

MANUALE USO E MANUTENZIONE
OPERATING AND MAINTENANCE MANUAL
MODE D'EMPLOI ET MAINTENANCE
BEDIENUNGS- UND WARTUNGSHANDBUCH
MANUAL DE INSTRUCCIONES PARA USO Y MANUTENCION

MOD. TR 70 - TR 75/E



OPERATING AND MAINTENANCE MANUAL

ENGLISH

Thank you for choosing this machine. We are sure that its performance will meet your requirements.

It is in your interest to keep the machine in perfect running order. In this handbook you will find the necessary instructions on how to use and service it.

SAFETY STANDARDS

Throughout the manual this symbol indicates important information warning you of any hazardous operation. Always read the message that follows it.



GENERAL WARNINGS



*This machine has been manufactured to make your work as safe as possible. **Caution is, nevertheless, the golden rule to follow to prevent accidents.***

KNOWING YOUR MACHINE

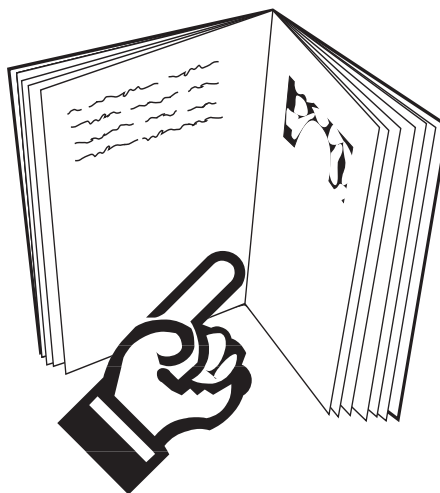


Caution: Store this manual in a safe place, near the machine, and disclose its storage location to all involved personnel.

Do not put this manual away without having first read it, regardless of any previous personal experience. A little time spent in reading will save time and extra work.

Read this handbook thoroughly before proceeding with start-up, use, maintenance and other operations. Read and rigorously follow the herein contained instructions and recommendations:

- read all **warning labels** applied to any part of the machine, and promptly replace them when they become worn or illegible;
- only trained and **authorised personnel** should operate the machine;
- **if any part jams or locks up**, before clearing make sure you first switch off the motor. **DO NOT clean, oil or grease** by hand any moving parts of the machine. In addition, **all repair and setting operations** of any moving parts with the motor running, are prohibited, unless the necessary precautions to prevent any accidents have been taken beforehand;
- **all moving parts are fitted with adequate guards and protections.** Always remount them after removal for servicing.



WEAR ADEQUATE CLOTHING

Be sure to wear tight-fitting clothing without any loose parts. Never wear open or unfasted jackets, shirts or overalls.



IMPORTANT



To prevent accidents and ensure best performance **the machine must not be modified or altered** unless authorised by the manufacturer. Nor must it be used in conditions or for purposes other than those for which it has been expressly designed. Any arbitrary modification implemented in this machine will automatically **exempt the manufacturer from any liabilities** for ensuing damage or injury.

This machine has been designed and engineered in conformity to European directives: **2006/42/CE, 2006/95/CE, 2004/108/CE and EN 453.**

BE SURE TO READ “IMPORTANT” MESSAGES

Information highlighted as “**Important**” in the Operator’s Manual and/or machine indicate specific **instructions about settings, maintenance** and so on. Failure to comply with these instructions may lead to damage to the machine.

ELECTRICAL SHOCK

For your own personal safety, before connecting the machine to mains:

- check that power mains leading to distribution socket is fitted with an appropriate multi-polar switch protected against overloads and shortcircuits.
- carry out all phase connections, as well as any neutral and ground connections (compulsory) with a standard plug compatible with the above mentioned socket. The protection lead (ground) is the one with the yellow/green insulating sheath; make sure that the power supply cable is appropriate to its use, according to length, mains voltage and machine consumption.
- unless adequate protections against electrical shock are fitted, do not operate the machine in damp or wet environments.

Strictly do not start up the machine without the protective panelling. This may jeopardise personnel safety and machine serviceability.

TECHNICAL SPECIFICATIONS OF MODEL TR 70 - TR 75/E



ENGLISH

SPECIFICATIONS TABLE

Model	A Length mm	B Width mm	C Height mm	Kneading capacity daN ≈kg	Mass daN ≈kg	Motor power kW	Maximum production per hour daN/h (based on the kind of drawplate used)
TR 70	440	250	425	1.5	28	0.38	4
TR 75/E	510	310	570	3	48	0.55	8

NOODLES PRODUCING MACHINE

Produces different kinds of noodles and is basically made up of a kneading part and of an extrusion unit in order to cut the finished product

- The elements in contact with the noodles are made of stainless steel or bronze for foodstuffs.
- Moving parts mounted on ball bearings with long-life sealing gaskets or with supports with greaser.
- Driven by one motor; belt transmissions with a reducer without maintenance requirements.
- The machine has special footers which can be adjusted and equipped with plastic material.
- Connection by flameproof power cable according to necessary supply voltage, standard length L = 2 m, without terminal plug (only 75/E).
- Supplied accessories:
 - liquid measure decanter;
 - noodle-collecting frame (only 75/E);
 - wrench for locking ring nut.
- Working elements with the ability of turning in two directions: this enables the kneading of the initial dough, not yet ready, without any damage to the drawing group.
- Protection of iron parts by furnace coating with epoxy powders.
- Easy disassembling of the working parts; the machine is freely accessible in order to carry out thorough cleaning.
- The possibility of obtaining different products thanks to the change of the relevant drawplate.

- Power:

Model		
TR 70	1-phase standard power 230/50 Hz.	1-phase optional power 110/60 Hz. 220/60 Hz.
TR 75/E	Standard power supp. - three phase 400/50 Hz.	1-phase optional power 230/50 Hz. 220/60 Hz.

INSTRUCTIONS

The machine has only been realized to prepare cereal-based flour noodles for noodle shops and catering requirements.

WARNING



*For reasons of hygiene, health and warranty, **it is strictly prohibited to use the machine for the processing of substances other than foods.** Any other uses are contrary to the applications as originally intended by the manufacturer, who shall consequently not be held liable for any damage to the machine itself or to other objects, or for any injuries to persons that may arise thereof. In taking the risk of misuse, the user will be held responsible for any consequences.*



Always keep children away from the machinery.

1. PREPARING THE MACHINE

Prepare the machine before every process cycle. BE SURE that the machine, especially parts which come in contact with food products (extrusion sleeve, Archimedean screw, pool, mixer and drawplate) are perfectly clean (see chapter 6 CLEANING on page 25).


 **Always clean with machine off.**


2. OPERATING PRINCIPLE

This machine kneads the different products desired and enables you to obtain different kinds of noodles with a different group of lengths because it draws the dough, thanks to different discs.

This action is carried out thanks to a mixer linked to an Archimedean screw which obliges the product to assume the desired shape going through a drawplate.

3. USE OF THE MACHINE

 **Only after making sure that the machine is completely clean, especially all the parts which are directly in contact with the product** (extrusion sleeve, Archimedean screw, pool, mixer, drawplate, cover, control system; if it is necessary, use some warm water; see chapter 6 CLEANING page 25) you can carry out the requested operations in order to have the desired dough.

 **Caution:** the machine will run only if the safety microswitch is serviceable and perfectly positioned.

After having turned the machine off:

- position the selector on “0” (Fig. 2 C) and verify the correct set-up of the Archimedean screw (Fig. 1 A) making sure that the cylinder part is sustained by the dragging shaft;

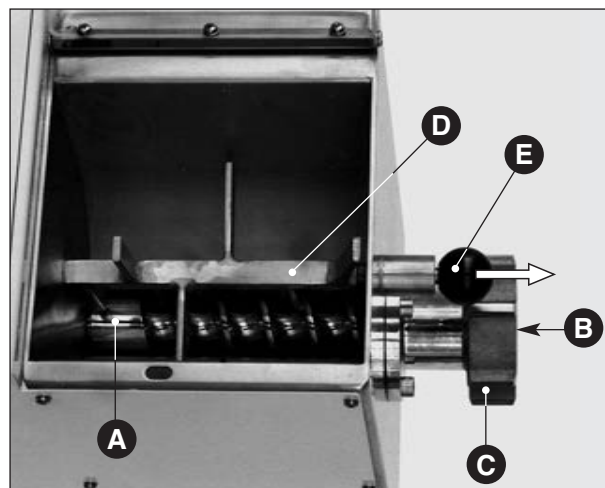


Fig. 1

Mobile support for TR 75/E



Fig. 1 bis

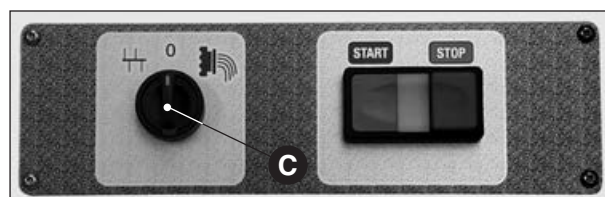


Fig. 2



Fig. 3

- then make sure that the plastic cap (**Fig. 1 B**) which replaces the drawplate is correctly positioned and the ring nut (**Fig. 1 C**) is tightly well-screwed on;
- lastly lock the mixer (**Fig. 1 D**) tightly in its seat by means of the head-knob (**Fig. 1 E**) or tighten the mobile support in the TR 75/E (**Fig. 1 bis** see page 21).

Pull up the pool cover (**Fig. 3 A**) and **always** put in the pre-established ingredients in the following sequence: flour and then, after closing the cap, all the other liquid elements.

In order to obtain the right dough, you need

to create the right ratio between the weight of the flour and the weight of the liquid part; in order to obtain a very good product, the flour has to contain a humidity percentage of no more than 15%; this allows the addition of water equal to 35% or up to 38% of the flour's weight. If you are using flours with different humidity contents, please change the quantity of the liquid in the opposite ratio. Moreover, in order to better use the machine, the product inside the pool has to be higher than at a minimum level which coincides more or less with the position of the mixer axle.

3.1 USEFUL ADVICE IN ORDER TO OBTAIN GOOD DOUGH

Any kind of flour can be used (bran or bran-flour). The dough can be kneaded **only** with eggs or with a mix of water and eggs. Water can be partially replaced by spinach or well-cut vegetables in order to obtain green noodles.

Because the flour's humidity **changes** according to the kind, the environment and the place where it is stocked, the indicated quantities have to be adapted to the kind of flour which is used, **lowering or increasing** the quantity of water.

The dough is the right one when, at the end

of kneading, it is as big as coffee beans.

If the flour forms lumps you have poured in too much liquid.

In this case, before turning the switch from **KNEAD to DRAWPLATE** you have to add some more flour and knead a little longer. If flour does not form a ball and is too floury, add some more water.

For the dough for the sheet of pasta which is to be re-kneaded please use "00" flour and add two eggs per kilo of flour (maximum). With these quantities you will obtain a very stretchy dough which is easy to knead.


3.2 QUANTITIES IN ORDER TO OBTAIN GOOD DOUGH

Pour the desired quantity of flour into the pool; it needs 7 eggs per kilo of flour:

Model	Flour kg.	Number of eggs	Grams of pasta product
TR 70	0,5	3	650
	1	7	1.350
	1,2*	9	1.650
TR 75/E	1	7	1.350
	2	14	2.700
	3	21	4.150

* This is the maximum capacity of the pool.

- Supposed weight of an egg: 50 grams.
- If you take 1 egg away you need to add 50 grams of water.

Now shut the cover and put the selector in the  position (**Fig. 4 A**).

Push the start button (**Fig. 4 B**).

Add the liquid part pouring it slowly but quickly through the small hole in the cover. At the end of the kneading operation, which should take around 10 minutes, make sure the product has the right thickness and should look like coffee beans (check through the small holes of the cover).

Turn the machine off by switching the selector to “0” (**Fig. 4 C**), or push the Stop button (**Fig. 4 E**).


3.3 INSTALLATION OF THE DRAWPLATE AND START-UP OF PRODUCTION

 **Make sure the machine is switched off.**

Withdraw the drawplate (**Fig. 5 A**) requested by the container filled with water where it was put after its last use.

Thoroughly rinse with plenty of running warm water in order to have the piece at the right temperature (see chapter 6 CLEANING page 25). Dry it with a soft cloth. Unscrew the blocking ring nuts (**Fig. 5 B** and **6 A**) and carefully clean the internal part including the edging.

Take the plastic cap off (**Fig. 5 C** and **6 B**). Disassemble the drawplate (**Fig. 7 A**). Screw in the ring nuts by hand and verify that all the pieces are in their places and that they are aligned along the axle.

In order to start production, position the selector on the  position (**Fig. 4 D**) and push the start button (**Fig. 4 B**).

The initial product coming out of the machine has an unacceptable look; this is the reason why it has to be eliminated.

After a short time (a couple of minutes) the product coming out is acceptable, the colour goes from whitish to yellow and it has a greater thickness.

The cut of the pasta at the desired length can be made by hand or by knife.

In the first case it is usually long length

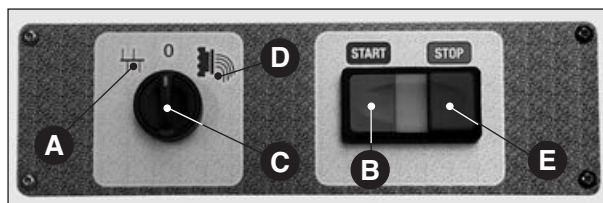


Fig. 4 - TR 70 Panel

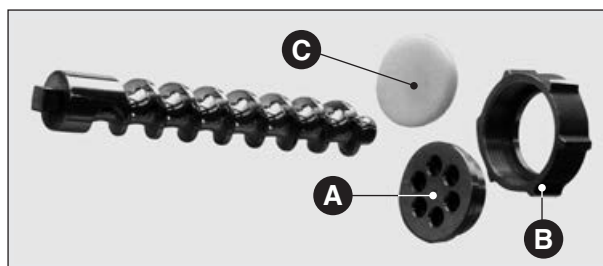


Fig. 5

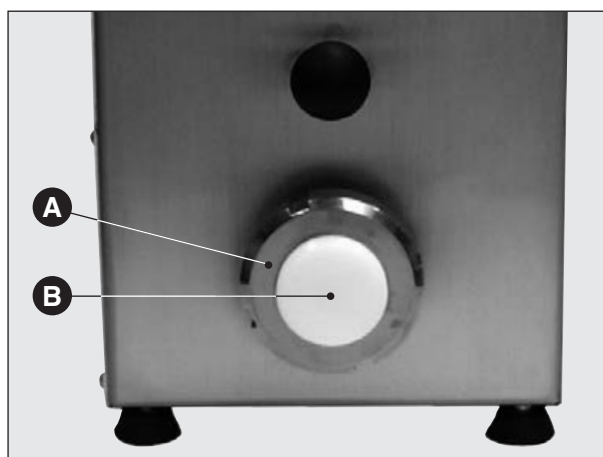


Fig. 6



Fig. 7

noodles (spaghetti or tagliatelle) and in the second case is especially short noodles (macaroni, etc.).

If the product is quite wet and tends to be sticky, it is best to dry the surface in any case, by switching on the fan (**Fig. 11 G**, only 75/E).

At the end of the operation:

- stop the machine by switching the selector to the “0” position (**Fig. 11 C**) and then turn it on the kneading position **HH** (**Fig. 11 A**) for 10-15 seconds so that the pressure on the drawplate, caused by the product itself, is eliminated;
- switch the selector to “0” (**Fig. 11 C**) or push the Stop button (**Fig. 11 E**);
- disassemble and wash the moving pieces and clean the machine (see chapter 6 CLEANING page 25).

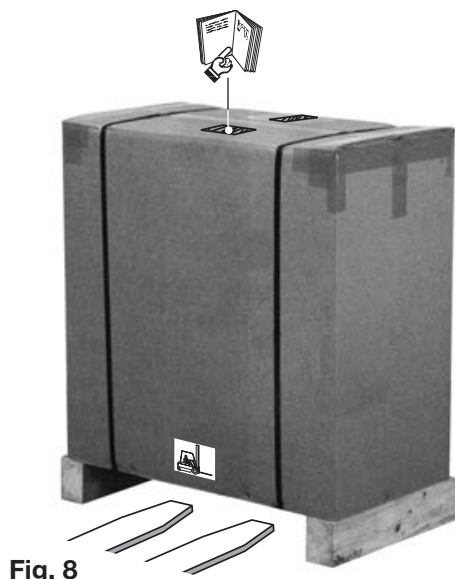


Fig. 8

4. TRANSPORTATION AND HANDLING

The machine is forwarded contained in special packaging which is securely closed with bands (**Fig 8**).

Apart from the machine, you can find the operating instructions and the conformity declaration to the EC directive.

The machine has to be unloaded from the means of transport, pulling it up and transporting it with a wheel-trolley.

Unless you need to check its contents, you are recommended not to open the packing until the moment of installation.

Remove straps, packing and polystyrene strips. Dispose of this material according to the regulations in force. Lift the machine and place on the installation site.

⚠ Make sure that the bearing surface of the machine is horizontal and steady.

5. INSTALLATION, CONNECTION AND SET-UP

Install and use the machine in a room that can be efficiently ventilated, and where the floor is smooth and compact and easy to clean.

⚠ WARNING: During the machine's operation, in order to obtain a product with the right thickness and humidity, avoid air currents which will cause precocious drying of the product together with its deterioration.

In order to give the necessary stability to the machine, check that the footers (**Fig. 9 A**) are securely attached to the floor; otherwise, turn them to avoid instability.

Position the machine in the desired place with a free back space of around 50 centimeters and a side space of 70-80 centimeters in order to guarantee easy use of the machine and its cleaning (**Fig. 10**).

Please check that the voltage of the machine which is written on the identification label, (see page 19) matches the one foreseen by the system on your premises.

Attach the right plug to the machine power cable in order to make the electrical connection to the system.

⚠ WARNING: (75/E) Have the plug fitted to the power supply by qualified personnel. Take the necessary precautions to prevent the cable from being crimped or damaged.

After mating the plug to the mains socket, the machine is ready for use.


First, however, check out proper operation of all moving parts and components of the machine.

5.1 CONTROL OF THE INSTALLATION


NOTE: Every drive is voluntarily run by the start button, when the bowl cover is closed (Fig. 12 F).


Verify that:

- In the “0” position (Fig. 11 C) all the elements of the machine have to stop; for model TR 75/E, in the “drawplate position” (Fig. 11 D) the mixer rotates in a clockwise direction and the Archimedean screw must rotate in the same direction (check through the slots in the lid); for model TR 70, on the other hand, in the “drawplate position” (Fig. 11 D) the mixer rotates in a counter-clockwise direction and the Archimedean screw must rotate in the opposite direction; in the “knead” position (Fig. 11 A) the parts must rotate in the opposite direction.

 *If the machine or some of its parts fail, call your local authorised dealer or concessionaire for repairs.*

6. CLEANING

 **Warning: For healthy and hygienic processing of nutritional products, be sure to keep your machine and the surrounding environment clean.**

 **DANGER:** Always cut off power supply before cleaning.

You have to properly clean all the elements which are in contact with the product; protection cover, pool, mixer, Archimedean screw, drawplate, ring nut, when the product is still soft.

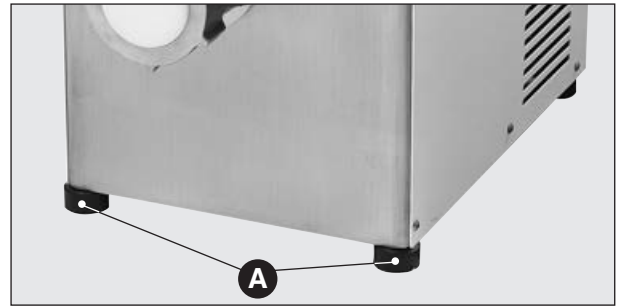


Fig. 9

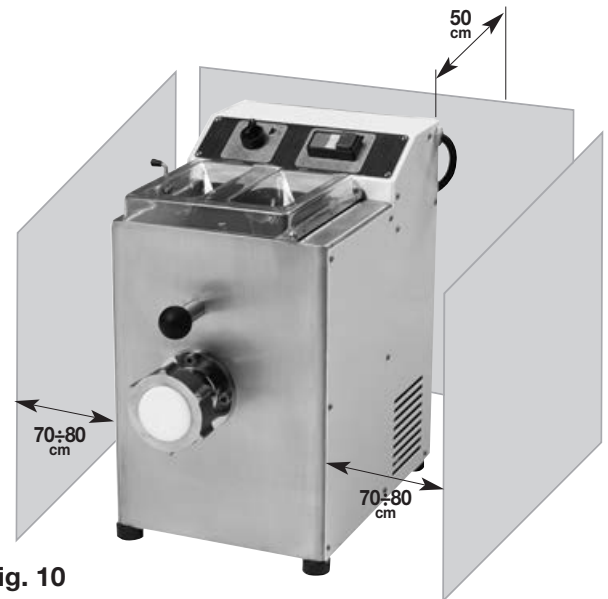


Fig. 10

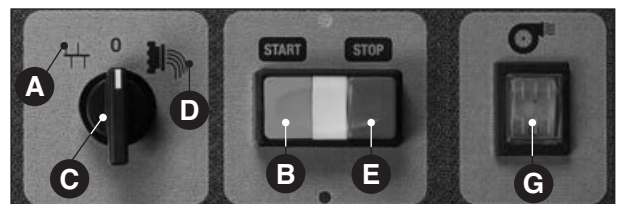


Fig. 11 - TR 75/E Panel

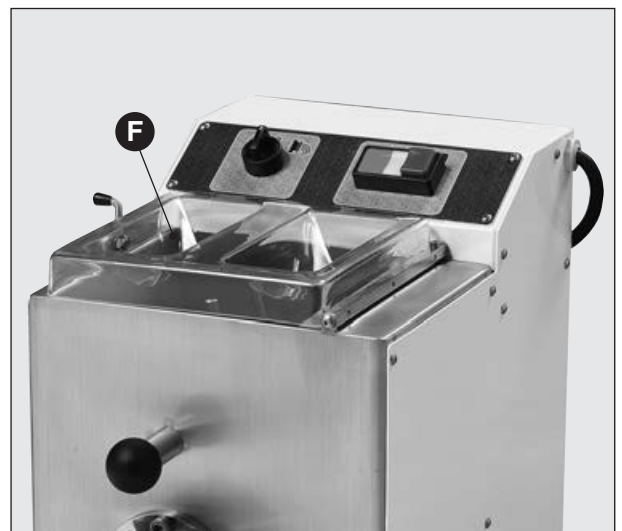


Fig. 12

The moving parts have to be disassembled as follows:

- Mixer: make sure the external shovel is in the upper vertical position (**Fig. 13 A**) (only this position allows the disassembling of the piece).

For model TR 70: remove the mixer, pull out the knob (**Fig. 13 B**) until the mixer disengages;

for model TR 75/E: remove the mixer by unscrewing the external mobile support until the mixer disengages (**Fig. 13 bis A**).

Take the square shaft away from its place (**Fig. 13 C**) and at the same time turn the external end upwards. If you want to assemble the piece follow these instructions vice versa. Line the central point of the shaft with the peg of the moving support; then, leave the handle.

- Ring nut: (**Fig. 13 D**) and drawplate (**Fig. 13 E**): unscrew the ring nut by hand, avoiding pieces falling when the ring nut comes out of its place, in order to avoid causing damage both to people or to the pieces themselves.
- Archimedean screw: (**Fig. 13 F**): after disassembling the ring nut and the drawplate, the Archimedean screw can easily be taken off from the machine by pushing its spiral from the internal end.

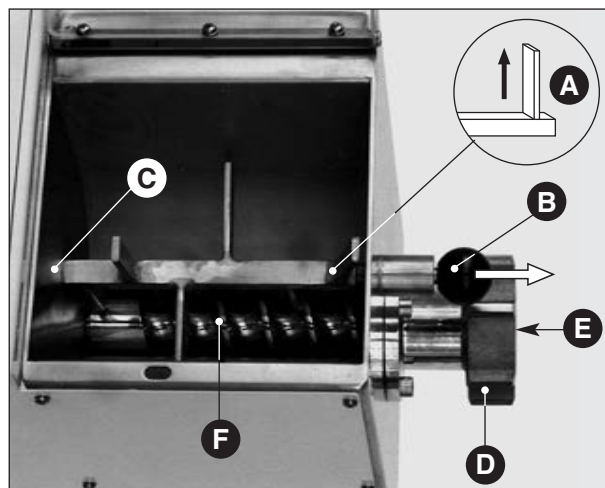


Fig. 13



Fig. 13 bis

6.1 COVER AND POOL CLEANING

Eliminate the dough residue and make sure to thoroughly clean the most remote-access pieces: connections of the Archimedean screw and mixer movements (**Fig 14**), extrusion sleeve, cover and pool internal parts. Use some warm water in order to eliminate the residual product and then rinse; dry the surfaces with the help of blotting paper.



WARNING: Never use non-nutritional, abrasive or corrosive chemicals to clean. Also never use coarse or abrasive objects such as steel wool, abrasive sponges and so on.

To clean machine internal and external parts:

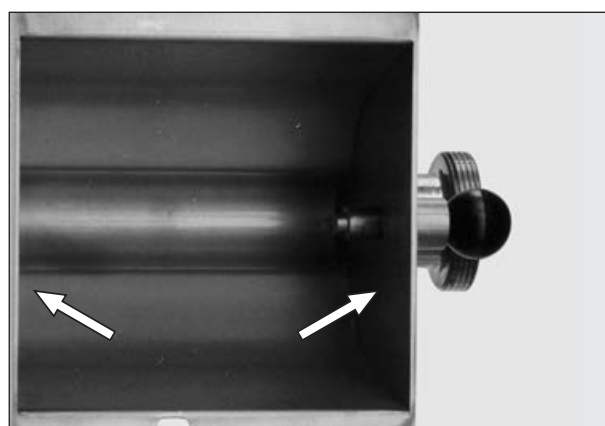


Fig. 14

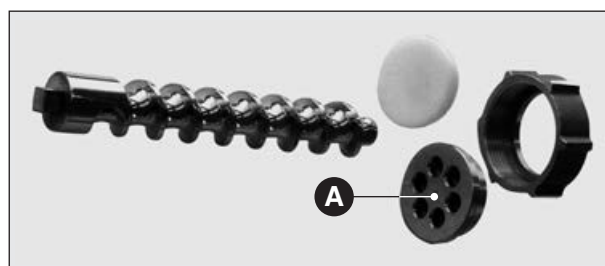


Fig. 15

- **remove power supply plug** from power mains socket;
- clean coated surfaces with soft cloth and disinfect with alcohol;
- to clean internal parts of machine:
 - turn the machine and lay it down on a side;
 - clean the internal parts with the help of a soft cloth and blow with a compressed air jet.

CAUTION: Do not clean the tank lid with alcohol or other solvents.

6.2 CLEANING OF THE ARCHIMEDEAN SCREW, MIXER, RING NUT AND DRAWPLATE (Fig. 15)

Eliminate the dough residue and wash the pieces with water; you may use a soft brush or a plastic egg-slice.

These elements can be thoroughly washed in a dishwasher. Rinse and dry the mixer, the Archimedean screw and the ring nut and reassemble them on the machine.

The drawplate (**Fig. 15 A**) is to stay in a container with water when it is not in use.

For reasons of hygiene, please change the water every day.

7. MAINTENANCE AND ADJUSTMENT

WARNING: Remember that **all maintenance operations are hazardous** if you do not first disconnect the power supply plug from power mains.

The points of the machine which need a certain maintenance are the following: the transmission gears, the dragging belt and the mixer external support. Please carry out the first maintenance after the first 100 hours and thereafter every 500 hours.

Mixer support: Use registered fats for foods (USDA-H1) (in case of requirement contact your local dealer).

Drive gears and chain: please use mineral grease SAE MR3.

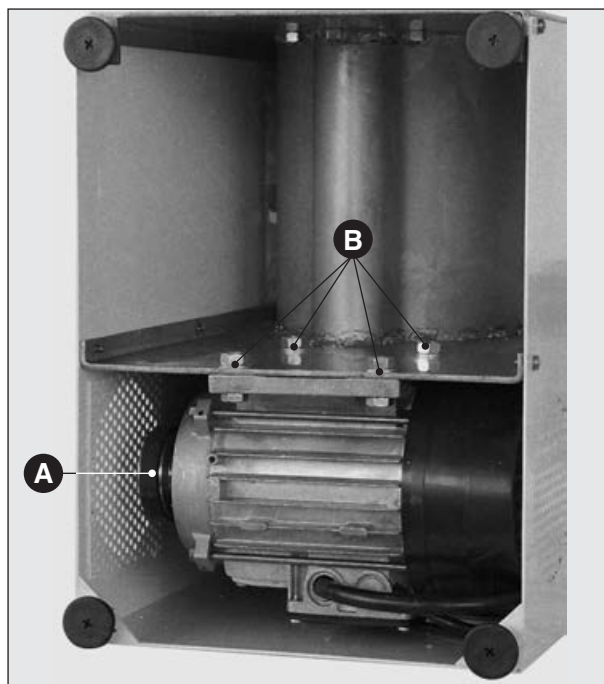


Fig. 16

7.1 BELT STRETCHING

When performing the abovementioned maintenance or when the machine is not working properly, (loss of rounds) verify the correct stretching of the transmission belt (**Fig. 16 A**). Put the machine on one side and make sure that the belt is sufficiently stretched. If necessary, unscrew the blocking motor screws (**Fig. 16 B**) and push it downwards and stretch the belt without exaggerating; then re-block the screws.

WARNING: Never use the machine with any missing, disassembled or open guards and shields.

WARNING: If servicing operations require repairs to electrical system and/or replacement of bearings or mechanical components, call an expert technician or your local dealer.

8. MACHINE WHIRR

The whirring noise emitted by the machine has been measured on an identical sample machine in compliance with standard DIN 45635. A constant value not exceeding 70_dB(A) was measured as stated in the manufacturer's test report.

9. DISMANTLING AND DEMOLISHING THE MACHINE

If machine needs to be dismantled and/or demolished, its components do not entail a degree of danger that requires any particular precaution.

Remember, however, that to facilitate material recycling operations, it is a good rule to remove electrical system components from the machine.



INFORMATIVE REPORT TO THE CUSTOMERS

according to the art.13 of Decree Legislative 25 July 2005, n.151 "Performance Directives 2002/95/CE, 2002/96/CE and 2003/108/CE, relative to the reduction of the use of dangerous substances in the electronic and electrical equipment, let alone to disposal of the refusals".

The symbol of the crossed bin brought back on the equipment or its packing indicates that the product at the end of its own life cycle must be collected separately from the other refusals. The differentiated collection of the present equipment at the end of its life cycle is organized and is managed from the distributor. The customer who want to unravel itself the present equipment will have therefore to contact the distributor and follow the system that he has adopted in order to concur the separate collection of the equipment at the end of its life cycle. The adapted differentiated collection for the successive start of the cast-off equipment to the recycling, to the treatment and to the compatible with environment disposal contributes to avoid possible negative effects on the atmosphere and the health and favours the re-employment and/or the recycling of the materials of which the equipment is made. Illicit disposal of the product by the holder involves the application of the previewed administrative endorsements from the enforced norm.

10. INCONVENIENCES AND THEIR REMEDIES

INCONVENIENCES

1) Machine operation failure

2) Problems on the product:
The product gets stuck when being poured out

The product looks unacceptable even after the initial minutes: it breaks and looses flour

The product does not come out from the drawplate

CAUSES

- disconnected plug
- plug leads not correctly connected
- trip switch adjusted for insufficient values
- unsuitable trip switch
- the security hook on the pool cover is not inserted properly

- dough too humid is used

- too short kneading time
- too reduced water percentage

- the blocking of the drawplate because of dried dough

REMEDIES

- connect plug
- check lead connections

- adjust trip switch accordingly
- replace trip switch
- position the hook at the end of the run

- reduce the quantity of water used for the dough respecting the abovementioned percentage
- increase the kneading time
- increase the quantity of water in order to respect the aforementioned percentage
- disassemble and clean the drawplate