



FORTADOR SELF-WASH I

SELF-SERVICE STEAM CLEANER
OPERATING MANUAL



NOTE

Before starting, read this operating manual carefully in order to avoid improper use or situations that may be dangerous for people, animals or objects. The manufacturer shall bear no responsibility and shall exclude the possibility to apply guarantee terms in the following cases: any misuse or use in improper conditions, any damage resulting from normal wear-out or aging, inappropriate application, neglect, improper operation or storage, exposure to moisture, arbitrary modification or repair, improper installation, using wrong power supply source, operator errors, failure to obey this operating manual, or any other events for which the manufacturer cannot be blamed, including any loss or damage in transport.



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INTRODUCTION

Thank you for purchasing FORTADOR Self-Wash I steam cleaner. The FORTADOR brand is an effect of our long-standing experience, and a response to our Customers' needs. The technology confined in the state-of-the-art enclosure provides for higher capacity and performance as well as lower failure rate than ever before. The solutions used, which only occur in FORTADOR steam cleaner, make it possible to make the machine operation easier and faster. The 19-inch display keeps the user inform on the machine functions. The highest quality of the components and low energy consumption provide for even faster return on investment.

The machine is equipped in multiple standard and optional functions:

- aluminium housing,
- continuous operation 24 hrs / 365 days,
- boiler made of acid-resistant stainless steel,
- coin and banknotes reader,
- built-in professional dry / wet vacuum cleaner from Ghibli & Wirbel,
- anti-freezing system,
- anti-theft SAFE CASH system,
- multi-language voice instructions,
- daily e-mail sending with a cash / time report,
- LED lights,
- protective display glass made of scratch-resistant Gorilla Glass.

Options:

- additional water tank instead of permanent water connection,
- settlement via PayPass cards,
- colour adjusted to Customer's logo,
- additional languages.



Manufacturer and Maintenance Service Provider
www.fortador.com

TECHNICAL SPECIFICATION

Technical data

Power supply	400 V, 50 / 60 Hz
Power	6 kW
Protection class	IPX4
Working pressure	8 bar (116 PSI)
Maximum pressure	10 bar (145 PSI)
Steam temperature	120 - 140° C
Boiler temperature	max. 190° C
Boiler capacity	5 litres
Water tank capacity	permanent water connection
Detergent tank capacity	40 litres
Noise level	60 dB
Dimensions (W x L x H)	90 x 97,5 x 210 cm
Weight	520 kg

Technical data are placed at the rating plate at the rear wall of the cover in the area marked with the red frame. When contacting our Service Dept., please always refer to your machine's serial no. from the rating plate.

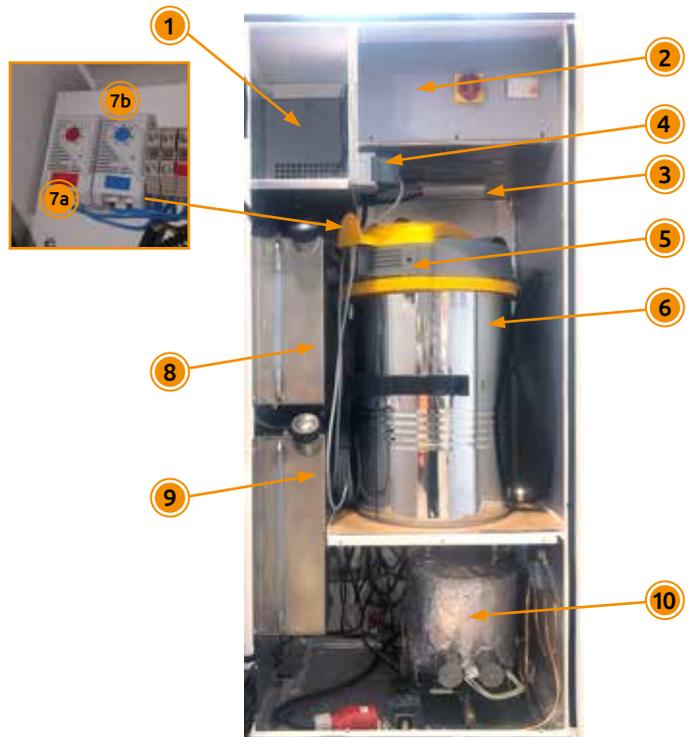
Manufacturer:	Fortador Europe	 
Model:	Fortador Self-Wash I	
Voltage:	400V AC 50-60 Hz	
Power:	7 kW IPX4	
Rated pressure:	1,2 Mpa	
Max. pressure:	1,4 Mpa	
Max. rated temperature:	190 °C	
Empty weight:	450 kg	
S/N:	G020001	
Manufacturing year:	2020	

Before use read the instruction carefully! Made in European Union

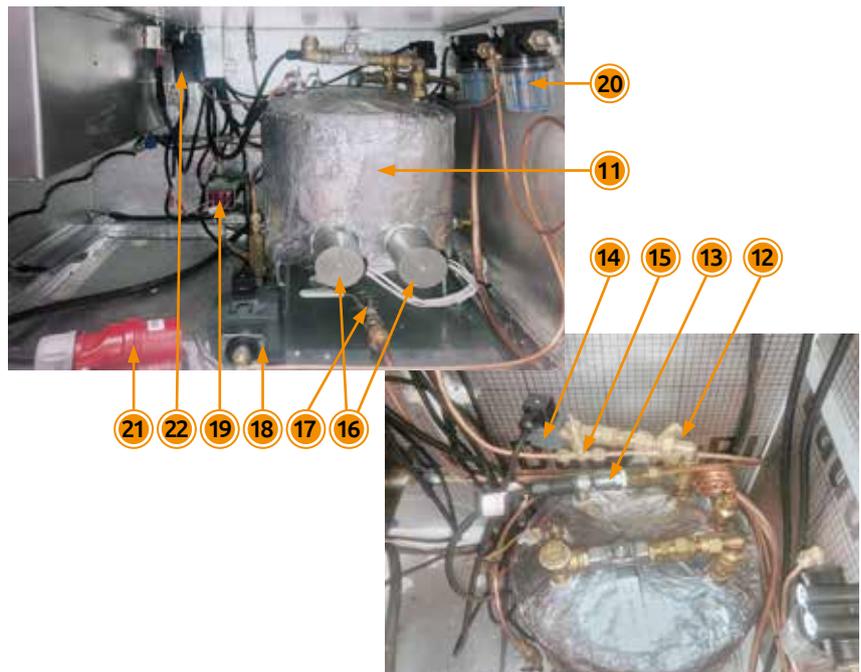


DESCRIPTION OF THE MACHINE

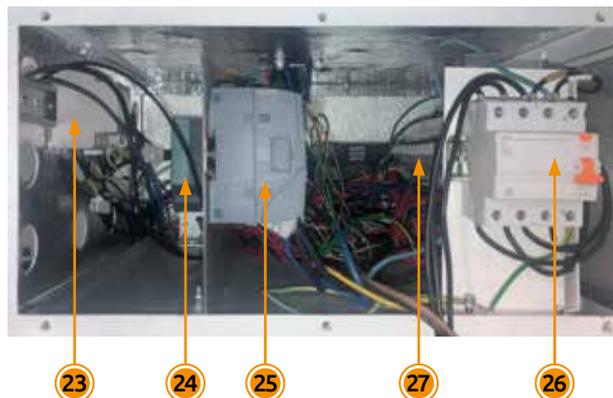
1. Locked access to payment devices
2. Electric chamber
3. Heater - Air heater in the machine
4. Vacuum cleaner electric socket
5. Vacuum cleaner engine
6. Waste tank
- 7a. Air heater thermostat
- 7b. Air cooling thermostat
8. Detergent tank
9. Water tank
10. Hydraulic chamber



11. Bojler
12. Safety Valve
13. Pressure sensor (presostat)
14. Solenoid valve
15. Steam hose connection
16. Heaters
17. Drain valve
18. Water pump
19. Detergent pump
20. Water i detergent filter
21. Electric plug 400V



22. Detergent regulator
23. Electric socket 230V - service
24. Siemens controller power supply
25. Siemens controller
26. Current circuit breaker
27. Overcurrent breakers



SAFETY REQUIREMENTS

The FORTADOR steam cleaner is an industrial machine that must not be operated by persons who are not aware of hazards associated therewith.

Guidelines and recommendations contained in this Manual must be properly understood and obeyed if the condition of the machine proper and safe operation of is to be fulfilled.

Just as in case of most mechanical machines, all relative safety precautions must be observed while operating and servicing the machine. Failure to observe this Operating Manual and recommendations contained in it may lead to injury or damage to the machine or other objects situated nearby. At the same time, it must be borne in mind that it is not possible to present any exhaustive guidelines or recommendations, which would make it possible to completely eliminate risks during its operation or maintenance, and while handling or using chemical products that this machine has been designed to process. In case of special applications and working conditions, some additional safety precautions can turn out to be necessary, which are not discussed in this document. In such non-discussed cases, the user should obey generally adopted safety rules.

Before starting and operating the machine, please read this Operating Manual thoroughly.

This Operating Manual should be stored for later use or for the successive owner.

- Operating pressure can be dangerous for people and animals.
- Operators should be sober, adult, and trained in machine operation and maintenance.
- Spare parts cannot be different than those recommended and manufactured by the manufacturer.
- In case power supply cable is damaged, it must be replaced by an authorised service-provider under pain of loss of guarantee.
- Water tank must be filled with tap water only. Do not add any detergents, chemicals, or descaling agents to the water tank.
- **Do not use distilled water!**
- Before starting the machine, check if its operational openings are free from dirt.
- It is only allowed to use original hoses and guns.
- Do not start the machine if its electrical cable or any other part is damaged.
- Never tilt or topple the machine when switched on.
- Children are absolutely not allowed to contact the machine.
- Be careful while working near children or animals.
- Do not use the machine when damaged or when its power supply cable shows any signs of damage. In case the machine fails to work the way it should, if it fell or got damaged or was left outdoors or flooded, contact our service dept.: help@fortador.com
- Do not try to pull or lift the machine by its power supply cable or hose.
- Watch for hoses, guns, filters, and seals. As consumables, they are covered by limited guarantee only.
- Never direct steam towards people or animals.
- •Keep the machine away from naked flame, radiators, ovens or any other heat sources.



- Do not use the machine in any confined, insufficiently ventilated areas. Its fumes may pose a threat to your health.
- When in operation, the machine should not be moved.
- **The machine should be connected to electrical installation that is provided with reliable earthing. It is forbidden to operate the machine connected to electrical installation no earthing, as it may pose a threat of electric shock!**

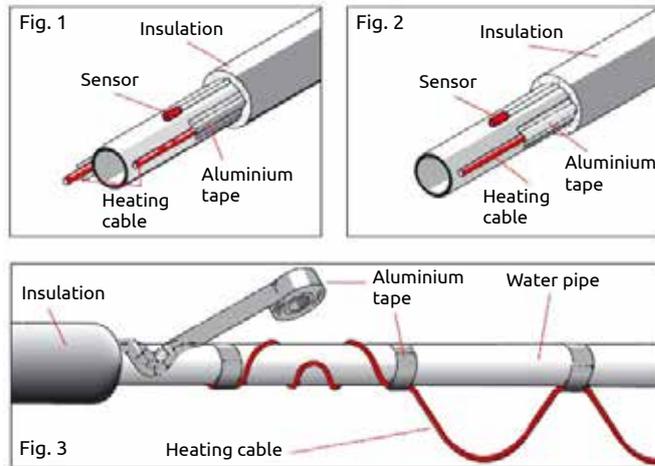


- Prior to each start-up, check residual-current circuit-breaker for proper operation in line with the procedure as described in the “before each start-up” chapter. It is forbidden to operate the machine with faulty residual-current circuit-breaker, as it may pose a threat of electric shock!

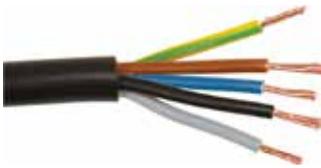


- Do not submerge the machine or any of its components in water or any other fluids.
- To use the machine in explosive areas additional permission may be required.
- Never use the machine close to toxic / hazardous substances.
- Never install the machine on temperature-sensitive foundations.
- Do not operate machine buttons / valves using excessive force.
- The machine should be installed on stable level ground. Make sure that its front wheels are secured during operation.
- Never block the gun’s trigger.
- Do not direct steam jet towards electronic devices.
- While washing your car, make sure that the nozzle is more than 10 cm away from the surface.
- When not in use, the machine should be switched off and drained.
- Remember that the hose bending radius can never be lower than 10 cm. Bending the hose to a tighter radius results in teflon breaking, and, in consequence, in hose damage.
- The machine should be always switched-on. Never switch-off the machine without consulting with our Service Dept.

a. Water connection needs to be done with 1/2" pipe – excavation depth min. 1,5 m, the pipe should be additionally protected by anti-freezing system with heating cable (according to below drawing).



b. At the water pipe end a ball valve 1/2" should be installed.



c. Electric supply needs to be done with copper cable 5 x 4 mm² – illustrative picture.



d. At the cable end an electric socket 32A-5T should be installed.

e. It is recommended to install a main switch 35 A.



3 When the power is switched-on, proper operation of air heater and cooling fan should be controlled. For this purpose set the temperature of 7a thermostat above the ambient temperature, the heater should start to work. After 1 minute the heaters should be noticeably warm. Restore the old temperature setting. The same procedure needs to be done with thermostat 7b, although set the temperature below the ambient temperature. If the fans start to work, the old temperature setting can be restored.

APPLICATION CONFIGURATION

1 Initial configuration

- To launch the main operating system screen, launch the login screen by clicking the logo at the top of the screen.



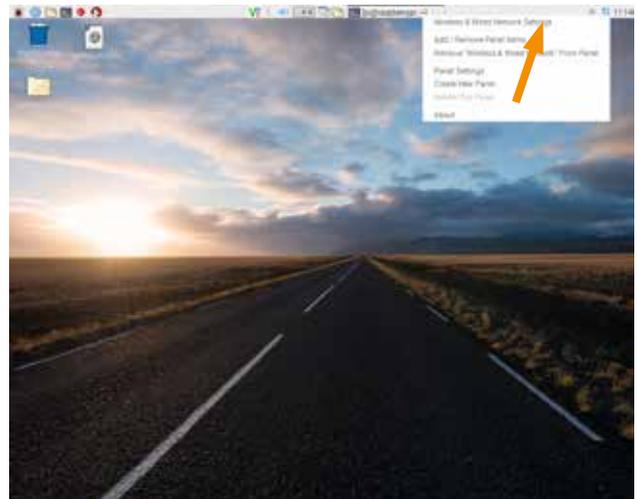
- In the login window, enter: **password: 12** and accept with the button: „Confirm”



- After logging in to the administration panel, click „close” to display the main screen of the operating system



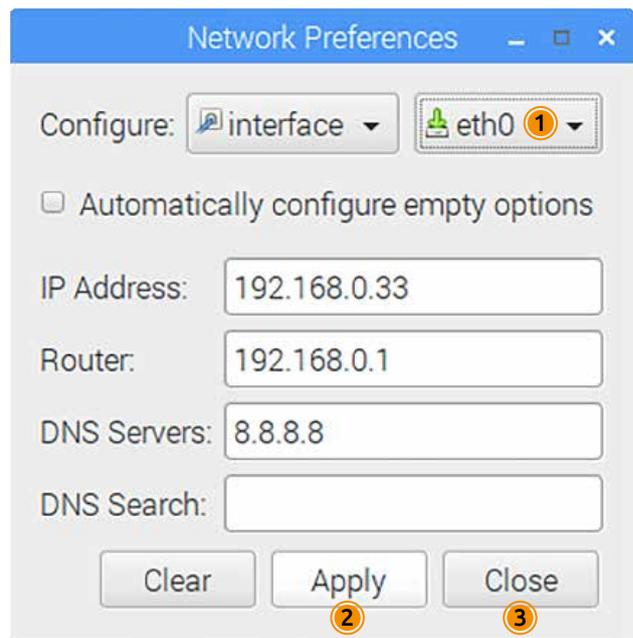
- After clicking the right mouse button on the arrow symbol in the upper right corner select the network settings



- In the displayed window from the drop-down menu on the right (1) select eth0 and then complete the table according to the formula.

Confirm the settings with the „Apply” button(2), then close the menu by clicking the „close” button (3).

Resetting the device.



2 Configuration and administration panel in the application

- To enter the application's administration panel, launch the login screen by clicking the logo at the top of the screen (see figure 1). In the login window, enter : **password: 12**

- We go to the administrative panel.

1. Pressure settings
2. SMTP configuration
3. List of email addresses
4. Coin acceptor configuration
5. Banknote acceptor configuration
6. Change password for admin panel
7. Payment terminal configuration



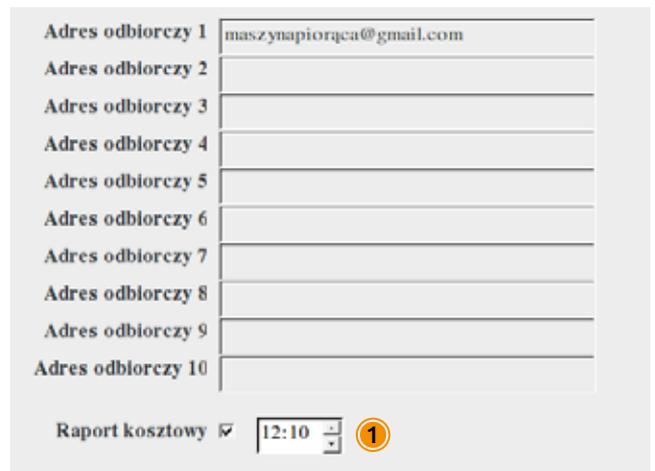
3 SMTP configuration - necessary for the device to send daily reports

1. Email title - any name
2. Sending address : selfwashfortador@gmail.com
3. Password - sending address : fortador2
4. Host : smtp.gmail.com
5. Port : 587
6. SSL option must be checked.



4 List of email addresses - email addresses to which device will send daily reports

1. The hour when the device should send daily reports



5 Device configuration

Coin acceptor

1. Active field must be checked
2. In the right part of the table check the filed with the corresponding denomination
3. Use the arrows to set the device work time at the corresponding denomination.

Wrzutnik monet			<input checked="" type="checkbox"/>
1	1 pln	30	<input checked="" type="checkbox"/>
2	2 pln	60	<input checked="" type="checkbox"/>
3	5 pln	150	<input checked="" type="checkbox"/>
4	0.5 e	1	<input type="checkbox"/>
5	1 e	1	<input type="checkbox"/>
6	2 e	1	<input type="checkbox"/>
7	żet 1	1	<input type="checkbox"/>
8	żet 2	1	<input type="checkbox"/>
9		1	<input type="checkbox"/>
10		1	<input type="checkbox"/>

6 Banknote acceptor

1. Active field must be checked
2. In the right part of the table check the filed with the corresponding denomination
3. Use the arrows to set the device work time at the corresponding denomination.

Akceptor			<input checked="" type="checkbox"/>
11	10 pln	300	<input checked="" type="checkbox"/>
12	20 pln	600	<input checked="" type="checkbox"/>
13	50 pln	1500	<input checked="" type="checkbox"/>
14	100 pln	3000	<input type="checkbox"/>
15	200 pln	6000	<input type="checkbox"/>
16		1	<input type="checkbox"/>
17		1	<input type="checkbox"/>
18		1	<input type="checkbox"/>
19		1	<input type="checkbox"/>
20		1	<input type="checkbox"/>

7 Changing the password for the administration panel

To change the password, enter the current one password for administrative panel (1), then enter the new password in positions 2 and 3. The whole operation should be confirmed with the button „Change password” (4).

Administrator panel configuration confirm with click the „Close” button.

Aktualne hasło	<input type="text"/>
Nowe hasło	<input type="text"/>
Nowe hasło - powtórz	<input type="text"/>
Zmień hasło	<input type="button"/>

TERMINAL CONFIGURATION

1 Press the button in the terminal near the LED until it becomes orange.



2 "Maintenance mode" screen should appear, then press * and go to next screen.



3 Using "F" button go to "MANAGEMENT" and press "V".



- 4 Using "F" button go to "SETTINGS" and press "V", as password write 2008 and press "V".



- 5 Using "F" button go to "SERVICE" and press "V"



6 Using "V" select "TERMINAL INITIALIZATION".



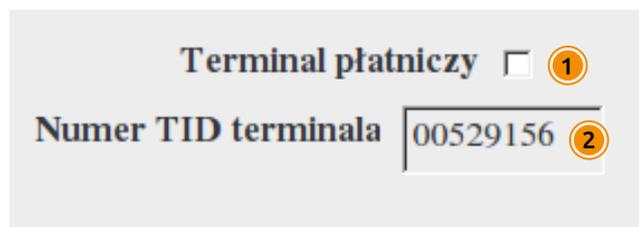
7 Enter TID unique identification number and press "V". Terminal will automatically start configuration process and finally make re-start.



8 Go to configuration panel

1. Active field must be checked
2. Enter the TID number of the terminal

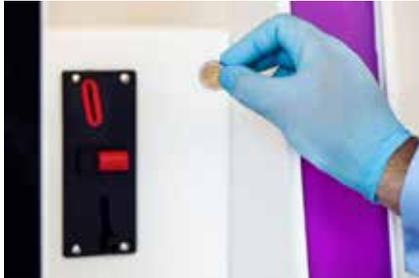
We finish the configuration by pressing the „Close” button. We are resetting the device.



UPHOLSTERY WASHING

The device owner should ensure regular detergent level control and re-filling. The DETERGENT tank should be re-filled with detergent diluted in water in proportions as described in the detergent label. **NOTE: Failure to obey this sequence may lead to detergent pump getting damaged! Such damage is not covered by warranty.**

It is not recommended to use high-foam and acid pH reaction cleaning detergents.



In order to use the device insert a coin or banknote or tap the credit card (depending on ordered version). The time you have paid for will be displayed on the screen.



- 1 Direct the steam nozzle towards exterior of the car, pressing the trigger in order to remove condensed steam.

Important: it is not recommended to clean with steam leather upholstery, ceiling lining or rubber prints that are on material upholstery.

Important: while washing the sucker gets hot – be careful.

- 2 Select the requested washing program using one of three touch buttons:
 - Yellow button – vacuuming – selecting this option you can prepare the surface for washing.
 - Green button – washing with “dry” steam – selecting this option you can wash without detergent.
 - Red button – washing with detergent – selecting this option you can wash using detergent.

Important: upon completion of work it is recommended to use the vacuum cleaner (yellow button) again, in order to remove remaining wetness.

If the time is up, insert next coin in order to continue work or put back the steam hose, if the washing / vacuuming is finished.

DAILY MAINTENANCE

When the device has been installed by Fortador Service Dept., following daily maintenance should be performed:



1 Empty the casket with collected coins.



2 Empty the filthiness tank.



3 Re-fill the detergent tank.



4 Re-fill the water tank (in option without permanent water connection).

5 Check suction power at the washing nozzle. If it's too weak, it may mean that vacuuming hose is clogged, what finally can result in motors overheating or complete burning. If the hose is clogged the patency should be restored with long wire.

WEEKLY MAINTENANCE



- 1 Check the residual-current circuit-breaker with the TEST button (if works properly, the machine should be switched-off).



- 2 Check the cleanness of the water filter, if dirty should be cleaned.

EMERGENCY SWITCH-OFF PROCEDURE



In emergency situations, that can endanger operators health or may result in damage to property, the red emergency button should be pressed immediately. The power will be cut off.

If the reason has been removed, the machine should be switched-on with the emergency button by turning the knob clockwise.

MAINTENANCE PLAN

The FORTADOR steam cleaner is made of best materials. In order to keep it in its perfect condition, it requires scheduled maintenance in line with the below maintenance plan.

MAINTENANCE OPERATIONS	TIME INTERVAL (WORK HOURS COUNT)
Clean the water filter	100
Check (water, detergent) sensors	150
Descaling	50 – 200 (depending on water hardness)
Replace the vacuum cleaner motor	500 - 1000

Within the guarantee period, scheduled maintenance must be performed by the guarantee-issuing party or the authorised dealer. Failure to observe this condition will result in loss of guarantee.

CE ATTESTATION OF CONFORMITY

Applicant	Fortador K.A. Traczyńscy Sp.J. Aleja Krakowska 108 05-090 Sękocin Stary, Poland
Equipment Under Test	Self-service steam cleaner
Trade Name	Fortador
Model Name	Self-Wash I
Type of Test	89 / 336 / EEC
EUT Powered during test	AC 400 V / 50 Hz
Technical condition	EN 55014-1 EN 55014-2 EN 60335-1 EN 60335-2-79 EN 61000-3-2 EN 61000-3-3
Date of test	02-07.03.2015

This CE-Attestation of Conformity is issued according to the Directive 89/336/EEC relating to electromagnetic compatibility on a voluntary basis. It confirms that the listed equipment complies with the principal protection requirements of the EMC directive and applies only to the sample and its technical documentation submitted to TÜV SÜD Product Service GmbH for testing and certification.



After preparation of the necessary technical documentation as well as the conformity directives have to be observed.

TRANSPORT

The machine can be transported by any means of transport, provided that it is properly fastened (e.g. using straps) and secured against damage in its original box delivered together with the machine.

Make sure that the straps are properly tensioned to avoid the machine moving.

During transport, the machine cannot be filled with steam, and it must be drained from all fluids.

FINAL REMARKS

When properly operated and maintained, this FORTADOR steam cleaner can provide long years of reliable operation. Problems that may occur when using the machine should be solved before it is started. While operating any machine, it is necessary to know its normal operation in order to be able to identify its improper operation. Obey all generally adopted precautions while operating any electrical or hydraulic equipment. This Operating Manual has been written in order to thoroughly explain the operations that can be performed using this machine. Its operators must read and understand this Operating Manual before they can begin solving any problems. Any repairs performed by the user on his own within the guarantee period are prohibited, and shall result in loss of guarantee. Therefore, in case of any problem or doubt, please contact our Service Dept.

e-mail: help@fortador.com

tel. +48 791 400 166





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