MAINTENANCE AND INSTRUCTION MANUAL
Boldan TD9 Steamer

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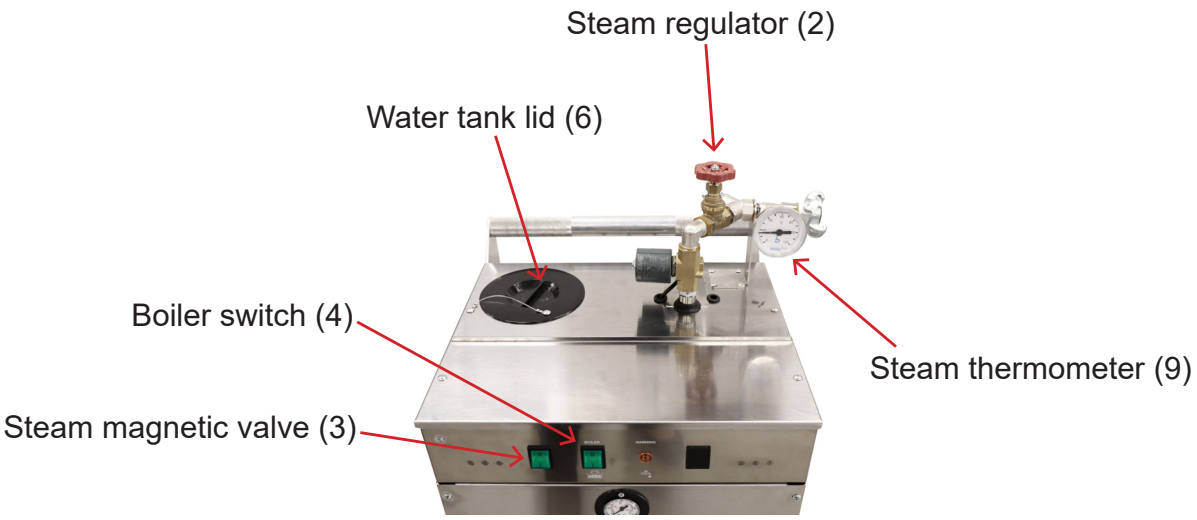
Read this manual carefully before using the appliance.



1	Pressure gauge
2	Steam regulator
3	Steam magnetic valve
4	Boiler switch
5	Water level indicator light
6	Water tank lid

7	Power main switch
8	Identification plate
9	Steam thermometer
10	Safety hook
11	Release valve lever

1 GENERAL INFORMATION

We congratulate you on your having chosen a Boldan product, and we would like to remind you that it has been designed and manufactured paying the utmost attention to the operator's safety, to the efficiency of the work and to environmental protection.

Knowledge of the product being a fundamental element to guarantee the above indicated, we recommend to carefully read this manual and to thoughtfully follow its advice. A particular attention should be given while reading *Safety warnings* and in general to every written Warning.

Boldan is not to be held responsible for damages coming from

- Failure to comply with this manual recommendations
- Use of the appliance other than what is indicated in paragraph *2.4 Intended purpose*
- Use of the appliance against current accident prevention regulations
- Failure to carry out required maintenance.
- Modifications or interventions not authorised by Boldan
- Utilisation of spare parts which are not original or not suitable to the appliance model
- Repairs carried out by an unskilled operator

1.1 Warranty conditions

The validity of the warranty is 12 months, starting from the date indicated on the fiscal sale document (fiscal cash slip, invoice, etc.).

The buyer has the right to ask for the replacing of defective parts, while the right of asking for the compensation for any direct or indirect damages is not included. Manpower, packing and transport expenses are to be paid by the buyer.

The components which have been replaced under warranty must be returned to Boldan.

This warranty does not provide for the replacement of the appliance and ends automatically if the buyer does not comply with date of payment agreed upon.

Not included in the warranty are:

- Any direct or indirect damages caused by falling, incorrect use of the appliance and failure to comply with safety regulations and with the instructions relevant to installation, use and maintenance contained in this manual

- Damages caused by the fact that the appliance does not work because it has to be repaired
- All those parts which prove to be defective because of negligence and careless during use
- Damages caused by use of spare parts not original or not expressly approved by Boldan and damages caused by repairs carried out by un unskilled operator
- Damages caused by a wrong electric feeding

Every tempering with the appliance, in particular to safety devices, will invalidate warranty and will relieve the manufacturer of any responsibility.

Boldan reserves the right to introduce changes at any time, in order to improve the product, and it is not obliged to introduce the same changes to the appliance previously manufactured, delivered or ready to be delivered.

1.2 Manufacturer's address

The manufacturer's address of the appliance:
Boldan Oy, Matkuntie 3, 05200 Rajamäki, Finland

1.3 Symbols and definitions contained in this manual

1.3.1 Symbols

The symbol **WARNING!** which characterises some parts of the text indicates a great possibility of damage of persons if relevant instructions and indications are not followed.

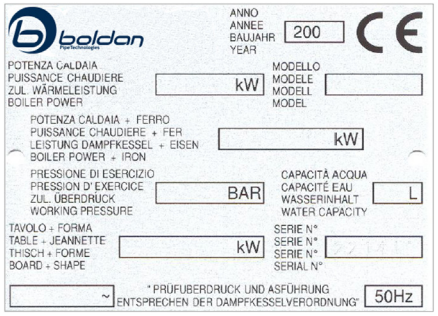
1.3.2 Definitions

SKILLED OPERATOR: a person, generally speaking coming from Boldan service shop or from a Boldan retailer, who has been expressly trained and authorised to carry out special maintenance operations and repairs on the appliance.

Operations on electric parts must be performed by a SKILLED OPERATOR being also a QUALIFIED ELECTRICIAN, that is a person professionally trained and made competent to inspect, to install and to repair electric appliances, "workmanlike" and in compliance with current regulations in force in the country where the appliance is installed.

1.4 Identification plate

The identification plate, with the main technical specifications, is located on the side of the appliance and may be easily seen (see also the following paragraph *Identification of components*).



2 GENERAL DESCRIPTION

The appliance Boldan TD9 Steamer is a steam generator to be filled with water, and it has been designed to feed two steam valves.

2.1 How the steam generator works

The water container in the boiler is heated under pressure, by two electric plated resistors, until it reaches a temperature allowing saturated dry steam production.

Steam gets to the user if a push-button on the user, which controls the opening of an electric valve, is depressed. Moreover, an automatic electric pump refills the boiler with water taken from the steam generator's inner tank or from water network directly.

2.2 Technical information and specifications

Technical information and specifications are indicative. Boldan reserves the right to introduce all those changes deemed to be advisable.

MODEL		TD9
Voltage	V	230 / 400 3N ~
Frequency	Hz	50
Boiler power	kW	9
Electric pump power	kW	0,50
Water capacity	Lt.	7
Working pressure	Bar	5,5
Weight	kg	45

2.3 Safety devices

The appliance is equipped with the following safety devices:

1. Safety valve: it is made of a safety pressure valve, positioned on the boiler, which has to be suitably calibrated and which releases the exceeding over pressure if any trouble with the pressure control system occurs.
2. Safety temperature control device (manual pace): it is a device , sensitive to temperature, which stops the appliance in case of a breakdown in the pressure control system and in the safety valve occurs, thus avoiding dangerous conditions.
3. Locking hook of the release valve lever: it is a device which prevent the accidental opening of the release valve, by working on the control lever of the release valve. **WARNING!** If any intervention in the above described safety devices (see points 1 and 2), do not use any means the appliance without having previously asked a SKILLED OPERATOR to inspect the appliance.

2.4 Intended purpose

The steam generator has been designed to work using ordinary or purified water.

The appliance is not suitable to be used in places showing special conditions as, for instance, an explosive or corrosive atmosphere.

ANY OTHER USE IS TO BE CONSIDERED IMPROPER. THE MANUFACTURER SHALL NOT BE HELD LIABLE FOR DAMAGES CAUSED BY WRONGFUL OR IMPROPER USE OF THE APPLIANCE.

3 SAFETY WARNINGS

1. The use of this appliance requires attention and care. Do not give it to others without making sure, under your direct responsibility, that this chance user has carefully read this manual and therefore knows the appliance.
2. Pay a special attention to the content explained in paragraph *5.1 Inspection and connection to the electric line*.
3. Before putting the appliance into operation, be careful to put in a dry place, level, and safe to prevent falling or tilting.
4. Do not use the appliance when: The appliance, electric cables or other important components, as the steam feeding tube, are damaged; The appliance has fallen down; The appliance is leaking; If so, ask a SKILLED OPERATOR to inspect the appliance.

5. Keep electric cables and plugs perfectly dry. Do not touch them with wet hands.
6. If electric cables are damaged, ask a SKILLED OPERATOR to replace them.
7. Do not put any reducer or adapter between the electric plug and the socket.
8. Do not remove the plug from the socket by pulling the feeding cable.
9. Before putting the appliance into operation make sure that the release valve lever (11) is locked by the safety hook (10).
10. Never move the lever of the release valve lever (11) when the generator is still hot.
11. During use, the appliance should be kept under control. Keep children away from the device when in use.
12. Never put in the appliance in the water.
13. While refilling the inner tank make sure that water does not overflow. If this happens, wait at least 24 hours before starting the generator so that water within the appliance evaporates.
14. Always bring switches (3), (4), (10) (there is no light in the switches) and the power main switch (7) in OFF position (marked by the sign “0”) and remove the plug from the socket (to be more simple, in this maintenance and instruction manual, we consider the appliance as always connected to the electric feeding system through a plug. If the appliance is connected to the electric feeding system in a fixed way, consider that: the switch disconnecting all poles in OFF position is equal to having the appliance unplugged from the socket; the switch disconnecting all poles in ON position is equal to having the appliance plugged to the socket: Before leaving the room, even for a few minutes (as not to leave the appliance unattended), After use. Moreover, wait for the appliance to be completely cold: Before doing any cleaning or maintenance; Before adding some water into the steam generator.
15. When you let the appliance cool, pay attention: Not to leave the appliance unattended; put the appliance in a safe position, where there is no falling risk; Do not put the appliance near inflammable materials.
16. Always call a SKILLED OPERATOR for repairs; in this way, you will be sure that only original spare parts are used. Incomplete repairs involve a serious danger for users.
17. The appliance must never be switched on when the water tank is empty.

4 UNPACKING

After having unpacked the appliance, check that it is not damaged. If in doubt do not use it but call your retailer who will ask a SKILLED OPERATOR to inspect it.

5 CONNECTING TO ELECTRIC AND WATER LINER

5.1 Inspections and connection to the electric line

1. Ask a SKILLED OPERATOR to check that the feeding of your electric system is in accordance with the data shown on the identification plate (8) of the appliance. In particular, voltage should not differ from what indicated in the plate by +/- 10%.
2. The socket to which the appliance is connected should be arranged by a SKILLED OPERATOR in accordance with law provisions in force in the country where the appliance is installed. In particular, the socket should be equipped with a ground conductor, with a suitable fuse and should be protected with a magnetic-thermal sensitivity differential switch not exceeding 30 mA.
3. If the appliance is to be connected in a fixed way to the electric feeding system, installation should be carried out by a SKILLED OPERATOR in accordance with law provisions in force in the country where the appliance has been installed. In particular, the following recommendations should be carefully followed: grounding, protection through a suitable fuse and magnetic-thermal sensitivity differential switch not exceeding 30 mA, sectioning of the electric system of the appliance with switch disconnecting all poles.
4. If the appliance is not to be connected to the electric system in a fixed way and the feeding cable is not equipped with a plug, ask a SKILLED OPERATOR to connect a plug in compliance with the regulations in force in the country where the appliance has been installed.
5. If the feeding cable is too short, ask a SKILLED OPERATOR to replace it.
6. Three-phase appliances should be connected to a three-phase line with neutral conductor.

5.2 Connecting the steam generator to the water line

The electric pump of the steam generator can be directly connected to the water line by making use of a suitable tube resistant at the pressure of 10 bar at least. Do not make use of the tube supplied connecting the inner tank to the pump.

This operation should be carried out by a SKILLED OPERATOR only, in compliance with the norms in force in the country where the appliance is installed.

6 FUNCTIONING

1. Make sure that the release valve lever (11) is closed and locked by the safety hook (10).
2. Through the water tank lid (6) and with the help of the decanter given in option, refill the inner tank of the steam generator with common or purified water, we advise not to use: distilled water, water containing oils, perfumes, detergents, etc. During this operation make sure that water does not overflow out of the tank (see also point 15 of paragraph *3 Safety warning*).
3. Make sure that the power main switch (7) is in OFF position (marked by the symbol “0”) and insert the electric plug in the socket of the electric system.
4. Put the power main switch (7) in ON position (marked by the symbol “I”).
5. Put the boiler switch (4) in ON position (switch lit up). The electric pump which provides for the water refilling of the boiler will enter into function. The electric pump will automatically stop when water reaches the maximum level of water in the boiler.

IMPORTANT NOTE:

The starting of the electric pump can be hampered by a light oxidation caused by the appliance’s inactivity. When it happens, put the power main switch (7) many times from ON position (marked by the symbol “I”) to the OFF position (marked by the symbol “0”) and back, as to give more possibilities to the pump to start. To avoid any oxidation we recommend do not let inactive the pump for more 10 days. If the electric pump does not start by no means, ask a SKILLED OPERATOR. When the level in the inner tank has decreased to a point where only 10 cm. of water are left, refill the tank after having brought the power main switch (7) in OFF position (marked by the symbol “0”) and after having removed the plug from the socket.

7 STOPPING AND PUTTING AWAY

7.1 Stopping

1. Put switches (3) (4) and (10) (switches not lit up) and the power main switch (7) in OFF position (marked by the symbol “O”) and disconnect the feeding plug from the electric system plug.

2. Wait for the steam generator to be completely cold. During this phase pay attention that:
   - Not to leave the appliance unattended
   - To put the appliance in a safe position, where there is no falling risk
   - Not to put the appliance near inflammable materials

3. Empty the water from the device by opening the release valve lever (11).

7.2 Putting away

Put the appliance in a dry/clean place paying attention as not to damage electric cables and the steam inlet tube.

8 CLEANING AND MAINTENANCE

WARNING! Any intervention concerning Cleaning, routine maintenance, special maintenance and repairing should be carried out only after having performed the operations indicated in the above paragraph *7.1 Stopping*. Always keep in mind to carry out cleaning and maintenance operations recommended by the maintenance and instruction manual of your iron.

8.1 Cleaning

If you wish to clean your steam generator on the outside, use a damp cloth and, afterwards, run a dry cloth over.

Do not use inflammable or aggressive substances to clean the appliance.

8.2 Routine maintenance

The following routine maintenance can be performed by the user. Carefully follow these instructions:

INTERVENTION	MAINTENANCE INTERVAL
Inspection of feeding cables, steam inlet tubes, connectors	Every time you use the appliance
Emptying the boiler from residual water	Every week, by carefully following the recommendations container in the following paragraph *8.2.1 Emptying the boiler from residual water*

8.2.1 Emptying the boiler from residual water

We suggest to empty the boiler of the steam generator every week by following these steps: **WARNING!**

1. Perform the operations indicated in paragraph *7.1 Stopping*
2. Lift the safety hook (10), thus releasing the lever of the release valve lever (11) located on side of generator.
3. Work the lever as to open the release valve and empty the boiler from all residual water.

   Any other maintenance intervention should be carried by a SKILLED OPERATOR, as indicated in the following paragraph.

8.3 Special maintenance and repairing

WARNING! Special maintenance and repairing should be carried out by a SKILLED OPERATOR.

The special maintenance programme is the following:

INTERVENTION	MAINTENANCE INTERVAL
Inspection of safety devices	Once a year
Inspection and cleaning of the suction filter of the pump	Once a year
Safety valve replacing	Every 3 years

To facilitate technical interventions by a SKILLED OPERATOR, we have added the electric diagram of the machine with single-phase electric feeding and three-phase electric feeding.

9 SCRAPPING AND DISPOSAL

Scrapping the appliance is an operation which should be performed only by skilled workers especially trained for this activity and in compliance with the legislation in force in the country where the appliance has been installed. Before scrapping the appliance make sure it cannot be used anymore, for instance by cutting the feeding cable, and make those parts, which could be a danger for children using the appliance to play, harmless.

10 TROUBLE SHOOTING

WARNING! Before performing any interventions carry out the operations indicate in paragraph *7.1 Stopping*.

TROUBLE	POSSIBLE CAUSE	REMEDIAL MEASURE
The power main switch (7) is brought in ON position but the appliance does not switch on	The plug of the feeling cable is not plugged in correctly	Unplug the plug from the socket and plug it again in the right way
	The fuse of the socket connected to the appliance has burnt out	Replace it with a suitable fuse. If the problem shows again, call a SKILLED OPERATOR
	The magnetothermal differential switch is protecting the socket to which the appliance is connected	Refit the switch. If the problem arises again,call a SKILLED OPERATOR
When the boiler switch (4) is depressed, the generator does not warm up and from the pressure gauge (1) you can read that there is no pressure	Breakdown in the thrust meter	Refit the switch. If the problem arises again, call a SKILLED OPERATOR
	Breakdown in the safety device against over-heating	Call a SKILLED OPERATOR
	Breakdown in the level regulator	Call a SKILLED OPERATOR
	Breakdown in the boiler resistor	Call a SKILLED OPERATOR
	Breakdown and/or lock in the pump	Call a SKILLED OPERATOR
	The water level in the inner tank has decreased under the minimum level	Add some water in the inner tank
When the boiler switch (4) is depressed, no water is introduced into the boiler	There are air bubbles in the suction hose of the pump	Carry out the operations explained in paragraph 7.1 and repeat the operations in paragraph 6
	The suction hose of the pump or the relevant filter are obstructed	Call a SKILLED OPERATOR
	Breakdown in the level regulator	Call a SKILLED OPERATOR
	Breakdown in the water electric valve	Call a SKILLED OPERATOR
	Breakdown in the safety valve	Call a SKILLED OPERATOR
	Breakdown in the thrust meter	Call a SKILLED OPERATOR
	Breakdown in one of the gaskets or in one of the tightening elements	Call a SKILLED OPERATOR
From within the generator some steam comes out	Breakdown in the safety valve	Call a SKILLED OPERATOR
	Breakdown in the thrust meter	Call a SKILLED OPERATOR
	Breakdown in one of the gaskets or in one of the tightening elements	Call a SKILLED OPERATOR
The water lever indicator light (5) is ON	Lack of water in the inner tank	Add some water in the inner tank
	Breakdown in the level regulator	Call a SKILLED OPERATOR
	Breakdown in the water electric valve	Call a SKILLED OPERATOR
	Breakdown and/or lock in the pump	Call a SKILLED OPERATOR
When the generator is warm and under pressure, water from the boiler comes back to the inner tank	Breakdown in the non-return valve	Call a SKILLED OPERATOR
When the generator is warm and under pressure, as the steam outlet push-button on the pressure immedi-ately vanishes	The boiler is full of water because of a break-down in the level regulator or in the water electric valve	Call a SKILLED OPERATOR

CONFORMITY DECLARATION

CE

DICHIARAZIONE DI CONFORMITA' ai sensi delle Direttive: 73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE

CONFORMITY DECLARATION according to the Directives: 73/23/EC, 89/336/EC, 93/68/EC, 97/23/EC

DÉCLARATION DE CONFORMITÉ aux termes des Directives: 73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE

KONFORMITÄTSERKLÄRUNG entsprechend der Richtlinien: 73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE

Declares under its own responsibility that the Boldan TD9 Steamer

with serial N° starting from: 09A1

to which this declaration refers to, complies to the qualifications of the Directives: **73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE** For inspection of the conformity of Directives above mentioned, the following Harmonized Rules have been consulted:

EN 60335-1 (1994)
TRD 801 (1996)
EN 292-2 (1995)
EN 61000-3-3 (1995)
EN 292-1 (1991)
EN 61000-3-2 (1995)
EN 55104 (1996)
EN 55014 (1994)
EN 60335-2-15 (1996)
EN 1050 (1996)