



Contents

Introduction	1	Maintenance	6
Installation	1	Compliance with regulations	7
Use and safety	3	Parts list - exploded view	A
Cleaning, hygiene and storage	5	Electrical diagrams	C
Fault-finding	5		

Introduction

The User Manual contains useful information for the user on how to work correctly and in complete safety, and is designed to make it easier to use the machine (called "machine" or "appliance" below).

What follows is in no case intended to be a long list of warnings and constraints, but rather as a series of instructions meant to improve the service provided by the machine in every respect, and particularly to avoid a series of injuries or damage to equipment that might result from inappropriate procedures for use and management.

It is essential that all the people responsible for transporting, installing, commissioning, using, maintaining, repairing or dismantling the machine should consult this manual and read it carefully before proceeding with the various operations, in order to avoid any incorrect or inappropriate handling that might result in damage to the machine or put people's safety at risk.

It is just as important that the Manual should always be available to the operator and it should be kept carefully where the machine is used ready for easy and immediate consultation in case of any doubt, or in any case, whenever the need arises.

If after reading the Manual, there are still any doubts concerning how to use the machine, please do not hesitate to contact the Manufacturer or approved After Sales Service provider, who is constantly available to ensure quick and careful service for improved machine operation and optimum efficiency.

Note that the safety, hygiene and environmental protection standards currently applicable in the country where the machine is installed must always be applied during all phases of machine operation. Consequently it is the user's responsibility to ensure that the machine is operated and used solely under the optimum safety conditions laid down for people, animals and property.

Introduction

1.1 DESCRIPTION

This multi-purpose vegetable slicer is used for slicing, fine slicing, stripping, grating, cutting into chips and cubes various food products (preparation of crudités, vegetables, fruits, cheeses, etc.).

With its varied cutting equipment which provides high hourly outputs, this is the professional vegetable slicer for restaurants, community kitchens and small industries.

-  1.1
- A Pusher
 - B Ram
 - C Hopper
 - D Casing
 - E Base
 - F Stand
 - G Body
 - H Control panel
 - I Locking pin

Installation



ATTENTION!!

Machine storage: -25°C to +50°C

Ambient temperature during operation: +4°C to +40°C

This machine is for professional use and must be used by staff trained to use, clean and maintain it, in terms of reliability and safety.

Use the machine in adequately lit premises (See applicable technical standard for the country of use. In Europe, refer to standard EN 12464-1)

When handling the machine, always check that the parts taken hold of are not mobile elements: risk of dropping and injury to the lower limbs.

The machine is not designed for use in explosive atmospheres.

2.1 DIMENSIONS - WEIGHT (INDICATION ONLY)

- Packaging dimensions in mm:

L: 580 W: 300 H: 600

- Appliance dimensions:  2.1

- Appliance weight:  2.1

2.2 POSITION AND ORGANISATION 2.2

- On a table of a maximum height of between 700 and 900 mm, the vegetable slicer takes a standard tub of a max. height of 200 mm.

- On a functional moveable base (supplied as an option).

- With tubs of large dimensions, place the vegetable slicer on the table edge or use the moveable base.

2.3 ELECTRICAL CONNECTION



ATTENTION!!

Connection to the electrical power supply must be done according to proper professional practice by a qualified and authorised person (see current standards and legislation in the country of installation).

If an adapter is used on the socket, a check must be made that the electrical characteristics of this adapter are not lower than those of the machine.

Do not use multiple plugs

The AC power supply to the machine must comply with the following conditions;

- Maximum voltage variation: $\pm 5\%$
- Maximum frequency variation: $\pm 1\%$ on a continuous basis, $\pm 2\%$ over short periods

ATTENTION: the electrical installation must comply (for design, creation and maintenance) with the legal and standard requirements in the country where used.

- Check that the electric mains voltage, the value shown on the specification plate and the label on the power cable are the same.
- The machine's electrical power supply must be protected against voltage surges (short-circuits and excess voltages) by using fuses or thermal relays of the appropriate gauge relative to the place of installation and machine specifications – see the specifications shown in column G of figure 2.3a

ATTENTION: Concerning protection against indirect contact (depending on the type of power supply provided and connection of the exposed conductive parts to the equipotential protection circuit), refer to point 6.3.3 of EN 60204-1 (IEC 60204-1) with the use of protection devices for automatic shut-off of power in the event of an insulation fault with a TN or TT, system, or for the IT system, with the use of a permanent insulation or differentials controller for automatic shut-off. The requirements of IEC 60364-4-41, 413.1 must apply for this protection.

For example: in a TT system, a differential circuit breaker must be installed upline of the power supply, with a suitable power cut-off (e.g.: 30 mA) on the earthing installation for the place where it is planned to install the machine.

ATTENTION: Failure to comply with these instructions means the customer runs the risk of machine failure and/or accidents due to direct or indirect contacts.

- Check that the electric mains voltage and the value shown on the specification plate and the label on the power cable are the same.
- The machine must be protected by a residual current device (RCD) and a fuse of a rating shown in column F of the specifications.

• **Motor specifications:**  **2.3**

- A** Number of phases (1 single phase or 3 three-phase)
- B** Nominal voltage in volts (value, range or commutation)
- C** Frequency (Hertz)
- D** Nominal rating (Watts)
- E** Nominal current (Amperes)
- F** Rating of the fuse protecting the electric line (Amperes)

1) Dual-voltage three-phase motor.

- A standardised 3-phase + Earth wall socket rated at 20A will be required and a relevant sealed plug to be fitted onto the power lead.



Must be earthed with a green/yellow wire.

- Check the direction of rotation with the ejector fitted in the machine.

- Remove the pusher after unlocking it (anti-clockwise direction ).

- Press the "On" button.

- Make a visual check on the ejector's rotation via the pusher tube. The ejector should turn in an anti-clockwise direction .

- If the direction of rotation is reversed, change over the 2 phase wires on the power socket.

• Connection is made at the upper voltage  (e.g. 400V). To connect at a lower voltage,  (e.g. 230V), proceed as follows:

- Disconnect the appliance and turn it over.
- Remove the 4 case retaining screws.

- Change the integral plate wire by moving the cable connection terminal marked as upper voltage (400V) onto that marked as lower voltage (230V).
- Change the motor wire connections (see electrical diagram).
- Refit the casing, then check the direction of rotation.

2) Single phase motor.

A standardised 2-pole + Earth wall socket rated at 10/16A will be required.

- Warning to the installer:

This electronic variable-speed vegetable slicer is fitted with an integral filter without going via the variator. To be effective, the system's earth must be of good quality, otherwise interference may pass via the variator and damage it.



Must be earthed by green/yellow wire.

- **No earth connection = no protection = risk of failure + DANGER for the user!**

Note: The earth values are defined according to the residual differential current (See standard NFC 15100 and PROMOTELEC guide) and must be checked by an electrician.



Damage caused by a lack of earth will not be covered by the warranty



In certain cases, depending on the sensitivity of the protective RCD, SI-type (Super Immunity) devices may need to be fitted to prevent unwanted tripping.

To PAT test the Electrolux Range of Food Preparation Equipment, the PCB board needs to be disconnected before any test is done. This is due to the fact that the boards are fitted with a grounding diode that can give incorrect result during such a test. Also on a standard appliance a flash test of 25 amps and up to 3000v is used but, as you would expect, to use this on equipment, which has a printed circuit, board would be quite destructive to that board. We would recommend the use of a PAT tester approved for computer systems which use a lower rate of amps.

The appliance is perfectly safe and is CE certificated. There are two ways to get overcame this problem.

- Disconnect the board as instructed and test using test for PC's,
- Or install the mixer on a fused spur (no plug) as this takes it away from being a portable appliance and the PAT test is then not needed.

Use and safety



ATTENTION!!

Clean the machine properly prior to its first use

Uncontrolled closure of the lid or ram press involves a risk of crushing the fingers.



Never put a hand in the ejection area while the machine is in operation; risk of injury. It is strictly forbidden to put the safety systems out of action or modify them: Risk of permanent injury!!!!

Check that the safety devices operate correctly each time before using (see paragraph on «safety system adjustments»). Never put a hand, a hard or frozen object into the hopper with the machine on.

For health and safety reasons, always use a washable or disposable strong head covering that covers the hair completely.

ATTENTION: All operations, whether using, cleaning or maintenance, present risks of cuts; never force and always keep hands a reasonable distance from cutting edges.

Always use appropriate protective equipment when carrying out these operations.



3.1 THE USER'S SAFETY IS GUARANTEED BY:

- The motor braked stop when the lever-ram is opened for risk-free loading.
- The impossibility of starting the motor in the absence of the hopper / ram.
- The dimensions of the long vegetable small hopper.
- The absence of risk by access to the ejection chute linked to the design of the cutting chamber, the ejector and the plates.
- Compliance with the instructions in this manual for using, cleaning and maintaining the appliance.

3.2 CHOICE OF CUTTING EQUIPMENT

3.2a

- **C slicer plates:** 1 to 14 mm straight cut.

Note: The C14 plate is only to be used with the FT or MT grids.

- **CW slicer plates:** 2 to 6 mm crinkle cut for:
 - Vegetables: potatoes, carrots, aubergines, beetroot, celery, cabbage, mushrooms, cucumbers, courgettes, chicory, fennel, onions, leeks, radish, etc.
 - Fruits: almonds, bananas, apples, etc.

3.2b

- **CC curved plates:** 1 to 5 mm cutting of delicate and stringy products.
 - Recommended for tomatoes, citrus fruit, mushrooms, salad chiffonnades and also all the other products described opposite.

3.2c

- **AS stripping plates:** cutting into 2 to 4 mm sticks.
 - **AS 2:** fine 2 x 2 mm patatas paja,
 - **AS 3:** medium 3 x 3 mm apio, zanahoria
 - **AS 4:** large 4 x 4 mm for matchstick potatoes

3.2d

- **J - P - K grater plates**
- **J2** fine **J3** medium **J4** large **J7** very large **J9** very large.

- Vegetables: carrots, "straw" potatoes, celeriac salad, red cabbage, beetroot, black radishes, horseradish and rœsti.
- Cheese: Gruyere and mozzarella.
- Other: walnuts, almonds, breadcrumbs, chocolate, etc.
- **P:** For parmesan, breadcrumbs, almonds, black radish and chocolate.
- **K:** Special grating of raw potatoes (Knödeln).

3.2e

- **FT chip grids:** 6 to 12 mm thick cut when combined with a C/CW plate of the same thickness.

3.2f

- **MT dicing grid:** cutting into 5 to 20 mm square sections when combined with a C/CW plate for:
 - Cubes or parallelepipeds: diced vegetables or fruits, mixed diced vegetables, minestrone, sautéed or deep-fried potatoes and soups.

To use the MT05 grid, only the small hopper with removable pusher should be used.

Indication of output (kg / hr):

Crisps with C 2	250
Potatoes C 3	300
Grated carrots J 3	250
Chips C 10 + FT 10	500
Sautéed potatoes C 14 + MT 20	600
Diced vegetables C 8 + MT 8	450

3.3 SETTING UP / USING



There is a risk of cuts with all these operations. Never force and keep the hands at a reasonable distance from the knives.

- The vegetable slicer is supplied with the ejector fitted on the drive shaft. Press the cover latch upwards and raise the cover up to the clip stop to remove the ejector.

Before starting any work, always make sure the cutting chamber, the drive shaft, the ejector, the plate and the grid are clean.

1) For slicing, thin slicing, grating and stripping

- Fit the cutting chamber.
- Fit the ejector onto the drive shaft flat.
- Install the required plate (slicer, stripper or grater).
- Turn the plate in a clockwise direction  to find the bayonet opening, then continue in the same direction until the pin stop.
- Close the cover and make sure it is locked.
- To remove the plate, turn in the opposite direction and raise it using the finger grips on its outside. If it remains stuck, see § 5.3.

2) For cutting chips or cubes

- Fit the cutting chamber.
- Fit the ejector (see § above).
- Place the chosen grid in its housing making sure that it does not wobble (cleanliness of the supports).

- Then install the chosen plate and close the cover.
- *Recommendation: For cutting products of different hardnesses with an **MT** grid, start by cutting the soft products, as these cannot push cubes of hard products held in the grid. For hard products of the carrot or celery type, or very adherent products of the cheese type, it is recommended that the small hopper is used.*

3) Operating



- Control panel:
 - A** "Off" button.
 - B** 1 speed "On" button
 - C** Pulse-operation "On" button
 - D** 2 speed "On" button
 - E - F** Speed selection button. Variable-speed model.
 - G** Speed display.

The slicer can be operated if:

- the hopper is locked
- the ram is lowered
 - a) Continual operation:
 - start by pressing **B**: speed 1
 - start by pressing **D**: speed 2 (depending on model)
 - b) Pulse operation:
 - start by pressing **C**
 - c) Variable speed:
 - Speed selection on **G** by pressing buttons **E** and **F**.

Note:

In the event of a prolonged stop over several days, disconnect the appliance so that the electronic variable speed unit is not left live.

- d) Stopping:
 - Button **A** must be used when the work is finished.

3.4 HOPPER SELECTION AND FUNCTIONS

1) Large hopper with hinged lever-ram.

A Cutting into slices **B** Stripping **C** Grating

- Processing large dimension products (Maximum 160 x 80 mm, corresponding to 1/4 cabbage).
- Manual loading is by introducing the products either singly or in handfuls, making sure they are correctly positioned to prevent any incorrect cutting. Rest "delicate" products (tomatoes, citrus fruit, etc.) against the side wall.

2) Small hopper with removable pusher.

- For cutting long products into slices (carrots, chicory, cucumbers, leeks, etc.) maximum opening Ø 52 mm.

For cutting into slices, always present long products by their tips.

- Manual loading is by introducing the products vertically into the small hopper, either singly or in handfuls.
- Recommendations to prevent:
 - A sloping, uneven cut: arrange fine products "head-to-tail".
 - Jamming: cut the vegetable ends.

3.5 USING THE LARGE HOPPER AND THE LEVER-RAM

The vegetable will only operate if the cover is closed.

- Keep the pusher inside of the lever-ram as this prevents products from coming back up.

- Press the ON button.

- Raise the lever-ram

- When the ram comes out of the hopper, the motor immediately stops, which means that products can be changed in complete safety.

- On lowering the lever, the vegetable slicer starts automatically.

For thin slicing and slicing.

- Using the lever-ram, follow the products into the hopper as far as the lower stop, using gradual force on the lever-ram.
- Raise the lever-ram and start a new cycle.
- When the work is finished, press the OFF button.

Note: Use gradual force to follow through with the lever-ram depending on:

- the product to be processed (soft product = light force),
- the cutting equipment selected (a grater requires more force than a slicing plate).

3.6 USING THE SMALL HOPPER AND THE PUSHER

- Leave the lever-ram in the down position and unlock the pusher.
- Press the ON button to start.
- Remove the pusher with one hand and load the products with the other.

- Push the products with the pusher and start a new cycle.
- When the work is finished, press the OFF button.



Never introduce the hand or a hard body into the hopper with the machine on.

Cleaning, hygiene and storage



ATTENTION!!

Before dismantling any part, disconnect the appliance from the power supply.

Before using any cleaning product, be sure to read the instruction and safety instructions accompanying the product and use appropriate protective equipment.

Do not wash the machine using a pressure washer, a spray or by immersion

Take care when handling screens and plates. (Risk of CUTS – ELECTRIC SHOCK).

4.1 BETWEEN TWO SESSIONS 4.1

- Remove the cutting equipment (plate, grid and ejector) and the pusher.
- Remove the cutting chamber.
- Remove the hopper-cover and the lever-ram, following the instructions below:

① Raise the ram up to the clipped position.
(This is the only position in which the pin can be locked/unlocked).

- ② Unlock the pin by pulling it out approximately 2 cm.
- ③ Lower the ram to facilitate withdrawal of the assembly.
- ④ Completely remove the pin.
- ⑤ The hopper-cover and cover-ram assembly can be withdrawn.
- Wash the equipment in hot water, rinse and dry.
- Clean the body with a clean, damp sponge.
- The cutting chamber, hopper and lever-ram can be washed in a dish-washer.

4.2 AFTER USE

- Refer to § 4.1.
- Clean the removable elements in hot water with the addition of detergent-degreaser-disinfectant which is compatible with the materials.
- Rinse with clean water and leave to dry.

Recommendation: for MT grids, push any trapped cubes using a carrot. Metal instruments are not to be used.

- Clean the outside of the vegetable slicer with a damp sponge and a mild detergent and then rinse using a clean sponge.

Note:

- Do not use abrasive detergents as these scratch the surfaces, or bleach-based detergents as these tarnish the aluminium.

4.2

4.3 STORAGE 4.3

- After cleaning, put all the cutting equipment away carefully in the storage case fixed to the wall.

Fault-finding

5.1 IF THE APPLIANCE WILL NOT START, CHECK THAT:

- The machine is plugged in.
- The electrical power supply to the socket is correct.
- The hopper is properly locked.
- The lever-ram is down.
- The pin is locked.

5.2 ABNORMAL NOISE:

- Stop the appliance.
- Check that the plate, grid and ejector are properly in place.
- Remove, clean if necessary and refit.
- If the noise persists and the appliance lacks power, check that:
 - The three-phase motor is not running on 2 phases.
 - The drive belt is not worn or needs tightening (see § 6.1).

5.3 JAMMED PLATE:

- Unplug the appliance.
- Place one hand flat on the ejector and stop it rotating.
- With the other hand, hold the plate on the outside and using the finger grips turn sharply in an anti-clockwise direction .
- Raise it using a to-and-fro rotation movement.  5.3b

5.3a

5.4 WORK QUALITY

- Stop the machine before starting any work on it.
- If the products are not being ejected properly, check that:
 - The ejector is fitted properly.
 - Products in the reception tray are not obstructing the outlet.
 - There is no accumulation of products in the cutting chamber.
- If the cutting is not of sufficient quality, check:
 - The direction of rotation (anti-clockwise  seen from above).

- The correct speed has been selected (depending on model).
- The correct cutting equipment has been selected (see § 3.2).
- The condition of the cutting equipment.
- The choice of hopper.
- The presentation of the products in the hopper (see § 3-4)



If the incident persists, contact your local dealer's service department.

Maintenance



Maintenance may only be carried out by persons who are qualified, trained and authorised.

6.1 MECHANISM

- The vegetable slicer requires only minimum maintenance (the motor and mechanism bearings are greased for life).
- It is recommended that the tension and wear of the drive belt is checked at least once a year.

To check it, proceed as follows:

- Turn the appliance over.  **6.1**
- Remove the 4 casing retaining screws
- **To tighten the drive belt**
 - Unscrew (1 turn) the 3 motor support retaining screws A (10 mm pipe wrench) .
 - Use a screwdriver as a lever between the pulley and the motor support plate.
 - Tighten the 2 screws located at the front of the motor support.

- Check the drive belt tension by pressing on it between the motor support and the large pulley with the thumb. A deflection of approximately 3 mm is sought.
- Tighten screw A located at the rear of the motor support.
- Remove any drive belt particles found on the inside of the casing.
- Check the condition of the electrical connections.
- Refit the casing.
- **Access to the electrical components:**
 - Disconnect the machine.



Residual voltage at the capacitor terminals.

- The capacitors may remain electrically charged.
- In order to avoid any risk when working on the machine, it is recommended that they are discharged by connecting across their terminals with an insulated conductor (a screwdriver, for example).

6.2 MAINTENANCE OF THE CUTTING EQUIPMENT

- Slicer plates: sharpening the knives
 - Remove the retaining screws,
 - Use a wet grindstone making sure to maintain the cutting angle.
- Chip grids.

The blades cannot be changed as they are mould-cast and tensioned for life.

- Rework the blade wire where necessary using a soft stone.

- Dicing grids.

The blades cannot be changed as they are mould-cast and tensioned for life.

 - Rework where necessary using a small file if the blades have been damaged after a blow.
- Graters.

The graters cannot be sharpened.

 - If there is significant wear in the grater holes, change the fitting.

6.3 ADJUSTMENT OF THE SAFETY DEVICES 6.3

- The correct operation of the safety devices should be checked frequently. The motor should stop in less than 2 seconds:
 - On opening the cover. The motor should not start if the cover is not properly closed (latch clipped),
 - On raising the lever-ram, dimension F at max. 45 mm from the edge of the hopper.
- If either of the two safety functions does not work:
 - Do not use the appliance.
 - Have it adjusted by your dealer's service department.

6.4 ELECTRICAL COMPONENTS

See electrical diagram.

• Wire colour identification:

- Power circuit : (F) black
- Control circuit : (A) red
- Motor : U1 - V1 - W1
- Phases : L1 / L2 / L3
- Neutral : N
- Earth : B/C yellow/green.

• Component identification:

- C.C. : Control card
- S2 : Hopper safety device

- S3 : Temperature sensor (depending on model)
- S5 : Ram safety device
- M : Motor
- C.Pu. : Power card
- B1 : Terminal block
- C D : Start capacitor
- C P : Running capacitor
- C b : Brake capacitor
- K1 : Start relay
- V : Variable speed control
- Fur : Spare fuse
- X : Power supply cord

6.5 ADDRESS FOR SERVICE REQUIREMENTS

We advise you first to contact the dealer who sold you the machine.



For any requests for information or orders for spare parts, specify the type of machine, the serial number and the electrical specifications.

The manufacturer reserves the right to modify and make improvements to its products without notice.

Dealer's stamp

Date of purchase:

Compliance with regulations

The machine has been designed and manufactured in compliance with:

- Machine directive 2006/42 CEE.
- CEM directive 2004/108 CEE.
- Low voltage directive 2006/95/CEE,
- Machine recycling directive 2002/95/CEE
- directive " WEEE " 2002/96/CEE

The "  " symbol on the product indicates that this product should not be considered as household rubbish. Instead, it should be taken to a recycling area for electric and electronic equipment. By making sure that the product is correctly disposed of in this way, you are assisting in preventing damage to the environment and to the health of persons which may result following uncontrolled disposal of this product. For further information on recycling this product, please contact the sales department or the product retailer, the after-sales department or the waste treatment department in question.

- directive " Waste " 2006/12/CEE

The machine is designed in such a way that it does not contribute, or contributes as little as possible, to increasing the quantity or noxiousness of waste and the risks of pollution.

Make sure you respect the recycling conditions.

- directive "Packaging and packaging waste "94/62/CEE

The machine packaging is designed in such a way that it does not contribute, or contributes as little as possible, to increasing the quantity or noxiousness of waste and the risks of pollution.

Make sure you eliminate the various parts of the packaging in the appropriate recycling points.

- **To European standards:**

EN 60 204-1-2006 machine electrical equipment.
EN 1678-1998 vegetable slicer, integral safety.

This compliance is certified by:

- The CE conformity mark, affixed on the machine,
- The relevant CE declaration of conformity, associated with the warranty.
- This instruction manual, which must be given to the operator.

Acoustic specifications:

- The acoustic pressure level measured in accordance with the test code EN ISO 3744 and EN ISO 11201 is 73 dBA under the conditions specified in standard EN 1678 : 1998 (use of a fine grater for processing raw, unpeeled potatoes). When empty the level is < 70 dBA.

Protection indices according to the standard EN 60529-2000:

- IP55 electrical controls
- IP24 overall machine

Integral safety:

- The machine has been designed and manufactured respecting the regulations and standards relating to it indicated above.
- The operator must be trained before using the machine and informed of any residual risks.

Food hygiene:

The machine is made from materials that conform to the following regulations and standards:

- Directive 1935/2004/CEE: materials and objects in contact with foodstuffs,
- Standards EN 601-2004: cast aluminium alloys in contact with foodstuffs.
- Directive EN 1672-2-2005 : Prescriptions relating to hygiene

The surfaces of the food area are smooth and easy to clean. Use detergents that are approved for food hygiene and respect the instructions for their use.

Vibration

The maximum level of vibration measured on the handle during use is: <2.5 m/s²