

# OPERATOR MANUAL NA 6888 DUO CHAMPION COMBI TOUCH XL



Win Equipment B.V. De Kronkels 31 3752 LM Bunschoten WITH EASE DELICIOUS SOFT SERVE FROM A NISSEI

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NA6888 Champion Combi Touch XL



## 1 Introduction

## 1.1 Purpose

The purpose of this Operator Manual is to provide the operator with information relating to the use and maintenance of the NA6888 Champion Combi Touch XL and for de only ice configuration.



Read this Operator Manual carefully before using the machine.

### Manufacturer

Win Equipment B.V. De Kronkels 31 3752 LM Bunschoten The Netherlands



Dealer mark		

## Operator Manual



### 1.3 Machine identification

The machine plate is affixed to the rear of the machine. This plate carries the CE mark. This means that the machine meets the basic health and safety requirements of the European Union.

nissei freezer						
11.		Hermetically sealed fluorinated greenho				
MODEL	NA6888WTGK	R448A charge	560 / 770 Gram			
SERIAL NR.		GWP	1273			
POWER 50 Hz	400 V; 3 Phase	CO <sub>2</sub> equivalent	1,693 Ton			
Dasher motor	550 / 550 W	Test pressures:				
Compressor	1100 / 1500 W	High side	2.1 MPa			
Rated current	9.2 A	Low side	1.5 MPa			
MANUFACTURER:		IMPORTER E.U.	:			
NISSEI COMPANY LTD		WIN EQUIPM	MENT B.V.			
2-11 3-CHOME HAGINOSHO,		De KRONKELS 3:	1			
TAKATSUKI-SHI,	,	3752LM BUNSC				
569-0093 JAPAN		the NETHERLAN	DS			



This machine contains fluorinated greenhouse gases in a hermetically sealed system with the values as specified in the label.

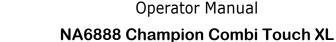
## 1.4 Warranty

The dealer offers on new machines a 5-year warranty on expensive parts and a 12-month warranty on non-wearing parts and repair costs. This is in accordance with the conditions specified in the order confirmation.

#### 1.5 **Accessories**

The following items are supplied with the machine:

- Operator manual
- Pasteurizing plug (Combi)
- O ring remover
- Allen bolt screwdrivers (2x) (Combi)
- Piston puller (XL)
- Cleaning brush, narrow and wide
- Tube of lubricant (Petrogel)
- O ring replacement set
- Set of fuses
- Set of nozzles





## 1.6 Liability

The dealer is not liable for any unsafe situations, accidents and/or damage resulting from any of the following points:

- Failure to observe warnings or instructions as displayed on the machine or in this Operator Manual.
- Use of the machine for applications or under conditions other than those specified in this Operator Manual.
- Changes of kind made to the machine. This also includes the use of different replacement parts.
- Inadequate maintenance.

The dealer is not liable for any consequential damage due to machine faults, such as damage to products, business interruptions, production loss etc.

## 1.7 Copyright

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No part of this publication may be copied, stored in an automated data file or made public, in any form or in any way, be it electronically, mechanically, by photocopy, recording or in any other way, without the prior written consent of the manufacturer.



## 2 Safety

## Symbols used in this manual.

Below you will find an explanation of the symbols that may be used in this manual to draw the attention of the reader to particular situations.



#### Caution needed:

- an accident may occur or
- damage may occur to the machine Do not do this!!!



Suggestion to make tasks or actions easier to carry out.



It is important to read the information provided.



Wait before continuing with the next action.

## **Emergency stop**

The emergency stop button must be pressed immediately if people or machinery are at risk.

The entire machine stops immediately and the power is turned off. The emergency circuit is now in operation.

The operation of the emergency stop is described in chapter 5.5 - 'Emergency stop'.



Use the emergency stop button immediately if people or machinery are at risk.



People who operate the machine must be informed about the operation and location of the emergency stop button.







## 2.3 Safety symbols on the machine

The following safety symbols have been affixed to the machine:

Location of emergency stop.

This symbol is affixed to the left front side of the machine above the emergency stop button.



Risk of trapping hand.

This symbol is affixed to the top of the machine next to the mix tank.



Do not spray with water.

This symbol is affixed to the rear of the machine next to the ventilation slots.



Danger: electricity.

This symbol is affixed inside the housing.



## 2.4 Safety instructions

The machine meets the basic health and safety requirements of the relevant directives of the European Union.

Improper or careless use can lead to dangerous situations. Please observe the following general safety instructions:

- Connect the machine in accordance with the basic health and safety requirements of the relevant European directives.
- Exercise caution with loose hair and clothing.
- Keep your hands away from dangerous zones.
- Never power up the machine if people are in contact with it.
- Pull the plug out of the socket before carrying out maintenance work on the machine.
- Faulty safety equipment must be replaced before the machine is used in production.
- The machine must be maintained in accordance with the instructions found in chapter 7 'Maintenance' on page 34.
- Changes to the machine must not be implemented without the prior consent of the manufacturer.
- The safety equipment of the machine must be checked weekly for correct operation.
- Never remove the machine's plating. There are no parts that you can replace or adjust yourself.
- Do not remove or cover any labels on the machine.



The safety instructions specified in this document must be observed. Deviating from the instructions can cause unacceptable risks.



## 2.5 Operation and maintenance

The machine may only be operated, maintained and cleaned by trained staff. The end user determines the basis on which staff are authorized for this purpose.

## 2.6 Hygiene

Good hygiene is very important. Please adhere to the following rules:

- **Clean** and **disinfect** the machine at least according to the hygiene code ice making but at least once every 6 weeks
- **Decalcify** the machine every 2<sup>nd</sup> till 4<sup>th</sup> cleaning, depending on the pollution, but at least twice a year.
- **Use** the recommended cleaning, disinfecting and decalcify agents to ensure an optimum result.
- **Use** prescribed lubricants only.



Good hygiene ensures better ice cream and satisfied customers.



The operator always remains responsible for good hygiene.

## 2.7 Storage

To prevent the machine being damage due to frost the machine must always be stored by a temperature between 4°C and 50°C when it is not used.



Prevent damage by frost. Store the machine when it is not used by a temperature between 4°C and 50 °C.



## 3 Installation



Read this chapter carefully before installing the machine. This is the only way to ensure maximum safety.

#### **Introduction** 3.1

The dealer carries out the initial installation. When moving the machine you are advised to contact the dealer.



The machine may only be installed by qualified personnel.

#### 3.2 Installation site

- DO NOT place the machine outside.
- Place the machine on a firm, flat surface (to prevent noise and vibration).
- Keep 10 cm free at the rear and 2 cm at the sides for ventilation.
- Do not place the machine in direct sunlight (not even behind glass) or near to a heat source (e.g. radiator or deep fryer).
- Place the machine in a room with a temperature between +5°C and +35°C.

#### **Electrical connection** 3.3

• Connect the plug of the machine to a high-voltage power supply (400 volts,  $3 \times 16 \text{ amps} + N + PE$ ).



When setting up the machine, make sure it is not positioned on the connection cable. This can damage the insulation and lead to a short-circuit.





## 3.4 Connection of cooling water



This paragraph only applies to water-cooled machines.

- Connect the supply hose to a washing machine tap (3/4" water tap with ventilation). The water pressure must be a minimum of 1,6 bar and a maximum of 3 bar.
- Connect the discharge hose to the discharge pipe.



When connecting, please observe the local water board connection conditions.

The machine has a check valve. This valve along with aerated faucet prevents the backflow of water into the water supply.



When setting up or moving the machine, make sure that the water supply and discharge hoses cannot bend or otherwise become blocked.



Make sure that no water can enter the machine. If water encounters electrical parts, this can cause damage and/or danger.

## 3.5 Adjusting castors

The castors under the machine can be adjusted in height.



Make sure that the machine does not topple over when adjusting the castors.

- 1. **Tighten** all castors as far as possible.
- 2. Now **adjust** the castors so that the machine leans slightly forward (this allows rinsing and washing water to flow to the draining aperture at the front of the machine).

Do not unscrew the castors by more than 5 to 8 mm.



3. Place the front castors on the brake.



Make sure that the brake of the two front castors is secured after adjusting.



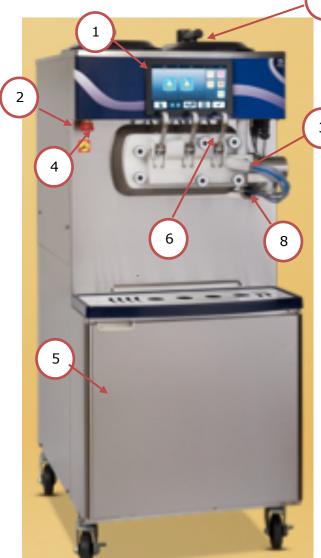
## 4 Machine Description

## 4.1 Function and products

The machine is only suitable for the commercial preparation of soft ice cream and milkshakes using water, ice cream mix and flavoured syrups as ingredients.

### 4.2 Machine overview

- **1.** Operating panel
- 2. Emergency stop
- **3.** Ice-head
- 4. USB connector
- **5.** Syrup compartment
- **6.** Ice cream dispensing
- **7.** Mix tank
- 8. Milkshake cup holder (Combi)





The machine has 2 mixing tanks, for 2 different flavours of soft ice. The taste in the right-hand tank is also used for the milkshakes.



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### 4.3 Touch Control

### **Display (Home-screen)**

#### • Run

Put the machine in Run mode. Ice can be tapped with the foot pedal and milkshake tapped with the buttons in the 'Run' screen.

### Standby

Put the machine in standby mode. The mix in the cylinder and mix tank remains cooled at approximately 5°C.

#### Stop

Pressing turns off the machine, the screen remains on.



### Pasteurizing

Put the machine in pasteurization. The ice mix in the cylinder and mixing tank are pasteurized, then machine switches to standby mode.

#### Cleaning

In 'Cleaning', the syrup hoses can be flushed as well as the Shake piston can be opened, and the Dasher can be operated.

### Dry Fill (optional)

Enables the Dry-fill program and asks for 'Single or 'Double'. Then mix the ice cream powder in the tank.

### Taskbar (at the bottom of the screen)

- The taskbar allows navigating through multiple screens
  - The first button is for going back to the Home screen
  - The second is for active mode
  - The third button is to go to the settings
  - The fourth button is to go to the log files
  - The fifth button displays the active messages and defects



Before the machine switches mode, the machine first goes past 'Stop' in the background.

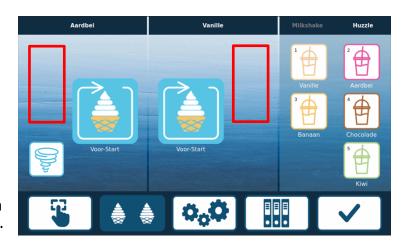
## **Operator Manual**



### **Control Panel (Run-Screen)**

- Het ice-icon Indicates the course of the viscosity.
- Twister-button (Optional) To make a

'Twister' use the 'Thyphone' button at the bottom left.



### Milkshake flavours (Only on Combi machines)

To make milkshakes, use the flavor buttons numbered 1 through 5 on the right side of the screen.

### • Huzzle (Optional)

To switch between milkshake and Huzzle, press 'Huzzle' above the flavour buttons.

### Alerts

At the location of the red shaded rectangle, alerts are displayed if the ice cream mix level is too low and/or if the temperature of the ice cream mix is too high.



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### Control panel (Cleaning-screen)

Water to tank button
 To fill the tank with
 water, press the 'Water
 Tank' button. As a
 result, the faucet on
 top of the machine
 opens for a set time.



### Dasher-button

To run the Dasher / Agitator cylinder for a set time use the yellow 'Dasher' button. Pressing again stops the Dasher.

- **Flavour buttons** (Only on Combi machines)

  To flush the syrup hoses, use the numbered syrup buttons on the right side of the screen.
- **Shake Piston button** (Only on Combi machines)

  To open the shake piston, use the green 'Shake Piston button. When the button is still grey, the pressure is still too high in the cylinder.

## **Operator Manual**



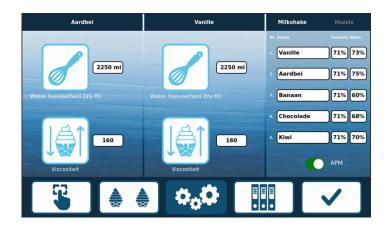
### **Control Panel (Setting-screen)**

### **Dry-Fill**

At this setting, the amount of water for a powder mix bag can be set.

### **Viscosity**

At this setting, the appropriate viscosity of the ice in the cylinder can be set.



### Milkshake flavours (Only on Combi machines)

To change the milkshake flavors, click on the white text box and then type in the name of the flavor. (The numbers 1 to 5 represent the syrup pumps in the syrup compartment.)

### Percentages water and syrup (Only on Combi machines)

The amount of water and syrup can be adjusted per milkshake flavor, this also applies to the different flavors of Huzzles.

Auto Portion Mode (APM) (Only on Combi machines)

Use the APM button to turn Auto Portion Mode on or off.



In this screen it is possible to change the ice cream flavor name at the top of the screen by clicking on it and typing in a new text.



## Operator Manual NA6888 Champion Combi Touch XL

### **Control Panel (Log-screen)**

### Pasteurizing

Provides the information about the previous pasteurization cycles.

#### Counters

Displays the number of ice creams and milkshakes tapped.



• **Settings** (Under development)
In this 'log' the made setting changes are displayed in an overview.

### Historical Alarms

In this 'log' the old and active errors are displayed in an overview.

Manuals (Under development)
 Below this button are the user manuals.

### Languages

Under this button, the language can be set.

• Nissei Service (Under development)

This is a button intended for the Service Employee of the dealer.

### Data & Time

Under this button, the date and time can be set.



### **Combi head**

- 1. Soft ice cream dispensing handle taste 1
- **2.** Soft ice cream dispensing handle mixed taste 1 and 2
- 3. Soft ice cream dispensing handle taste 2



On the underside of the ice cream head you will find:

- **4.** Soft ice cream dispensing spout taste 1
- **5.** Soft ice cream dispensing spout mixed taste 1 and 2
- **6.** Soft ice cream dispensing spout taste 2
- 7. Milkshake dispensing spout

## 4





### **Syrup compartment (Combi)**

For each of the five milkshake flavours, the following components can be found in the syrup compartment:

- **1.** Syrup pump
- 2. Syrup tank lid
- 3. Syrup tank



### Mix tank (2x)

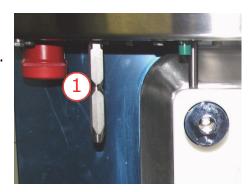
- 1. XL pump
- 2. Mix tank agitator
- **3.** Air hoses



### **Ice twister (optional)**

With the ice twister you can mix ingredients, like nuts or toppings, through the ice cream.

1. Spoon holder



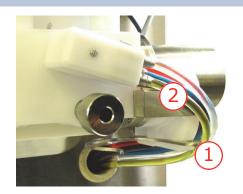
## **Operator Manual**



## Auto Portion Milkshake (Combi)

With the Auto Portion Milkshake you are able to fill a milkshake cup automatically.

- 1. Cup holder (stainless steel)
- 2. APM sensor





## 5 Operation

## 5.1 Start up (start of working day)



First check whether the machine is on both sides in 'STANDBY' mode. If this is not the case, measure the temperature of the mix in the mix tanks.

If the temperature is higher than 7°C, empty, clean and disinfect the machine (see chapter 7 - 'Maintenance' on page 34)

If the temperature is lower than 7°C, first pasteurize the machine before use.



Run the following process steps one by one for the two sides of the cylinder.



both sides on 'STANDBY' mode.



2. Remove the pasteurizing plug.

> Green background colour is only for machines with Milkshake (Combi)



3. Clean the syrup head and the opening in the combi-head with 80% alcohol spray.



4. Insert the syrup head in the combi-head.



**5. Press** 'Run' and wait for finishing 'Pre-Run'



**6. Wait** until ice icon is completely white.

## Operator Manual





 $\textbf{7. Dispense} \ \text{one or two} \\$ ice creams, taste them and throw them away.



8. Dispense one milk shake, taste it and throw it away.

The machine is now ready for use.



Starting the machine after cleaning is described in chapter 7 -'Maintenance' on page 34.





## **Dispensing ice cream**



1. Hold an ice cream cup or cone under the ice cream dispensing spout.



2. Depress the ice cream handle fully. The ice cream is now dispensed.



**3. Push** the ice cream handle fully back.

### **Tips**

Here are a few tips for dispensing soft ice cream properly:

- If no ice cream or milkshake has been dispensed for some minutes, briefly press the 'refresh button' first before dispensing ice cream.
- A good balance between air and ice cream mix in the cylinder improves the quality of the soft ice cream.
- Dispense soft ice cream carefully at a steady, constant dispensing rate.
- Do not dispense large amounts of soft ice cream in succession.
- Give the machine the opportunity in good time to bring the viscosity of the soft ice cream up to the required level again.

### Ice twister (option)



1. Slide a spoon onto the spoon holder.



**2. Hold** a cup under the ice **3. Press** and hold the twister



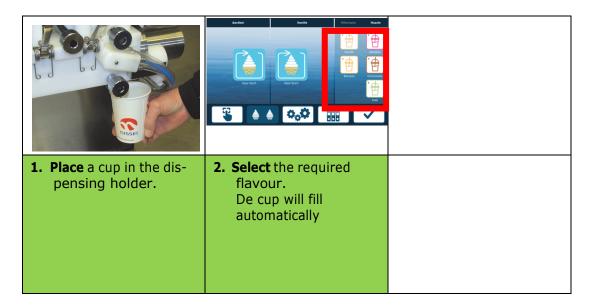
operating button to mix the ice cream.



Release the operating button to stop the ice twister.



#### Milkshake 5.3





If you want to stop the automatic dispensing press one of the flavour selection buttons.

### **Tips**

Here are a few tips for dispensing milkshake properly:

- The syrup tanks must be well-filled.
- Do not dispense several milkshakes in quick succession. First fit the lid and straw and then dispense the next milkshake.
- Dispense milkshakes carefully!
- A good milkshake is dependent on good soft ice cream.

## **5.4** Switching off (end of working day)

The machine is not switched off in the same way each day. A choice can be made between switching off & standby and switching off & pasteurizing.

### **Instructions for pasteurizing**

The Dutch hygiene code gives the following guidelines for pasteurizing:

- Pasteurizing takes place after the mix has been topped up.
- Always allow the machine to pasteurize at the end of the day (with a low turnover rate, pasteurize at least every two days).
- Before starting work, check that pasteurization has been performed correctly.
- Do not keep pasteurized mix for longer than 72 hours.
- Store mix at a temperature of 7°C or lower; preferably 4°C or lower.

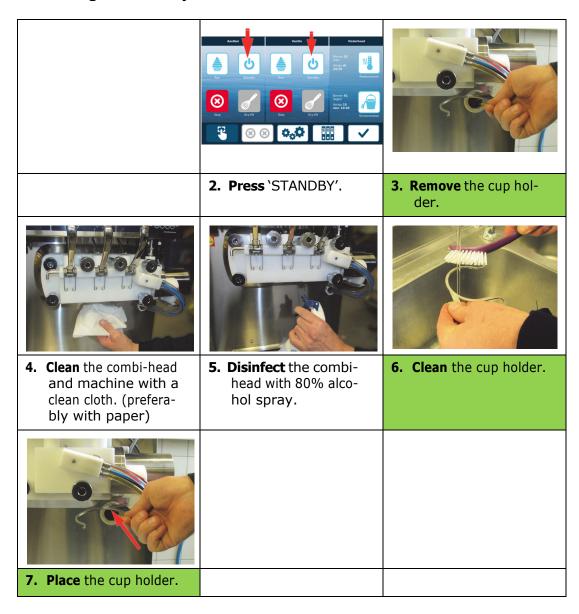


The dealer advises you to follow the above guidelines.





### 5.4.1 Switching to standby





### 5.4.2 Switching to pasteurizing



1. Pull the syrup head out of the combihead.



2. Clean the syrupi-head with a clean cloth. (preferably with pa-



3. Disinfect the syruphead with 80% alcohol spray.



4. **Insert** the pasteurising plug in the combihead.



**5. Insert** the pasteurising plug in the combihead.



**6. Press** 'Pasteurizing'.



**7. Press** 'OK' The ice mix will be pasteurized and after switch to Standby mode.



8. Remove the cup holder.



9. Clean the combi-head and machine with a clean cloth. (preferably with paper)



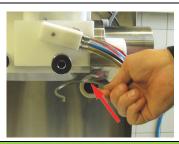
## Operator Manual NA6888 Champion Combi Touch XL



**10. Disinfect** the combihead with 80% alcohol spray.



11.Clean the cup holder.



12. Place the cup holder.



The milkshake motor becomes very hot during pasteurizing.



If the milkshake motor does not heat up, please contact the dealer

## 5.5 Emergency stop

The machine must be switched off immediately if people or machinery are at risk:

Press the emergency stop button.
 The entire machine stops immediately and the power is turned off. The emergency circuit is now in operation.





Press the emergency stop button immediately if people or machinery are at risk.

### Resetting

Resetting the emergency stop button:

Rotate the emergency stop button a quarter turn.
 The machine can now be started up again.



First check why the emergency stop button was pressed and remedy the problem.





## 5.6 Switching on/off

The machine does not have an on/off button. To switch off the machine completely:

- **1. Press** the emergency stop button.
- 2. Pull the plug out of the socket.

To switch on the machine:

- **1. Insert** the plug in the socket.
- **2. Reset** the emergency stop feature.



Do not switch off the machine at the end of the day; set it to 'PASTEURISING' or 'STANDBY'.

#### 5.7 **Dry fill (optional)**

To fill or top up the machine with ice cream mix using ice cream powder:

- **1. Remove** the lid from the mix tank.
- 2. Press 'Dry Fill' and choose single/2,25 or double/4,50. The chosen amount of water now flows into the mixing tank.
- **3. Wait** until the agitator rotates more quickly.
- **4. Add** the powder steadily in a controlled manner.
- **5. Replace** the lid on the mix tank.



Add the powder steadily to prevent lumps from forming.

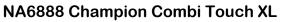


Wait at least 10 minutes after refilling before dispensing ice cream.

#### 5.7.1 Start up an empty machine with Dry fill

To start up an empty machine:

- 1. Prepare enough (at least 4 bags) ice cream mix in a clean, disinfected bucket.
- **2. Start** up the machine with the prepared mix according to paragraph 7.3.15.



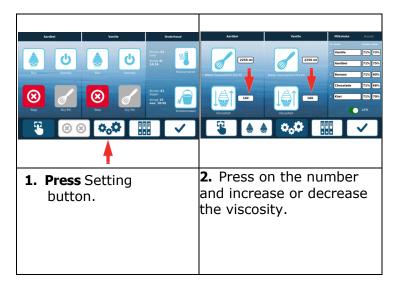


## **5.8** Changing the settings

### 5.8.1 Adjusting the viscosity

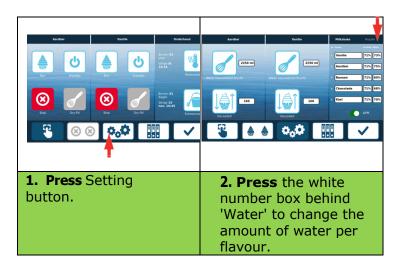


The viscosity can be adjusted in the setting screen.



### 5.8.2 Adjusting milkshake thickness

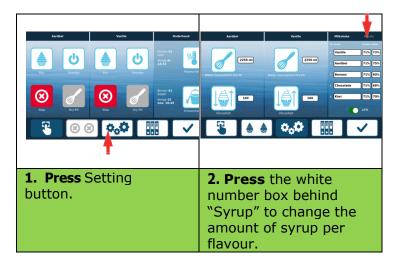
The amount of water in the milkshake can be adjusted in the setting screen





#### 5.8.3 **Adjusting syrup quantity**

The syrup quantity can be adjusted in the setting screen.





## **6 Faults**

### 6.1 Introduction



You will probably be able to resolve some of the faults yourself without difficulty. First try to remedy faults yourself using the instructions in this manual before contacting the dealer.

## 6.2 Messages on display

The following messages can appear on the display:

Message	Problem
E02	Overloading of the cooling compressor.
E03	Machine is not receiving cooling water or cooling water is not being drained away.
E04	Overloading of the dashing motor.
E05	Temperature does not rise during pasteurizing.
E06	Temperature in the cylinder is too high during pasteurizing.
E07	Temperature in the mix tank is too high during pasteurizing.
E08	Temperature in the cylinder is too high during defrosting.
E09	Overheating of the cooling compressor.
E10	Faulty foot pedal microswitch.
E11	Measurement error of temperature sensor H in cylinder.
E12	Measurement error of temperature sensor F in cylinder.
E13	Measurement error of temperature sensor G.



If the error message remains, please contact the dealer.

### 6.3 How can I get the best yield from the machine

The machine must be running at a stable speed with a constant air/mix balance in order to achieve the best yield. If this air/mix balance is not constant, your ice cream will be soft or wet or your machine will make a rasping sound, you will experience a popping from the tap opening or the machine's display will show the indication LO. If one of these situations occurs, you should first check that the XL pump is still functioning properly before changing any of the machine's settings.

### 6.3.1 How can I check whether the XL pump is not causing a malfunction

The proper functioning of the XL pump is easy to check by then carrying out the following two actions:

- **1.** Place a drop of water on the nozzle and draw off a tiny piece of ice cream. The drop of water should now be drawn into the nozzle valve.
- **2.** Draw off a normal ice cream. The pump should stop within two-to-three strokes.

If this is not so in one or both of these cases, you should first remove the XL pump from the machine and clean it in accordance with paragraph 7.3.14.

After replacing the XL pump in the machine, you should first draw off 20-to-25 ice creams before you can judge the result.

### 6.3.2 What should I do with a soft or wet and watery ice cream

A soft or wet and watery ice cream is normally caused by too little air in the ice cream. In some cases, too high a temperature of the ice cream, above -5° C can also make the ice cream soft or wet and watery. You should then carry out the following steps in order to make your ice cream a little drier and firmer:

- **1.** Measure the temperature of your ice cream. If it is over -5° C, you should increase the viscosity by half a point (see paragraph 5.8.1).
- 2. If the temperature of the ice cream is below -5° C, check first if the hole in the nozzle on the nozzle valve is blocked. If this is the case, clean the nozzle thoroughly and replace the nozzle on the nozzle valve. The air/mix balance will then be restored and drawing off 20-to-25 ice creams will improve the quality of the ice cream.



## Operator Manual NA6888 Champion Combi Touch XL



If the soft or wet and watery ice cream was not caused by point 1 or 2, you should place a nozzle with a larger hole onto the nozzle valve.

The nozzles in your spare part box go up in steps of 5. You should place the nozzle with the next higher number onto the nozzle valve. If for example, you use nozzle 70, you should fit nozzle 75.

The air/mix balance will then be improved automatically and drawing off 20-to-25 ice creams will improve the quality of the ice cream. If you do not see any improvement after drawing off 20-to-25 ice creams, place the next higher nozzle and repeat this process until you are able to draw off a dry and firm ice cream.

## **6.3.3** What should I do in case of rasping, popping or if the machine displays LO

Rasping, popping or LO in the display is almost always due to too much air in the cylinder. This leads to free air bubbles in the cylinder that pop out of the ice cream machine when drawing off an ice cream. You can solve this by placing a nozzle with a smaller hole onto the nozzle valve.

The nozzles in your spare part box go down in steps of 5. You should place the nozzle with the next lower number from your spare part box onto the nozzle valve. If for example, you use nozzle 80, you should fit nozzle 75.

The air/mix balance will then automatically improve and the rasping, popping or the LO in the display will be reduced or stop after drawing off 20-to-25 ice creams. If you do not see any improvement after drawing off 20-to-25 ice creams, place the next lower nozzle and repeat this process until there is no more rasping, popping or LO in the display.

## Operator Manual



## 6.4 Faults table

Problem	Cause	Remedy
LO appears in the display.	Too much air in the cylinder.	See chapter 6.3.3 'What should I do in case of rasping, popping or if the machine displays LO'.
Machine is not responding and no lights are lit up.	The emergency stop button has been pressed.	Reset the emergency stop feature.
	Fuse(s) in meter box is (are) faulty.	Replace fuse(s) in the meter box.
	Phase fault protection relay is energized.	Incorrect phase connection in the meter box.
Scraping and popping.	Too much air in the cylinder.	See chapter 6.3.3 'What should I do in case of rasping, popping or if the machine displays LO'.
The ice cream is too soft (not caused by excessive sales).	Not much air in the ice cream (not caused by few sales over a long period).	See chapter 6.3.2 'What should I do with a soft or wet and watery ice cream'.
The machine is vibrating abnormally.	The power supply is disrupted or drive belt(s) is (are) faulty.	Please contact the dealer.
Ice cream is leaking through behind the combi head.	The components have not been fitted correctly (cap nuts are loose).	Fit the components properly. Check whether the nozzle and nozzle tube are clean.
	Gasket is worn	Check and replace if necessary.





# Operator Manual NA6888 Champion Combi Touch XL

Problem	Cause	Remedy	
Milkshake is not being mixed.	The black plug is mounted in the wrong way.	Check the plug. Feel the casing of the motor to check if the motor is running.	
	The fuse of the milkshake motor is broken.	Please contact the dealer.	
Sirup pumps are not running.	Broken fuse, broken wiring or other defect.	Please contact the dealer.	
The machine is after Pasteurization not in 'Standby' mode.	Mix tank agitator not working (error meassage EO5).	Check whether agitator is turning (it should turn on every 3-to-4 minutes). If not, please contact the dealer.	
	Mix tank lid does not close properly (heat loss) (error meassage EO5).	Fit mix tank lid properly.	
	The 'OFF' light is lit. There was a power failure that turned off the whole machine.	In case yes, empty the machine completly and clean and disinfect the whole machine. In cas no, pasteurise the machine before use.	
Dirt is dripping from the little hole at the bottom of the shaker motor.	The seal in the milkshake motor is worn.	Please contact the dealer as soon as possible. The milkshake motor may become irreparably damaged if you continue to dispense milkshakes!	



If dirt is dripping from the milkshake motor, please contact the dealer as soon as possible. The milkshake motor may become irreparably damaged if you continue to dispense milkshakes!



# 7 Maintenance

#### 7.1 Safety instructions

- **Do not use** a water hose or high-pressure cleaner to spray the machine clean.
- Clean and disinfect the machine at least once every six weeks with the recommended cleaning and disinfecting agents.
- **Decalcify** the machine every 2<sup>nd</sup> till 4<sup>th</sup> cleaning, depending of the polution, but at least twice a year.
- **Use** prescribed lubricants only.



Maintenance work may only be carried out by trained staff.

Regular maintenance ensures good-quality ice cream and a properly functioning machine.

#### 7.2 General instructions

The machine must be cleaned and disinfected at least once every six weeks. Between 2 to 2.5 hours are needed for this. Below are a number of general instructions for how to clean and disinfect the machine correctly.



#### NA6888 Champion Combi Touch XL

#### 7.2.1 Requirements

The following items are needed when cleaning the machine:

- Buckets & brushes
- Tea towel or kitchen roll
- Cleaning agent (recommended: Nissei Cip Clean)
- Disinfecting agent (recommended: Nissei Algides)
- O ring remover and piston puller
- 80% alcohol spray
- Lubricant (Petrogel)



The amount of Petrogel on the saucer is enough to lubrucate all the parts of the machine.



Every 2nd till 4th cleaning depending on the pollution, but at least twice a year:

• Decalcify agent (recommended: Nissei Discaler).

#### **7.2.2** Preventive maintenance

Preventive maintenance can be carried out by the operator when cleaning the machine.

The following parts must be checked:

- Rubbers and O rings of the XL pump and combi head.
   We advise you to replace these twice a year.
- Scraper blades of the cylinder beater. These must be sharp enough to scrape the ice from the cylinder wall.
   We advise you to replace these once a year.



Contact the dealer to order spare parts.

Always replace all O rings together.



The O rings can only be order in a complete set. See annex 2 - 'Spare Parts' on page 62 for the product number.

#### 7.2.3 Cleaning and disinfecting

We advice to use to use cleaning agent and disinfecting agent mentioned below:

Cleaning agent: Nissei Cip Clean
 Disinfecting agent: Nissei Algides
 When cleaning and disinfecting all components:

- **Rinse** away as much ice cream mix as possible with cold water.
- **Clean** further with brush and cleaning solution and allow the components to stand in the cleaning solution for 5 minutes.
- **Rinse** thoroughly with lukewarm water. (2x)
- **Place** the components in the disinfecting solution for 5 minutes.
- Rinse thoroughly with cold water. (2x)



Clean an disinfect your hands thoroughly with alcohol 80% before touch disinfected parts.

- **Dry** the components as much as possible with a clean towel (preferably paper).
- Place the parts on a clean tea towel or sheet of kitchen paper.

#### Cleaning solution

 Make a solution of 100 ml. Nissei Cip Clean and 10 liters of warm water in a clean bucket.



During cleaning, regularly change the cleaning solution.

#### **Disinfecting solution**

• Make a solution of 125 ml. Nissei Algides Combi and 10 liters of cold water in a clean bucket.



During disinfecting, regularly change the disinfecting solution.



#### NA6888 Champion Combi Touch XL

#### 7.2.4 Decalcify

The machine, the cylinder beater and all cleaned stainless steel parts of the mix pump must be decalcified every  $2^{nd}$  till  $4^{th}$  cleaning, depending on the pollution, but at least twice a year. We advice to use to use the decalcify agent mentioned below:

• Decalcify agent: Nissei Descaler



Decalcify the machine, the cylinder beater and all cleaned stainless steel parts of the mix pump 2<sup>nd</sup> till 4<sup>th</sup> cleaning, depending on the pollution, but at least twice a year.

#### **Decalcify solution**

• Make a solution of 100 ml Nissei Descaler and 10 liters of cold water.

#### 7.3 (Dis)assembling, cleaning and disinfecting the machine



Please read the general instructions on cleaning and disinfecting before starting.

#### 7.3.1 Procedure

(Dis)assembling, cleaning and disinfecting the machine is an intensive task. The following sequence is recommended for an effective procedure:

- **1.** Defrost and drain both cylinders.
- 2. Remove XL pumps and mix tank agitators.
- 3. Drain mix tanks.
- 4. Clean mix tanks and cylinders.
- **5.** Decalcify the machine (every 2<sup>nd</sup> till 4<sup>th</sup> cleaning, depending on the pollution, but at least twice a year.)
- 6. Remove combi-head.
- **7.** (Dis)assemble, clean and disinfect combi-head.
- 8. (Dis)assemble milkshake motor.
- **9.** (Dis)assemble, clean and disinfect cylinder beater and cream seal.
- 10. Fit combi-head.
- 11. Disinfect machine.
- **12.** Clean, rinse and disinfect XL pump parts.
- 13. Startup machine.
- **14.** Clean and rinse syrup head and hoses.



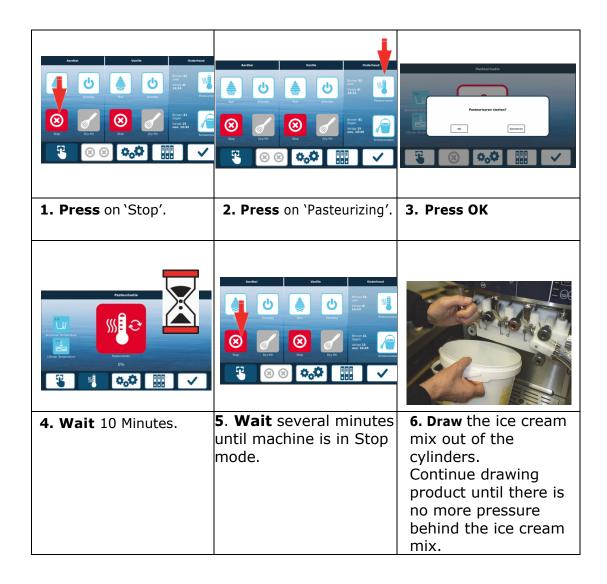
For optimum hygiene, it is recommended that you start the machine up with new ice cream mix. Do not use old ice cream mix.



#### **Defrosting and draining cylinders (left and right)** 7.3.2



Throw away the old ice cream mix. Do NOT re-use.





#### 7.3.3 Removing XL pump and mix tank agitator (left and right)



Make sure there is no more pressure in the cylinder before removing the XL pump from the mix tank.



**1. Disconnect** the air hoses.



2. Remove the XL pump. Click the pump loose by rotating it anti-clockwise and then pull it straight upwards.



**3. Place** an air hose over the two air tubes.



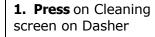
**4. Remove** the agitator cap.



**5. Remove** the agitator.

#### 7.3.4 Draining the mix tank (left and right)







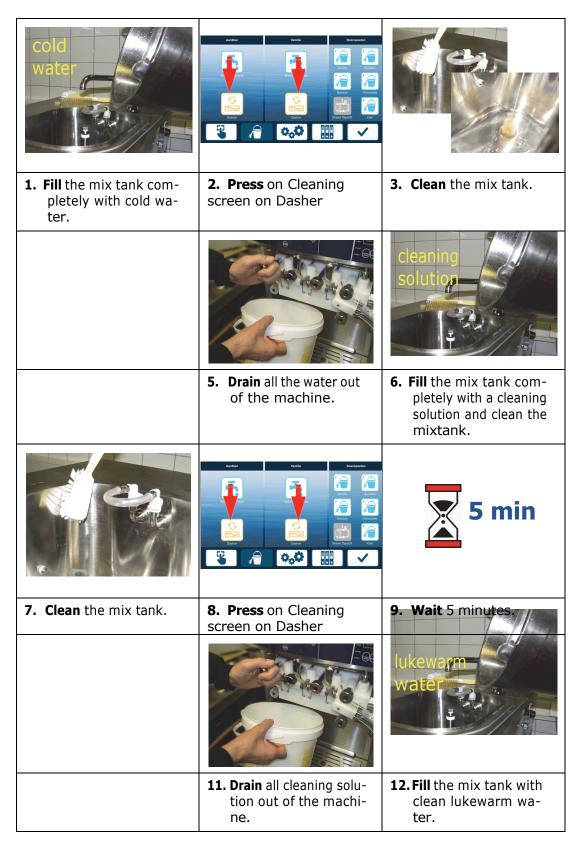
**2. Drain** all ice cream mix from the machine.



Throw away the old ice cream mix. Do NOT re-use.

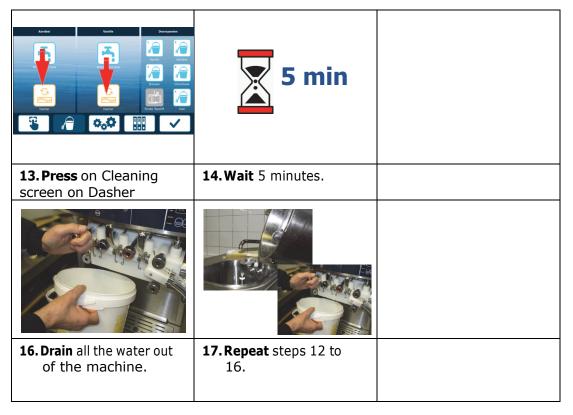


#### Cleaning the mix tanks and cylinders (left and right) 7.3.5





#### **Operator Manual** NISSEI NA6888 Champion Combi Touch XL





Do not return the XL pump to the mix tank yet. This is done during start up.



#### **Decalcify the machine (left and right)** 7.3.6



Decalcify the machine every 2<sup>nd</sup> till 4<sup>th</sup> cleaning, depending on the pollution, but at least twice a year.

Place all the cleaned stainless-steel parts of the mix pump in the mix tank so these are decalcified too.







1. Fill the mix tank completely with decalcify solution.

2. Wait for at least 10 minutes.

**3. Drain** all the decalcify solution out of the machine.



4. Fill the mix tank completely with cold water.



**5. Drain** all the water out of the machine.



**6. Repeat** steps 4 to 5.



#### NA6888 Champion Combi Touch XL

#### Removing the combi-head. 7.3.7







2. Pull the syrup head out of the combihead.



3. Place the locking pin back in the combihead.



**4. Loosen** the APM plug. 5.



**6. Pull** the APM plug straight downwards and out.



7. Loosen the shake motor gland nut .



8. Pull the shake motor plug straight downwards and out.



9. Dismantle the handles



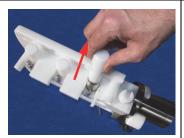
**10. Loosen** the six bolts.



11. Remove the combihead from the machi-



#### Disassembling, cleaning and disinfecting the combi-head 7.3.8



1. Remove the four pistons out of the combi-head.



2. Loosen the allen bolts.



3. Remove the APM unit from the milkshake motor.



4. Pull the milkshake motor from the combihead with a rotating movement.



**5. Remove** the gasket on the back of the combihead.



**6. Push** the non-return valve backwards and out of the combihead.



7. Remove the two O rings of both pistons.



8. Remove the valve hose from the non-return valve.



**9. Remove** the two O rings from the nonreturn valve.



10. Clean and disinfect all components and dry them carefully with a clean towel (preferably paper)



Do not submerge the APM unit in water, but clean it with a brush and (moist) cloth. Otherwise it will be seriously damaged!



#### 7.3.9 (Dis)assembling, cleaning and disinfecting the milkshake motor



**1. Remove** the locking screw.



**2. Carefully pull** the brush housing from the milkshake motor.



**3. Remove** the O rings from the brush housing.



**4. Remove** the O ring from the milkshake motor.



**5. Clean** and disinfect all components and dry them carefully with a clean towel (preferably paper). (see paragraph 7.2.3)



**6. Lubricate** the O rings.



**7. Fit** the O rings to the brush housing.



**8. Fit** the O ring to the milkshake motor.



**9. Carefully fit** the brush housing to the milkshake motor.



10. Fit the locking screw.

Do not submerge the milkshake motor in water, otherwise it will be seriously damaged!

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#### Fitting the combi-head 7.3.10



1. Fit the valve hose to the non-return valve. This must **NOT** be lubricated!



2. Fit the two O rings to the non-return valve. These must **NOT** be lubricated!



3. Insert the non-return valve in the combihead.



4. Lubricate the O rings for the pistons.



**5. Lubricate** the grooves for the O-rings.



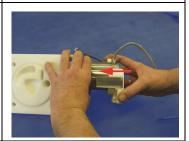
6. Fit the H- ring on middle piston.



7. Follow the correct fitting sequence for other pistons.



8. Insert the milkshake motor into the combihead with a rotating movement.



9. Place the APM unit at the milkshake motor.



10. Tighten the allen bolts.



**11.Fit** die pistons by turning in the combihead.



12. Insert the locking pin back in the syrup head.



#### 7.3.11 (Dis)assembling, cleaning and disinfecting the cylinder beaters (L+R)



 Remove the beaters from the cylinders. (Be careful not to drop the scraper blades onto the ground.)



2. Remove the cream seal from the drive shaft at the back of the cylinder.



**3. Clean** the (outside of) the cylinder.



**4. Disassemble** both beater.



**5. Clean** and disinfect all components and dry them carefully with a clean towel (preferably paper). (see paragraph 7.2.3)



**6. Lubricate** the cream seal.



**7. Fit** the cream seals to both drive shafts.



8. Assemble the beater. Be aware two different diameters.



**9. Insert** the right beater in each cylinder.

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#### Fitting the combi-head 7.3.12



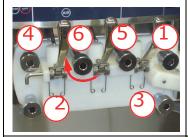
1. Attach the gaskets to the back of the combi- head. **DO NOT** lubricate it!



2. Place the combi-head on the machine. (**Be careful!** The pin for the headprotection must be pressed upwards. Place the combi-head in front of the cylinder correctly.)



3. Make sure the milk shake dispensing piston fits the joint correctly.



4. Loosely tighten the six bolts in the sequence shown. Then tighten firmly by hand following the same sequence.



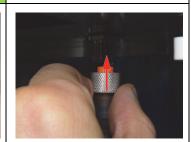
**5. Place** the locking pin of the syrup head.



7. Place the plug of the milkshake motor.



8. Tighten the plug of the milkshake motor.



**9. Place** the plug of the APM.



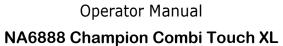
10. Tighten the plug of the APM.



**11. Mount** spring on each handle as picture.



12. Mount handles that they spring back.





#### **7.3.13 Disinfecting the machine (**left and right)







**1. Fill** the mix tank completely with disinfecting solution.

**2. Wait** at least 5 minutes.

**3. Drain** all the disinfecting solution out of the machine.



**4. Fill** the mix tank completely with cold water.



**5. Drain** all the water out of the machine.



**6. Repeat** steps 4 to 5.



#### (Dis)assembling, cleaning and disinfecting the XL pump 7.3.14



1. Pull the locking pins out of the pump.



2. Remove the pump foot from the pump.



3. Remove the nozzle tube.



4. Remove the nozzle from the tube.



5. Turn the piston puller in the piston.



6. Pull the piston out of the pump housing.



**7. Remove** the piston puller.



8. Loosen the top disc from the shaft.



9. Slide the middle disc from the shaft.



10. Remove the O rings from the outside of the discs.



11. Remove the O ring from the shaft.



12. Remove the two O rings on the inside of the middle disc.







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#### NA6888 Champion Combi Touch XL



**13. Remove** the three O rings from the pump foot.

**14. Remove** the valve hose from the pump foot.

**15. Remove** the mix valve from the pump foot.



**16. Clean** and disinfect all components and dry them carefully with a clean towel (preferably paper). (see paragraph 7.2.3)



**17. Fit** the valve hose to the pump foot. **DO NOT** lubricate it!



**18. Fit** the mix valve to the pump foot. **DO NOT** lubricate it!



**19. Fit** the 3 O rings to the pump foot. **DO NOT** lubricate it!



**20. Lubricate** all O rings with Petrogel.



**21. Fit** the thick O ring to the bottom disc.



**22. Fit** the O rings to the outside of the top disc.



**23. Fit** the two O rings to the outside of the middle disc.



**24. Fit** the O rings to the inside of the middle disc.



**25. Fit** the O ring to the shaft.



26. Lubricate the shaft.



**27. Lubricate** the inner O rings of the middle disc.

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28. Slide the middle disc over the shaft. Attention, the big ring of the middle disc too the bottomside.



29. Turn the top disc onto the shaft.



30. Lubricate the O rings of the bottom and upper disc well once more.



31.Slide the middle disc against the bottom disc.



**32. Fit** the piston package into the pump housing. Push the piston package into the housing as far as it will go.



**33.Fit** the nozzle tube.



34. Attach the pump foot to the pump. Ensure a proper alignment of the nozzle behind the ridge.



**35.Insert** the locking pins through the pump housing.



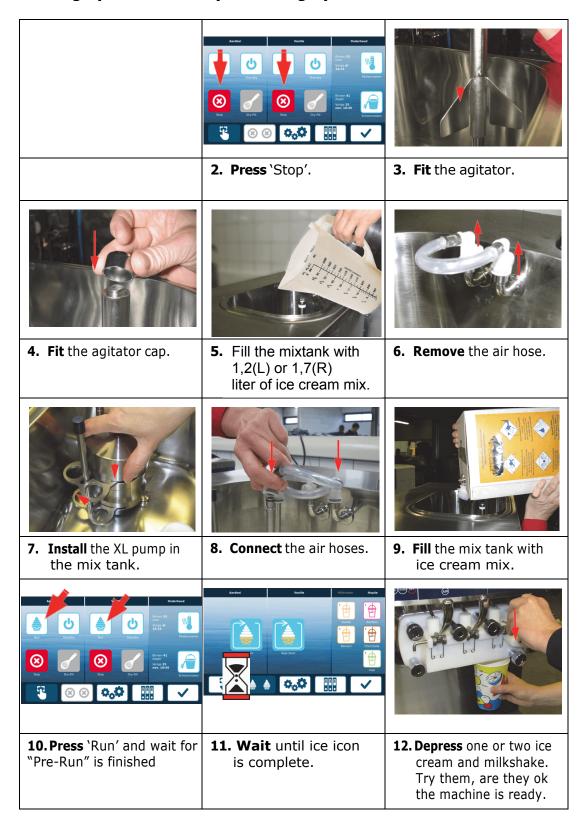
36. Attach the nozzle to the tube.



Do not return the mixpump to the mix tank yet. This is done during start up.



#### Starting up the machine (left and right) 7.3.15

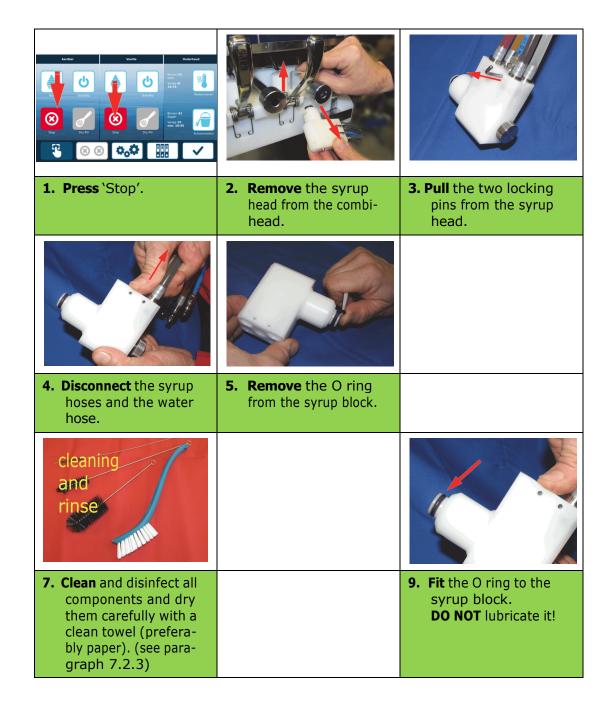


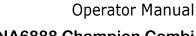


#### Clean and rinse syrup head and hoses 7.3.16



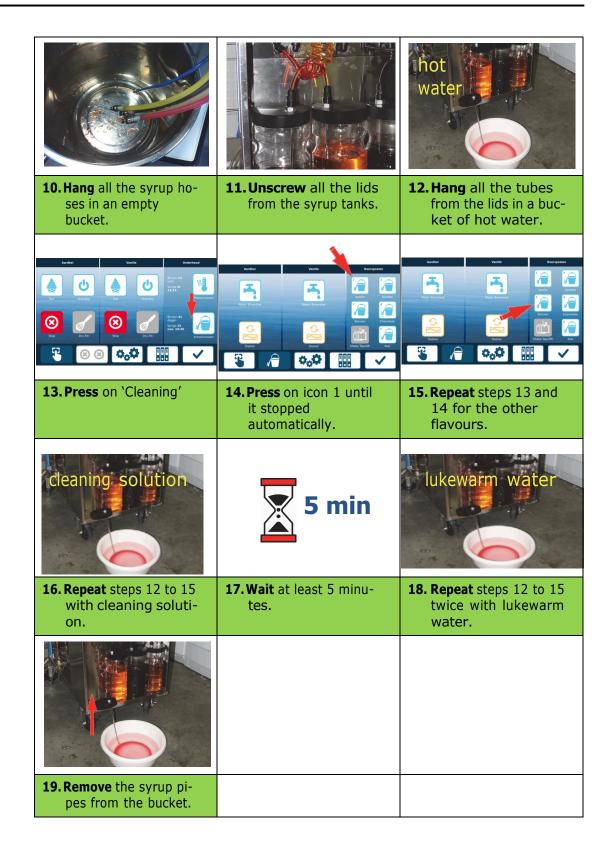
These operations must be carried out once every three months (once every two cleanings).





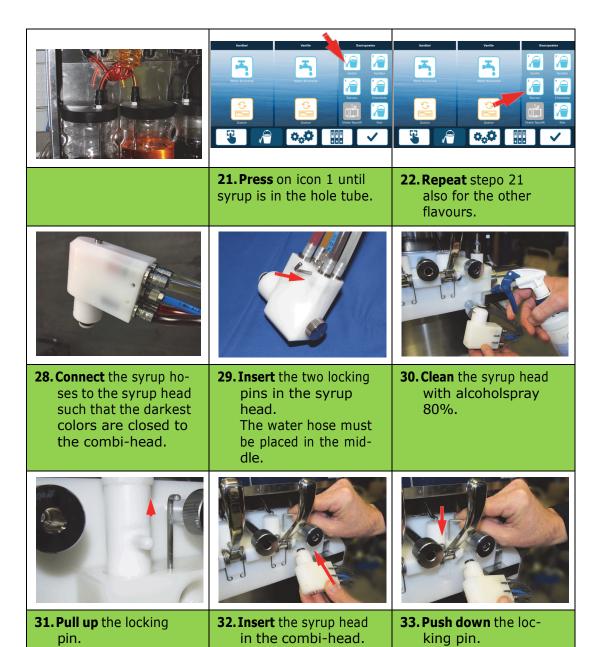


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#### **Operator Manual**





# 8 Transportation and Storage



Check that all connections have been disconnected before moving the machine.

#### 8.1 Transportation

The following rules must be observed during transportation:

- Always transport the machine upright.
- Use suitable lifting gear. Do not lift the machine manually.



If necessary, have the machine transported by a specialist company. They have suitable lifting gear and transportation means.

#### 8.2 Storage

The following rules must be observed during storage:

- First clean the machine thoroughly.
- Store the combi-head and XL pump disassembled.
- The storage area must be dry with an air humidity level of 45-75%.
- The ambient temperature must be between 4°C and 50°C.
- The storage area must be free of dust, or the machine and parts must be covered with plastic film.



# 9 Discarding

#### 9.1 Environmental factors

The following must be observed:



When discharging the machine, it must be handed in to an authorized waste collection point for electrical equipment.



Here the machine is disposed of in an environmentally friendly manner and materials are reused.



It must be considered that refrigerant gasses are present in the machine.



# **Annex 1 Specifications**

Machine dimensions				
Height Including tap	1500 mm 1600 mm			
Width	650 mm			
Depth	900 mm			
Weight	circa 290 kg			

Connection details			
Electrical	400 V 3 x 16 amp + N + PE		
Water pressure	Min. 1,6 bar/max. 3 bar		
Ambient temperature	+5°C to +35°C		

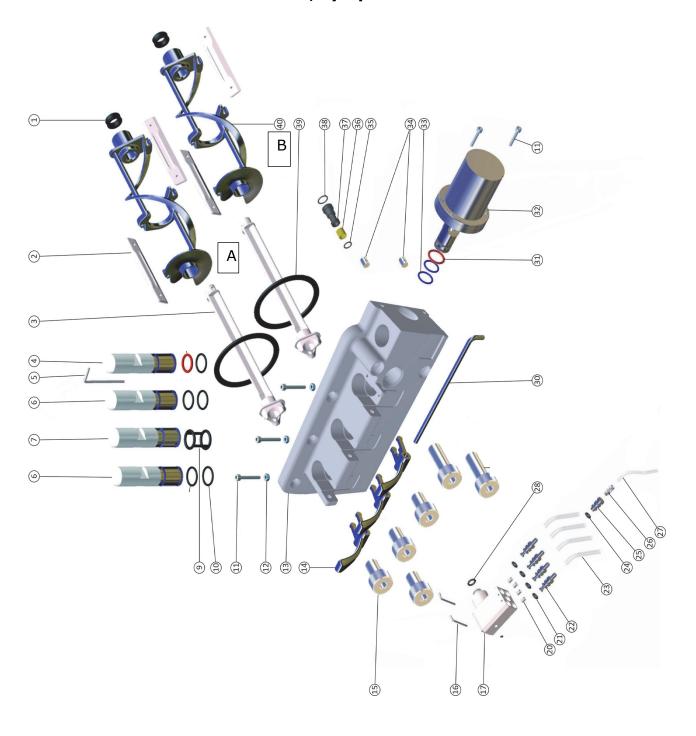
Consumption details		
Electrical	4,5 kWh	
Cooling water	± 90 m³/year	

Specifications				
Dispensing capacity	Approx. 75 + 55 liters/hour			
Soft ice cream flavours	2			
Milkshake flavours	5 (Combi)			
Cylinder capacity	3,4 + 2,5 liters			
Mix tank capacity	2x 20 liters			



# **Annex 2 Spare Parts**

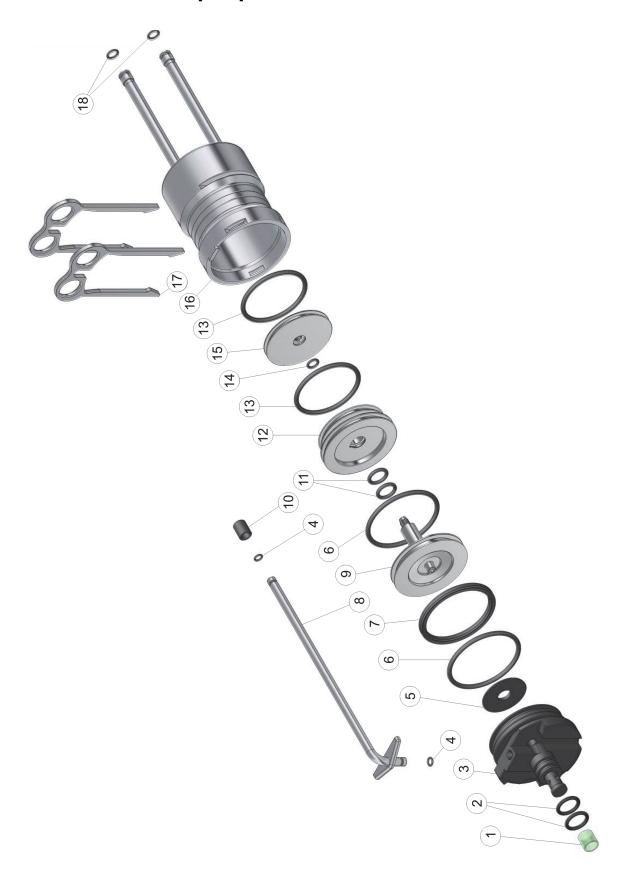
#### Combi-head, syrup block and beater **A2.1**



Item no.	Name	Quantity	Product no.	Item no.	Name	Quantity	Product no.
1	Cream seal	2	35000	23	Syrup hose	5x 1,20 m.	31605
2	Scraper blade	4	30091	24	O-ring 7 x 3	1	35009
3	Centre bar	2	30117				
4	Piston milkshake APM	1	30021	25	Water valve	1	31590
5	Locking pin syrup bloc	1	0800048	26	Coupling piece M6-6mm	1	31591
6	Piston ice cream	2	230850	27	Water hose (blue)	1,2 m	36212
7	Piston center	1	230870	28	O ring 10 x 3	1	35008
9	H-ring	1	292140	30	Dispensing handle locking pin 230	1	31024
10	O-ring Piston 24 x 3	6	292130	31	O ring 26,58 x 3,53 (orange)	1	35001
11	Allen bolt RVS M6 x 40	3		32	Milkshake motor	1	31010
12	Nut RVS M6	3		33	O ring 24 x 3,5 (blue)	2	35025
13 C	Combi head	1	230540	34	Bush for Allen bolt	2	30032
13 IJ	Ice head	1	230630	35	O ring 12 x 2	1	35012
14	Dispensing handle	3	31027	36	Valve hose 14 mm	1	33475
	Dispensing handle spring	3	11223	37	Non-return valve	1	30068
15	Head bolt stainless steel	6	138044	38	O ring 16 x 2	1	35014
16	Locking pin syrup hoses	2	0830019	39A	Gasket 95 mm	1	138042
17	Syrup block	1	240940	39B	Gasket 110 mm	1	138880
20	Valve hose 6 mm	5	33471	40A	Cylinder beater 95 mm	1	30053
21	O ring 7 x 3	5	35009	40B	Cylinder beater 110 mm	1	350303
22	Syrup valve	5	31592		O-ring set NA 6888 Combi XL		292335
					O-ring set NA 6888 IJs XL		292235



#### A2.2 **XL** pump

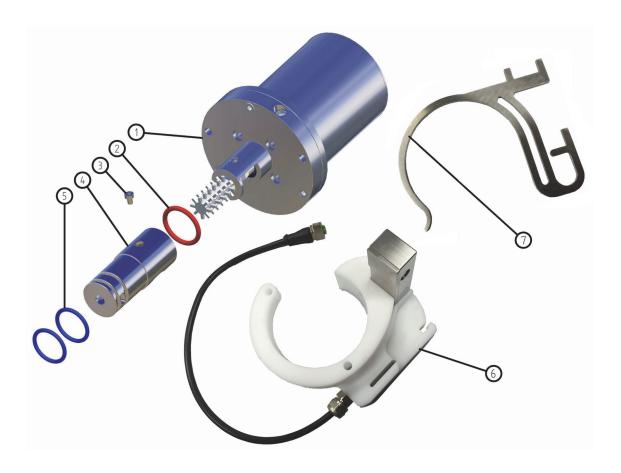


# NA6888 Champion Combi Touch XL

Item no.	Name	Quantity	Product no.
1	Valve hose 14mm	1	33475
2	O ring 17 x 3	2	35013
3	Pump foot	1	085046
4	O ring 5,1 x 1,6	2	35029
5	Mix pump valve	1	33409
6	O ring 64 x 4	2	35017
7	O ring 59.69 x 5.33	1	35016
8	Nozzle tube	1	33493
9	Bottom piston	1	085039
10	Nozzle	1	400(+size)
11	O ring 14 x 3	2	35021
12	Middle piston	1	085042
13	O ring 57 x 4	2	35015
14	O ring 8 x 2	1	97010
15	Top piston	1	085040
16	Pump housing	1	085045
17	Locking pin	2	085044
18	O ring 8 x 2	2	97010
	O ring set XL pump	1	33111



#### Milkshake motor A2.3



Item no.	Name	Quantity	Product no.
1	Shake Motor	1	31010
2	O ring 26.58 x 3.53 (orange)	1	35001
3	Allen bolt (flat head) M4 x 6	1	
4	Brush housing	1	31002
5	O ring 24 x 3.5 (blue)	2	35025
6	APM sensor	1	34007
7	Cup holder	1	31032





# **Annex 3 EC Declaration**

# EC Declaration of Conformity of the Machinery Directive 2006/42/EC, Appendix II, under 1.A

Manufacturer,

Win Equipment B.V. De Kronkels 31 3752 LM Bunschoten The Netherlands



hereby declares that the following machine:

Name: Nissei soft ice cream machine type: NA6888 Champion Combi Touch XL

type: NA6888 Champion Touch XL

is in conformance with the following EC directive:

• the Machinery Directive 2006/42/EC

and the following harmonized European standards:

- NEN-EN-ISO 12100-1
- NEN-EN-IEC 60204-1

Bunschoten, December 1st 2022

Name: M. Jocker

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Version date: Dec 1th 2022 67