INSTRUCTIONS FOR USE

Tornado

The model name and serial number should always be provided when ordering spare parts or during queries per telephone or written correspondence:

Serial number of the machine:

………………………………………………

Machine model:

………………………………………………

<table>
<tr><td>WARNING
To avoid injury, always read this Instructions for Use and accompanied documents before using the product.

 Mandatory to read the Instructions for Use.</td></tr>
</table>

Contents

PREFACE

This Instructions for use describes the design and operation of the machine and the maintenance for which the user is responsible. The Assembly and installation instructions describes the machine's installation. The Technical manual describes necessary information for operators and maintenance personnel. The information in the manual must be complied with to ensure safe and error-free operation.

Users must read through the Instructions for use before using the machine for the first time, as well as familiarizing themselves with the operation of the machine and its safety instructions. Operators and maintenance personnel must have completed training through the marketing organization of Arjo.

The information in this Instructions for use describes the machine as dispatched from Arjo. There may be differences due to customization for customers or countries.

Available models:

FD1800   Free-standing machine with manual door

FD1805   Built in under counter with manual door

FD1810   Free-standing machine with automatic door

The machine is accompanied by the following documentation:

- Instructions for use

- Assembly and installation instructions

- Quick reference guide

The following documentation shall be provided by the sales company to the end-user on request:

- Technical manual

- Spare parts list

The accompanying Quick reference guide must be hung up and clearly visible in the installation area.

Arjo reserves the right to change the specification and design without prior notice. The information in this Instructions for use was up-to-date on the date that it was issued.

Definitions in this IFU

Safety warning. Failure to understand and obey this warning may result in injury or machine damage.

Hot surface. Risk of injury.

Dangerous voltage. Risk of injury.

Automatic door. Risk of getting stuck.

Note! **Note means: This is important information for the correct use of this system or device.**

1 SAFETY PRECAUTIONS

This machine has been designed with a number of built-in safety devices.

To avoid injury, it is highly important not to bypass these safety devices.

1.1 Important

- The machine is designed for connection to water only (and for steam if applicable).
- Read the Instructions for use thoroughly before use.
- The machine should only be handled by authorized personnel. Personnel must also receive regular training.
- If any part is missing or damaged - do NOT use the product.
- Exercise caution when using the machine, as it uses hot water and possibly steam.
- Exercise caution when handling the chemical agent used in the machine. Follow the instructions on the agent:
  - if the agent is swallowed, comes into contact with the eyes or skin or if vapors are inhaled.
  - for instructions on dosage amount and washing temperatures.
  - for instructions regarding storage and sorting/disposal of packing.
- Make sure that the machine has access to detergent before the process starts. This is important both for the operation of the machine and for keeping the washing chamber free from staining.
- The machine must be kept clean if it is to work properly.
- Do not wash down or hose down the machine with water.
- Installation and service work must be performed by trained personnel.
- Never bypass the machine's door switch under any circumstances.
- Always connect the equipment via an RCD (residual current device).
- Always use a grounded power supply for the flusher-disinfector.

- Leakage in the system, for example a worn door seal, must be rectified without delay.

- Spare parts must only be obtained from Arjo's sales companies.

- If a serious incident occurs in relation to this medical device, affecting the user, or the patient then the user or patient should report the serious incident to the medical device manufacturer or the distributor. In the European Union, the user should also report the serious incident to the Competent Authority in the member state where they are located.

1.2 Isolator switch

The machine must always be equipped with a separate isolator switch in the feed power supply. The isolator switch must be easily accessible on a wall close to the machine. The external electrical isolator switch must be marked "I" and "O" to identify the position of the switch.

1.3 In an emergency

- Switch off the main switch.
- Close shutoff valves in the water and any steam supply lines.

2 PRESENTATION

2.1 Area of application

Flusher-disinfector for emptying, cleaning and disinfecting, bedpans, urine bottles and other containers for human waste.

To meet the requirements of EN ISO 15883, the goods must be placed in the proper holder, recommended by Arjo.

Goods being disinfected are exposed to 90°C for at least 6 seconds, A_0 60 or A_0 600 (disinfection type is configured during installation).

The customer is responsible for ensuring that an Installation Qualification, Operating Qualification and Performance Qualification according to ISO 15883 are carried out before the product is put into use.
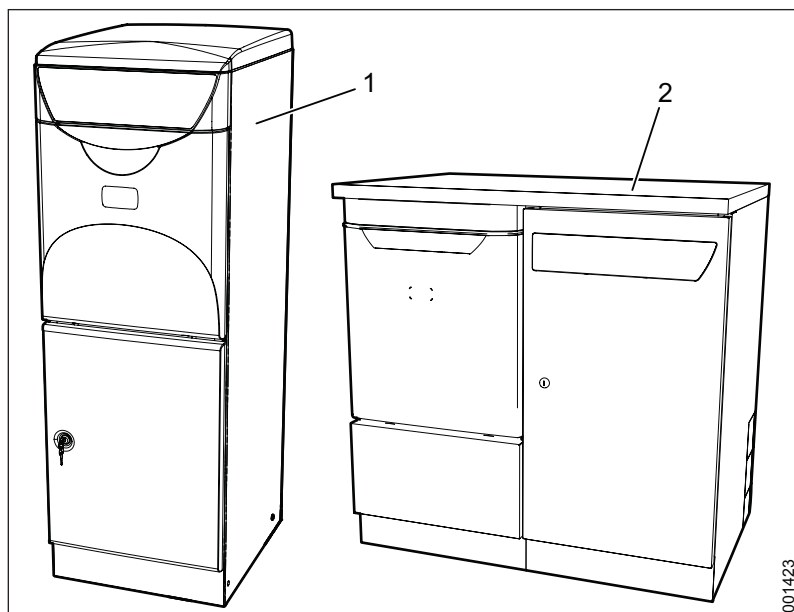
2.2 Models

Figure 1. Machine models

1. Free-standing model   2. Under-bench model

2.3 Control panel

2.3.1 Parts (FD1800, FD1805)
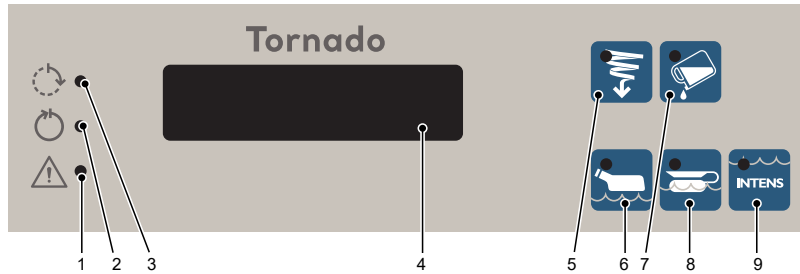
Figure 2. Control panel

1. Red: Error indication
2. Green: Process complete
3. Yellow: Process running
4. Display
5. Rim flushing

6. Economy program
7. Detergent*
8. Normal program
9. Intensive program

* Option

2.3.2 Parts (FD1810)
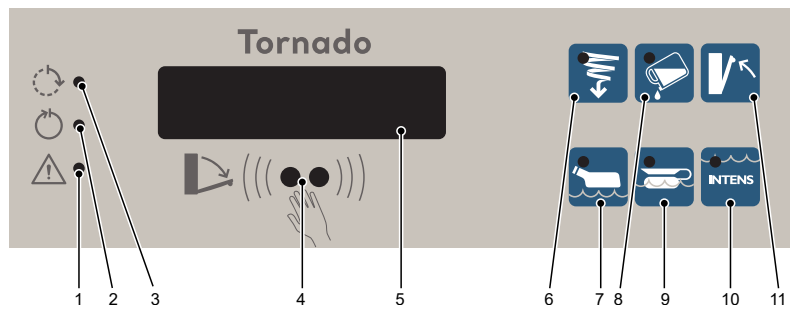
Figure 3. Control panel

1. Red: Error indication
2. Green: Process complete
3. Yellow: Process running
4. IR sensor*
5. Display
6. Rim flushing

7. Economy program
8. Detergent*
9. Normal program
10. Intensive program
11. Door closing/opening*

* Option

2.3.3 Functions

	Function
↻	Yellow flashing indicator light: The process can be aborted. Yellow indicator light: The machine is running a program. The display shows the current status*, for example the cleaning phase and temperature.
↻	Green indicator light: The program is complete. The green light goes out when the door is opened and for a short time a program summary* is shown in the display, for example maximum temperature.
⚠	Red indicator light: Error indication. The display shows an error message.
	Button for choosing economy program for lightly soiled goods.
	Button for choosing normal program for normally soiled goods.
INTENS	Button for choosing intensive program for heavily soiled goods.
	Button for selecting rim flushing.
	Button for selecting cleaning agent (option).
	Button for opening or closing door (option).
	Sensor for door opening/closing (option).

* The information displayed depends on the display options.

2.4 Display options

A service technician can set the information to be shown in the display.

2.4.1 Displayed while a program is running

The display can be set to show one of the following alternatives while a program is running:

- Temperature
- A_0 value
- A_0 value / Temperature
- Remaining Time
- Temperature / Remaining time
- A_0 value / Remaining time
- A_0 value / Remaining time / Temperature

If an alternative with more than one parameter is selected, the parameters will be displayed alternately. The A_0 value always remains at 0 until the thermal disinfection begins. When the temperature reaches 85°C, the A_0 value will increase in line with the temperature and time.

2.4.2 Display after program end

The display can be set to show one of the following alternatives once a program has finished:

- Max. temperature
- A_0 value
- A_0 value / Max temperature

If an alternative with more than one parameter is selected, the parameters will be displayed alternately.

3   OPERATING INSTRUCTIONS

WARNING!

To prevent contamination, use personal protective equipment, such as gloves and protective glasses, when handling soiled waste containers and loading the goods into the flusher-disinfector.

3.1   Program overview

The machine's standard programs are described here. There may be other programs for the program buttons. A service technician can change the button functions.

Program	Economy	Normal	Intensive
Goods	Lightly soiled	Normally soiled	Heavily soiled
Key			
Process	Cleaning Disinfection Ventilation End of program	Cleaning Disinfection Ventilation End of program	Cleaning Disinfection Ventilation End of program
Time*	5-9 min	6-9 min	7–11 min
Energy	0.16 kWh	0.16 kWh	0.16 kWh
Water	11 l ± 10%	18 l ± 10%	25 l ± 10%

* The process times may vary depending on which cooling/ventilation method is used. They may also vary based on the water temperature and pressure.

3.2 Machine with manual door

3.2.1 Start a program

⚠️ **WARNING!**
If the machine has not been used for more than 72 hours, it is necessary to run a program with an empty chamber before using the machine to clean goods.

1. Open the door.
2. Place the goods to be cleaned in the holder.
3. Close the door.
4. Select program:
   - For the Normal program, press 🔲.
   - For the Economy program, press 🔲.
   - For the Intensive program, press 🔲.
5. The yellow light at ↻ flashes for six seconds. During this period the program can be cancelled by pressing the program button one more time.

3.2.2 During ongoing program

⚠️ **WARNING!**
If the red indicator lights up an error has occurred. The process is cancelled and must be repeated.

3.2.3 After program completion

⚠️ **WARNING!**
The goods may be hot at the end of the program. If the temperature of the goods is above 60°C, the display shows U7.

1. When the program is complete:
   - The green light at ⟳ lights up.
   - The door unlocks automatically.
   - Cooling/Ventilation of goods may continue after completed program (option) and is thus terminated when the door is opened.
2. Open the door and remove the goods.

3.3 Machine with automatic door

3.3.1 Start a program

⚠	**WARNING!** **If the machine has not been used for more than 72 hours, it is necessary to run a program with an empty chamber before using the machine to clean goods.**

⚠	**WARNING!** **Keep hands and arms away when an automatic door has been activated in order to avoid the risk of getting stuck.**

1. Press the door button or activate the IR sensor by holding your hand in front of the sensor. The door opens.

2. Place the goods to be cleaned in the holder.

3. Select program:

    • For the Normal program, press 🔲.

    • For the Economy program, press 🔲.

    • For the Intensive program, press 🔲.

4. Press the door button, press the foot pedal or activate the IR sensor.
   The door closes and the selected program starts.

5. The yellow light at ⟳ flashes for six seconds. During this period the program can be cancelled by pressing the program button one more time.

3.3.2 During ongoing program

⚠	**WARNING!** **If the red indicator lights up an error has occurred. The process is cancelled and must be repeated.**

3.3.3 After program completion

	WARNING!
⚠️ 🖐️	**Keep hands and arms away when an automatic door has been activated in order to avoid the risk of getting stuck.**

	WARNING!
♨️	**The goods may be hot at the end of the program. If the temperature of the goods is above 60°C, the display shows U7.**

1. When the program is complete:

    - The green light at ⏻ lights up.

    - The door unlocks automatically.

    - Cooling/Ventilation of goods may continue after completed program (option) and is thus terminated when the door is opened.

2. Press the door button or activate the IR sensor. The door opens.

3. Remove the goods.

3.4 Cooling

A ventilator starts when the disinfection is complete:

- Warm air is sucked out of the chamber.

- New air is introduced via a HEPA filter.

The items to be washed are cooled using the following method:

- Internal cooling: items to be washed are cooled using water from a tank.

- Fan (option): items cooled by cold air from an external fan. The air is introduced via a HEPA filter.

Cooling/Ventilation can continue after completed process (option). When the green lamp is lit the cooling/ventilation can be terminated by opening the door.

3.5 Examples of items and program selection
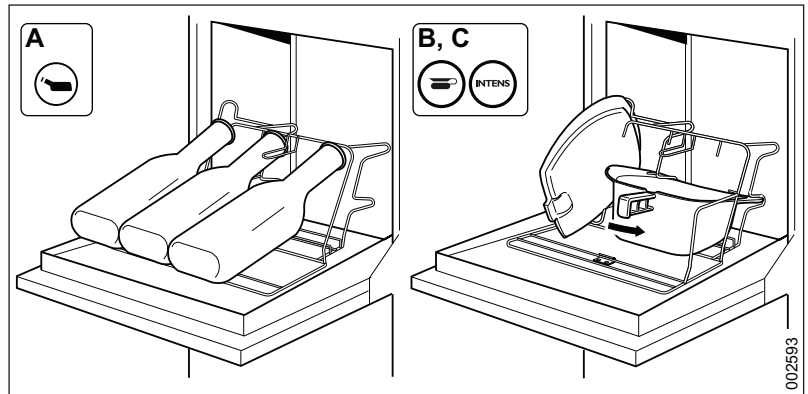
Figure 4. Example of goods with economy program (A), normal program (B) and intensive program (C)
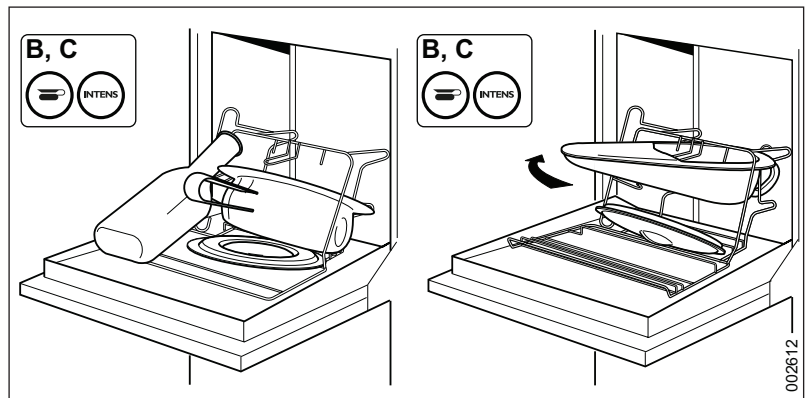
Figure 5. Example of goods with normal program (B) and intensive program (C)

4   PROCESS

4.1   Log file for machine with USB port

An example of the placement of the USB port is shown below. The example shows the free-standing model.
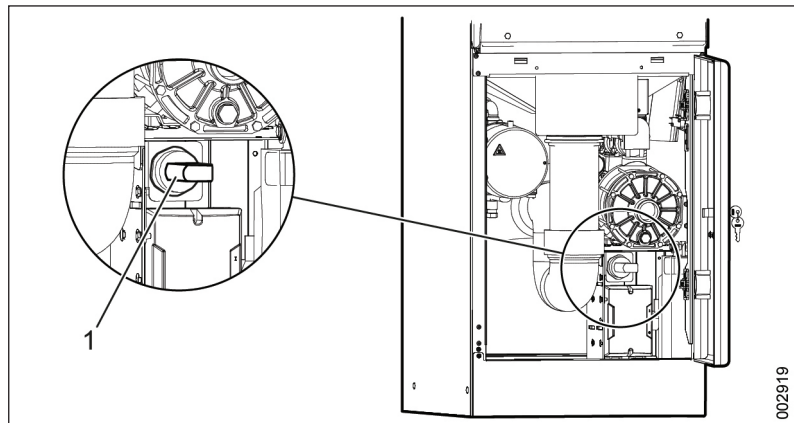
Figure 6. Example of the placement of the USB port (1)

If a USB memory stick is connected it is used as a storage site for a log file. The file is 1–2 kB in size.

4.2   Printing out a process for a machine with printer (Optional)

If a printer is connected the process information is printed out when a program is being run.

4.3   An example of a log file or printout

All log files for processes and process printouts contain the same basic information, while numbers and types of phases depend on the program used. If an error takes place even the error code is included.

The log files/printouts are printed in the set language. An example of an English log file/printout is shown below.

Example		Information
| ```
--------------------------------
PROG: P04 NORMAL+DETERG.
DATE: 20/12/2012
PROC START: 13:54:36
MACHINE: W50039685
MACHINE ID: 2
PROCESS ID: 2
``` — A | A | Basic data:<br><br>• Program number and name<br>• Date yyyy/mm/dd<br>• Time when the process starts (hh:mm:ss, 24 hour format)<br>• Machine name<br>• Machine identity<br>• Process identity |
| ```

PHASE: 01-CLEANING
13:54:38   43 C
``` — B1
```

PHASE: 02-CLEANING
13:55:14   44 C
``` — B1<br>```
--------------------------------
PHASE: 03-CLEANING
13:56:12          39 C
``` — B1 | B1 | Phase, cleaning:<br><br>• Phase name<br>• Time and temperature when phase starts |
| ```
--------------------------------
PHASE: 04-DISINFECTION
13:56:54          47 C
13:59:40          85 C
14:01:00          93 C
``` — B2 | B2 | Phase, disinfection:<br><br>• Phase name<br>• Time and temperature when phase starts<br>• Time and temperature when the different disinfection levels are achieved ($A_0$ 60 or $A_0$ 600) |
| ```
--------------------------------
PHASE: 05-COOLING
14:01:00          93 C
14:02:18          59 C
``` — B3 | B3 | Phase, cooling:<br><br>• Phase name<br>• Time and temperature when phase starts<br>• Time and temperature when the phase ends<br>• (The user can verify here that vessels and similar are not too hot) |
| ```
--------------------------------
FLUSH END
14:02:18          59 C
Max Ao 97, Max T 94 C
``` — C | C | End of process:<br><br>• Time when the process ends<br>• Temperature when the process ends<br>• Maximum achieved $A_0$-level during the process<br>• Maximum temperature during the process |
| ```
--------------------------------
SIGNATURE.........................
``` — D | D | Signature box:<br><br>• Empty row for the user to approve the process |

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5 MAINTENANCE

5.1 Flushing chamber

If limescale deposits occur, they must be removed with a proper descaler that is intended for the purpose such as Arjo Clean Neutralizer Plus. See the instructions for the agent before using it.

5.2 The outside

⚠️ **WARNING!**
Do not wash the machine down with water.

The outside of the machine can be cleaned and disinfected with an alcohol-based cleaning agent or medicinal alcohol. The area around the display should be cleaned with an alcohol-based cleaner.

Figure 7. Cleaning the machine

5.3 Preventive maintenance

For safety purposes, never modify equipment or use incompatible parts.

5.3.1 Periodic maintenance

Periodic maintenance and system testing must be performed to ensure safety and the machine's proper operation.

The amount of maintenance required depends largely on the quality of the incoming water and how often the machine is used. The maintenance interval will have to be determined in each individual case. Arjo recommends that the stated maintenance operations be performed at intervals according to the service table.

5.3.2   Service table

The service table below shows recommended maintenance intervals. In addition to system testing, we recommend that appropriate cleaning tests and temperature validation are performed according to EN ISO 15883.

	Measure	Each year/ 10,000 cycles	Every other year/20,000 cycles	Time* (minutes)
1	**General**			
1.1	Check the cabling and connection points.	•		10
1.2	Check the function of the cooling fan. Clean as required.	•		5
1.3	Check that the panel label is firmly affixed, is undamaged and legible.	•		2
1.4	Check that the door lock and breaker are functioning properly.	•		5
1.5	Check that a goods placement sign and quick help instructions have been put up.	•		1
1.6	Check error codes and the number of processes.	•		2
2	**The chamber**			
2.1	Check that the rotating nozzles are moving freely. Clean as required.	•		20
2.2	Check that the fixed nozzles are not clogged with grime and deposits. Clean as required.	•		20
2.3	Check for leakage in the nozzle attachments and the hose connections to the chamber.	•		-
2.4	Check for proper operation of the temperature sensor.	•		10
2.5	Check that the door seal and chamber seal are tight. Clean or replace as necessary.	•		10
2.6	Check the mounting for the goods holder.	•		2

	Measure	Each year/ 10,000 cycles	Every other year/20,000 cycles	Time* (minutes)
2.7	Check that the overflow drain connection to the chamber is tight.		•	-
2.8	Clean the inside of the flushing chamber.	•		10
2.9	Check the door and door spring.		•	15
3	**Process tank**			
3.1	Clean as required.	•		-
3.2	Check and clean the level sensor.	•		5
3.3	Check that the valves are working and that the connections are not leaking. Clean as required.	•		10
4	**Steam Generators**			
4.1	Check the connections to the steam generator for leakage and make sure the surrounding insulation is intact and no hot surfaces are exposed.	•		5
4.2	Check that the steam generator is working properly.	•		10
5	**Main pump**			
5.1	Check that the main pump is firmly attached and that there are no leaks in the connections.	•		5
6	**Dosing system**			
6.1	Check the hoses between the dosing pump and the detergent holder. Replace if necessary.	•		5–10
6.2	Check the dosage amount. Adjust if necessary.	•		10–30
6.3	Replace hose in the dosing pump.	•		5
6.4	Check that the empty container alarm works. Clean or replace as necessary.	•		5
6.5	Check that the door to the detergent cabinet closes properly (option IPX4).	•		1
6.6	Check the function of the check valve in the steam generator.	•		5
7	**Drainage connection**			
7.1	Check that the drainage connection is firmly attached and that it is not leaking.	•		5
8	**Ventilator**			
8.1	Replace HEPA filter.	•		10
8.2	Check the fan for proper operation and check that the connections are tight.	•		5
8.3	Check that the check valves are functioning properly. Clean as required.	•		10
8.4	Check hoses to the fan.	•		5
9	**Automatic door**			
9.1	Check the automatic closing function (option).	•		5

	Measure	Each year/ 10,000 cycles	Every other year/20,000 cycles	Time* (minutes)
10	**Function check (at each service)**			
10.1	Run a complete process and be sure there are no deviations according to the periodic checkpoints.			
10.2	Check that the panel's lights and alarms are functioning.			

* The time required is estimated with the top off and may vary depending on the installation settings, operating conditions and equipment level.

5.4   Machines that are not in use

A machine that is not being used should be drained. Contact a service technician.

6 ALARM

6.1 Alarm indication

⚠ **WARNING!**
If the disinfection process is cancelled, the goods are not clean. The goods must be processed again.

If the red lamp at ⚠ lights up, the disinfection has been aborted. The display shows an error message, see "Troubleshooting".

6.2 Acknowledgement of error message

⚠ **WARNING!**
Only to be carried out by authorized staff.

Some error messages need to be acknowledged before the machine can be returned to run mode. When the cause of the error has been found and the error has been put right, the error message is acknowledged as follows:

First press the 🔘 button, then the 🔘 button. Keep both buttons pressed at the same time for 10 seconds. If the error has not been corrected, the error message cannot be acknowledged. The machine is now ready to operate. Re-run the aborted program to disinfect the items. If the error persists, call service personnel.

6.3 During a power failure

If the power fails during a process, the machine remains locked. When the power returns, the machine restarts the process automatically.

7 TROUBLESHOOTING

7.1 List of codes

The tables below describe the error messages that can be generated as well as possible measures.

Code	Description	Measure
U1	Lime descaler low level	Top up descaler agent.
U2	Process agent low level	Top up process agent (option)
U3	Rinse-aid low level	Top up rinse-aid (option).
U6	Inspection request	Contact authorized service personnel.
U7	Warning of high temperature for goods	Let the goods cool down.
U8	External communication	External connection interrupted.
U9	Inactivity warning	The machine has been inactive for 72 hours. A program with an empty chamber must be run before using the machine to clean goods.
H1	Descaler empty	Top up descaler.
H3	Rinsing agent empty	Top up rinsing agent.
H6	Start attempt with door open	Close the door (the machine makes a new start attempt). If the error recurs, contact authorized service personnel.
H7	Battery low	Contact authorized service personnel.
F1	Temperature sensor error	Contact authorized service personnel.
F2	Level sensor error, tank	Contact authorized service personnel.
F3	Level sensor error, detergent	Contact authorized service personnel.
F4	Logic error in door, door locked but not closed.	Contact authorized service personnel.
F5	Logic error, machine configuration	Contact authorized service personnel.
F6	Inspection request	Contact authorized service personnel.
F7	Disinfection temperature not reached.	Contact authorized service personnel.
F8	Door open/unlocked during process	Contact authorized service personnel.
F9	Settings error (E2 error)	Contact authorized service personnel.
F10	Could not fill/empty tank	Contact authorized service personnel.
F11	Leakage	Contact authorized service personnel.
F14	Operating time, door	Contact authorized service personnel.
F15	Operating time, turner	Contact authorized service personnel.
F16	Log. error, turner	Contact authorized service personnel.
F18	Wrong machine type	Contact authorized service personnel.

7.2 Types of codes

- Ux is an information code.
- Hx is a handling code.
- Fx is an error code.

8 DETERGENT

8.1 Using detergent

⚠️ **WARNING!**
Using other detergents, especially acidic ones, may damage the machine (dosing pumps, steam generators and pipes).

⚠️ **WARNING!**
Follow the instructions for the container for additional instructions on using the detergent.

The machine has been proven and tested with Arjo's detergents. We recommend that you use Arjo detergents.

- Chemicals recommended in the Instructions for use does not mean that the manufacturer of the machine accepts liability for any impact the agent has on goods to be washed.

- Changes in the composition, conditions etc. that were not reported by the manufacturer may affect the result of the cleaning process.

- Always follow the instrument manufacturer's instructions when you use new instruments.

- The dosage amount depends on the water quality. For more information see the process chemicals product specification.

8.2 Flushing detergent

Following detergents can be ordered from Arjo sales companies.

Agent	Description
■ ARJO LIQUIDS FLUSHER DETERGENT	A mild alkaline detergent to be used for automated cleaning of human waste containers.
■ ARJO LIQUIDS FLUSHER RINSE	A mild alkaline solution to be used for automated rinsing of human waste containers and system piping to prevent hard water scale build up.

8.3 Positioning

The illustration below shows, for example, where to place the detergent for the free-standing model.
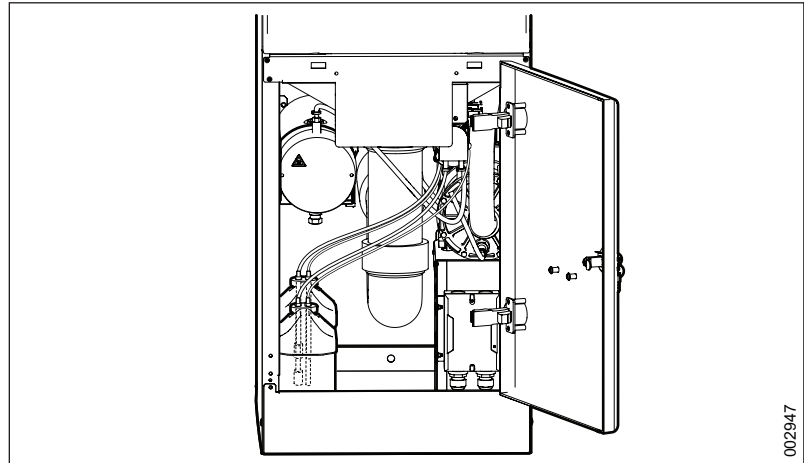

Figure 8. Example of the placement of detergent

8.4 Switching

WARNING!

⚠ **To avoid eye and skin damage, always use protective glasses and gloves. If contact occurs rinse with plenty of water. If eyes or skin becomes irritated, contact a physician. Always read the material safety data sheet of the detergent.**

When replacing with a new container, always check that the detergent is correctly connected. The color of the ring on the low level alarm (A) should be the same as the color on the side of the container (B).
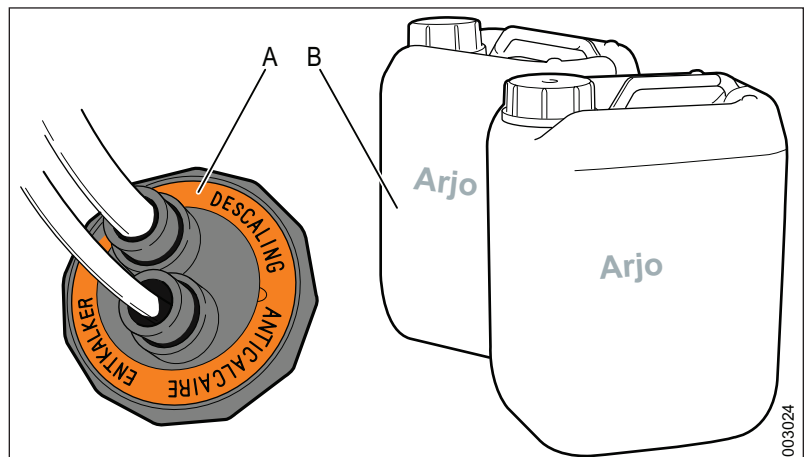

Figure 9. Checking the detergent

9 WATER QUALITY

⚠️ **WARNING!**
It is the customer's responsibility to supply the washer-disinfector with water of the right quality.

The quality of the water used in all stages of cleaning is important for good cleaning results.

9.1 Requirements

The water used in each stage must be compatible with:

- The material that the machine is made of.
- The chemicals used in the process.
- Process requirements for the various stages of the process

9.2 Main factors

The main factors for good water quality are:

Hardness: High hardness will cause limescale deposits in the washer-disinfector, leading to poor cleaning results.

Ionic contaminants: A high concentration of ionic contaminants may cause corrosion and pitting on stainless steel. Heavy metals such as iron, manganese or copper cause instruments to tarnish.

Microbial contaminants: Goods to be washed are treated for microorganisms and their residual products, which may cause fever-like symptoms if they get into the human body. Use water that does not increase the biological load.

Sanitary chemicals: High concentrations of, and high exposure to, sanitary chemicals may cause corrosion and pitting on stainless steel.

9.3 Recommendation

- Arjo recommends that water used in the pre-rinsing, washing and final rinsing phases should be of drinking quality in accordance with the guidelines.
- Recommended water quality is drinking water with max 5°dH.
- Detailed information about acceptable water quality can be found in "Guidelines for Drinking Water Quality, published by WHO.

9.4 Local standard

Follow local standards if they are stricter than Arjo's recommendations. Especially when treated water is used for the final washing/disinfection phase.

Additional advice should also be obtained from the manufacturers of chemical and medical equipment.

9.5   Local standard, typical specification

A typical specification for treated water is:

pH	5.5 to 8
Conductivity	<30 µs.cm-1
TDS	<40 mg/l
Maximum hardness	<50 mg/l
Chlorine	<10 mg/l
Heavy metals	<10 mg/l
Phosphates	<0.2 mg/l as P2O5
Silicates	<0.2 mg/l as SiO2
Endotoxins	<0.25 EU/ml
Total number of micro-organisms	<100 per 100 ml

10   ENVIRONMENTAL PRODUCT DECLARATION

	Stainless steel	
	FD1800	FD1810
Total weight kg / % by weight	100/ 100	105 / 100
Mechanical parts		
Stainless steel	60 / 60	60 / 57.1
Steel	1 / 1	1 / 0.9
Cast iron	13 / 13	13 / 12.3
Copper	1 / 1	1 / 0.9
Plastic	16 / 16	16 / 15.2
Rubber	3 / 3	3 / 2.8
Other mech. parts	2 / 2	2.5 / 2.4
Electrical / Electronics		
Wiring	1.5 / 1.5	2.5 / 2.4
Circuit boards	0.3 / 0.3	1 / 0.9
Other components	2.8 / 2.8	5 / 4.8

10.1   Comments

Other components consists of pumps, door motors, etc. which cannot be weighed or divided up in the same way as other parts. There is no mercury in the machine or its components.

10.2   Distribution

The machines are packed on wooden pallets and clad with corrugated cardboard, or wrapped in plastic. Users must make sure that the packaging material is sorted and recycled.

10.3   Use

The flusher-disinfector affects the environment during its entire life cycle. Our assessment is that electric power and water consumption have the greatest impact on the environment. In total during the lifecycle the machines use approx 11000 kWh of electricity and approx 1300 m³ of water. A total of approx 210 liters of detergent are released into the drainage system, dependent on the programs/dosages of the machine.

10.4   Load pallets

The pallet that the machine is delivered on is manufactured and labeled according to ISPM15. This label means that the wood packaging is dried and heat-treated, KD 56°C/30 min.

11 END OF LIFE DISPOSAL

⚠ **WARNING!**
The product may be contaminated and has to be disinfected before recycling.

Equipment that has electrical and electronic components should be disassembled and recycled per Waste of Electrical and Electronic Equipment (WEEE) or in accordance with local or national regulation.

Disinfection liquids – if you have extra liquid, it's safe to pour it down the drain with running water. These products are water soluble and usually mixed with water when used for cleaning, your municipality will treat these cleaners the same way they would if you used them for cleaning.

The packaging containers should be recycled according to the national or local regulations.

12 SYMBOL EXPLANATION

Symbol	Explanation
	Warning
	Warning, hot surface
	Warning, dangerous voltage
	Warning, risk of getting stuck
	Wear protective gloves
	Wear eye protection
	Refer to instruction manual/booklet - Instructions for use should be read
	Name and address of the manufacturer
	Manufacturing date
	Use by date
REF	Catalogue number
SN	Serial number
MD	Indicates the product is a Medical Device according to EU Medical Device Regulation 2017/745
UDI	Unique device identifier
CE 2797	CE marking indicating conformity with European Community harmonized legislation Figures indicate Notified Body supervision
IP21 / IP22 / IP24	IP = Ingress Protection, a rating value for the protection against mechanical ingress and water ingress

Symbol	Explanation
WRAS APPROVED PRODUCT	Water Supply (Water Fittings) Regulations and Scottish Water Byelaws
W WaterMark WMTS104 LicWMK26397 SAI Global	WaterMark certification label with license number WMK26397
Intertek	Intertek Warnock Hersey Certification Mark
ETL Intertek 5009941	Electrical test label. Indicates ETL Certification through Intertek. The proof of product compliance to North American safety standards
DVGW CERT Anschlusssicher W 540	DVGW CERT Conformity Certificate
kiwa certified BRL-K14011	Dutch safety certification for water safety
(WEEE symbol)	Separate electrical and electronic components for recycling in accordance with the European Directive 2012/19/EU (WEEE)
(2) HDPE	Recyclable, the number (2) indicates high-density polyethylene

UK symbol explanation	
This section is only applicable to United Kingdom (UK) market when UK marking is applied to the Arjo medical device labelling.	
UK CA 0086	UK marking indicating conformity with UK Medical Devices Regulations 2002 (SI 2002 No 618, as amended) Figures indicate UK Approved Body supervision.

UK Responsible Person & UK Importer:

Arjo (UK) Ltd, ArjoHuntleigh House, Houghton Regis. LU5 5XF

Is the appointed UK Responsible Person as defined in UK Medical Devices Regulations 2002 (SI 2002 No 618, as amended).

For Northern Ireland (NI) CE marking will still apply until further amendment to applicable regulations.

13 ELECTROMAGNETIC COMPATIBILITY

Intended environment: industrial electromagnetic environment

Guidance and manufacturer's declaration – electromagnetic emission		
Emmision test	**Compliance**	**Guidance**
RF emissions CISPR 11	Group 1	This equipment uses RF energy only for its internal functions. Therefore its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class **A**	This equipment is suitable for use in all establishments, including domestic establishments and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes.

Guidance and manufacturer's declaration – electromagnetic immunity		
Immunity test	**IEC 60601-1-2 test level / performance criterion**	**Compliance level / performance criterion**
Electrostatic discharge (ESD) IEC 61000-4-2	±4 kV contact discharge / B ±8 kV air discharge / B	±4 kV contact discharge / B ±8 kV air discharge / B
Conducted disturbances inducted by RF fields IEC 61000-4-6	3 V in 0,15 MHz to 80 MHz / A	3 V in 0,15 MHz to 80 MHz / A
Radiated RF electromagnetic field IEC 61000-4-3	10 V/m (80 MHz to 1 GHz) / A 3 V/m (1,4 GHz to 2 GHz) / A 1 V/m (2 GHz to 2,7 GHz) / A	10 V/m (80 MHz to 1 GHz) / A 3 V/m (1,4 GHz to 2 GHz) / A 1 V/m (2 GHz to 2,7 GHz) / A
Electrical fast transient/burst IEC 61000-4-4	±2 kV AC port / B 5 kHz repetition frequency	±2 kV AC port / B 5 kHz repetition frequency
Power frequency Magnetic field IEC 61000-4-8	30 A/m 50 Hz or 60 Hz / A	30 A/m 50 Hz / A
Surge IEC 61000-4-5	±1 kV line-to-line / B ±2 kV line-to-ground / B	±1 kV line-to-line / B ±2 kV line-to-ground / B
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0 % UT; 1 cycle / B 40% Utl 10/12 cycles* / C 70% during 25/30 cycles* / C 0% during 250/300 cycles* / C	0 % UT; 1 cycle / B 40% Utl 10/12 cycles* / C 70% during 25/30 cycles* / C 0% during 250/300 cycles* / C
*For example: "25/30 cycles" menas "25 cycles for 50 Hz test" or "30 cycles for 60 Hz test".		
Note: UT is the AC mains voltage prior to application of the test level.		

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At Arjo, we believe that empowering movement within healthcare environments is essential to quality care. Our products and solutions are designed to promote a safe and dignified experience through patient handling, medical beds, personal hygiene, disinfection, diagnostics, and the prevention of pressure injuries and venous thromboembolism. With over 6500 people worldwide and 65 years caring for patients and healthcare professionals, we are committed to driving healthier outcomes for people facing mobility challenges.

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