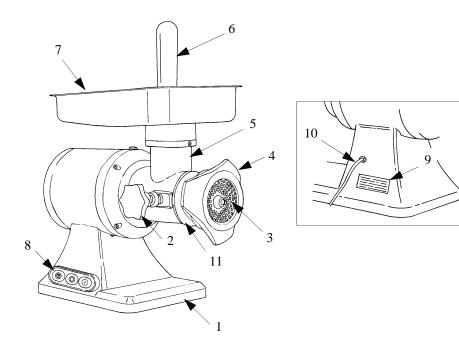
1.3.2 - Constructive Characteristics

The TC/TCG is made from AISI 304 stainless steel and aluminium alloy for food appliances. These metals are ideal regarding hygiene, they are also acid and salt

resistant and are also rust proof.

1.3.3 - Appliance Components

FIG. n°2 - general view of the TC



LEGEND:

1 - Base 7 - Food tray 2 - Knob 8 - Controls

3 - Disk 9 - serial number and data plate

4 - Lock nut 10 - power cable 5 - union 11 - mincer opening

6 - Pestle

5.2 - SETTING UP THE TC/TCG FOR USE

N.B. before using the appliance make sure all the components that can be removed are secured in position (see FIG. $n^{\circ}14$)

- mount the mincer outlet (rif. 3) and block it into position using the handle located on the side of the union (rif.4);
- mount the screw feeder, blade and disk, and then screw on the lock nut.

5.3 - FILLING THE MINCER (see FIG. $n^{\circ}10$)

When using the mincer it is important that you stand in the correct position (see $FIG.\ n^{\circ}12$). Do not position yourself so that any part of your body comes in direct contact with the mincer when working.

N.B. The mincer must be filled when working. The procedure to follow is:

- 1. place the food in the tray (1);
- 2. start the mincer using the start button "I" (see FIG. n^9 -9a);
- 3. raise the pestle (2); feed the meat into the tube (3); without forcing use the pestle to push the meat into the opening.
- 4. if the meat is suitably cut beforehand there should be no problems with the screw feeder, however, if there are problems tighten the lock nut until the meat is cut to desired size.
- 5. So both the disk and blade last longer and to maintain their sharpness in time:
 - when all the meat has been minced turn off the appliance;
 - blade and disk must always be coupled.
- 6. Do not tighten the lock nut excessively.
- 7. Press the stop button "0" when you have finished using the appliance (see FIG. $n^{\circ}9-9a$); then strip the appliance and thoroughly clean both the opening and all other components.

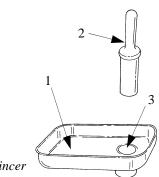


FIG. n°10 - Filling the mincer

4.4 - FUNCTIONAL CHECK

- To check the appliance works correctly proceed as follows:
- press the start button "I" and check that the screw feeder rotates anti-clockwise to the outlet opening of the TC;
- press the start button "I" and the stop button "0" and check the grater roller turns in the direction indicated by the arrow on the sticky label on the grater (see FIG. $n^{\circ}8$);
- by pressing the reverse button "T" check the grater roller changes direction and starts turning clockwise.
- using the presser lever see if the appliance automatically stops



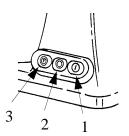
sticky label with arrow indicating the rotation of the grater roller

FIG. n°8 - Grater Rotation

CHAP. 5 - USING THE APPLIANCE

5.1 - CONTROLS

The controls for the TC/TCG are shown in FIG. $n^{\circ}9$.

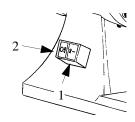


- 1 Start button "I".
- 2 Stop button "0".
- 3 Reverse button "T".

FIG. n°9 - Controls

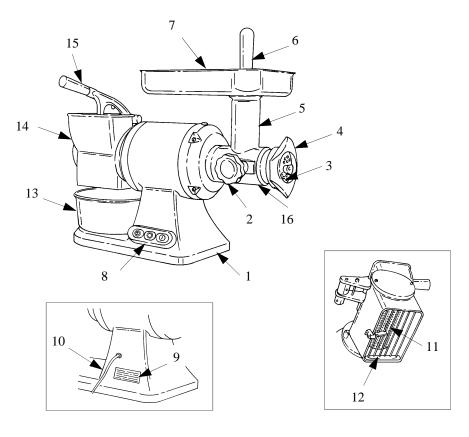
5.1.1 - Controls for FRENCH KIT

The controls for the FRENCH KIT are arranged on the TC/TCG as shown in FIG.n°9a.



- 1 Start button "I".
- 2 Stop button "0".

FIG. n°9a - Controls for FRENCH KIT



LEGEND:

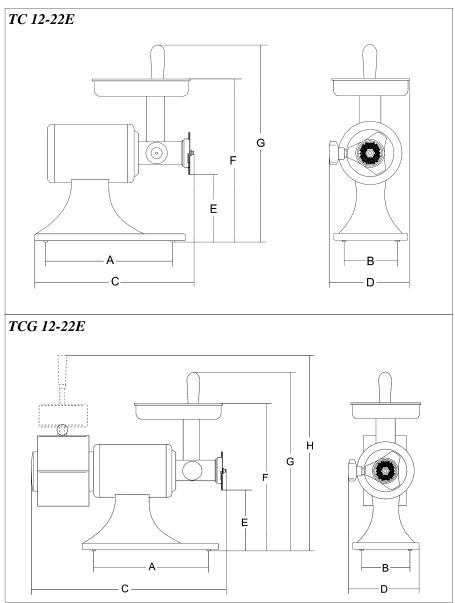
- 1 Base
- 2 Knob
- 3 Disk
- 4 Lock nut
- 5 Union
- 6 Pestle
- 7 Food tray
- 8 Controls
- 9 Serial number and data plate

- 10 Power cable
- 11 Grater roller
- 12 Protection grille
- 13 Container / bowl
- 14 Grater
- 15 Presser lever
- 16 Mincer opening

CHAP. 2 - TECHNICAL DATA

2.1 - MEASUREMENTS, WEIGHT, CHARACTERISTICS ...

FIG. n°3 - Overall dimensions



4.3.2 - Wiring diagram three-phase

TF 230 V / 50 Hz TF 380 V / 50 Hz LJ/L2 L3 I - 2 = 230 V. I - 3 = 380 V.F 17 O =STOP 0 -I =START L =LIGHT 24V M = MOTOR230V 50Hz / 380V 50Hz

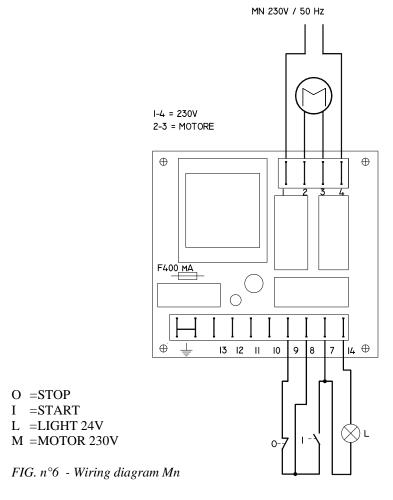
FIG. n°7 - Wiring diagram Tf

the outlet opening: if rotation is incorrect invert two of the three power supply wires (black or grey) either in the plug or in the socket

The motor mounted on the TC/TCG can run off a 230 V. three-phase tension or off a 400V three-phase tension supply. Unless otherwise specified, all connections are for a 380V supply. If the appliance has to be adapted to a 230 V three-phase circuit call the "SERVICE CENTRE" for assistance.

4.3 - WIRING DIAGRAMS TC/TCG 12-22E

4.3.1 - Wiring diagram for single-phase



TAB. n°1 - MEASUREMENTS AND TECHNICAL CHARACTERISTICS

Model	u.m.	TC 12E	TC 22E	TCG 12E	TCG 22E
Power Supply	Mn Tf	230 V. / 50Hz 230-400 V. / 50Hz			
A x B	mm	225x185	225x185	265x190	265x190
CxDxF	mm	430x215x445	440x215x445	600x300x455	620x300x455
E G	mm	140 520	135 520	155 530	145 530
Roller revolutions	R.p.m.	/	/	1400	1400
Ø Plate	mm	70	82	70	82
Ø holes plate	mm	4,5	4,5	4,5	4,5
Output/10 min. TC	Kg/ 10 min.	25	33	25	33
Motor	Нр	1	1.2	1	1.2
Power	Watt	735	800	735	800
Net weight	kg	18	22	23	26
Noise level	dB	≤73	≤73	≤73	≤73

<u>CAUTION</u>: the appliance is designed for the electrical specifications given on the plate applied to the rear of the appliance (see FIG. $n^{\circ}2-2a$); before connecting to the electricity power supply refer to chapter **4.2 connecting to the electricity supply**

CHAP. 3 - CONSIGNING THE APPLIANCE

3.1 - TRANSPORTING THE APPLIANCE (see FIG. $n^{\circ}4$)

The TC/TCG leaves our warehouse carefully packed; packaging consists in:

- a) a resistant cardboard box;
- e) pestle;

b) the appliance;

f) CE Certificate of Conformity.

- c) this manual;
- d) food tray;

12

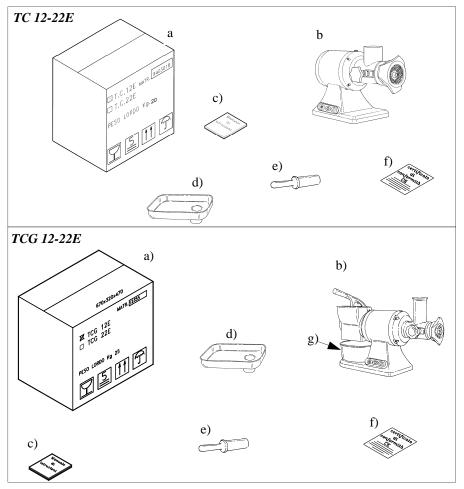


FIG. n°4 - packaging

3.2 - CHECKING PACKAGING UPON CONSIGNMENT

When the goods are received proceed with opening the packaging if there are no signs of damage, and make sure that inside there are all the listed items (see Fig. n°4). If when the goods are delivered there are signs of damage to the packaging, such as dents or if they have been dropped, immediately inform the forwarding agent or courier, and within three days from the date indicated on the documents draw up a detailed list and report of all damage to the goods. **Do not turn the packed goods upside down!!** When transporting the package make sure its four main points are firmly secured (maintain the goods parallel to the ground).

3.3 - DISPOSING OF PACKAGING

The various items used for packaging (cardboard, pallets, plastic straps, polyurethane foam) are normal urban waste products and can be disposed of without difficulty.

If the appliance is destined to countries where there are specific standards regarding waste, dispose of packaging respecting the standards and laws in force.

CHAP. 4 INSTALLING THE APPLIANCE

4.1 - APPLIANCE LOCATION

The work surface where the TC/TCG will be located must be suitable for the size of the appliance, please refer to the measurements given in Tab. 1. The work surface must be level and dry and at a height of 80 cm from the ground.

The appliance must be located in a non-salty environment with a max humidity value of 75% and with a temperature between +5° and +35°C; and however, always in areas and environments that do not cause any type of malfunction to the appliance.

4.2 - CONNECTING TO THE ELECTRICITY SUPPLY

4.2.1 - TC/TCG with a single-phase motor

The TC/TCG comes supplied with a $3 \times 1.5 \text{ mm}^2$ section (thickness) and $\cong 1.5 \text{ m}$ long power cable.

Connect the TC/TCG to a 230V./50Hz power supply, interposing a differential -thermo magnetic switch type 10A, Δ I = 0.03A. At this point make sure the main earth circuit functions correctly.

Also check that the information given on the technical data and serial number plate ($FIG.\ n^{\circ}5$) corresponds to the information given in the accompanying documents.



FIG. n°5 Technical data & serial number plate

4.2.2 - TC/TCG with three-phase motor

The TC/TCG comes supplied with a $5 \times 1,5 \text{ mm}^2$ section (thickness) and $\cong 1.5 \text{ m}$. long power cable.

Use a CEI (red) plug to connect the TC/TCG to a three-phase supply 400V./50Hz source , interposing a differential-thermo magnetic switch type 10 A, $\Delta I=0.03$ A. At this point make sure the earth circuit functions correctly.

Before actually connecting the appliance to the three-phase power supply, check that the screw feeder rotates in the right direction. To do this, press the "I" button (see FIG. n. °9-9a) and then immediately press the "0" button.

The mincer screw feeder should rotate in an anti-clockwise direction in respect to