

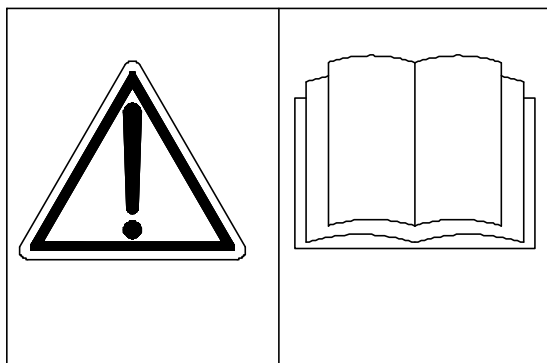
INSTRUCTION BOOK PLANETARY MIXER PE 7.5



INSTRUCTION BOOK: The following instruction book contains the necessary instructions for the

transport, the functioning and the maintenance of the mixer and must be read before each of these operations. The instruction book should be read by the technicians who must have care of the maintenance of the mixer and also by the operators who must use the mixer itself. This manual is part of the mixer and the user must have care of it during all the life of the mixer.

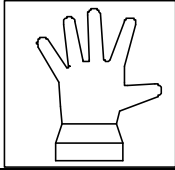
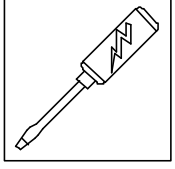
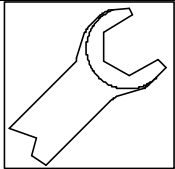
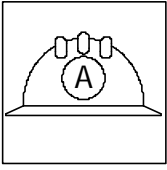
The observance of all the rules contained in it allow the correct use of the mixer, its security and also the security of the operator.



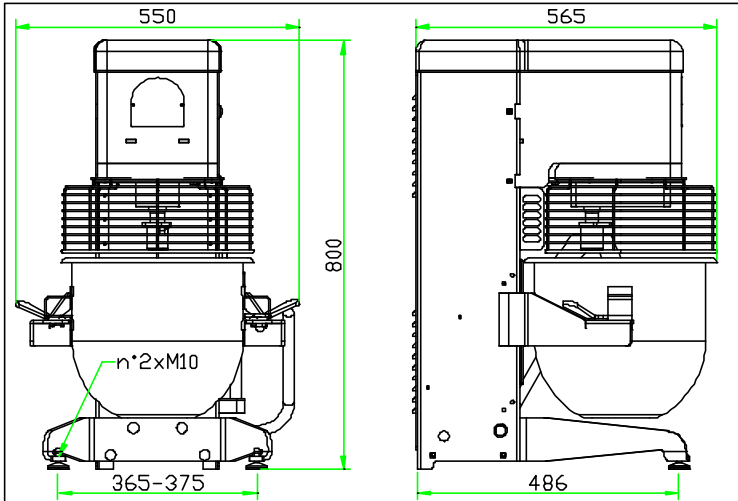
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SYMBOLS: they are used to define the qualification of the person who has to carry out a particular operation.

Symbol	Description	Characteristics
	OPERATOR	Person in good conditions of health who has been informed about the use of the machine and has read and well understood this instruction book.
	ELECTRICIAN	Person in good conditions of health who is qualified for the profession of electrician and has read and well understood this instruction book.
	MECHANIC	Person in good conditions of health who is qualified for the profession of mechanic and has read and well understood this instruction book.
	SIGMA ASSISTANCE Tel. 0039.030.265.04.88 Fax 0039.030.265.10.82	<ul style="list-style-type: none"> • Revision of the manual. • Phone-assistance about the use. • Phone-assistance about the starting or the faults of the mixer. • Spare parts requests. • Repairs of the mixer. • Revisions of the mixer.

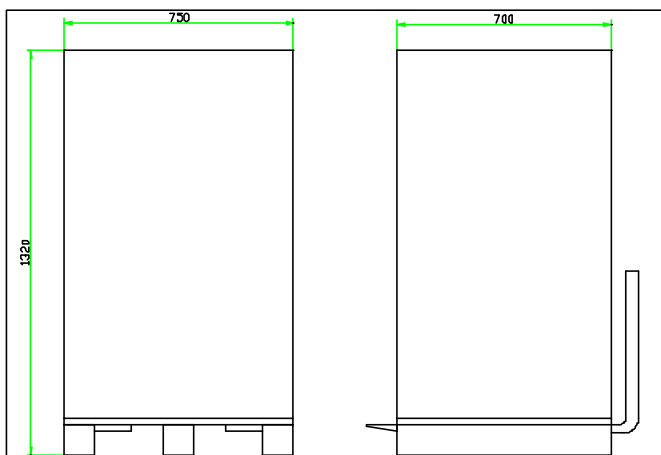
5) DIMENSIONS AND WEIGHT Fig. 4: total net weight kg 38 + kg 12 packing



6) TRANSPORT- PACKING - HANDLING. Fig. 4B

The standard packing box onto pallet has the following external dimensions 650x400 h750.

Lifting rules with lift truck:



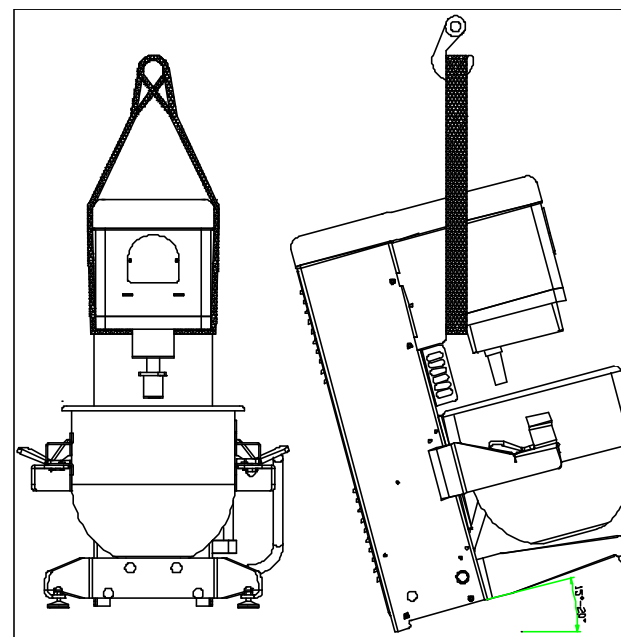
- Make sure that the lift truck is adequate to the load.
- Enlarge the lifting forks.
- Make sure that during the lifting the forks come out from the pallet.
- During the movements always keep the load near the ground.

The mixer can be lifted also with a strong belt put between the bowl and the head, after removing the lower grid (removable).

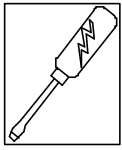
Lifting rules with belt:

- Make sure that the lifting means is adequate to the load.
- Make sure that the load is correctly fastened.
- Do the movements in a free area.

6.2) STOCKING: The machine should be installed in a closed room sheltered from dust and atmospheric agents, temperatures should be between -20 e $+40^{\circ}\text{C}$ and moistures should not be more than 90%. The room must be hygienically sure.



7) INSTALLATION

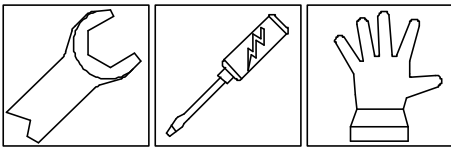


The machine must be placed on a solid working table or on a basement.

Next to the machine a lead must be installed wires section of 1,5 mm² at least and tap with blocked plug.

Make sure that volt, Hz, kw comply with the ones indicated on the rating plate of the machine.

ATTENTION: At the start of the power supply a differential must be fitted with leakage current of 0,03A (Ampere).



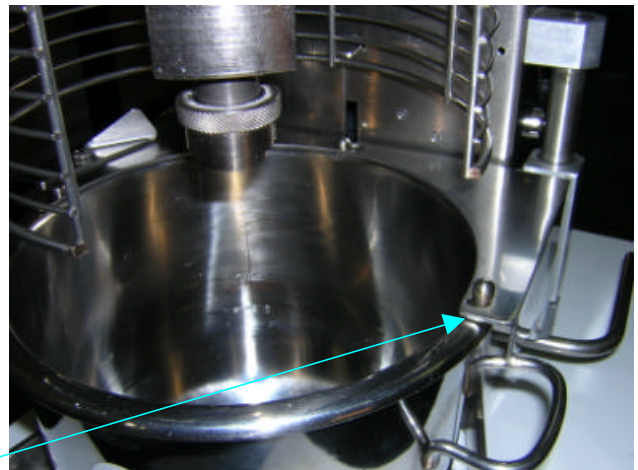
8.0) OPERATING INSTRUCTIONS

The machine must have the bowl attached and the protection grid closed otherwise the protections and safety devices prevent the machine from working.

DO NOT REMOVE OR TAMPER PROTECTIOND AND SAFETY DEVICES, EITHER ELECTRIC OR MECHANIC, THE MACHINE IS EQUIPPED WITH.

8.1)1. The bowl must be attached to the mixer **BEFORE** attaching the tools. Make sure that the bowl lift lever is in the down position. Place the bowl onto the mixer making sure that the holes on each side are securely placed over the pins. Rotate the bowl clockwise.

Insert the bowl pins in the lifting arch and rotate anti-clockwise.



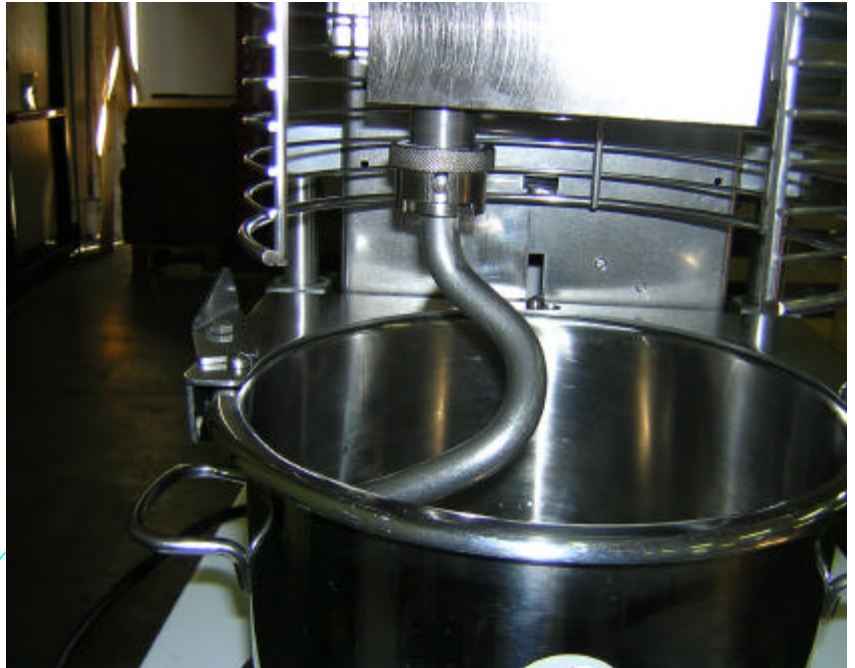
8.2) Complete the operation by blocking the bowl with the handle.

Block the bowl with the handle



- 8.3) Rotate the bowl guard in the open position, select the appropriate tool and insert it onto the tool shaft.. Insert the tool clockwise so that the notch on the agitator fits over the pin on the tool shaft as shown in the picture.

Rotate the grid and insert the appropriate tool.



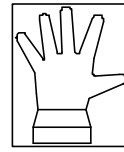
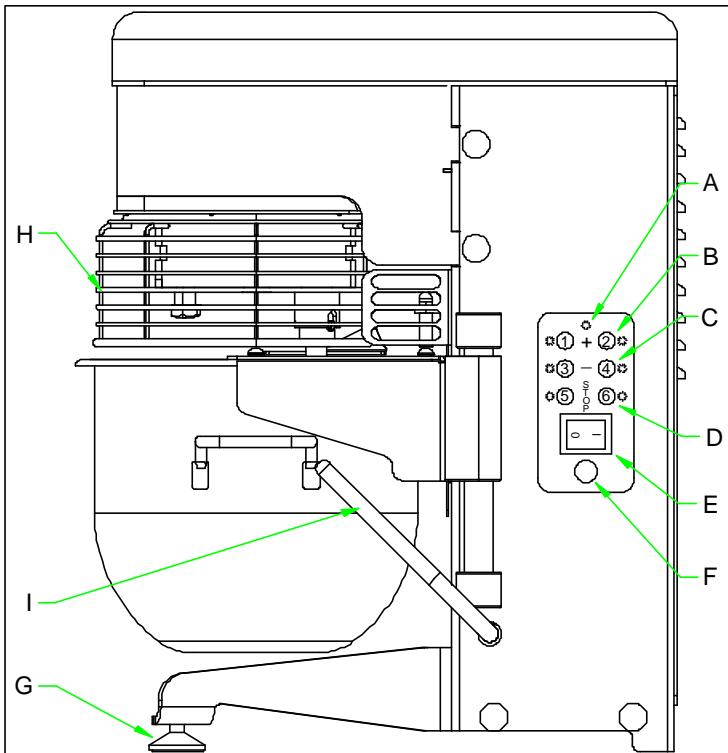
Rotate the tool anticlockwise for unhooking it..

- 8.4) Use the bowl lift lever to lift the bowl in working position and close the protection grid.

- 1) rotate the grid to close the mixer**
- 2) use the lift lever to lift the bowl.**
- 3) The mixer is ready to work.**



9.0) HOW TO WORK WITH THE MACHINE : THE CONTROL PANEL



A) Main switch led.
By pushing the buttons with the digits you make rotate the tool at the selected speed , speed 1 is the

lowest while speed 6 is the highest.

B) Couple of buttons, by pushing them together you can increase the selected speed till the maximum of the rpm.

C) Couple of buttons, by pushing them together you can decrease the selected speed till the minimum of the rpm.

D) Couple of buttons, by pushing them, together you stop the mixer.

E) Main switch.

F) Indicator. It shows the absorbed current of the mixer .

G) Regulation feet.

H) Protection grid with safety microswitch.

I) Bowl lifting lever.

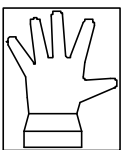
How to start the mixer:

- Press the main button in position I.
- Insert the tool.
- Insert the bowl.
- Lift the bowl
- Rotate the protection grid in the close position.
- Press one of the buttons with the digits to select the speed, the mixer will start to work.
- 9.1) OPERATIVE RUNNING: Press the main switch F (see the exploded view from position O to position I. Lamp A will light. Press button 1, (or another one of the buttons if you already know the working speed) the tool will start to rotate at the minimum speed, by pressing the buttons 2, 3 and the following till number 6 the speed will increase till the highest one. By pressing together the couple of buttons B, the speed gradually increases till the highest one. By pressing together the couple of buttons C, the speed gradually decreases till the lowest one. **By watching the indicator F you can see the absorbed current of the mixer. Pay attention not to exceed the power of absorption indicated in the rating plate.**

9.2) END OF WORK: To remove the dough when the tool is still, rotate the grid; lower the bowl with the lifting lever and rotate the tool anticlockwise to unlock it. Free the bowl from the safety handles and take the bowl with the tool out.

Remind to switch the main switch off.

9.3) TOOLS AND THEIR USE.



Spiral: use it for hard dough,

- Pizza or bread dough
- Cake and croissant dough etc.
- Cream puff dough
- Meat, mashed potatoes etc

Tool rpm: minimum speed Position: 1, 2

Whisk::use it to mount the softest ingredients

- Albumen
- Biscuits.
- Meringues
- Whipped cream.

DO NOT USE FOR HARD DOUGH

Tool rpm: from medium to max

Blade: use it for dough of intermediate consistency

- Meat and mashed potatoes

Tool rpm: from minimum to medium speed Position:
1, 2, 3, 4

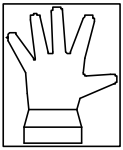


9.4) SCRAPER:

It is possible to require this tool that removes the dough from the edge, it is useful for dough with margarine, butter or sugar. You have to mount it onto the planetary in the appropriate attach.



After having insert it block it with the appropriate screw.

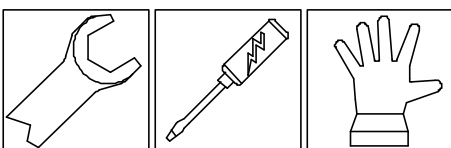


9.5) HOW TO WORK WITH THE MIXER.

Many problems rise from an improper use of the machine by the end user. Tg of the advised quantities will be prejudicial to the quality of the working process and to the endurance of the mechanical parts of the machine. It will be useful to take as an indication about the maximum quantities the following capacity chart:

APPLICATION	INGREDIENTS	PE 7.5	PE 20	TOOL	SPEED NR
dough 55% water	Kg flour.	2.0	5	Spiral	1-2
Croissant dough	Kg flour.	1,8	4.5	Spiral	1-2
Cream puff dough	Kg flour.	1,5	4	Spiral	1-2
meat	Kg.	3,5	10	Spiral/blade	1-2-3
Mashed potatoes	Kg.potatoes	3,5	10	Blade/whisk	2-3-4
Albumen	Number of eggs	12	32	Whisk	4-5-6
Biscuits	Number of eggs	12	30	whisk	3-4-5
Meringues	Kg sugar.	0,55	1,5	Whisk	4-5-6
Whipped cream	Lt of cream	1,5	4	Whisk	4-5-6

10) SAFETY DEVICES: The mixer is equipped with a series of safety devices that



saveguards the operator's safety. These devices should neither be tampered nor excluded and are to be checked before starting the machine.

- Shutdown general switch in the electrical board: interrupts the input of the open electrical board allowing a safe mechanical maintenance.

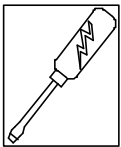
- Inverter power blocking: interrupts the input in case of too much motor load.
- Thermal probe: interrupts the input in case of motor overheating.
- Fixed protections: all the covers fixed with screws can be taken off just for the maintenance by skilled staff.
- Mobile protections: the movement of the grid and of the bowl drives two microswitches that prevent the movement of the mixer if:
 - The bowl is not in the high position.
 - The grid is not closed.

10.2) SAFETY SUGGESTIONS:

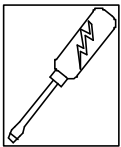
- The machine should be installed in an illuminated and airy room.
- The user should wear adequate clothes, nonslip shoes, very well closed sleeves, do not wear dangling clothes (ties, napkins, open jackets ecc.) to prevent the risk of entangling.

11) USE AND MAINTENANCE DISPOSALS

According to our experience the first and most efficacious form of maintenance is cleaning the machine. For cleaning and removing the dough waste we advice the use of a plastic spatula or of a moist cloth . The outer surfaces can be easily cleaned with spray or neutral soap.



EARTHING: The efficacy of the grounding of the mixer should be checked. Should it be faulty or not correct serious accidents and also death can happen.



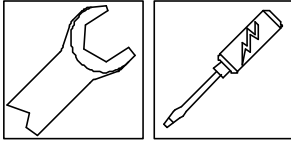
ELECTRICAL BOARD: general disposals.

The opening of the electrical board is allowed just to authorized staff. The mixer with not protected electrical parts should never be left unattended.

The working of the machine where electrical parts are not protected is allowed just in presence of skilled staff and just for the short time necessary for the eventual repairs under the responsibility of the staff.

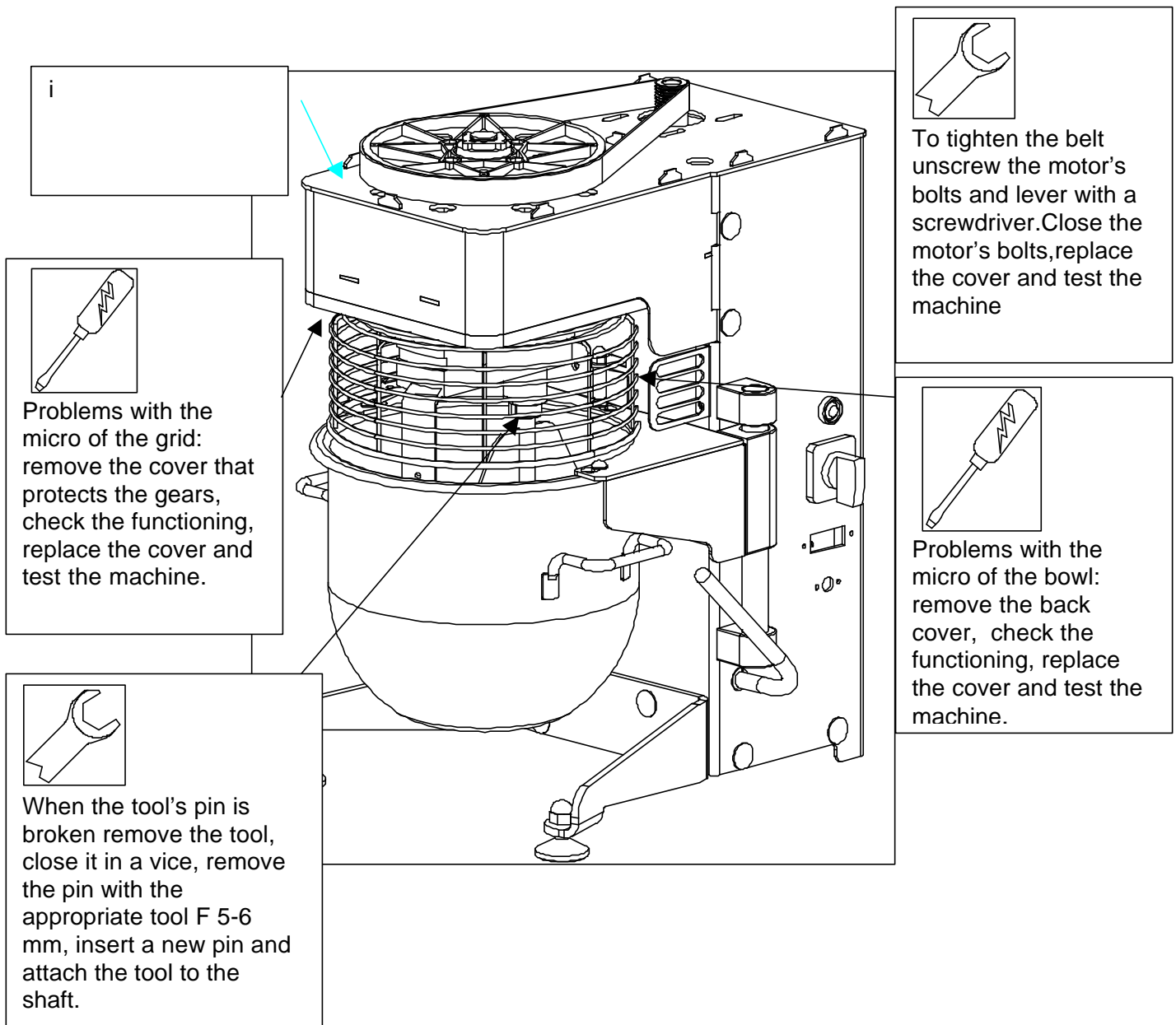
The electrical plan is shown in the enclosed nr 1.

12)ORDINARY MAINTENANCE



first three months

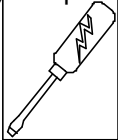
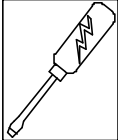
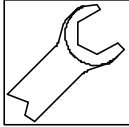
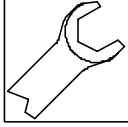
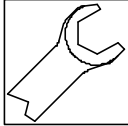
ANY CHECK OR MAINTENANCE OPERATION SHOULD BE CARRIED OUT ONLY WHEN THE MIXER IS UNPLUGGED AND POWER IS DICONNECTED. The machine does not need particular maintenance operations. Check worn-out level of the belts after the

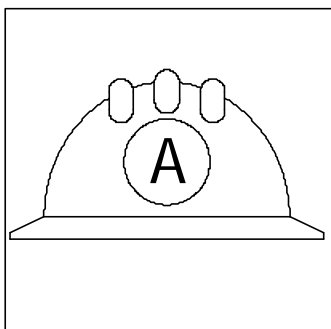


ATTENTION: The machine is not waterproof, therefore whatever cleaning process must not involve a jet of water.

If the power supply cable becomes damaged it must be substituted with a **H07RN/F** cable with a cross-sectional measurement of $3 \times 1,5 \text{ mm}^2$.

13.1) POSSIBLE FAULTS AND REPAIRS

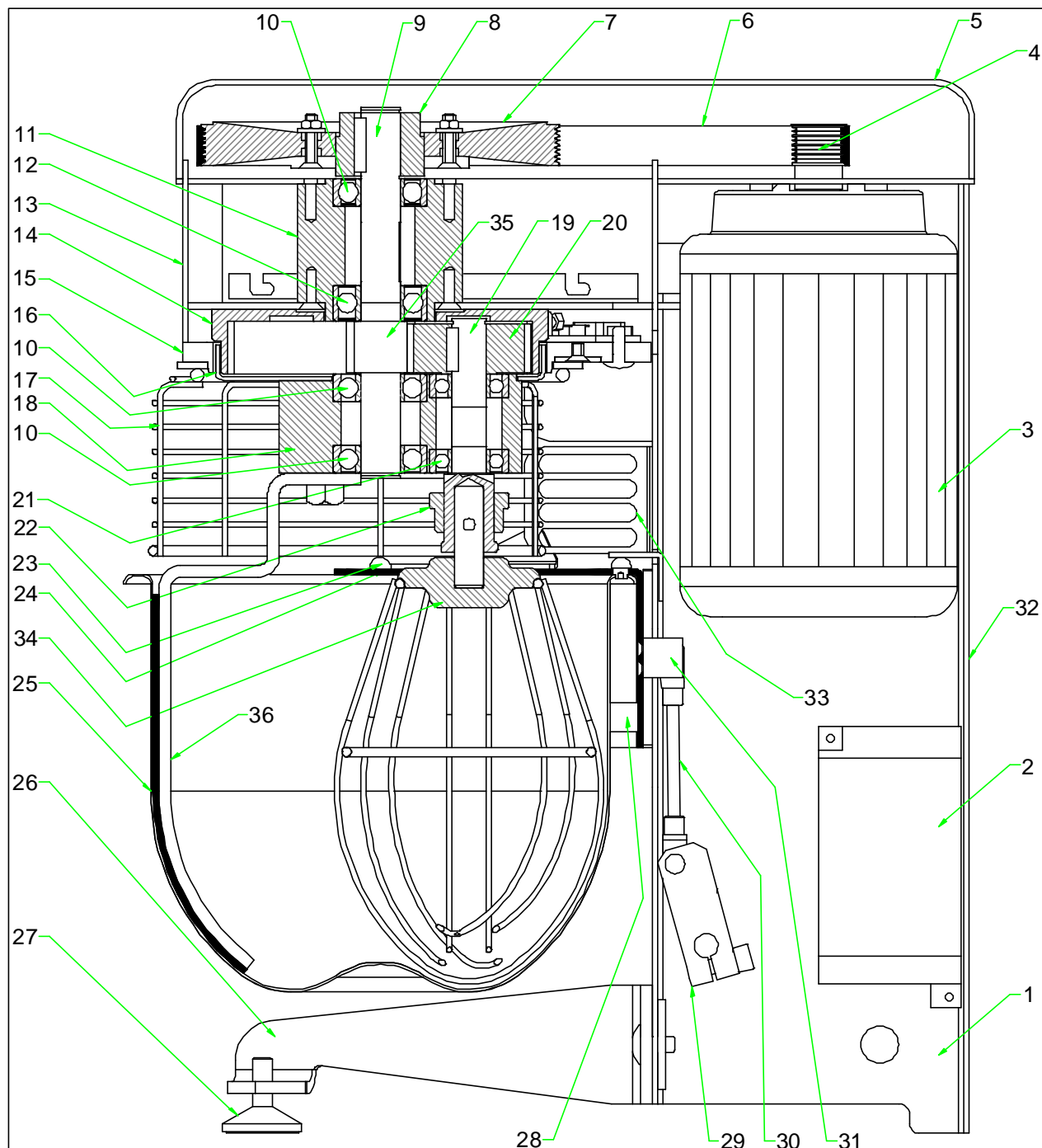
FUNCTIONING ANOMALIES	POSSIBLE CAUSES	REPAIRS
When turning switch into position 1 the warning lamp does not light	<ol style="list-style-type: none"> 1) The plug or the wires are not correctly connected. 2) The warning lamp is burnt 3) 	<ol style="list-style-type: none"> 1) Check right connection. 2) Replace the light. 
When pressing start button the machine does not start.	<ol style="list-style-type: none"> 1) The protection grid is open 2) The bowl is not in the correct position . 3) The safety microswitches are damaged. 	<ol style="list-style-type: none"> 1) Turn it completely close again and block it. 2) Check the position. 3) Replace the microswitches. 
The machine stops and does not start again	<ol style="list-style-type: none"> 1) The termic probe has intervenced 2) The inverter protection has intervenced 	<ol style="list-style-type: none"> 1) Wait some minutes for the cooling of the machine 
Continuous noise.	<ol style="list-style-type: none"> 1) Check roller bearings. 	<ol style="list-style-type: none"> 1) Replace the bearings. 
The tool does not do its normal revolution on the tool shaft.	<ol style="list-style-type: none"> 1) Belt released. 2) Belt worn out. 3) Etrainment pin broken 	<ol style="list-style-type: none"> 1) Tighten the belt 2) Replace the belt. 3) Replace the pin. 



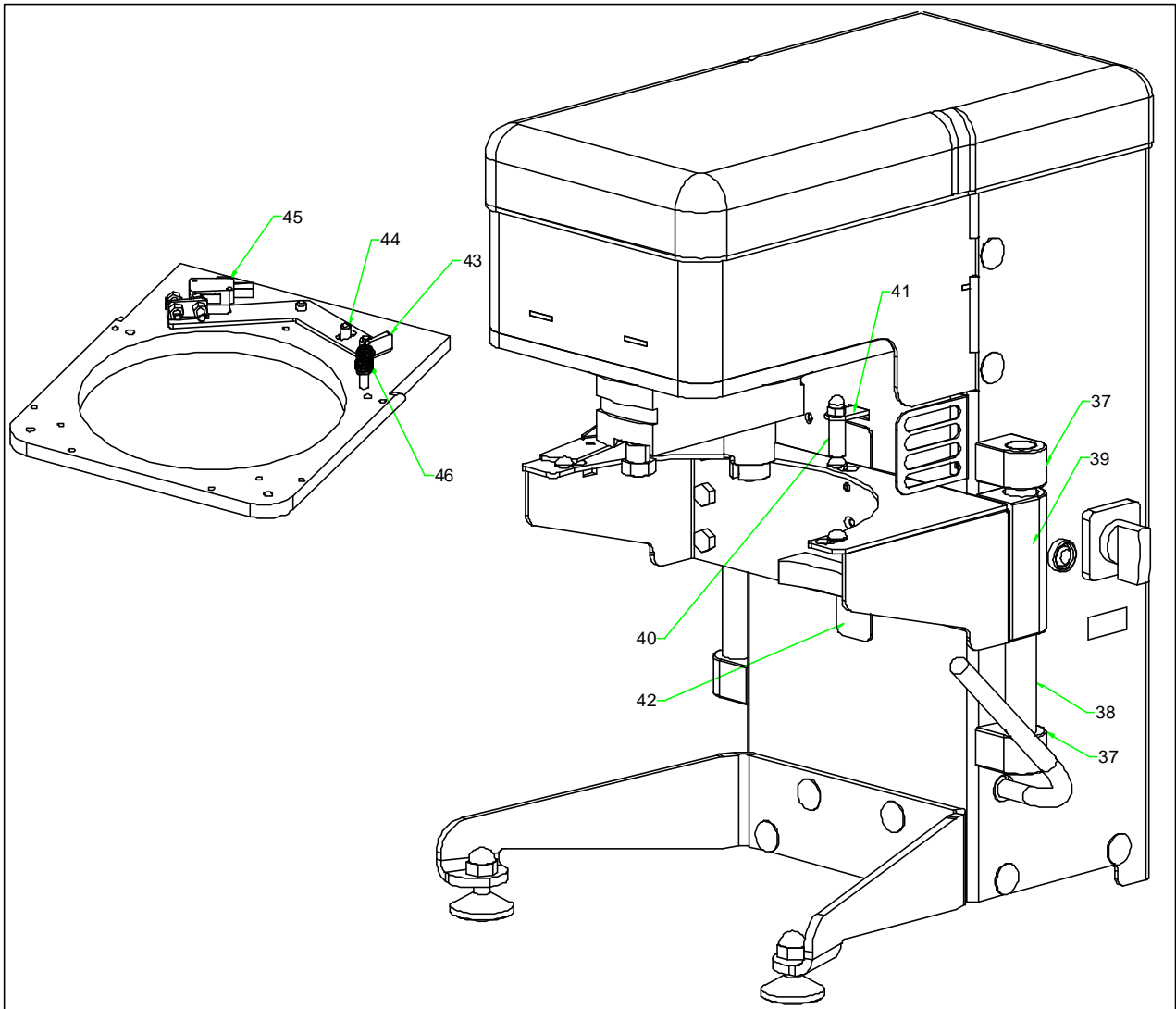
13.2) Extraordinary maintenance:

In case of operations not mentioned in this instruction manual please call SIGMA SrL. To replace motor, electronic panel, important mechanical parts such as planetary or gears or if the machine falls down, please get in touch with our assistance service.

14) SPARE PARTS REQUEST: In case you need spare parts please contact SIGMA S.R.L. assistance



Nr	Code	QtY	Description
1	02175004	1	Vertical rod for PE 7.5
2	2500	1	Motor operation
3	1100	1	Motor G71 4 poles 0.37 kw 380/50/3 B14
4	01175048	1	Motor pulley PE 7.5
5	12003960	1	Belt multigrip 8J 813
6	03175045	1	Upper cover
7	01175049	1	Drive pulley PE 7.5
8	01175050	1	Hub hole d=20
9	01175038	1	Planetary shaft
10	13000315	3	Bearings 6204 2RS 20-47-14
11	01175005	1	Journal box for planetary PE 7.5
12	13000362	1	Bearings 4204 2RS 20-47-14
13	02175001	1	Plate for head enclosure
	02175002	1	Plate for head reinforce
	02175003	1	Head plate PE 7.5
14	01175041	1	Internal toothed crown PE 7.5
15	01175022	1	Cover for gears' protection 7.5
16	01175040	1	Covering for planetary PE 7.5
17	05175019	1	Removable grid for the bowl 7.5
	05175020	1	Closed protection in polycarbonate
	021750021	1	Cam for grid 7.5
18	01175039	1	Planetary PE 7.5
19	01175035	1	Tool shaft PE 7.5
20	01175037	1	Planetary gear
21			
22	01175036	1	Blocking tools ring PE 7.5
23	02175008	1	Blocking bowl sheet PE 7.5
24	02175007	1	Bowl arm PE 7.5
25	04175018	1	Bowl 7.5 litri
26	02175006	1	Front basement
27			
28	01175010	1	Bowl contrast block
29	01175012	1	Bowl movement block
30			
31	01175011	1	Bowl lifting block
32	02175046	1	Back cover PE 7.5
33	02175025	1	Bowl protection plate
34	01175030	1	Whisk PE 7.5
	01175033	1	Blade PE 7.5
	01175034	1	Spiral PE 7.5
35	01175055	1	Planetary gears
36	01175042	1	Scraper rod PE 7.5
	01175043	1	Scraper PE 7.5
	01175044	1	Scraper pin



Nr	Code	Qty	Description
37	01175053	4	Bowl attach
38	01175057	2	Drive bars for bowl PE 7.5
39	01175009	2	Block for guiding bowl
	15005003	4	Journal box KU 20-23-20
40	01175056	1	Bowl presence rod
41			
42	02175054	1	Enclosure cover PE 7.5
43	02175023	1	Sheet for micro grid PE 7.5
44	01175024	1	Micro bearing screw PE 7.5
	13003106	1	Bearing 626 2RS 6-9-19
45	25001301	1	Micro crouzet 83161.1w3
	25001302	1	Lever crouzet 161e raggio 13.6 fiorel
46	08091045	1	Spring D=11 filo d=1 x 15 spire

15) PRINCIPAL COMPONENTS:

- Raw materials: Steel, NBR (rubber), Nylon, Bronze.
- Surfaces treatment: Polishing of the parts with alimentary polish.

16) RISKS, PROHIBITIONS, OBLIGAS.



Do not put out the fire with water



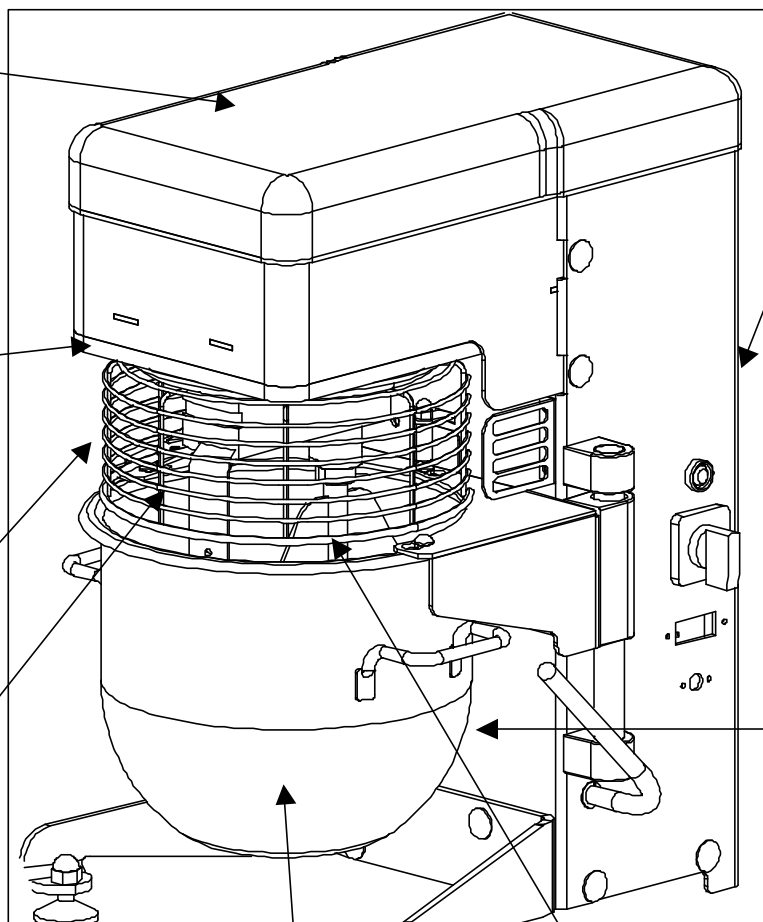
Do not start the mixer before having checked the protection



Do not clean the mixer while it is running



380 V



Strong strikes can release the safety grid. The machine stops immediately. **DO NOT** touch anything without disconnecting the machine.

The use of the whisk for too hard dough can cause the breaking of some parts that could also go out of the grid.

The weight of the bowl is 25 kg and should be lifted only with the special grips. Put the machine onto flat surfaces at a height comfortable for the operator.

Steadiness of the machine: if the machine should be placed onto wet or greasy surfaces or on unstable laces (ships, planes or other), take off the feet and fix the machine on the floor using the special holes.

17) ELIMINATION: The buyer is responsible if the machine goes out of order. The disassembly of the mechanical and electrical parts should be done by the competent staff. The machine should be eliminated locally following the local rules and regulations