

For the competent person

Installation manual

## Neutralisation device without feed pump

Article number 009730

**GB, IE**

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## 1 Notes on the documentation

The following information is intended to help you throughout the entire documentation. Further documents apply in combination with this installation manual. We accept no liability for any damage caused by failure to observe these instructions.

### Other applicable documents

- When installing the neutralisation device without the feed pump, observe all installation instructions for parts and components of the system.

These installation instructions are enclosed with the various system parts and supplementary components.

- Furthermore, observe all operating instructions enclosed with components of the system.

### 1.1 Document storage

- Please pass on this installation manual and all other applicable documents and auxiliary equipment to the plant operator.

The system operator should retain these instructions and tools so that they are available when required.

### 1.2 Symbols used

The symbols used in the text are explained below.



Symbol that denotes danger:

- Imminent danger to life
- Risk of severe personal injury
- Risk of minor personal injury



Symbol that denotes danger:

- Risk of death from electric shock



Symbol that denotes danger:

- Risk of material damage
- Risk of damage to the environment



Symbol that denotes useful tips and information

- Symbol for a required action

## 1.3 Applicability of the instructions

This installation manual applies only for units with the following article number:

- 009730



## 2 Safety instructions and regulations



### 2 Safety instructions and regulations

- ▶ When installing the neutralisation device without the feed pump, observe the basic safety instructions and the warnings that, where applicable, precede the instructions for an action.

#### 2.1 Safety and warning information

During installation, observe the general safety information and the warnings that precede every action that needs to be carried out.

##### 2.1.1 Classification of warnings

The warnings are classified in accordance with the severity of the possible danger using the following warning symbols and signal words:

Warning symbol	Signal word	Explanation
	<b>Danger!</b>	Imminent danger to life or risk of severe personal injury
	<b>Danger!</b>	Risk of death from electric shock
	<b>Warning!</b>	Risk of minor personal injury
	<b>Caution!</b>	Risk of material or environmental damage

##### 2.1.2 Structure of warnings

Warnings are identified by an upper and lower separating line and are laid out according to the following basic principle:



**Signal word!**

**Type and source of the danger!**

Explanation of the type and source of danger

- ▶ Measures for averting the danger

#### 2.2 Intended use

The Vaillant neutralisation devices without feed pump are designed using state-of-the-art technology in accordance with the recognised safety rules and regulations. Nevertheless, there is still a risk of injury or death to the user or others or of damage to the unit and other property in the event of improper use or use for which it is not intended.

This neutralisation device without feed pump is not designed to be used by persons (including children) with limited physical, mental or sensory capabilities or by persons who do not have enough experience and/or knowledge, unless they are supervised by a person who is responsible for their safety or have been instructed by him/her about how to use the unit.

Children must be supervised to ensure that they do not play with the unit.

The neutralisation device provides neutralisation of the condensed water from gas-fired high-efficiency boilers and/or flue gas systems made of stainless steel, plastic and ceramic. The neutralised condensed water can be fed into the drainage system.

The neutralisation device can be used for gas-fired high-efficiency boilers up to 450 kW.

Using the Vaillant neutralisation device without feed pump in vehicles is regarded as improper use. Units that are not classed as vehicles are those that are installed in a fixed and permanent location (known as "fixed installation").

Any other use, or use beyond that specified, shall be considered improper use. Any direct commercial or industrial use is also deemed improper. The manufacturer/supplier is not liable for any claims or damage resulting from improper use. The user alone bears the risk.

Intended use includes the following:

- observing the installation manual
- observing all other applicable documents
- compliance with all inspection and maintenance conditions listed in the instructions



**Caution!**

Any improper use is prohibited.



## 2.3 Basic safety instructions

### Installation, maintenance and repair

The unit must only be installed by a suitably qualified competent person. The existing regulations, rules and guidelines must be observed when doing so.

Inspection/maintenance and repairs must also be carried out by this competent person.

### Risk of death from electric shock!

There is a risk of electric shock when opening the gas-fired high-efficiency boiler.

- Before opening the cover, switch off the gas-fired high-efficiency boiler (mains switch and fuse).

### Risk of injury due to neutralisation medium and condensed water!

The condensed water from the gas-fired high-efficiency boiler and the neutralisation medium pose a risk to the eyes if they come into contact with them.

- Avoid condensed water coming into contact with the eyes.
- Avoid neutralisation medium coming into contact with the eyes.
- If your eyes do come into contact with condensed water or neutralisation medium, rinse your eyes thoroughly with clean water.
- Ensure that the neutralisation device is only operated out of the reach of children.

### Material damage!

Improper use of tools or unsuitable tools may cause damage.

- To tighten or loosen threaded connections, only use a suitable open-ended spanner (combination wrench) - do not use pipe wrenches, extensions, etc.

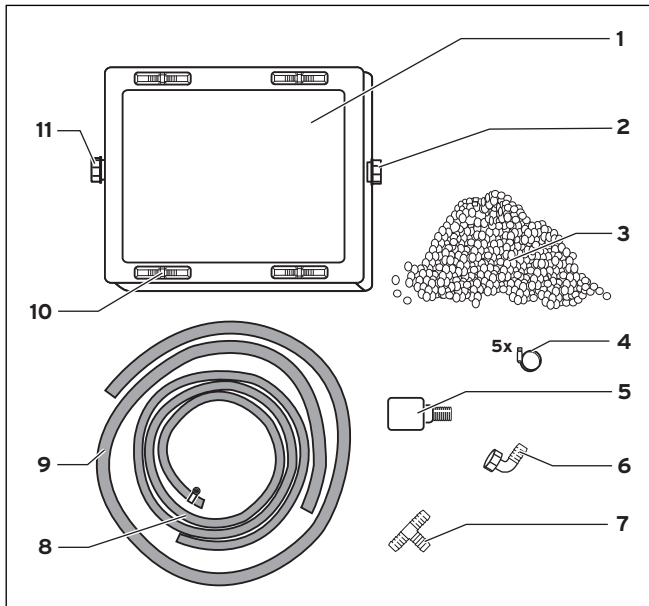
## 2.4 Regulations and standards

- Ensure that the neutralisation device is installed in accordance with the safety regulations and all other relevant state or local regulations.

## 3 Installation and start-up

### 3 Installation and start-up

#### 3.1 Checking the delivery



**3.1 Overview of the neutralisation device without feed pump**

Pos.	Number	Description
1	1	Neutralisation box
2	1	Connection for drain hose
3	1	Neutralisation medium 30 kg (contained in delivery of the neutralisation box)
4	5	Hose clamps
5	1	Connection adaptor on the condensate drain DN 40 of the gas-fired high-efficiency boiler
6	1	Angle piece 20 x 20 for infeed connection
7	1	T piece 20 x 20 x 20 for connecting the chimney water drainage
8	1	Drain hose DN 19
9	1	Infeed hose DN 19
10	1	Opener
11	1	Connection for infeed hose

#### 3.1 Scope of delivery for the neutralisation device without feed pump

- Check that the scope of delivery is complete (→ **tab. 3.1**).

#### 3.2 Function

The neutralisation device provides neutralisation of the condensed water from gas-fired high-efficiency boilers and/or flue gas systems made of stainless steel, plastic and ceramic.

The condensed water from the gas-fired high-efficiency boiler is fed into a vessel (neutralisation box). The vessel contains the neutralisation medium which raises the pH value of the condensed water to a neutral level. The neutralisation agent can be replaced via a removable cover. The neutralised condensed water can be fed into the drainage system.

#### 3.3 Fitting the neutralisation device

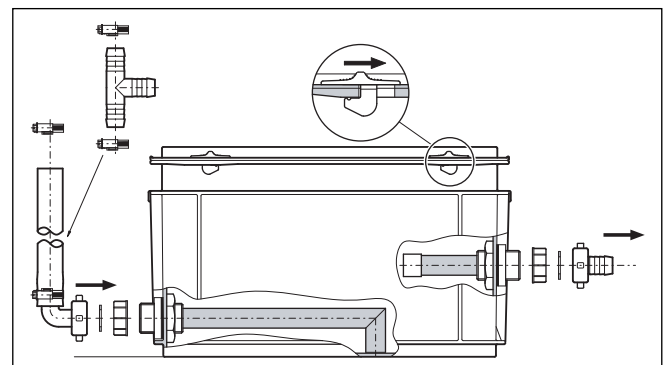


#### **Danger!**

#### **Risk of death from electric shock!**

There is a risk of electric shock when opening the gas-fired high-efficiency boiler.

- Before opening the cover, switch off the gas-fired high-efficiency boiler (mains switch and fuse).



#### 3.2 Fitting the neutralisation device without feed pump

The position numbers in the following text refer to **fig. 3.1**.

#### **Fitting the infeed hose**

- Unscrew the yellow protective cap from the connection (11).
- Use the existing seal to fit the infeed hose.
- Shorten the infeed hose (9) to the desired length.
- Connect the infeed hose (9) with the connection adaptor (5) and the angle piece (6).
- Secure the connection adaptor (5) and angle piece (6) with 2 hose clamps (4).
- Secure the mounted infeed hose on the connection (11).

**Fitting the T piece**

If a chimney water drainage is to be connected to the neutralisation device, you must then fit the T piece (7).

- Shorten the infeed hose so that the supplied T piece can be fitted using 2 hose clamps (4).
- Fit the T piece using the hose clamps (4).

**Fitting the drain hose**

- Secure the drain hose (8) to the side of the unit at the connection (2).
- Secure the drain hose (8) using a hose clamp (4).

**Neutralisation medium**

An initial filling with neutralisation medium is included in delivery.

**3.4 Start-up**

After installation, the neutralisation device is ready for operation.

- Switch the gas-fired high-efficiency boiler on again.

**3.4.1 Handing over to the operator**

You must instruct the operator of the unit on the handling and operating of the neutralisation device.

- Provide the operator with all relevant instructions and unit documentation for safe-keeping.
- Go through the installation manual with the operator and answer any questions that may arise.
- Draw special attention to the safety instructions which the operator must follow.
- Inform the operator of the necessity to ensure that the neutralisation device is regularly inspected/maintained (inspection and maintenance contract).
- Make the operator aware that the instructions must be kept close to the neutralisation device.

## 4 Troubleshooting and maintenance

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#### 4.1 Troubleshooting

If the condensed water exceeds the maximum fill level and does not overflow, there is a fault present.

- Disconnect the gas-fired high-efficiency boiler from the power supply.
- Check what the cause of the fault is and rectify this (→ **tab. 4.1**).
- Once the fault is rectified, connect the gas-fired high-efficiency boiler to the power supply and start it up.

Possible fault cause	Troubleshooting
Infeed blocked	<ul style="list-style-type: none"><li>➤ Check whether the infeed hose is kinked.</li><li>➤ Clean the sieve pipe of the infeed spigot (→ <b>section 4.2.2</b>).</li></ul>
Drain blocked	<ul style="list-style-type: none"><li>➤ Check whether the drain hose is kinked.</li><li>➤ Clean the sieve pipe of the drain spigot. (→ <b>section 4.2.2</b>).</li></ul>

#### 4.1 Faults

#### 4.2 Maintenance



#### **Danger!**

#### **Risk of death from electric shock!**

There is a risk of electric shock when opening the gas-fired high-efficiency boiler.

- Before opening the cover, put the gas-fired high-efficiency boiler out of operation (mains switch and fuse).

- Inspect the neutralisation device at least once a year, as described in sections 4.2.1 and 4.2.2.

#### 4.2.1 Checking and replacing the neutralisation medium



Neutralisation medium for topping up is available as an accessory.

- Replace consumed neutralisation medium.
- The effectiveness of the neutralisation is checked using pH paper.

- Wet the pH paper with the condensed water draining from the drain hose.
- If you obtain a reading of less than 6.5, clean the neutralisation device immediately and re-fill it with 30 kg of neutralisation medium.

#### **Storing neutralisation medium**

- Store the neutralisation medium in a dry environment.
- Ensure that the neutralisation medium is kept dry.

#### **Disposing of the neutralisation medium**

The neutralisation medium is ecologically safe. You can dispose of it together with construction waste or domestic waste.

#### 4.2.2 Cleaning the sieve pipes

Once you have opened and drained the neutralisation box, you can then see one sieve pipe inside on the condensed water infeed spigot and another on the condensate drain spigot.

- Check whether the sieve pipes are clogged.
- Clean the sieve pipes, if required.

#### 4.3 Replacement parts

An overview of the available genuine Vaillant spare parts can be obtained:

- From your parts wholesaler.
- Alternatively contact Spares Technical Enquiries on 01773 596615 or via email: [technicalspares@groupservice.co.uk](mailto:technicalspares@groupservice.co.uk)



## 5 Guarantee and customer service

### 5.1 Vaillant warranty

Vaillant provides a full parts and labour warranty for this appliance.

The appliance must be installed by a suitably competent person in accordance with the Gas Safety (Installation and Use) Regulations 1998, and the manufacturer's instructions. In the UK competent persons approved at the time by the Health and Safety Executive undertake the work in compliance with safe and satisfactory standards.

All unvented domestic hot water cylinders must be installed by a competent person to the prevailing building regulations at the time of installation (G3).

Terms and conditions apply to the warranty, details of which can be found on the warranty registration card included with this appliance.

Failure to install and commission this appliance in compliance with the manufacturer's instructions may invalidate the warranty (this does not affect the customer's statutory rights).

### 5.2 Vaillant Service

To ensure regular servicing, it is strongly recommended that arrangements are made for a Maintenance Agreement. Please contact Vaillant Service Solutions (0870 6060 777) for further details.

## 6 Technical data

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Description	Unit	
Suitable for	-	Gas-fired high-efficiency boilers up to 450 kW
Suitable for gas-fired high-efficiency boilers with fuel	-	Natural gas E, H, LL/liquid gas propane and butane
Neutralisation medium	-	Calcium carbonate
Working life (dependent upon volume of condensate water)	Year	approx. 1
Operating temperature	°C	0 to 50
Condensed water fill volume	l	max. 13
Neutralisation medium fill quantity	kg	30
Condensed water infeed	-	Textile-reinforced PVC hose DN 19
Condensate drain	-	Textile-reinforced PVC hose DN 19
Dimensions (L x W x H)	mm	420 x 300 x 240

#### 6.1 Technical data



## Supplier

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