



**AUTO-FILL  
WATER BOILERS**

**INSTRUCTION MANUAL**

**MODELS COVERED**

**WB3  
WB7  
WB15  
WB5E**

## IMPORTANT HEALTH AND SAFETY INFORMATION

PLEASE READ BEFORE USING YOUR NEW WATER BOILER

Your new water boiler is designed to provide a constant source of near boiling water for the preparation of hot drinks. **THIS IS VERY HOT**

All personnel must be provided with sufficient and appropriate training in the safe use of this appliance.

An instruction sheet displayed next to the machine is often helpful in notifying users that the appliance contains and dispense near-boiling water.

In line with Health & Safety requirements we recommend that a risk assessment be carried out after the boiler has been installed.

It is advisable to display a sign informing customers that drinks made from this boiler are very hot.

During normal use of the boiler, certain surfaces will become hot. (especially near to the draw off tap). Care should be taken to avoid potential injury from burns and scalding whilst operating the appliance.

Disclaimer. This appliance is designed to heat water. No other medium should be used. Glen Dimplex UK Ltd will not be held responsible for any accidents or injuries that occur from either misuse of the appliance or temperature of water or the hot drinks served.

## INTRODUCTION

Your new water boiler is designed to give years of trouble free service provided that the instructions contained in this manual are followed carefully.

Your new boiler is energy efficient, simple to operate and easy to service.

It is recommended that the installation is carried out by a properly qualified fitter.

## CHECK LIST

Before starting installation, check that you have the following parts:

1. Boiler Unit
2. Case
3. Mounting Template
4. Fitting Kit
5. Tap Kit (WB5E Only)

## INSTALLATION

### POSITIONING THE UNIT

The heater should be positioned in a convenient place on a wall that is capable of supporting it safely. Use the mounting template and fitting kit provided.

Position the boiler so that the tap is about 400mm above a draining board. Leave sufficient space around the unit to enable access for servicing, paying particular attention to the position of the top centre fixing screw that holds the cover in place.

Screw in the top two screws leaving about 6mm protruding and hang the machine using the keyhole slots provided. Once the machine is positioned, tighten the top screws and insert the bottom screw.

### ELECTRICAL CONNECTION ALL MACHINES

Supply – 220/240V 50Hz – 3kW. The circuit should be protected by its own 13amp double pole connection unit with flex outlet to BS5733, alternatively the circuit should have means of disconnection incorporated in fixed wiring, having a contact separation of at least 3mm in all poles. Minimum cable size is 1.5mm<sup>2</sup>. The use of an ELCB is recommended.

Electrical installation should conform to current I.E.E. wiring regulations.

When using fixed wiring, the bare section of earth wire must be sleeved to within 8mm of the end.

Only a qualified electrician should carry out this work.

## **WARNING: THIS APPLIANCE MUST BE EARTHED**

### REAR ENTRY OF CABLE

Fixed or flexible cable to be connected direct to the terminal block, cable gland not utilised.

### BOTTOM ENTRY OF CABLE

Use the cable gland. Loosen cable-gripping nut. Pass cable through gland, leaving enough free cable to connect into the terminal block. Tighten cable gland grip nut.

**DO NOT SWITCH ON UNTIL THE INSTALLATION IS COMPLETE AND THE CASE AND TAP ARE IN PLACE**

### WATER CONNECTION

**NOTE: Although it will not harm the boiler, it should not be operated with the water supply turned off.**

The water supply **must** have a pressure not exceeding 7 Bar (700kpa) and no lower than 1 Bar (200kpa). **If the mains water pressure is below 1 Bar a fault situation could arise as described in section; "Temperature Control and Safety cut-outs". In addition the water inlet valve may not seat properly and can cause overflowing**

If your water pressure exceeds 7 Bar, a suitable pressure reduction valve will need to be fitted to the water supply to bring it to a level that the machine can cope with. **Failure to do this could result in the boiler overflowing .**

The manufacturers cannot be held responsible for any machine malfunction if the water pressure exceeds that stated. If in doubt, consult your water supply company.

The boiler has a type B air gap in compliance with water bylaws and has both WRAS and KIWA approval.

**Please note that washing machine hoses are not suitable for drinking water and will cause a very bad taste to the water.**

A 15mm stop valve should be fitted between the water supply and the boiler so that the machine can be isolated. Water purification filters are available to ensure fresh tasting water. Please contact the service department for details on 01704 502911. In hard water areas scale can cause problems. Fitting a scale reducer will help minimise scale.

We regret that the manufacturers cannot be held responsible for scale problems even if a scale reducer has been installed.

## BOTTOM ENTRY

Connect to a suitable cold drinking water supply using 15mm copper pipe and push on the 'T' piece supplied. The 'T' has been blanked off using a brass plug. Leave this plug in place. Push the 'T' piece firmly onto the water inlet solenoid pipe with the brass plug facing forward. Then push the 15mm cold water supply firmly into the bottom of the fitting.

To avoid damage to the unit, do not use any solder connections whilst pipes are connected to the boiler.

## REAR ENTRY

For rear entry of cold water supply, remove the plug from the 'T' piece by compressing the grey collar and pulling out. Push the plug firmly into the bottom of the 'T' piece.

Push the 'T' piece firmly into the water inlet solenoid pipe with the 'T' facing the wall.

Push the 15mm cold water supply firmly into the 'T' fitting.

To avoid damage to the unit, do not use any solder connections whilst pipes are connected to the boiler.

## OVERFLOW PIPE BOTTOM ENTRY

In your fitting kit you will find a straight push on connector with a small length of 15mm copper tube pushed into it.

This connector **must** be pushed onto the corresponding overflow pipe on the bracket (alongside the solenoid).

If you wish to extend the overflow, remove the copper pipe supplied and replace with pipe of your chosen length. The pipe must have a continuous fall and should not be longer than 200mm (if a longer run is required use 22mm pipe to avoid airlocks). The overflow pipe should have no more than four right angle bends and should discharge to a safe visible position.

Under certain conditions, the overflow pipe could vent steam, hot water or cold water and the manufacturers cannot be held responsible should damage arise from such discharge if the overflow pipe has not been directed to a suitable position where overflowing water can run away safely.

**Under no circumstances should the overflow pipe be allowed to vent inside the case of the boiler.**

## OVERFLOW PIPE REAR ENTRY

In your fitting kit you will find a straight push on connector with a small length of 15mm copper tube pushed into it.

If rear entry has been chosen this connector must be replaced by a push on elbow (available from plumber's merchants). Push the elbow onto the overflow pipe on the bracket (alongside the solenoid).

The pipe must have a continuous fall and should not be longer than 200mm (if a longer run is required use 22mm pipe to avoid airlocks). The overflow pipe should have no more than four right angle bends and should discharge to a safe visible position.

Under certain conditions, the overflow pipe could vent steam, hot water or cold water and the manufacturers cannot be held responsible should damage arise from such discharge if the overflow pipe has not been directed to a suitable position where overflowing water can run away safely.

**Under no circumstances should the overflow pipe be allowed to vent inside the case of the boiler.**

## VENT PIPE

A small silicone tube connects the boiler to the wall bracket. Ensure that this is connected and that the opening in the bracket is not obstructed.

## FIT CASE

Attach the L.E.D display lead to the case per the instructions. Using the fixing screws fit the outer case to the boiler.

## WB5E ONLY. FIT TAP

Remove plastic plug from the tap boss. Ensure that the yellow washer is in place and carefully screw the chromed tap extension into place using a 28mm open-ended spanner to tighten. Do not use grips or tools that are likely to scratch the chrome.

Push the grey tap collar firmly into place and twist to fit snugly against the case.

## OPERATION (All models except WB5E)

After the electrical and water connections have been made, switch the power and water supply on.

The power and ready lights will flash once. The power light will then be constantly illuminated to indicate mains supply.

Providing the water supply is present, the machine will start to fill. If the machine does not fill to its pre-set level within 4 to 5 minutes the red service light will flash 6 times. If this happens, check that the water stop valve is turned on. If the valve is on, check that the small plastic filter in the water inlet solenoid on the machine is not clogged with debris. To clear the service light, switch the machine off and then back on again.

When the correct temperature has been reached, the ready light will be illuminated, wait at least 10 minutes after the ready light illuminates before starting to draw water (on first installation only). Your machine does not fill completely at once. The water input is electronically controlled to obtain maximum output, temperature and efficiency.

In daily use, switch on and wait for the ready light to illuminate. The water will then be at the correct temperature and the boiler ready to use. We recommend that you switch the power supply to the boiler off overnight and when the unit is not in use.

## OPERATION (WB5Eonly)

After the electrical and water connections have been made, switch the power and water supply on.

When the power supply is switched on, the small indicator lamp on the front panel will glow orange. This means that the water is filling to the bottom probe. When the bottom probe has been reached, the indicator lamp will change to red to show heating. When the water has reached the correct temperature the light will change green. Wait a further 10 minutes before starting to use.

Your machine does not fill completely at once. The water input is electronically controlled to obtain maximum output, temperature and efficiency.

In daily use, switch on and wait for the green light. The water will then be at the correct temperature and the boiler ready to use.

## TEMPERATURE CONTROL & SAFETY CUT OUT

A small knob protrudes from the base of the mounting bracket (Not WB5E). This controls the boiler temperature. It has been factory set at approximately 98°C and should not need adjustment. However, under certain conditions (extreme change in ambient room or cold water temperature), the boiler temperature may fluctuate slightly. The knob may then be used to adjust this. Using a screwdriver, loosen the transit bracket, which holds the knob in place. Turn the knob clockwise to increase or anti-clockwise to decrease the temperature.

All models except WB5E

Should the temperature be set too high, steam or boiling water will discharge through the overflow pipe. In the event of this happening, a high temperature control switch will switch off the heater. The red service light will flash 10 or 12 times depending upon the water level. Switch the boiler off at the electricity supply and switch back on a few moments later. This will reset the boiler but if it cuts out again it is recommended that you then adjust the temperature by turning the knob anti-clockwise. If the boiler continues to over-boil, contact the Instanta service department on 01704 502911 for advice.

WB5E

Should the temperature be set too high, steam or boiling water will discharge through the overflow pipe. In the event of this happening, a high temperature control switch will switch off the heater. After a short period, the neon indicator will change from green to flashing red or flashing red and green. Switch the boiler off at the electricity supply and switch back on a few moments later. This will reset the boiler but if it cuts out again it is recommended that you contact the Instanta service department for advice.

## CLEANING

The external surface of the machine can be kept clean by wiping with a damp cloth.

Do not use abrasive material on the outer surface of the machine.



## TECHNICAL SPECIFICATION ALL MODELS

Tank constructed in stainless steel.

Tank insulated from outer casing with high temperature polystyrene.

All boilers have electronic control of the main functions. This means that the temperature is controlled precisely within given parameters. The circuit constantly monitors the operation of the machine and warns the user via the light if abnormal circumstances have been detected.

If the light flashes, refer to the diagnosis codes.

## MAINTENANCE

**NOTE: After initial commissioning or subsequent re-commissioning (service-repair), check that the water supply has been established prior to switching on the boiler.**

The boiler should be periodically checked for scale build up. The frequency depends upon hardness of the water and whether or not an effective scale reducer is fitted. It is advisable to keep a spare tap spring (part no TP1007/L) and washer (part no TP1001/L) in case of emergencies. Apart from the removal of scale, no regular maintenance should be required.

## DE-SCALING All models except WB5E

To de-scale your machine, first disconnect the machine from the power supply.

Remove the case by removing the top and bottom screws holding the case to the wall bracket.

Drain the remaining water through the drain plug in the bottom of the tank.

Remove the boiler lid by unscrewing the fixing screws. The tank is now accessible.

The whole boiler can be disconnected and lifted away from the wall fixing by removing the push on water and vent fittings and disconnecting the electrical components. However, it is recommended that only a qualified person undertakes this work and that unless a qualified person is available, the de-scaling is carried out with the boiler on the wall.

Lift out the baffle plates on the inside of the tank (taking note of the position of the plates). Remove as much scale as possible by hand. Dissolve any scale that is difficult to remove by using a de-scaling solution. Remember to replace the drain plug before using the de-scaler.

Clean the level sensing probes and their white holders completely using a clean non-metallic scourer.

Ensure all traces of de-scaler are removed before using the boiler again.

Rather than frequently de-scaling the machine, it may be preferable to install an effective scale reducer or WRAS approved food quality water softener. This will reduce the frequency of de-scaling but will not remove scale completely in some areas.

## DE-SCALING WB5E

To de-scale your machine, first disconnect the machine from the power supply.

Drain all the water using the tap. Disconnect the tap. Remove the case by removing the top and bottom screws holding the case to the wall bracket.

Drain the remaining water through the drain plug in the bottom of the tank.

Remove the boiler lid by unscrewing the fixing screws. The tank is now accessible.

The whole boiler can be disconnected and lifted away from the wall fixing by removing the push on water and vent fittings and disconnecting the electrical components. However, it is recommended that only a qualified person undertakes this work and that unless a qualified person is available, the de-scaling is carried out with the boiler on the wall.

Lift out the baffle plates on the inside of the tank (taking note of the position of the plates). Remove as much scale as possible by hand. Dissolve any scale that is difficult to remove by using a de-scaling solution. Remember to replace the drain plug before using the de-scaler.

Clean the level sensing probes and their white holders completely using a clean non-metallic scourer.

Ensure all traces of de-scaler are removed before using the boiler again.

Rather than frequently de-scaling the machine, it may be preferable to install an effective scale reducer or WRC approved food quality water softener. This will reduce the frequency of de-scaling but will not remove scale completely in some areas

## SERVICE WARNING LIGHT (WB5E only)

Your boiler is able to detect certain fault conditions, these are as follows:

- |    |                      |   |  |
|----|----------------------|---|--|
| 1. | Flashing Green       | = | The bottom probe is scaled up.   |
| 2. | Flashing Orange      | = | The water supply is turned off or the bottom probe is scaled up                    |
| 3. | Flashing Red         | = | An internal component has failed or.<br>The safety cut out has come into operation |
| 4. | Flashing Green & Red | = | As Above.  |

## SERVICE WARNING LIGHT (All Models except WB5E)

All models except WB5E have this facility. This light is designed to help you discover the cause of any malfunction. If the circuit senses a problem, the service light will flash a number of times and then pause and repeat this sequence. Count the number of flashes between pauses and refer to the table on the back cover. Some serious service problems will disable the boiler whilst less serious ones will allow you to continue to operate until a convenient time arises for the fault to be rectified.

NUMBER OF FLASHES BETWEEN PAUSES	MEANING	ACTION
<b>1 Constant</b>	Water level sensor has scaled up at normal level and machine has filled to a higher level	Clean Sensing Probes
<b>2</b>	Operating level sensor has been detected but lower level sensor has not	Clean Sensing Probes
<b>3</b>	Overfill level sensor has been detected but other sensors have not	Clean Sensing Probes
<b>4</b>	Danger level sensor has been detected and machine functions have been shut down	Clean Sensing Probes
<b>5</b>	Thermistor or potentiometer have failed	Call service department on 01704 502911 Quoting the Serial Number
<b>6</b>	Boiler has failed to fill in the allotted time. Possible causes :- 1. Water supply turned off. 2. Water inlet valve has failed. 3. Blockage in water inlet pipe. 4. Pipe connecting inlet valve to boiler has become detached. 5. Bottom sensor is scaled up	Check water supply  If in order call Instanta service department quoting the Serial Number
<b>7</b>	The temperature sensor (thermistor) has become disconnected or the heating element(s) have failed.	Call service department on 01704 502911 Quoting the Serial Number
<b>8 or 9</b>	Fault on temperature sensor (thermistor).	Call service department on 01704 502911 Quoting the Serial Number
<b>10</b>	Heating element(s) faulty .	Call service department on 01704 502911 Quoting the Serial Number
<b>11</b>	The water supply has been interrupted and the level has	Check water supply

	fallen to a point at which the heating element(s) could be damaged.	If in order call service department on 01704 502911 Quoting the Serial Number
<b>12</b>	The machine has over-boiled and the level has fallen to a point at which the element(s) could be damaged. Or safety cut out has come into operation see paragraphs re Temperature Control	Call service department on 01704 502911 Quoting the Serial Number