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Mod: PBP-60/VV

Production code: BR60P

INSTRUCTION MANUAL

DOUBLE ARM MIXER – BR SERIES



INDEX

CHAPTER 1. GENERAL INFORMATIONS.....	5
1.1 PREFACE	5
1.2 MACHINE IDENTIFICATION DATA	5
1.3 WARRANTY.....	6
1.4 MACHINE SPECIFICATIONS	6
1.4.1 TECHNICAL SPECIFICATIONS.....	7
1.5 RELEVANT REGULATIONS.....	7
1.6 OPERATING AREA.....	8
1.7 SAFETY AND HEALTH WARNINGS	8
1.7.1 POWDERS RISK.....	9
1.8 SERVICE AND SPARE PARTS.....	10
1.9 DEMOLITION OF THE MACHINE.....	10
CHAPTER 2. INSTALLATION OF THE MACHINE	11
2.1 ENVIRONMENTAL CONDITIONS OF INSTALLATION SITE	11
2.2 TRANSPORT AND HANDLING	11
2.3 ADJUSTMENTS	12
2.3.1 LEVELING OF THE MACHINE	12
2.3.2 HEIGHT ADJUSTING OF RIGHT ARM	12
2.4 ELECTRICAL CONNECTION.....	13
CHAPTER 3. CONTROL AND SAFETY DEVICES	14
3.1 CONTROL AND LIGHT-SIGNALLING DEVICES.....	14
3.1.1 MACHINE WITH VARIABLE SPEED (PICT. 3.1):	14
3.1.2 MACHINE WITH TWO-SPEED (PICT. 3.2):	14
3.2 USE OF TIMER	15
3.3 SAFETY DEVICES	15
CHAPTER 4. USE OF THE MACHINE	17
4.1 TESTING.....	17
4.2 LOADING MACHINE.....	17
4.3 MACHINE START-UP	18
4.3.1 MACHINE WITH VARIABLE SPEED (PICT. 3.1)	18

4.3.2	MACHINE WITH TWO (PICT. 3.2)	18
4.4	STOPPING MACHINE	19
4.5	DOUGH DISCHARGE	19
CHAPTER 5. MAINTENANCE.....		20
5.1	ORDINARY MAINTENANCE.....	20
5.1.1	CLEANING.....	20
5.1.2	GREASING OF KNEADING ARMS	21
5.2	PROGRAMMED MAINTENANCE.....	22
5.2.1	BOWL BELTS TENSION ADJUSTMENT	23
5.2.2	TENSION ADJUSTMENT OF BELT WHICH MOVES THE ARMS.....	23
5.3	POSSIBLE FAILURE AND/OR ANOMALIES.....	24

CHAPTER 1. GENERAL INFORMATION

1.1 PREFACE

This manual is directed towards those who install, operate and maintain the machine so that they can take advantage of the characteristics of the product in the best way. It is important that this manual is kept and remains with the machine if it is moved or if ownership changes so that it can be consulted under all circumstances and therefore the necessary information is available to operate it within safe conditions.

The manufacturer does not take upon themselves the obligation to give notice of possible successive modifications of the product. Furthermore, under the terms of law, this document remains the property of the manufacturer, and tampering, reproduction or transmission to a third party are prohibited without their consent.

The following symbols are used to better stress some passages

⚠ **ATTENTION:** indicates hazards that might cause serious damages; attention is required

i **NOTE:** indicates particularly important technical information

1.2 MACHINE IDENTIFICATION DATA

The identification data of the machine are impressed on the plate placed on the rear of the machine.

		CE	
		KW	
MODELLO MODEL		VOLT	
MATRICOLA SERIAL NUMBER		Hz	
ANNO DI COSTRUZIONE YEAR OF CONSTRUCTION		FASI PHASES	
PESO KG. WEIGHT KG.		AMP.	

1.3 WARRANTY

The duration of the guarantee is for two years and runs from the date on the invoice or tax receipt was issued at the time of purchase. Within this period, components that have been unequivocally ascertained to be faulty due to manufacturing defects will be substituted or repaired freely by the manufacturer from their premises, except for electrical components and those subject to wear and tear. The guarantee excludes postage and labour costs.

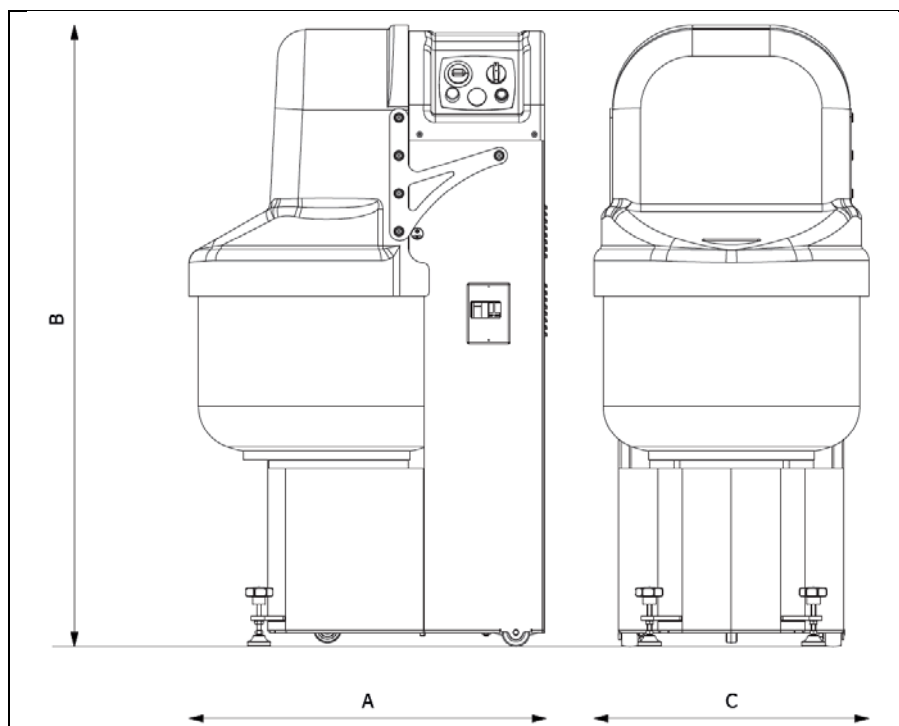
The guarantee is forfeited in the case of the damage being caused by: transportation, wrong or insufficient maintenance, unskilled operators, tampering, repairs carried out by unauthorised personnel, or failure to comply with the instructions of the manual. Compensation from the manufacturer will not be given for direct or indirect damages arising during any time the machine is inoperative due to its breakdown, it being awaiting repairs, or in any way referable to the non-physical presence of the machine.

1.4 MACHINE SPECIFICATIONS

The machine has been built and designed for professional use in the bakery and pastry industry. The use of the double arm system allows an excellent oxygenation of the dough, avoiding overheating.

The machine consist of (PICT.1.1):

- A robust, painted steel body powder coated with epoxy-powders for foodstuffs (reinforced with metal profiles where the mechanical stress is greater) which contains and supports the various machine components.
- Bowl and kneading arms made in stainless steel inox 304.
- Closed bowl protection guard made in a transparent high robustness plastic
- Movement of the arms made with oil bathed cast iron gears.
- Gear box made in high-robustness cast iron and perfectly leak-proof
- Two fixed rear wheels, a front swivel wheel and two front levelling feet.
- Supplied with timer
- Right arm adjustable in height for the realization of particular pastry dough.
- Available with motor:
 - three-phase with variable speed
 - three-phase 2 speed



PICT. 1.1

1.4.1 TECHNICAL SPECIFICATIONS

	Model	Kneading capacity kg	Flour capacity kg	Bowl volume lt	Arms speed min	Bowl dim. mm	Motor Power kW	Volt	Dimensions mm A B C	Weight Kg
BR SERIES	BR 40D	5/40	3/25	70	40/60	530x320	1.1/1.5	400/50/3	770x1350x600	270
	BR 40P	5/40	3/25	70	da 40a 60	530x320	2.2	400/50/3	770x1350x600	270
	BR 50D	5/50	3/33	80	40/60	550x340	1.5/2.2	400/50/3	770x1350x600	280
	BR 50P	5/50	3/33	80	da 40a 60	550x340	2.2	400/50/3	770x1350x600	280
	BR 60D	5/60	3/40	92	40/60	550x390	1.5/2.2	400/50/3	770x1350x600	290
	BR 60P	5/60	3/40	92	da 40a 60	550x390	2.2	400/50/3	770x1350x600	290

D = Tree-phase 2 speeds

P = Tree-phase with variable speed

1.5 RELEVANT REGULATIONS

The machine has been designed and manufactured in accordance with the Machinery Directive 2006/42/CE and the following standards:

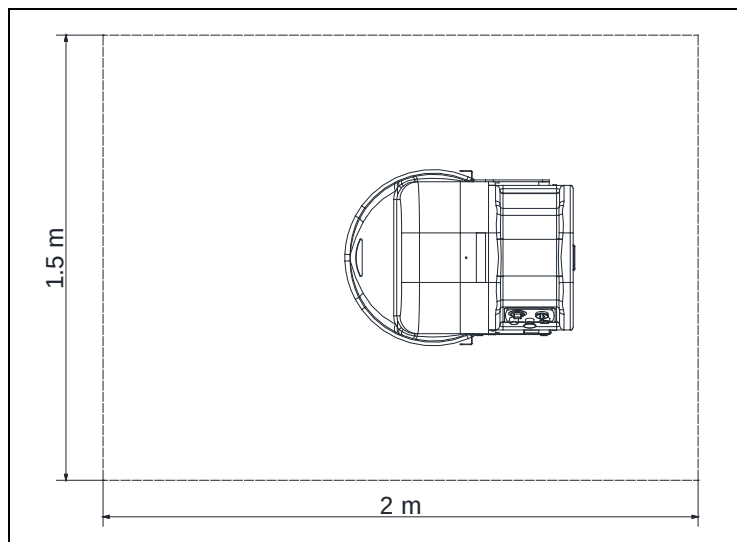
- UNI EN ISO14121-1: Safety of machinery
- UNI EN ISO12100: Safety of machinery - General principles for design

- UNI EN ISO13857: Safety distances
- UNI EN 349:2008: Minimum gaps to avoid crushing of parts of the human body
- IEC60204-1 Ed. 6.0: Electrical equipment of machines
- EN 453: Food Processing Machinery - Dough Mixers

The declaration of compliance is inside the bowl of the machine.

1.6 OPERATING AREA

In the normal working conditions and to have the best exploration of the potentiality of the machine, the operator needs the area represented in PICT. 1.2



PICT. 1.2

1.7 SAFETY AND HEALTH WARNINGS

Although the machine is built in conformity to the required security rules regarding electrical, mechanical and hygienic regulation it can be dangerous if:

- Used in case and condition different to those described by the manufacturer.
- Manumission of the protection and of the safety devices.
- Inattention to the instruction of: Installation - Functioning - Use - Maintenance.

In particular:

- Do not use the machine in humid, wet or badly lit environments, close to inflammable liquids or gas.
- Keep away from children and non authorized personnel.

- c) Only utilize the machine with the correct voltage. Normal usage gives better results.
- d) Dress in adequate way. Do not wear hanging clothes or any items which can be caught in the machine. Use non-slip shoes. For hygiene and safety keep your hair tied back and wear protective gloves.
- e) Protect the cable. Do not pull the cable to extract the plug. Do not leave the cable near high temperatures, sharp objects, water or solvents.
- f) Take the plug out. When the machine is not in use, before cleaning, maintenance and moving it.
- g) Check that the machine is not damaged. Before using the machine carefully check that all security devices are working. Check that: the mobile parts are not blocked, there are not any parts damaged, all the parts have been set up correctly and all the conditions that could influence the regular functioning of the machine are in working order.
- h) Repairing the machine by qualified personnel. The repairs can only be done by qualified people, using original spare parts.

The manufacturer declines any responsibility for damages to people, animals or things caused by the non – observance or non-respect of instructions s for installation, use and maintenance contained in this manual.

1.7.1 POWDERS RISK

During the loading operations of the dry products in the bowl or during the normal working some hanged dusts can be determined (for example flour dust).

The ingredients and the packaged products must be handled with care, reducing at minimum the height over the bowl from which they are poured. The packages must be opened with care in the bowl inferior part to promote the flour dust release in the less possible time.

The risk of suspended dust during the use of the machine is almost irrelevant, since the openings of the bowl protection guard are so small that they do not allow appreciable emissions of flour dust.

1.8 SERVICE AND SPARE PARTS

For questions on service and spare parts please contact your local dealer and state the following information (see data plate):

- Type of machine
- Year of production
- Reference number of the required piece as indicated in the drawing enclosed).

Use only genuine spare parts.

1.9 DEMOLITION OF THE MACHINE

In case of dismantling and demolition of the machine, the pieces which the machine is made of, do not present any kind of danger that necessitates any particular caution. To facilitate the recycling process, you must separate the different parts according to material type and provide the scrapping in compliance with the existing laws and regulations.

CHAPTER 2. INSTALLATION OF THE MACHINE

The machine should be installed in a well-ventilated room protected from dust and direct contact with atmospheric agents.

The machine must remain packed until the final installation at the place of employment.

2.1 ENVIRONMENTAL CONDITIONS OF INSTALLATION SITE

The environmental conditions in which the machine must be installed must follow these characteristics:

- Temperature: +5/+40° C, with the average temperature not exceeding 35°C over a period of 24 hours.
- Relative humidity: from 30% to 95% in the absence of condensation
- Water and heat sources at safe distance from the machine
- Well-dimensioned flat and stable surface

2.2 TRANSPORT AND HANDLING

The machine is delivered completely assembled, and fixed onto a fumigated wooden-pallet with ratcheting straps.

Transport and handling of machine must be carried out under safety conditions using appropriate means of transport.

To lift and handle the pallet or the case use a suitable fork lift truck or cables; the lifting forks and the cables are to be introduced into the specific openings under the pallet.

After reaching the place of installation, remove the machine from the packaging and check its integrity.

By means of lifting belts or cables under the machine body, and using a suitable hoisting device, lift the machine and remove the pallet.

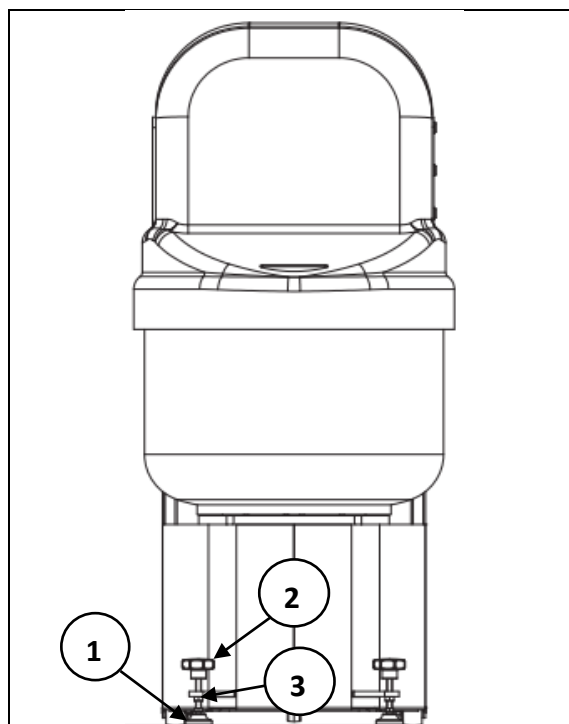
Leave free space around the machine to facilitate the operations of use, cleaning and maintenance. Separate the different materials according to material type and recycle them in accordance with relevant legislations.

2.3 ADJUSTMENTS

2.3.1 LEVELING OF THE MACHINE

After positioning in the selected area, adjust the front levelling feet Pos. 1 PICT.2.1 with the three-lobed hand wheel Pos. 2 to get perfect levelling and then lock it by tightening the nut Pos. 3.

If the machine is unstable due to floor irregularity, adjust the support feet or wheels by inserting rubber pieces.



PICT.2.1

2.3.2 HEIGHT ADJUSTING OF RIGHT ARM

⚠ ATTENTION

Height adjustment of right arm must be carried out when the machine is switched off and disconnected from the electricity mains.

The right arm can be adjusted to 3 different positions.



PICT.2.2

To adjust the height of arm proceed as follows:

- 1) Loosen the clamping handle M by turning it counter clockwise to unlock the arm (PICT. 2.2)
- 2) Use the spoked hand wheel L to adjust the height of the arm (the arm lifts if the spoked hand wheel will be rotated counter clockwise).
- 3) lock the arm with the clamping handle M (by turning it clockwise) by ensuring that the threaded stud is fully inserted in the appropriate hole in the arm.

2.4 ELECTRICAL CONNECTION

The machine is equipped with connecting cable located on the back of the machine. It's essential to mount a normalised and polarised plug at the end of the cable.

The electric net must be provided with an automatic differential switch and this has to be suitable to the machine

The electrical plug must be easy to access.

⚠ ATTENTION

Before proceeding to the electrical connection, ensure that voltage and frequency are the same declared by the Manufacturer and shown on the identification plate.

⚠ ATTENTION

Any electrical intervention involving the working site is to be carried out by qualified and skilled technicians. The manufacturer will not be liable for defects, breakdowns or malfunctioning arising from the non-compliance with the power supply values stated.

CHAPTER 3. CONTROL AND SAFETY DEVICES

The machine is equipped with the following control, safety and light-signalling devices::

3.1 CONTROL AND LIGHT-SIGNALLING DEVICES

3.1.1 MACHINE WITH VARIABLE SPEED (PICT. 3.1):

A –Main switch with manual-reset thermal protection

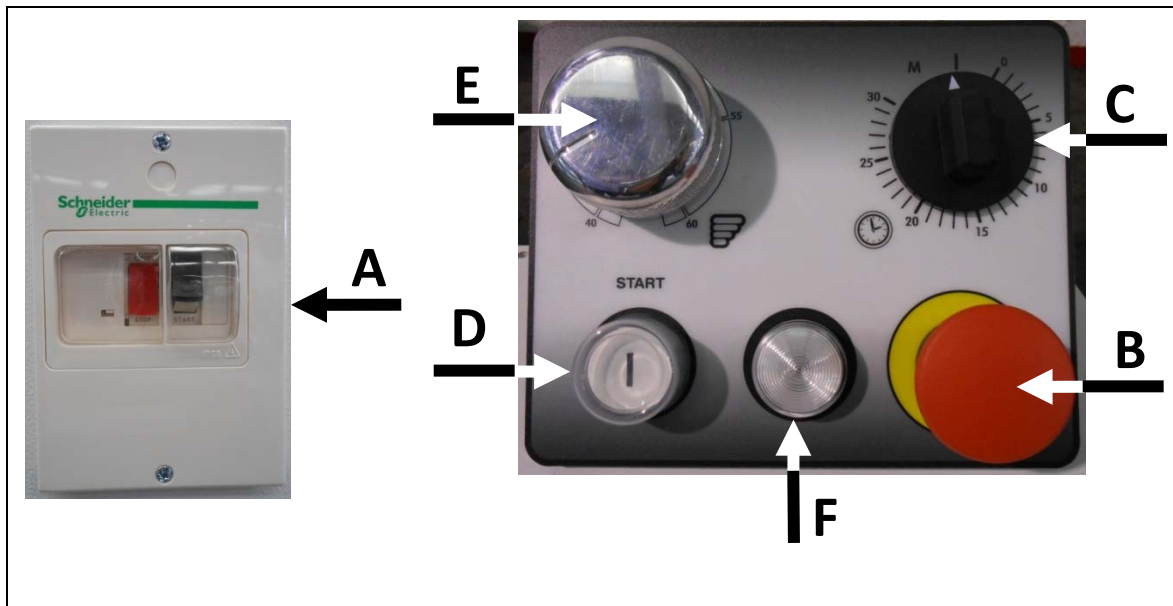
B – Stop button

C - Timer

D - START button

E - Speed controller of kneading arms

F – Light-signalling connection to the mains



PICT. 3.1

3.1.2 MACHINE WITH TWO-SPEED (PICT. 3.2):

A - Main switch with manual-reset thermal protection

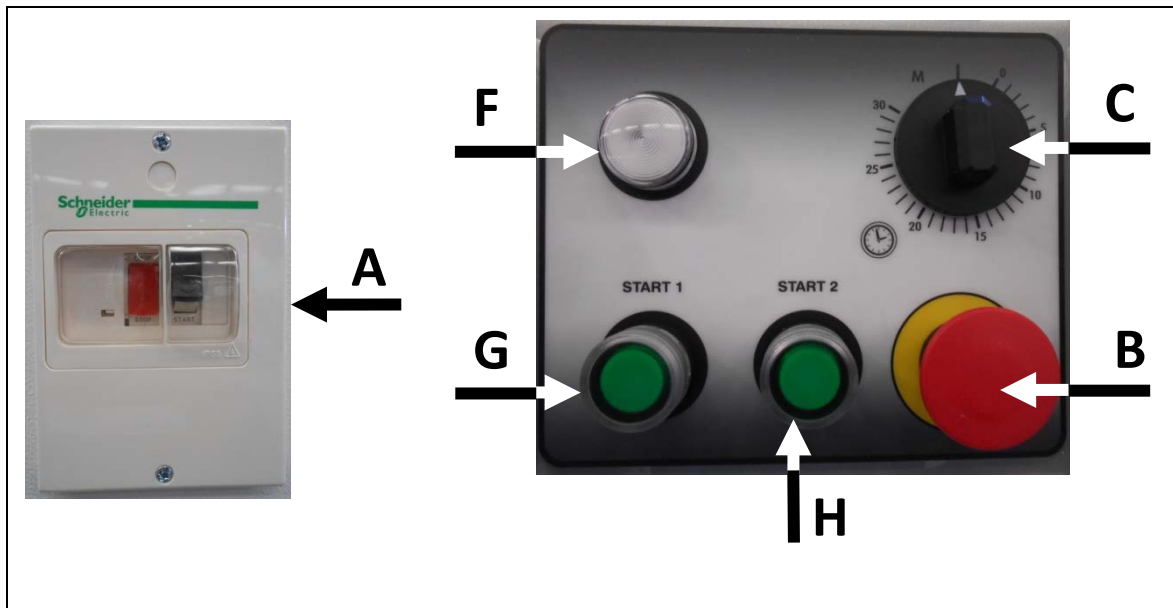
B - Stop button

C - Timer

F - Light signalling connection to the mains

G - Start button at 1st speed (START 1)

H - Start button at 2st speed (START 2)



PICT. 3.2

3.2 USE OF TIMER

All the mixer of BR Series are equipped with a timer.

Turning the C knob (PICT. 3.1-3.2) clockwise It is possible to set the operating time of the machine (between 1 and 30 minutes) after which the machine will stop automatically.

To work in manual mode, turn the C (PICT. 3.1-3.2) knob in position M; in this mode, to stop the working cycle, the operator must press the STOP button (PICT. 3.1-3.2).

3.3 SAFETY DEVICES

The machine is equipped with the following safety devices:

- a) STOP button B (PICT. 3.1-3.2) - It stops the machine immediately
- b) Bowl protection guard I (PICT.3.3) - It prevents access to the bowl during the work process
- c) Limit switch micro switch - It stopping the machine if the bowl protection guard is lifted
- d) Thermal overload switch - It interrupts the electrical supply to the motor when excessive electrical current is absorbed or when the motor overheats.



PICT. 3.3

CHAPTER 4. USE OF THE MACHINE

4.1 TESTING

Before starting the machine, the safety devices should be checked according to the following procedure:

- 1 while the machine is working, press the STOP button B (PICT. 3.1-3.2). The machine should stop immediately.
- 2 while the machine is working lift the protection grid I (PICT. 3.3). The machine should stop immediately

Check that the control devices are functioning correctly, as described in the paragraphs 4.3, 4.4.

Once the plug has been connected to the power supply socket, check the correctness of the bowl rotation direction (look at the direction shown by the arrow on the bowl). If the rotation direction is not correct, proceed as follows:

1. Stop the machine (Press STOP button B PICT. 3.1)
2. unplug the power cord from the power outlet
3. Reverse on the plug the position of two phases (example: L1 with L2 and vice-versa).
4. plug the power cord into the power outlet
5. Restart the machine and verify if the bowl is rotating the right way.

Operate the machine for a few minutes while empty by checking that the movement of the arm and the rotation of the bowl are free to operate without any impediments or inertia.

4.2 LOADING MACHINE

Lift up the bowl protection guard I (PICT. 3.3)

Put all initial ingredients into the bowl and then close the bowl protection guard.

To add ingredients during the work cycle, lift up the bowl protection guard I (PICT.3.3), add the ingredients, lower the protection and press START (machine with variable speed) or START 1-START 2 (machine with two speed)

ATTENTION

Loading operations must be carried out when the machine is switched off and disconnected from the electricity mains.

⚠ ATTENTION

Do not introduce into the bowl any quantity of ingredients exceeding the capacity given by the Manufacturer in the present manual (look at paragraphs 1.4.1). This might cause severe damage to the machine and in particular to the motion transmission system.

⚠ ATTENTION

During loading of dry ingredients in the bowl, powder suspended can be determined. (e.g. flour powder). Ingredients and packaged products must be handled with care by minimizing the height above the bowl base from which they are poured.

Careful slitting of bags in the lower part of the bowl to allow dust free discharge of flour as far as possible.

The manufacturer will be not responsible for any reasons and for any eventual damages caused from a non-observance of the instructions given in the same.

4.3 MACHINE START-UP

Before starting the machine:

- a) Be sure that the bowl protection guard is lowered onto the bowl.
- b) Connect the power cable to the electric socket
- c) enable main power switch A (PICT. 3.1) ; the switching-on of light-signalling F (PICT. 3.1-3.2) indicate that the machine is connected to mains supply.

4.3.1 MACHINE WITH VARIABLE SPEED (PICT. 3.1)

- 1) Turn the C knob (PICT.3.1) counter clockwise to position M (manual mode) or set the mixing time with timer turning the knob C clockwise depending on desired operating mode.
- 2) Press the START button (D) on the control panel (PICT. 3.1) to start the machine
- 3) Use the E knob (PICT. 3.1) to set the speed of kneading arms.

4.3.2 MACHINE WITH TWO (PICT. 3.2)

- 1) Turn the C knob (PICT.3.1) counter clockwise to position M (manual mode) or set the mixing time with timer turning the knob C clockwise depending on desired operating mode.
- 2) Press the START 1 button (PICT. 3.2) to start the machine at 1st speed or press START 2 button (PICT. 3.2) to start the machine at 2st speed

4.4 STOPPING MACHINE

Manual mode: Press the STOP button B (PICT. 3.1-3.2)

Timer mode: the machine will stop automatically at the end of the time set with timer C (PICT.3.1-3.2).

To interrupt the working cycle before the time set with timer, press the STOP button B (PICT. 3.1-3.2).

4.5 DOUGH DISCHARGE

After stopping the machine, turn the main power switch off and unplug the power-cord plug from the electrical outlet.

Lift the bowl protection guard and extract the dough manually from the bowl after portioning it into smaller parts

CHAPTER 5. MAINTENANCE

ATTENTION

Before you start clearing or servicing the machine, verify that power has been turned off. In any case of malfunctioning or damage of the machine you must apply for authorized assistance from the manufacturer.

Maintenance is divided into two categories: ordinary maintenance and programmed maintenance

5.1 ORDINARY MAINTENANCE

ATTENTION

For ordinary maintenance we intend all the operations that can be done by the operator only after having read carefully the instructions given in this section.

5.1.1 CLEANING

Cleaning the machine at the end of each operating cycle is highly recommended.

For the good functioning of the machine and for hygienic purposes, it is necessary to remove the dough crusts from the bowl, the bowl protection guard and the kneading arms by means of a cleaning cloths soaked in water or appropriate detergent. If needed, try to remove the hardest remains by means of a plastic paddle.

ATTENTION

During the cleaning operations some dusts can be determined (for example flour dust); it's recommended to use an dust aspirator.

ATTENTION

Never use steel wool, compressed air jets or abrasive products to clean the machine.

ATTENTION

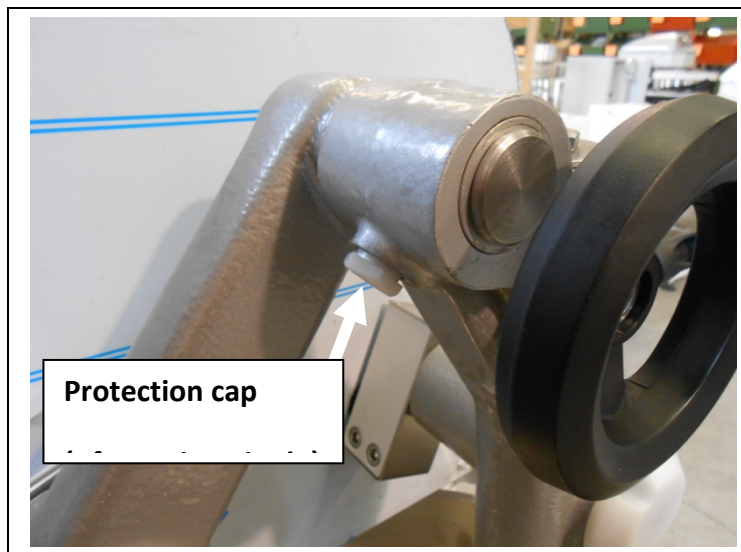
Do not use water jets to clean both the control panel and the electric board.

5.1.2 GREASING OF KNEADING ARMS

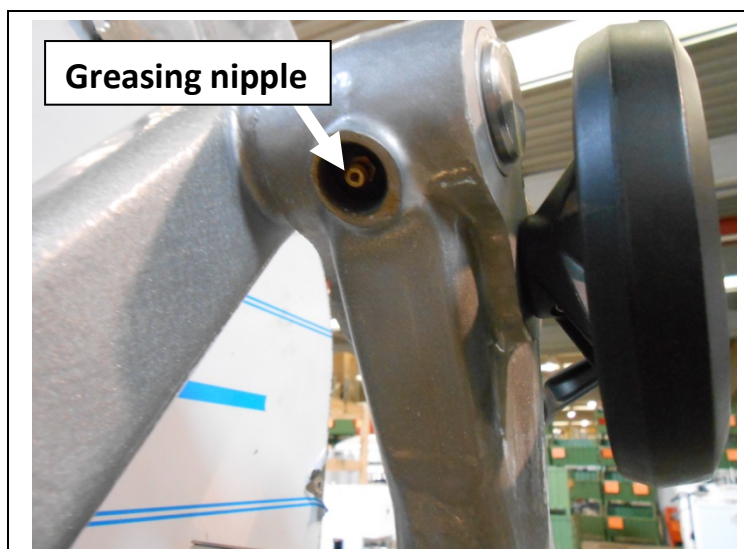
⚠ ATTENTION

The greasing of kneading arms must be carried out when the machine is switched off and unplugged from the mains and without removing the upper cover.

For greasing the kneading arms, a 150 gr manual grease press is supplied with the machine. Apply the manual grease press into the greasing nipple (PICT. 5.2) accessible by removing the cap on the right arm (PICT. 5.1).



PICT. 5.1



PICT. 5.2

For greasing the kneading arms, proceed as follows:

- 1) Lift the bowl protection guard I (PICT. 3.3)
- 2) Unscrew and remove the cap (PICT. 5.1) for access to the greasing nipple (PICT. 5.2).

- 3) Place the tip of manual grease press (PICT. 5.3) into the grease nipple then press to allow the exit of the grease. Repeat the procedure 2 to 3 times.

It is recommended to perform the greasing procedure after approximately 10 hours of operation, and thereafter every approximately 50 hours of operation.



PICT. 5.3

i NOTE

PICT. 5.3 was taken after removing the upper cover of the machine and it has the sole aim of providing operator a clearer idea of the greasing operations.

Greasing of kneading arms must be carried out without removing the upper cover.

5.2 PROGRAMMED MAINTENANCE

⚠ ATTENTION

Ordinary maintenance operations must only be carried out by qualified personnel.

These are periodic inspections in order to prevent any future failure and to maintain the machines security standards

Particular attention must be paid to the belts tensioning.

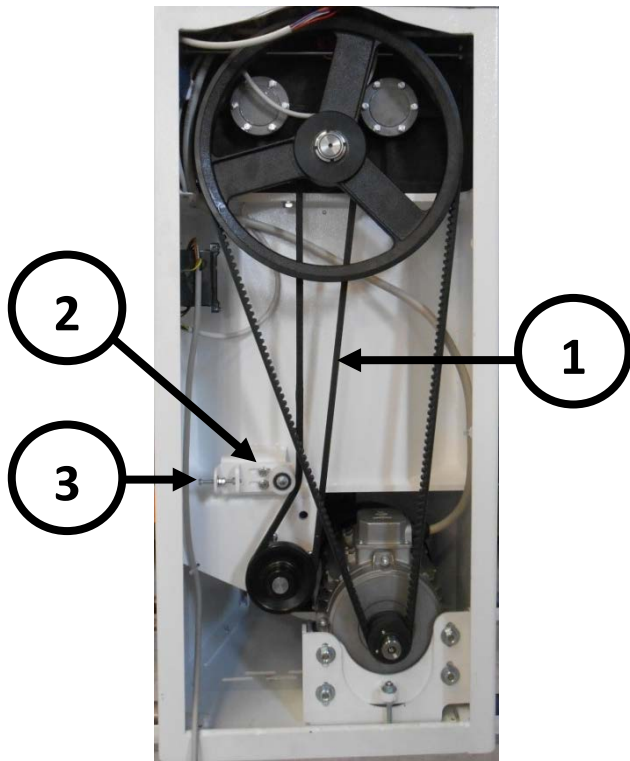
The tension and general condition of the belt should therefore be checked at least monthly

⚠ ATTENTION

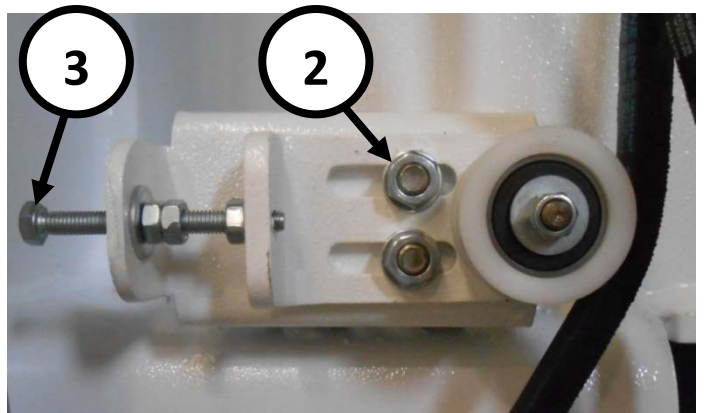
Belts tension must be carried out when the machine is switched off and unplugged from the mains

5.2.1 BOWL BELTS TENSION ADJUSTMENT

Proceed as follows:



PICT. 5.4



PICT. 5.5

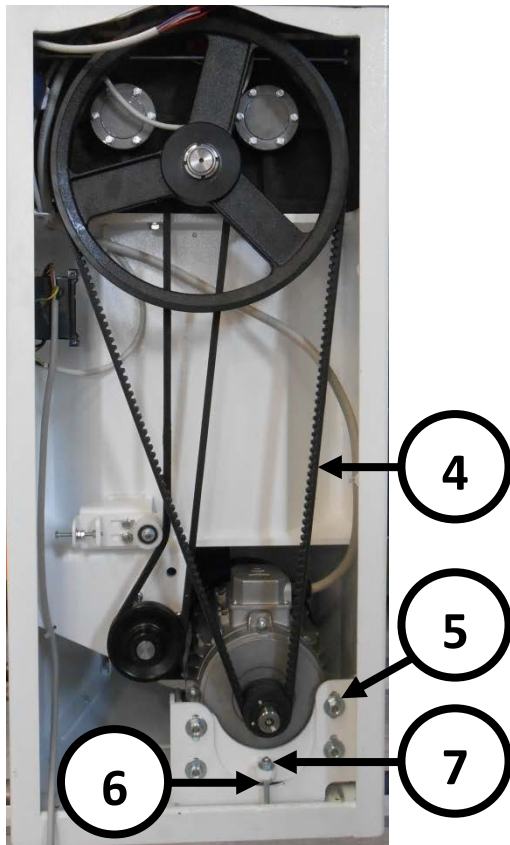
- 1) Remove the protection cover at the back of the machine after unscrewing the fixing screws
- 2) Loosen the two nuts Pos.2(PICT.5.4-5.5) securing the moving plate with the belt tensioning roller to the frame.
- 3) Restore the correct belts tension with the screw Pos.3 (PICT. 5.4-5.5)
- 4) Retighten the two nuts Pos.2 (PICT.5.4-5.5)
- 5) Re-assemble the protection cover at the back of the machine

5.2.2 TENSION ADJUSTMENT OF BELT WHICH MOVES THE ARMS

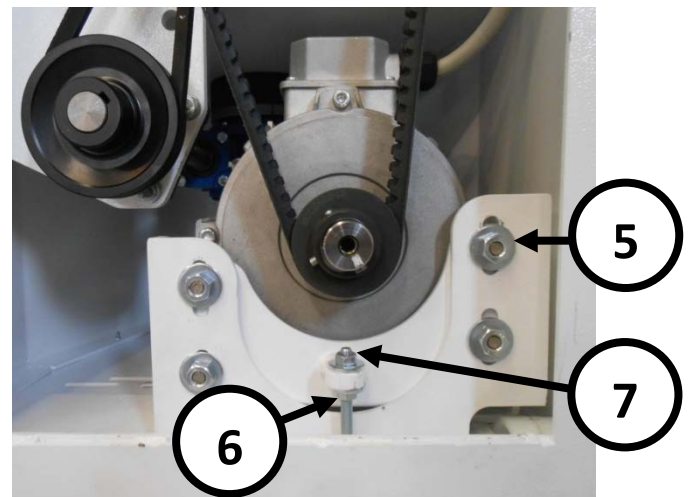
Proceed as follows:

- 1) Remove the protection cover at the back of the machine after unscrewing the fixing screws
- 2) Loosen the four nuts Pos.5 (PICT. 5.6-5.7)
- 3) Unscrew the nut Pos.6 (PICT. 5.6-5.7)
- 4) Restore the correct belts tension with the nut Pos. 7 PICT. 5.6-5.7)
- 5) Retighten the nut Pos.6 (PICT. 5.6-5.7)

- 6) Retighten the nut Pos.5 (PICT. 5.6-5.7)
- 7) Re-assemble the protection cover at the back of the machine



PICT. 5.6



PICT. 5.7

5.3 POSSIBLE FAILURE AND/OR ANOMALIES

ANOMALY	POSSIBLE CAUSE	POSSIBLE REMEDY
The machine does not start	Lack of power	Verify the electric meter, the power outlet, the power plug and the power cord.
	The bowl protection guard is lift	Lower the bowl protection guard
	The main power switch is turned off	Turn the main power switch on
	No mode of working (manual or with timer) is selected	Set the mode of working; turn the knob of timer counter clockwise for manual mode or turn the knob clockwise and to the operating time
The rotation direction of the bowl is not correct	The phases are inverted	Reverse on the plug the position of two phases
The kneading arms tend to slow or to stop	Hard dough	Add water in the bowl