



# INSTRUCTIONS MANUAL

## HANDICRAFT ICE CREAM

### BAK-16 BAKL-16

### BAK-30 BAKL-30



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- ALÉM DESTAS MÁQUINAS, FABRICAMOS UMA LINHA COMPLETA DE EQUIPAMENTOS. CONSULTE SEU REVENDEDOR.  
- ESTE PRODUTO CONTA COM ASSISTÊNCIA TÉCNICA, REPRESENTANTES E REVENDEDORES EM TODO TERRITÓRIO NACIONAL.  
DEVIDO À CONSTANTE EVOLUÇÃO DOS NOSSOS PRODUTOS, AS INFORMAÇÕES AQUI CONTIDAS PODEM SER MODIFICADAS SEM AVISO PRÉVIO.

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# 1. Introduction

## 1.1 Safety

When not properly used the Ice Cream Mixer models BAK-16, BAKL-16, BAK-30 and BAKL-30 are potentially dangerous machines. Servicing, cleaning or any other operation shall be made by trained people. Plug has to be off outlet during any of these operations.

1.1.1 -Unplug the machine when you need to remove any removable part during cleaning, maintenance or any other operation.

1.1.2 - Never make use of any tool or instrument that is not originally part of the machine to help operation.

1.1.3 - Before switching the machine on check if all removable parts are properly fitted in their right positions.

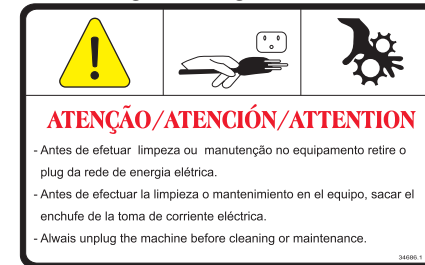
1.1.4 - Never throw water directly to the machine.

1.1.5 - Never use inappropriate clothes mainly long sleeves during operation.

1.1.6 - Keep hands off turning parts.

1.1.7 - Do not operate the machine wearing wet clothes or wet shoes.

1.1.8 - Provide electric grounding when the machine is installed.



### IMPORTANT

**1 -The temperature of the liquid surrounding the bowl during operation must vary Between (-20 and - 25 degrees Celsius ) .**

**2- Check if the WORM is centred and scratching the side of the bowl, otherwise, the equipment must not be used as it will get damaged.**

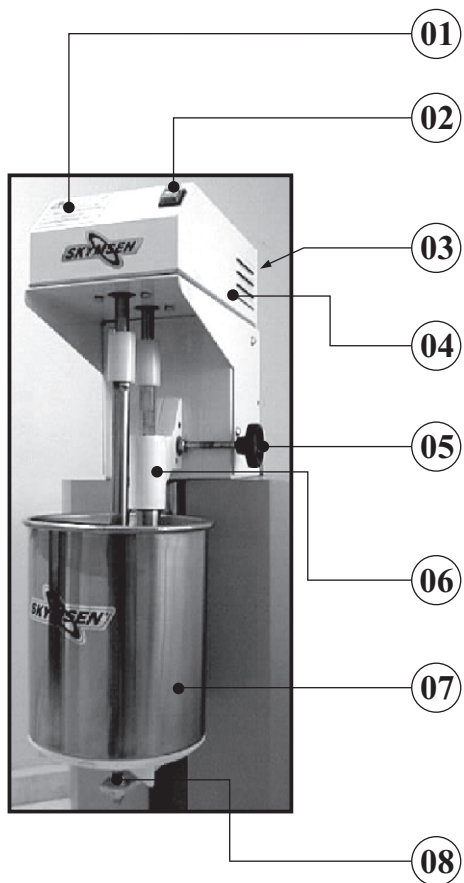
**3 - In order to have a good performance, the ice cream paste must be processed between 15 and 20 minutes and then placed into the freezer.**

**4 -During the processing intervals avoid the bowl to remain inside the liquid without to process the paste. Such care will avoid ice development on the bowl internal side, increasing the equipment lifetime .**

## 1.2 Main Components

All components were manufactured using raw materials carefully selected for their proper function, according to Siemens test patterns and experience .  
The new sheet design makes the equipment more hygienic and easy to clean.

PICTURE - 01



- 01 Warning label**
- 02 Plastic protected electric switch**
- 03 110/220V Voltage Selector Switch**
- 04 Motor housing**
- 05 Handle**
- 06 Bushing and Worm Set**
- 07 Complete Bowl**
- 08 Central pin set**
- 09 Loops**
- 10 Gloves**
- 11 Scraper**
- 12 Base**

PICTURE - 02

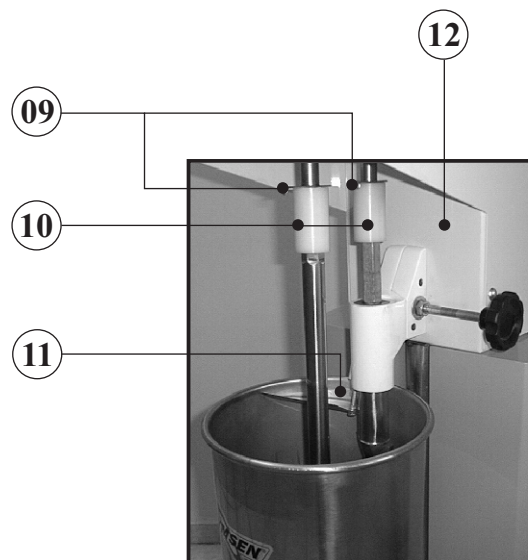


Tabela - 02

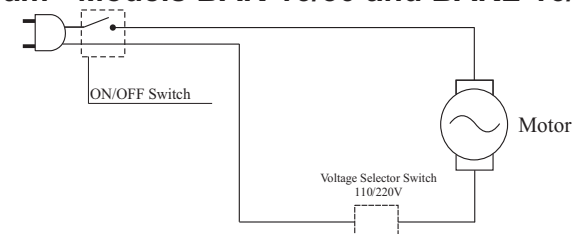
**Problemas**

**Causas**

**Soluções**

Burning odor and/or smoke.	Motor or other electric parts problems.	Call Technical Assistance.
Machine starts but takes some time to move the Complete bowl N°07 (Fig.01).	Belts not fastened enough.	Call Technical Assistance.
	Motor start capacitor damaged.	Call Technical Assistance.
Strange noise.	Defective bearings.	Call Technical Assistance.
Machine stops during operation.	Lack of power.	Check if plug is connected to the power supply source and/or electricity shortage.
	Belts not fastened enough.	Call Technical Assistance.

**5.2 Electric Diagram - Models BAK-16/30 and BAKL-16/30**



The operation performed by not trained or skilled personnel shall be forbidden.  
 Never touch turning parts with your hands or in any other way.  
 NEVER operate machine without all original safety devices under perfect conditions.

## 4.5 After Finishing The Work

### 4.5.1 Precautions

Always TURN THE MACHINE OFF by removing the plug from the socket before cleaning the machine. Never clean the machine unless it has come to a complete stop. Put all components back to their functional positions before turning it ON again. Check level of oil. DO NOT place your fingers in between belts and pulleys nor chains and gears.

## 4.6 Maintenance

### 4.6.1 Danger

Any maintenance with the machine in working situation is dangerous. TURN IT OFF BY PULLING THE PLUG OFF THE SOCKET DURING MAINTENANCE.

### 4.6.2 Advice

Electrical or mechanical maintenance has to be undertaken by qualified personal. Person in charge has to be sure that the machine is under TOTAL SAFETY conditions when working.

## 5 Analysis and Problems Solving

### 5.1 Problem, causes and solutions

The Handicraft Ice Cream MixerMod. BAK-16 , BAKL-16 , BAK-30 and BAKL-30 are designed to operate with the need of minimum maintenance but the natural wearing caused by longer use of the equipment may occasionally cause some malfunctions. If such problem occurs with your mixer refer to Table 02 in which the most common situations are listed with recommended solutions.

## 1.3 Technical Characteristics

**Table - 01**

Characteristics	Unit.	BAK / BAKL-16	BAK / BAKL-30
Production	[l/h]	16	30
Voltage	[V]	110 / 220 (**)	110 / 220 (**)
Frequency	[Hz]	50 ou 60 (*)	50 ou 60 (*)
Power Rating	[CV]	0,33	0,5
Consumption	[kW/h]	0,26	0,39
Height	[mm]	877	877
Width	[mm]	280	320
Depth	[mm]	466	486
Capacity	[l]	16	30
Net/Gross Weight	[kg]	38/46	51/64

(\*\*) Adjustable through the voltage selector switch N°03 (Pic.01)

(\*) Frequency will be unique according to the equipment motor.

## 2. Installation and Pre Operation

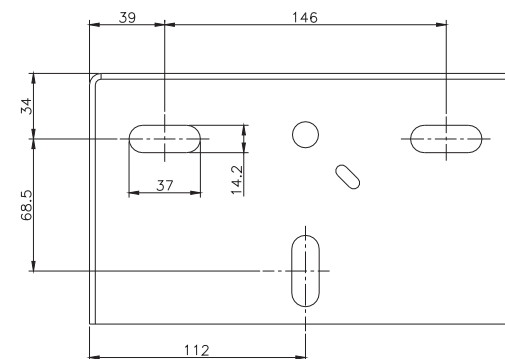
### 2.1 Installation

The Ice Cream Dough Mixer Models BAK-16, BAKL-16, BA-30 and BAKL-30 have to be installed inside freezing containers. The below picture indicates the holes placement and dimensions to fasten the equipment.

The feeding cord has 2 pins and one grounding wire. It is mandatory that the three of them are to be properly connected before to start the equipment. Before to switch the machine on, check the voltage and adjust it according to the network electricity voltage using the Voltage selector Switch N°03 (Pic.01)

Internal picture of the Base N°12 (Pic.02) where the slits positions to fasten the equipment are shown.

**Picture-01**



### 2.2 Pre Operation

Check if the Ice Cream Dough Mixer is firm in its position. Remove and wash all removable parts. For your safety read item "3.3 Cleaning" on this Manual.

## 3. Operation

### 3.1 Starting

To switch ON the machine, push the plastic protected switch N°02 (Pic.01) located in the frontal side of the motor housing N°04 (Pic.01).

### 3.2 Feeding Procedure

Put the ingredients inside the complete bowl N°07 (Pic.01) and switch the machine on.

#### IMPORTANT

**Before switching the machine on make sure all removable parts are firm in their positions.**

### 3.3 Cleaning

#### IMPORTANT

**Never do cleaning with machine plugged in, always unplug machine before cleaning.**

All removable parts must be removed and washed. Wash them with running water and neutral soap. Below we will describe the procedures for the parts removal.

#### 3.3.1 Cautions with Stainless Steel:

The Stainless Steel may present rust signs, which ARE ALWAYS CAUSED BY EXTERNAL AGENTS, especially when the cleaning or sanitization is not constant and appropriate.

The Stainless Steel resistance towards corrosion is mainly due to the presence of chrome, which in contact with oxygen allows the formation of a very thin protective coat. This protective coat is formed through the whole surface of the steel, blocking the action of external corrosive agents.

When the protective coat is broken, the corrosion process begins, being possible to avoid it by means of constant and adequate cleaning.

Cleaning must always be done immediately after using the equipment. For such end, use water, neutral soap or detergent, and clean the equipment with a soft cloth or a nylon sponge. Then rinse it with plain running water, and dry immediately with a soft cloth, this way avoiding humidity on surfaces and especially on gaps.

The rinsing and drying processes are extremely important to prevent stains and corrosion from arising.

## 4.2 Safety Procedures and Notes Before Switching Machine ON

#### IMPORTANT

**Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to be familiar with the set and that you have well understood all information contained in this manual. If you have any question contact your supervisor or your nearest Dealer.**

#### 4.2.1 Danger

An electric cable or electric wire with damaged jacket or bad insulation could cause electrical chocks as well as electrical leak. Before use check conditions of all wires and cables.

#### 4.2.2 Advices

Be sure ALL INSTRUCTIONS in this manual have been thoroughly understood. Every function and operational procedure have to be very clear to the operator. Contact your nearest Dealer for further questions.

Any manual command (switch, button or lever) shall be given only after being sure it is the correct one.

#### 4.2.3 Precautions

The electric cable has to be compatible with the power required by the machine. Cables touching the floor or close to the machine need to be protected against short circuits.

Oil reservoir has to be full up to the required level as indicated. Check level and add oil if necessary.

## 4.3 Routine Inspection

#### 4.3.1 Advice

When checking the tension of the belts or chains, DO NOT introduce your fingers between the belts and the pulleys and nor between the chain and the gears.

#### 4.3.2 Precautions

Check if motors and sliding or turning parts of the machine produce abnormal noises.

Check the tension of the belts and chains and replace the set when belt or chain show signs of being worn out.

When checking tensions of belts or chain DO NOT introduce your fingers between belts and pulleys, nor between the chains and gears.

Check protections and safety devices to make sure they are working properly.

## 4.4 Operation

#### 4.4.1 Advice

Be sure your hair is not loose in order to avoid getting caught by turning parts which could lead to a serious accident. Tie your hair up well and/or cover your head with a scarf.



## 4. General Safety Practices

### IMPORTANT

If any item from the **GENERAL SAFETY NOTIONS** section is not applicable to your product, please disregard it.

The following safety instructions are addressed to both the operator of the machine as well as the person in charge of maintenance. The machine has to be delivered only in perfect conditions of use by the Distributor to the user. The user shall operate the machine only after being well acquainted with the safety procedures described in the present manual. **READ THIS MANUAL WITH ATTENTION.**

### 4.1 Basic Operation Practices

#### 4.1.1 Dangerous parts

Some areas of the electric device have parts that are connected or have parts connected to high voltage. These parts when touched may cause severe electrical chocks or even be fatal. Never touch commands such as switches, buttons, and knobs with your hands wearing wet clothes and/or wet shoes. By not following these instructions operator could be exposed to severe electrical shocks or even to a fatal situation.

#### 4.1.2 Warnings

The operator has to be well familiar with the position of ON/OFF Switch to make sure the Switch is easy to be reached when necessary. Before any kind of maintenance, physically remove plug from the socket.

Provide space for a comfortable operation thus avoiding accidents. Water or oil spilled on the floor will turn it slippery and dangerous. Make sure the floor is clean and dry.

Before giving any manual command (switch, buttons, turn keys or lever) be sure the command is the correct one. Check this manual for further details if necessary.

Never use a manual command (switch, buttons, lever) unadvisedly.

If any work is to be made by two or more persons, coordination signs will have to be given for each operation step. Every step of the operation shall be taken only if a sign has been made and responded.

#### 4.1.3 Advices

In case of power shortage, immediately turn the machine OFF.  
Use recommended or equivalent lubricants, oils or greases.  
Avoid mechanical chocks as they may cause failures or malfunction. 6  
Avoid penetration of water, dirt or dust into mechanical or electrical components of the machine.

DO NOT modify original characteristics of the machine.  
DO NOT remove, tear off or maculate any labels stuck on the machine. If any labels has been removed or is no longer legible contact your nearest dealer for replacement.

**READ CAREFULLY AND WITH ATTENTION THE SAFETY OR OPERATION INSTRUCTIONS LABELS DISPLAYED ON THE MACHINE, AS WELL AS THE INSTRUCTION MANUAL AND THE TECHNICAL CHARACTERISTICS WRITTEN INSIDE .**

### IMPORTANT

**Acid solutions, salty solutions, disinfectants and some sterilizing solutions (hypochlorites, tetravalent ammonia salts, iodine compounds, nitric acid and others), must be AVOIDED, once it cannot remain for long in contact with the stainless steel:**

These substances attack the stainless steel due to the **CHLORINE** on its composition, causing corrosion spots (pitting).

Even detergents used in domestic cleaning must not remain in contact with the stainless steel longer than the necessary, being mandatory to remove it with plain water and then dry the surface completely.

### Use of abrasives:

Sponges or steel wool and carbon steel brushes, besides scratching the surface and compromising the stainless steel protection, leave particles that rust and react contaminating the stainless steel. That is why such products must not be used for cleaning and sanitization. Scrapings made with sharp instruments or similar must also be avoided.

### Main substances that cause stainless steel corrosion:

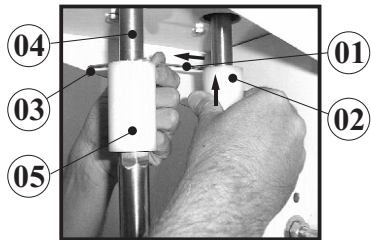
Dust, grease, acid solutions such as vinegar, fruit juices, etc., saltern solutions (brine), blood, detergents (except for the neutral ones), common steel particles, residue of sponges or common steel wool, and also other abrasives.

## 3.4 Removing the CONJUNTO MANCAL CARACOL

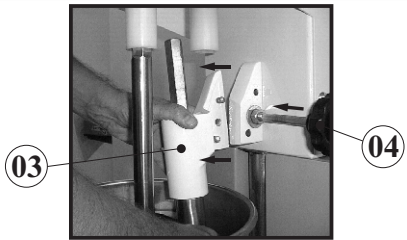
Turn the handling (N° 04 Pic.04) anti- clockwise until you remove it  
Take the loop off N°1 (Pic.03) pulling it out  
Lift the glove vertically up N° 02 (Pic.03).  
Take the Bushing and Worm Set off N° 03 (Pic.04) making alternate movements forcing them to the left side.

### Observation:

**If it becomes difficult to remove the Bushing and Worm Set N°03 (Pic.04), replace the handle N°04 (Pic.04) (without screwing it) and push it forcing to exit the Bushing and Worm Set**



Picture - 03

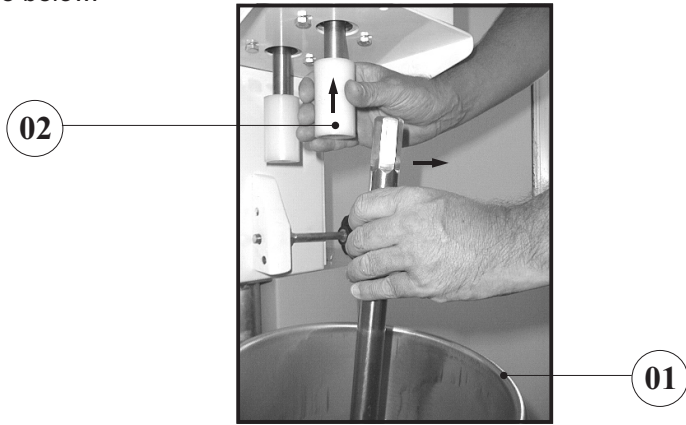


Picture - 04

3.5 Removing the Complete Bowl

To remove the complete bowl N°01 (Pic.05), take the loop N°03 (Pic.03) pulling it out.  
Lift the glove vertically N°02 (Pic.05) and then take the complete bowl out N° 01 (Pic.05) as picture below.

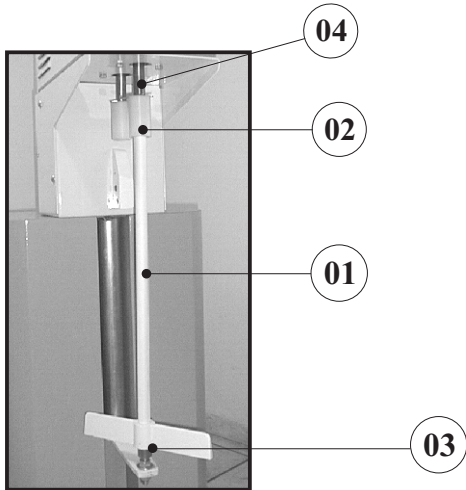
Picture - 05



3.6 Using the Liquid Agitator

The liquid agitator N°01 (Pic.06) is used in the process of popsicle making. In order to place it, take the Bushing and Worm Set and the complete bowl off as item " 3.4 removing the Bushing and Worm Set " and item " 3.5 Removing the Complete Bowl " .  
Before placing the liquid agitatorN°01 (Pic.06), grease the hole N° 03 (Pic.06) which is in the inferior side of the liquid agitator with appropriate bearing grease .  
Then lift the glove N°02 (Pic.06), place the liquid agitator hexahedral in the same position and slide the glove down so that its upper shaft N. 04 (Pic.06) and the liquid agitator N.01 (Pic.06) will achieve a perfect transmission.  
To avoid the glove to move up due to the shafts rotation, place the loop N.03 (Pic.03) into the existing slit in the bowl upper shaft N. 04 (Pic. 06 ).

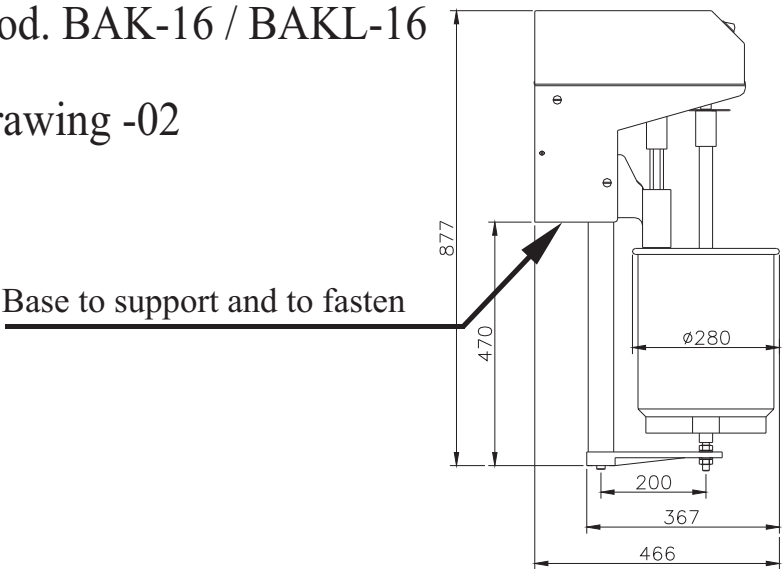
Picture - 06



3.7 Main Dimensions

Mod. BAK-16 / BAKL-16

Drawing -02



Mod. BAK-30 / BAKL-30

Drawing -03

