SEPHRA®

CATERING EQUIPMENT AND SUPPLIES

DUO LANE 240 COMMERCIAL DONUT MACHINE OPERATING MANUAL

MODEL SEMILDON01
VERSION 2.0.6 MARCH 2024

Sephra are your one-stop shop for Donut Machines, Consumables, Spare Parts and Repairs.

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IMPORTANT SAFEGUARDS

CAUTION: Read the instructions before using the machine.

Careful acquaintance with this manual will help you to master this equipment correctly and fast.

- Operation with oil level below MIN mark may lead to oil combustion!
- Hot oil is extremely dangerous! Protective gear such as gloves, apron, face shield and sleeves should be worn while operating the machine!
- The machine should operate on a reliable table to avoid a fall or an accidental push.
- There must not be any sources of open fire near the machine as heated oil is flammable.
- The premises must be equipped with fire extinguisher, as heated oil cannot be put out with water.
- Avoid dropping water into hot oil.
- The frying tank's tap must always have a screwed gag against an accidental turn-on.
- Change the oil regularly because old oil has lower ignition temperature.

Please make sure that you save these instructions whether for you intend to use the appliance for Domestic or Commercial purposes.

- DO NOT disassemble the machine or separate units while equipment is connected to the mains!
- Many parts are hot while in operation!
- Burn hazard!
- DO NOT touch any moving parts of the machines in operation
- DO NOT wash the individual parts the machine under a stream of water or by dipping!
- Warning concerning possible slippery floor adjacent to the machine
- DO NOT change the design of the machine

THE LEGEND OF SEPHRA

Woven among the threads of ancient Aztec legend lies the story of Sephra, an enchanting goddess whose beauty could be described only as the richness of the dark earth combined with the lustre and glow of pure gold. Her voice was softer than the most delicate flower, and her presence carried the aroma of sweet cocoa. It was Sephra who gave the ancient Aztecs the precious gift of the cocoa tree.

The legend reveals that the spirit of Sephra nourished the cocoa trees and lived within the priceless beans they produced. The Aztec kings named the cocoa tree "Theobroma Cacao," meaning "food of the gods." So valuable were cocoa beans that they were used to pay tribute to royalty and were given as sacred offerings to the gods.

Montezuma, the ruler of the wealthy Aztec Empire, was so enchanted by Sephra that he commissioned an elite force of skilled artisans and master craftsmen to construct a temple in her honour. As a special offering to the goddess, Montezuma built a magnificent fountain in the highest room of the temple and filled it with glistening spring water, which flowed from beneath its walls. He then surrounded the fountain with a splendid array of the most perfect cocoa beans, in hopes that Sephra would continue to bless the people with the unique and valuable crop.

So pleased was Sephra with Montezuma's gift that she came to him in a dream and told him that her spirit would always live in the fountain he had given her. Moments later, Montezuma awoke to the sweet smell of cocoa lingering in the air. The aroma led him to the upper room of the temple where Sephra's fountain stood.

To his astonishment, the fountain no longer flowed with water, but with the richest, purest chocolate... this was truly a gift from the gods.

For centuries, Sephra's fountain remained hidden beneath the ruins of the ancient Aztec temple, waiting to be discovered. At long last it was, and with it was unveiled the secret of the pure, rich chocolate once coveted by gods and kings . . .

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DEAR SEPHRA CUSTOMER

Thank you for choosing one of our appliances. It is very easy to use and we do strongly recommend that you carefully read these instructions which include advice on how to use and install your appliance in order to obtain optimum results.

RECEPTION AND UNPACKING

Any product discrepancy or damage due to transport must be reported to your place of purchase or dealer within 24 hours of receiving your appliance. Please include a photo and description of the damage noticed on delivery.

ORDERING AND CONTACTING (240V)

You can order all you need for your appliance by contacting us on +44 (0)1592 656 737.

Purchase online by visiting our company website: http://www.sephra.com.

Any direct queries can be sent to: info@sephra.com.

ORDERING AND CONTACTING (120V)

You can order all you need for your appliance by contacting us on +1 858 675 3088.

Purchase online by visiting our company website: http://www.sephrausa.com.

Any direct queries can be sent to: info@sephrausa.com.

Our mission is to help you make your Sephra appliance a very profitable aspect of your business and we look forward to assisting you.

Thank you for choosing Sephra!

The Sephra team

OPERATING INSTRUCTIONS

The operating principle of the Sephra Duo Lane 240 automatic donut machine is based on automatic forming of donuts from cake based mix, frying them in oil in the frying tank divided into two streams, automatic turning and unloading of finished donuts.

Automatic forming of donuts is carried out by cutter with dough hopper (Fig.8) (Pic.1), electro-mechanic cutter drive (Fig.6) and cutter piston (Fig.7), which extrudes a dough piece in the shape of a donut out of the hopper into the frying tank (Fig.1). Donut weight can be adjusted by the mechanism of donut's weight adjustment, which is located on the cutter drive (Fig.6).
A formed donut drops into the frying tank with heated fry fat or oil onto the deflector (Fig.13), rises up to the surface and moves with the flow of fry liquid down the streams of the frying tank.

A circular flow of fry liquid is provided by the impeller (Fig.5) half-drowned into fry liquid and making necessary pressure, and the stream shield, which divides the frying tank into two communicating streams with forward and backward flow of fry liquid. The tray screens the flow from the obstacles (THE) and limits the mass of moving fry liquid, which ensures steadiness, evenness and necessary pressure of the flow all over the perimeter of the frying tank in the forward and backward streams.

At the end of the forward stream the turning skimmer carries a donut over into the backward stream with the help of the overturning and unloading mechanism. The skimmer also turns a donut onto the other side (the other side of a donut starts to fry). When skimmer lifts up with a donut, the flap also lifts by the spring and does not allow other donuts to float in under the skimmer returning to the original position. When the skimmer goes down it presses the flap to the bottom of the tray and clears the path for the next donut.

The skimmer of unloading at the end of the backward stream throws a donut out of the frying tank into the slide and from there – onto any dish. The edge of the skimmer does not allow a donut to float in the area of moving parts of the overturning and unloading mechanism. When the skimmer is lifted up, the flap does not allow the next donut to float in under the skimmer.
The time of a donut's being in each stream (time of frying) must be constant for donuts of the same weight in order to reach the same organoleptic properties of donuts regardless of the output settings of the machine. It is achieved by adjusting the correspondence of output settings to the quantity of donuts being fried simultaneously in both streams. Adjustment of output is enabled by step-by-step mode of the machine – synchronous work of the cutter drive and the donut feeding drive ensures forming a new donut simultaneously with throwing out finished one, turning over a donut from the forward stream into the backward one, and advancing donuts in both streams by the size of one donut.

The synchronization is executed by the control device (Fig.4), which gives commands to the cutter drive (Fig.6) and the overturning and unloading mechanism. Thus steady operation of the machine with any output settings is ensured.
The maximum output is achieved when there is maximum quantity of donuts in the frying tank simultaneously.

TECHNICAL DESCRIPTION

The Sephra Duo Lane 240 is intended for cooking donuts made from a cake based doughnut mix in an automatic mode. The machine is a light, compacted, portable, easy to install device. The machine is convenient to use in the sight of customers: in shops, trading pavilions, fairs, parks etc. Since the moment of dough loading, the machine carries out all technological operations automatically up to obtaining finished donuts.

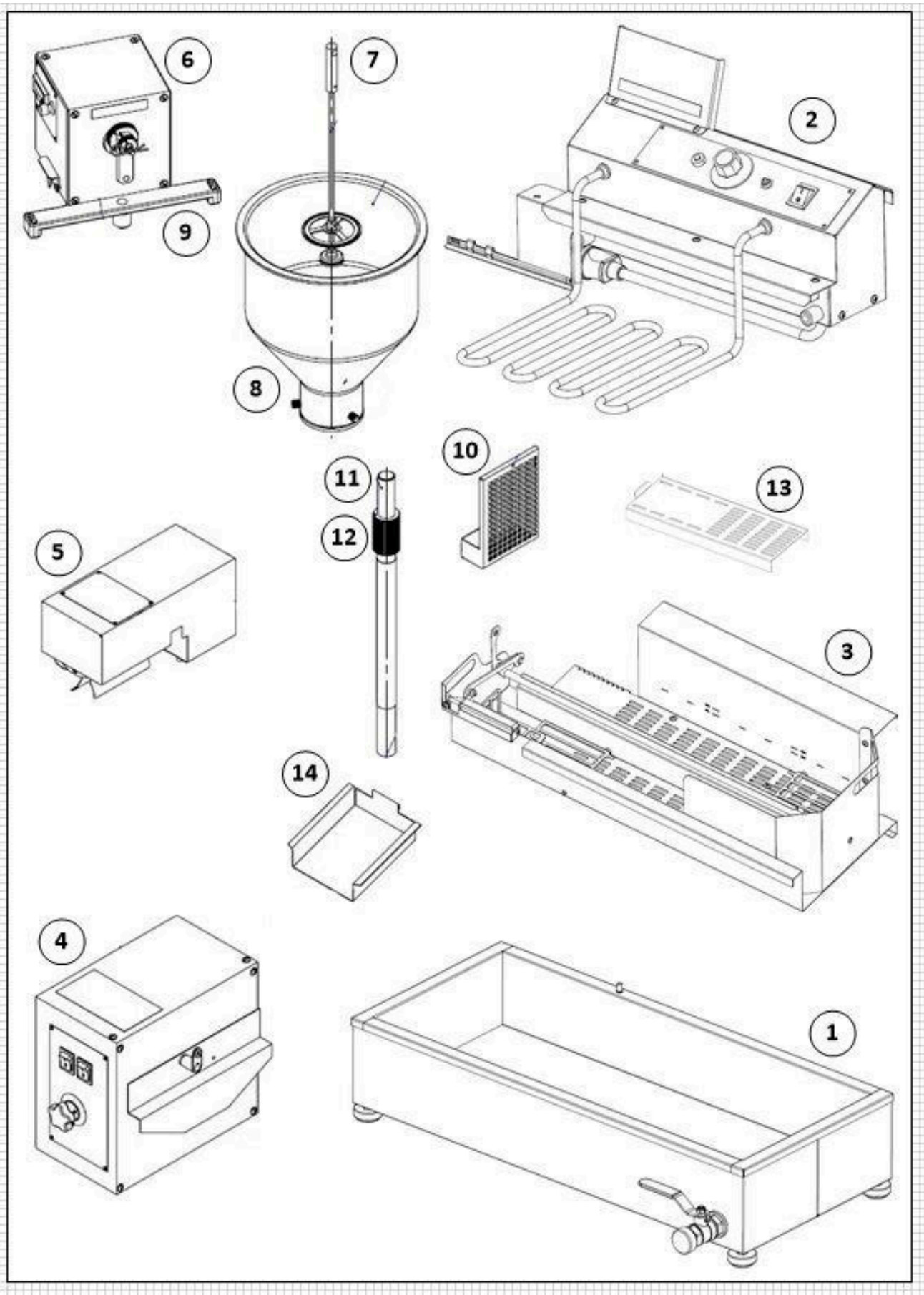
The cutter of the PRF-11/900 donut machine is equipped with a removable plunger for forming donut pieces of different shape and weight. The machine has a built-in safety system (protection against overheat) switching on automatically when turning on the machine.
The machine can operate both on fry fat and refined vegetable oil.

The possibility to adjust the output of the machine allows to use visual operation of the system (process of forming, frying, overturning, and unloading) as the dominant of a trading point and to draw attention of the customers.

The Sephra Duo Lane 240 donut machine consists of the following parts (Picture 1.):
1. Frying tank (Fig.1)
2. Tubular heating elements (THE) unit (Fig.2)
3. Tray with overturning and unloading mechanism (Fig.3)
4. Control device (control unit) (Fig.4)
5. Impeller drive (Fig.5)
6. Cutter drive (Fig.6) on a platform (Fig.9)
7. Cutter piston with a plunger (Fig.7)
8. Cutter hopper with a loose leaf (fixed three screw) (Fig.8)
9. Filter (Fig.10)
10. Stand (Fig.11) with adjustment female screw (Fig.12) (support)
11. Deflector (Fig.13)
12. Slide (Fig.14)
All the details, except the cutter hopper, are made of AISI 304 steel.
The cutter hopper is made of A5M food aluminum alloy.

The manufacturer reserved the right to change the design of the machine without preliminary notice!

TECHNICAL DESCRIPTION



TECHNICAL SPECIFICATIONS

Rated voltage: 1N~ 230 V
Rated frequency: 50-60 Hz
Rated power: 2650 W
Capacity of the frying tank: 8 L
Heating time: not more than 25 min
Capacity of the cutter hopper: 7 L

Maximum batch load weight:
- Oil: 7,5 kg
- Dough: 5 kg

Maximum output:
- traditional yeast doughnuts: up to 200 pieces per hour
- donuts made from a mixture: up to 240 pieces per hour

Weight of the machine: 27 kg

Dimensions:
- length: 790 mm
- width : 550 mm
- height with the cutter: 600 mm

The machine is stationary Class I electrical appliances (IEC 60335-1).
The machine must be operated at the ambient temperature from +10°C to +35°C. Ingress protection rating IP20 (IEC 60529).
On airborne noise emission, the A-weighted sound pressure level is below 70 db(A).

The delivery set includes:
1. Frying tank (1 pc)
2. Tubular heating elements (THE) unit (1 pc)
3. Tray with overturning and unloading mechanism (1 pc)
4. Control device (control unit) (1 pc)
5. Impeller drive (1 pc)
6. Cutter drive on a platform (1 pc)
7. Cutter piston with a removable 1 plunger (1 pc)
8. Cutter hopper with a removable 1 loose leaf (fixed three screw) (1 pc)
9. Filter (1 pc)
10. Stand with adjustment female screw (support) (1 pc)
11. Deflector (1 pc)
12. Slide (1 pc)
13. Operating manual (1 pc)
14. Packing set (1 pc)

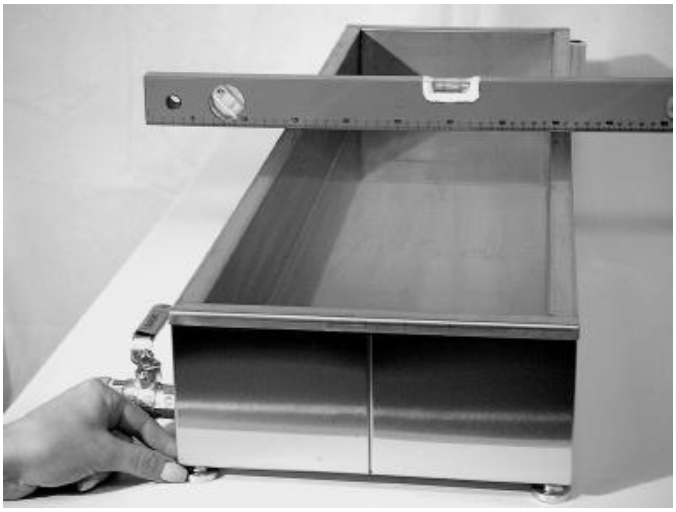
1 - Removable plunger pair (plunger and loose leaf), diameter: 36mm / 40mm

PREPARATION FOR WORK

Carefully take the parts of the machine out of the package, check the delivery set.

Remove a protective film from metal surfaces (at its presence).

Wipe THE block, control device, impeller and cutter drive with a damp fabric, then wipe dry. It is forbidden to wash all the sets mentioned above under a jet of water or dip it to the water! Other parts of the device wash up in a soap solution and wipe dry.

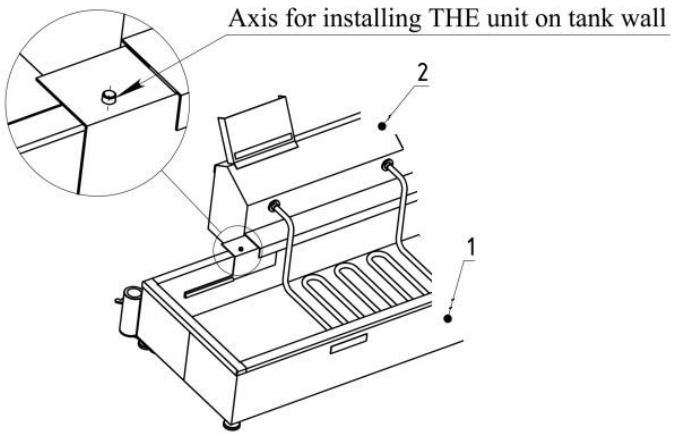


While assembling the machine, you must keep to the following sequence:

1. Setting the frying tank.
Set the frying tank (Fig.1) onto a prepared beforehand working place. With the help of level (not included in the delivery set) set the tank horizontally by rotating the legs.

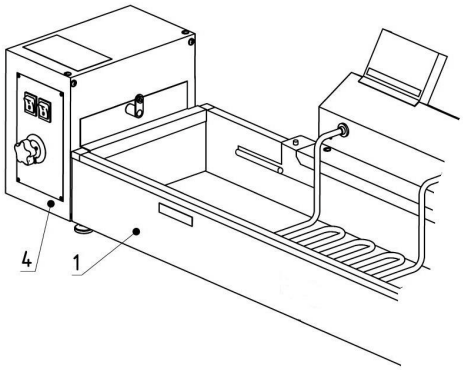
Carefully take the parts of the machine out of the package, check the delivery set.

Remove a protective film from metal surfaces (at its presence).

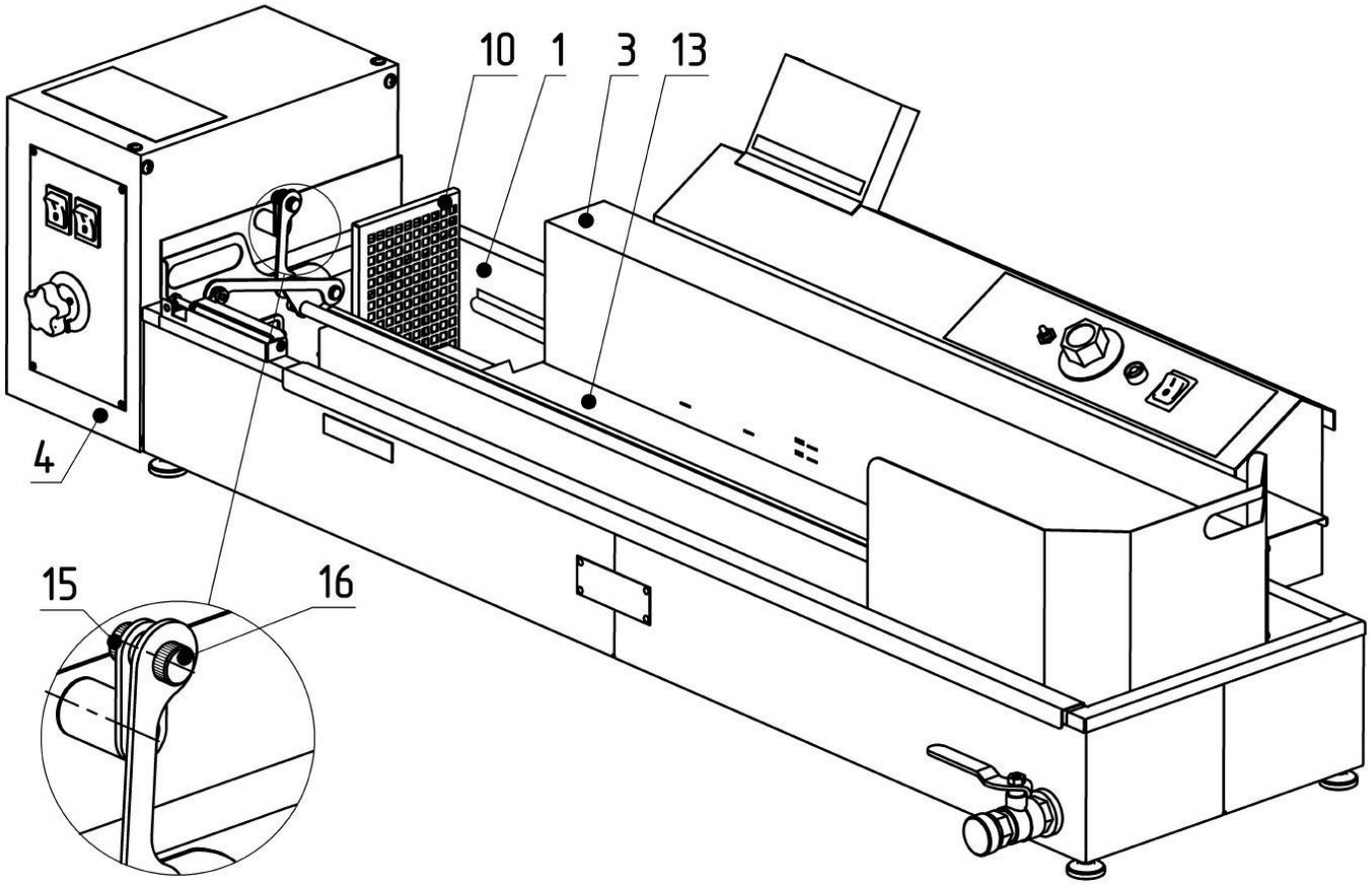


PREPARATION FOR WORK

3. Set the control device (Fig.4) on the left wall of tank (Fig.1). Be sure that the case of control device (Fig.4) is set tightly on the wall.



4. Insert the tray with the overturning and unloading mechanism (Fig.3) into the frying tank (Fig.1). Be sure that the tray (Fig.3) is tightly set on the tank wall (Fig.1). Unite the lever of the overturning and unloading mechanism (Fig.3) with the crank lever of the control device (Fig.4) using male screw (Fig.16) & female screw (Fig.15). The female screw (Fig.15) should be screwed into the male screw (Fig.16) as far as it will go. Put a filter (Fig. 10) in the frying tank (Fig. 1) to the side of set control device (Fig.4). Set deflector (Fig.13) as shown on the picture below.



AFTERSALES GUARANTEE

This appliance is guaranteed for one year on a "return to base" warranty.

We pay great attention to ensure that each of our appliances reaches the user in perfect operating condition. If you do find a problem when unpacking you appliance, please report it to the shop within 24 hours.

If you are confronted with faulty operation during the guarantee period, please contact your dealer. No damage due to incorrect use or failure to comply with the instructions is covered by the guarantee. Please do not hesitate to let us have your suggestions.

The symbol representing a waste-bin crossed out and shown on the product or its packaging indicates that this product must not be treated as ordinary household waste. It must be taken to the appropriate collection centre for recycling of electrical and electronic equipment:

- to a point of sale if an equivalent item of equipment is purchased.
- to a collection point made available in your neighbourhood (waste collection centre, selective waste collection, etc.).

By making sure that this product is disposed of in appropriate fashion you will help prevent any potentially negative consequences for the environment and human health.

Recycling of the materials will help preserve natural resources.

For any further information concerning recycling of this product, you can contact your local authorities, waste collection centre or the shop where you purchased the product.

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