

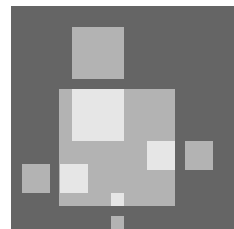
Operating Instructions and User's Information Manual

VIESSMANN

Vitoflame 100
Oil Burner (VEM Series)
for Vitola 200 boiler

Heating input: 83 to 300 MBH
24 to 88 kW

VITOFLAME 100



Vitoflame 100 oil burner
installed on a Vitola 200 boiler



WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

Do not store or use gasoline or other flammable liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL FLUE GAS

- Deactivate heating equipment.
- Open windows and doors.
- Inform your heating contractor.

Installation and service must be performed by a qualified installer, service agency or the #2 fuel oil supplier.

WARNING

Improper installation, adjustment, and/or operation could cause carbon monoxide poisoning resulting in injury or loss of life.

This product must be installed and serviced by a professional service technician who is experienced and qualified in hot water boiler installation and #2 fuel oil combustion.

IMPORTANT

Read and save these instructions for future reference.

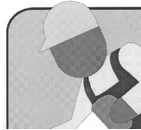
Safety, Installation and Warranty Requirements

Please ensure that these instructions are read and understood before commencing installation. Failure to comply with the instructions listed below and details printed in this manual can cause **product/property damage**, **severe personal injury**, and/or **loss of life**. Ensure all requirements below are understood and fulfilled (including detailed information found in manual subsections).

■ Licensed professional heating contractor

The installation, adjustment, service, and maintenance of this equipment *must be* performed by a licensed professional heating contractor.

► Please see section entitled "Important Regulatory and Installation Requirements".



■ Contaminated air

Air contaminated by chemicals can cause by-products in the combustion process which are *poisonous* to inhabitants and destructive to Viessmann equipment.

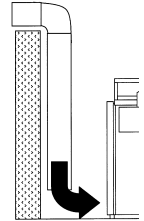
► For a listing of chemicals which cannot be stored in or near the boiler room, please see section entitled "Combustion Air Supply".



■ Fresh air

This equipment requires fresh air for safe operation and must be installed ensuring provisions for *adequate combustion* and *ventilation air* exist.

► For information pertaining to the fresh air requirements of this product, please see section entitled "Combustion Air Supply" in the Installation Instructions.



■ Product documentation

Read all applicable documentation before commencing installation. Store documentation near boiler in a readily accessible location for future reference by service personnel.

► For a listing of applicable literature, please see section entitled "Important Regulatory and Installation Requirements".



■ Carbon monoxide

Improper installation, adjustment, service and/or maintenance can cause flue products to flow into living space. Flue products contain *poisonous* carbon monoxide gas.

► For information pertaining to the proper installation, adjustment, service and maintenance of this equipment to avoid formation of carbon monoxide, please see sections entitled "Combustion Air Supply" in the Installation Instructions of the burner and "Venting Connection" in the Installation Instructions of the boiler.



■ Equipment venting

Never operate boiler without an *installed venting system*. An improper venting system can cause carbon monoxide poisoning.

► For information pertaining to venting and chimney requirements, please see section entitled "Venting Connection" in the Installation Instructions of the boiler. All products of combustion must be safely vented to the outdoors.



■ Advice to owner

Once the installation work is complete, the heating contractor must familiarize the system operator/ultimate owner with all equipment, as well as safety precautions/requirements, shut-down procedure, and the need for professional service annually before the heating season begins.



WARNING

Installers must follow local regulations with respect to installation of carbon monoxide detectors. Follow manufacturer's maintenance schedule of boiler.

■ Warranty

Information contained in this and related product documentation must be read and followed. *Failure to do so renders warranty null and void.*



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About these Instructions

 Take note of all symbols and notations intended to draw attention to potential hazards or important product information. These include "WARNING", "CAUTION", and "IMPORTANT". See below.

 **WARNING**

Indicates an imminently hazardous situation which, if not avoided, could result in death, serious injury or substantial product/property damage.

→ *Warnings draw your attention to the presence of potential hazards or important product information.*

 **CAUTION**

Indicates an imminently hazardous situation which, if not avoided, may result in minor injury or product/property damage.

→ *Cautions draw your attention to the presence of potential hazards or important product information.*

IMPORTANT

→ *Helpful hints for installation, operation or maintenance which pertain to the product.*



→ *This symbol indicates that additional, pertinent information is to be found in column three.*



→ *This symbol indicates that other instructions must be referenced.*

Important Regulatory and Safety Requirements

■ Operation

Before operating the boiler/burner unit, make sure you fully understand its method of operation. Your heating contractor should always perform the initial start-up and explain the system. Any warranty is null and void if these instructions are not followed.

WARNING

As there are no user-serviceable parts on the boiler, burners or control, the end-user must not perform service activities of any kind on system components. Failure to heed this warning can cause property damage, severe personal injury, or loss of life.

■ For safe operation

We recommend that you frequently:

- Check for debris which could obstruct the flow of flue gases. The vent or chimney must not be blocked. A blocked or partially blocked vent or chimney can cause flue gases to leak into the structure. Flue gases leaking into the house can cause injury or death. Blocked or partially blocked chimneys must have the blockage removed by a qualified heating contractor.
- Check pressure gage for correct system (water) pressure. Check for water on the floor from the discharge pipe of the pressure relief valve or any other pipe, pipe joint, valve or air vent.
- Check for moisture, water, or appearance of rust on the flue gas pipes, their joints as well as vent dampers, or side wall vent terminals (if so equipped).
- Ensure that nothing is obstructing the flow of combustion and ventilation air and no chemicals, garbage, gasoline, combustible materials, flammable vapors and liquids are stored (not even temporarily) in the vicinity of the boiler.
- Do **not** allow unsupervised children near the boiler.

■ Working on the equipment

All personnel working on the equipment or the heating system must have the **proper qualifications** and hold all necessary licenses.

Ensure **main power** to equipment, heating system, and all external controls has been **deactivated**. **Close main oil shut-off valve**. Take precautions in both instances to avoid accidental activation of power during service work.

Before the heating season begins, a service/inspection of the burner and the system by a qualified heating contractor is recommended once a year. Service contracts may be established through oil suppliers or other licensed contractors in your area. Maintenance, service and cleaning is specified in the Start-up/Service Instructions.

Do not store chemicals containing chlorine or other corrosive materials near the boiler, such as bleach, cleaning solvents, detergents, acids, hair spray, spray cans, paint thinners, paint, or water softener salt.

- Inform your heating contractor.

CAUTION

NEVER BURN GARBAGE OR PAPER IN THE UNIT, AND NEVER LEAVE COMBUSTIBLE MATERIAL AROUND THE BOILER.

Keep space around boiler clear. Do not place objects on top of boiler and heed minimum clearance to combustibles distances as specified on the boiler rating plate.

■ Maintenance and cleaning

Regular inspection and service by a qualified heating technician is critical to the performance of the Viessmann Vitoflame 100 oil burner. Neglected maintenance impacts on product warranty; regular cleaning and maintenance ensures clean, environmentally friendly and efficient operation. We recommend a maintenance contract with a qualified heating contractor.

■ Flue gas smell

- Deactivate heating equipment.
- Open windows and doors.
- Inform your heating contractor.

CAUTION

Incomplete combustion and poisonous gases result if the fresh air intakes in the mechanical room are closed. Never close these openings.

■ Dangerous conditions

- Deactivate main power immediately.
- Close main oil shut-off valve.

■ Technical information

Literature applicable to installation of the Vitoflame oil burner, VEM Series

- Installation Instructions
- Start-up/Service Instructions
- Operating Instructions and User's Information Manual
- Installation codes mentioned in this manual

Operation

This burner is factory calibrated for use with fuel oil #2 or lighter. Annual service contract should include checking calibration of burner by a qualified heating contractor.

Fuel



CAUTION

Do not use gasoline, crankcase oil, or any oil containing gasoline.

This burner uses fuel oil #2 or lighter. Do **not** use any other fuel.

Whenever possible, use an indoor oil storage tank. Cold oil from an outside storage tank can cause difficulty in calibrating burner for soot-free operation.

Obtain fuel oil #2 or lighter from a reputable supplier.

Start-up



CAUTION

Do not start burner unless all cleanout doors are secured in place.

- Open shut-off valves located near the oil tank and the filter.
- Activate main power.



CAUTION

ON OPENING THE OIL SUPPLY VALVE(S) CHECK FOR LEAKS ON THE SUPPLY LINE(S) AND COMPONENTS.

The burner is activated by the boiler system control mounted on the heating boiler (refer to operating instructions of boiler and control).

Burner operation is indicated by the burner operating display (A) located below the boiler control (see illustration on following page).

Shutdown



CAUTION

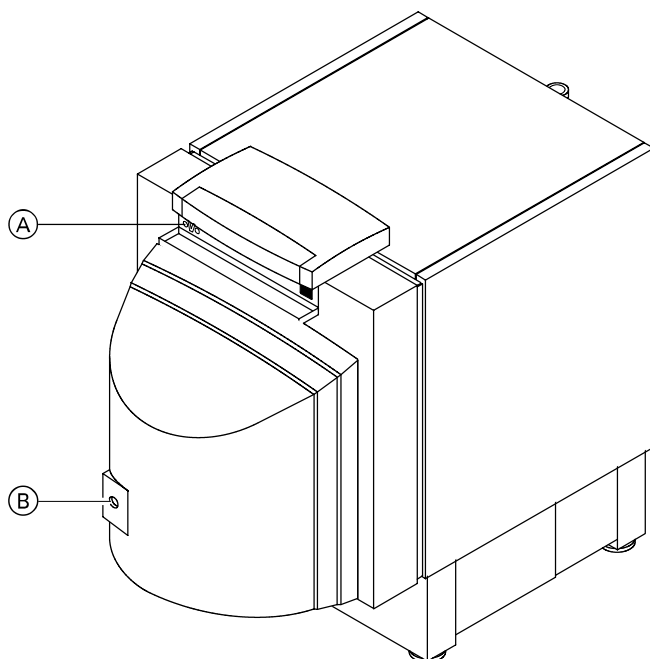
ALWAYS KEEP THE OIL SUPPLY VALVE SHUT OFF IF THE BURNER IS SHUT DOWN FOR AN EXTENDED PERIOD OF TIME.

- For short operational shutdowns, refer to operating instructions of boiler system control.
- For extended shutdown periods: Deactivate main power.

There are fuels offered by the market today which cause build-up on oil nozzles when burners are disengaged for several months. This can cause incomplete combustion. If necessary, new nozzles should be installed once the heating system is reactivated.

Operation (continued)

Burner disruptions



Burner operation is indicated by the burner operating display (A) located below the boiler control.

The burner reset button (B) serves as a self-illuminated flame failure indicator. If flame failure occurs, push this button. Do not push reset button more than three times. If burner fails to reactivate, please follow instructions under "Start-up". If the flame failure light continues to come on, please contact your heating contractor.

CAUTION

DO NOT TAMPER WITH THE UNIT OR CONTROLS - CONTACT YOUR HEATING CONTRACTOR.

CAUTION

Do not attempt to start the burner when excess oil has accumulated, when the boiler is full of vapor, or when the combustion chamber is very hot.

WARNING

Familiarize yourself in identifying the location and operation of the emergency power isolation switch specific to your installation.

Maintenance

Please observe safety instructions as well as maintenance and cleaning instructions found on page 5. Before each heating season begins, have the following service and maintenance done by a professional heating contractor:

1. Boiler heat exchanger inspected and cleaned.
2. Vent system inspected for deterioration, leaks, corrosion, proper draft, and proper operation. Check vent system for compliance with local and national code requirements. Repair or replace as required.
3. Burner checked and if necessary adjusted for proper combustion and operation. Check for adequate supply of fresh outside combustion and ventilation air.
4. The oil filter is of a disposable type and must be replaced with a filter cartridge supplied by Viessmann.

Neglecting to perform proper maintenance can cause unsafe operation.

WARNING

The boiler/burner unit shall be connected to a flue having sufficient draft at all times, to ensure safe, proper operation.

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