

X-ternal
CONDENSING

HANDBOOK AND SERVICE LOG



THE HOME OF THE WALLSTAR

12/14



15/19



TRADITIONAL



SYSTEM



Your Boiler Serial Number is:

to be found on the Burner Cover.



Tel No: 01953 455400
Fax No: 01953 454483
Email: info@hrmboilers.co.uk or technical@hrmboilers.co.uk

Dear Householder

Thank you, for selecting a boiler from HRM. Your boiler is the culmination of years of experience in the development, testing, and manufacture of oil fired equipment.

Our boilers are independently tested and comply with the latest European Boiler Efficiency Directive. Our quality assurance procedures are also approved and comply with the International Standards, ISO9001:2000 and ISO14001.

Each boiler is assembled and tested with care by a member of our production team.

Your boiler will provide you with a long and trouble free service life providing that a few essential steps are addressed. Please take time to read the “Householder Information” section of this handbook.

In the unlikely event of a fault, please contact your installer who should be able to identify the cause of the problem, if appropriate your installer will contact us.

Simon Eastwell
MD



IMPORTANT!

Your boiler must be commissioned in order to:

- Validate your warranty
- Ensure the boiler has been installed correctly and avoid premature failure
- Set the boiler to its optimum efficiency. Operating conditions for the boiler will vary from site to site, your commissioning engineer has specialised equipment to check the oil pressure and analyse the exhaust gases for temperature, smoke and carbon dioxide content.

Your installer will organise the commissioning of your boiler. Should you experience any difficulty locating an engineer, our service department may be able to provide you with details of an engineer in your area.

“Benchmark” Installation, Commissioning and Service Record Log Book

Please ensure that your installer has completed all sections of the log book (found at the back of this manual). The log book will be required in the event of any warranty work. Ensure that the service record is completed.

Warranty

Your HRM boiler is under warranty for 2 years from the date of installation.

Warranty Conditions

- The boiler must be installed and commissioned in accordance with our handbook
- The boiler must not be repaired, modified or tampered with by any person not authorised by HRM

Extended Warranty

The “**Benchmark**” and **warranty registration document at the end of this manual** should be completed as appropriate by your installer / engineer. This is your record that the boiler has been correctly installed in accordance with our recommendations. Return the warranty registration document to HRM in order to qualify for a **further 3 year warranty of the heat exchanger – a total of 5 years**.

Extended Warranty Conditions

- The boiler must be serviced annually and maintained in accordance with this handbook. The “Benchmark” service log is located at the back of this manual
- This warranty is in addition to your statutory and other legal rights

After Sales Service

- If your boiler fails during the warranty period contact your installer, who will be able to identify the cause of the problem and refer to HRM for any warranty work instruction.
- Under no circumstances should “in warranty” work be undertaken without authorisation from the HRM service department
- If you are unable to contact your installer please contact our service department, quoting your boiler’s serial number when phoning – this can be found on the cover of this manual.

Control Panel



Temperature Control Thermostat

The control thermostat regulates the temperature of the water within the boiler.

The recommended settings, governed by the control knob, are maximum for heating and hot water and minimum for hot water only.

Boiler Overheat (Limit) Thermostat

In the unlikely event the boiler overheats the reset button will trip and cut the power supply to the boiler. Allow the boiler to cool then press the reset button to reset the thermostat.



IMPORTANT - If overheating occurs regularly, consult your installation engineer. There may be a fault with the central heating system

Power Neon Lamp

The lamp is illuminated when there is power to the control thermostat and the control system (time clock) is requesting heat.

Limit Neon Lamp

The lamp is illuminated when there is power to the controls, but the boiler has overheated. When the limit reset is pressed this lamp should extinguish.

Lockout Neon Lamp

The remote reset plate supplied with the boiler can be connected to the X-ternal control panel to allow for indoor resetting of the burner. Simply pass the Molex connector through the cable trunking already used to supply power to the boiler and connect to the corresponding Molex connector on the control panel. The lamp is illuminated when there is power to the controls, but the burner has not fired correctly. When the lockout reset is pressed this lamp should extinguish. This lamp is also a reset button which provides an alternative to pressing the reset on the burner itself.

The burner is equipped with a flame failure device. When activated the reset button on the burner control box is illuminated. Refer to the fault finding section of the handbook to identify possible causes.

The test switch is provided for the service engineer, in normal operation the switch should be left in the “PROG” position.

Switching The Boiler On

- Turn on the oil supply
- Switch on the mains supply
- Set the timer control to “on”
- Set the boiler control thermostat to the required setting

Switching The Boiler Off For Long Periods

- Have the boiler serviced
- Switch off the mains supply (Note: Without power the boiler will have no frost protection)
- Turn off the oil at the tank

Pump Priming

If the burner fails to lift oil, the pump may be dry and require priming. To prime the burner, fill a suitable container, such as a jar, with heating oil, disconnect the flexible oil line at the isolating valve and place the end into the container. Hold the container above the height of the burner and press the lockout reset button, once the pump has pulled the oil from the container through it is primed and can be reconnected to the main supply.

Oil Delivery

Switch the boiler off during an oil delivery, wait for a short period before switching the boiler back on to allow sediment in the bottom of the oil supply tank to settle.

Maintenance

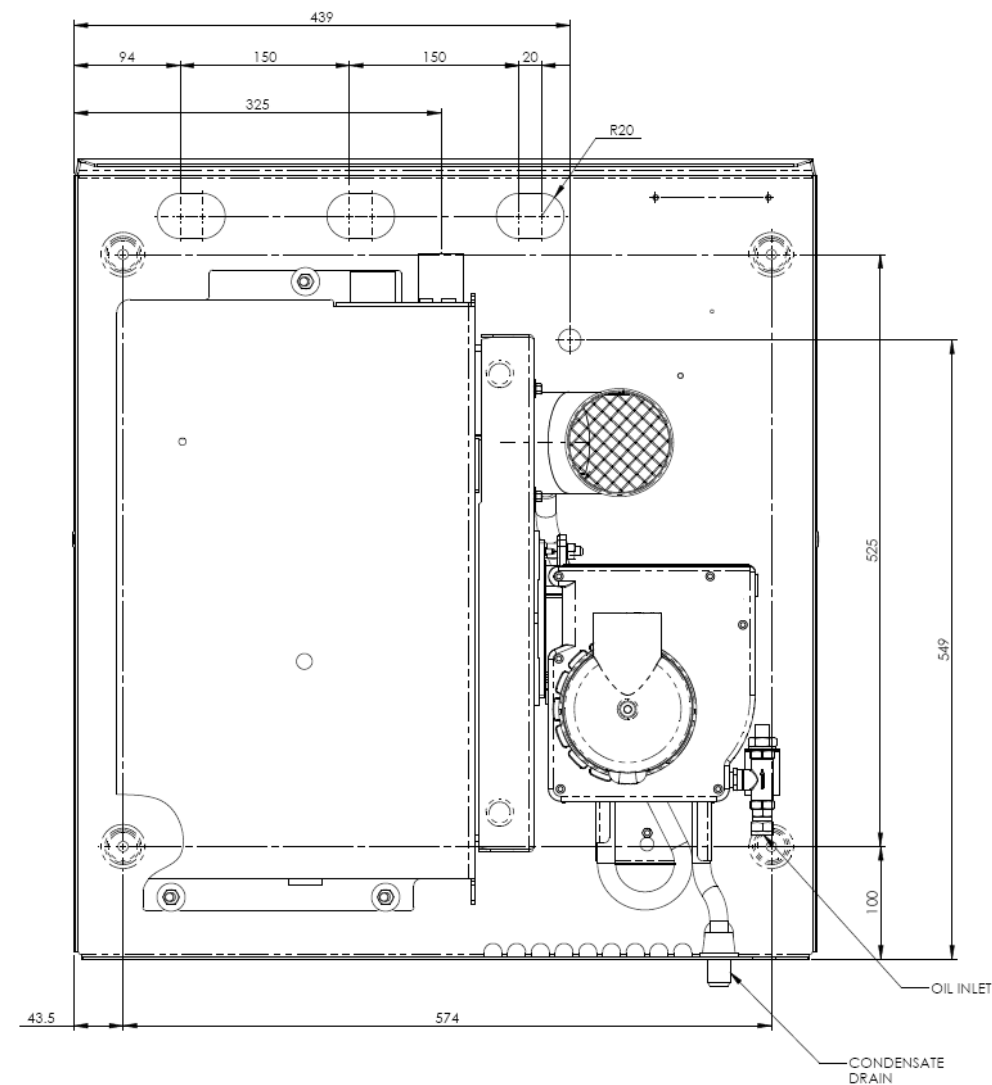
Your boiler should be serviced annually. Failure to have this done will invalidate your warranty and may also lead to inconvenient breakdowns. A “Benchmark” service log can be found at the back of this manual.

If you have difficulty in locating a service engineer, please contact our service department who may be able to provide you with the name of an engineer in your area.

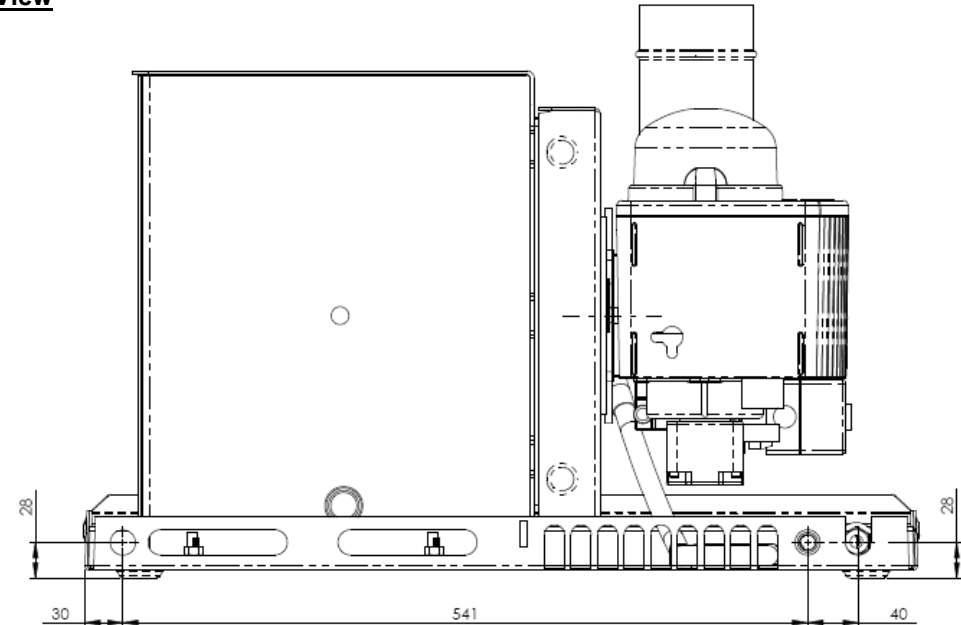
Burner Spares

Please contact our sales department for further information on burner spares.

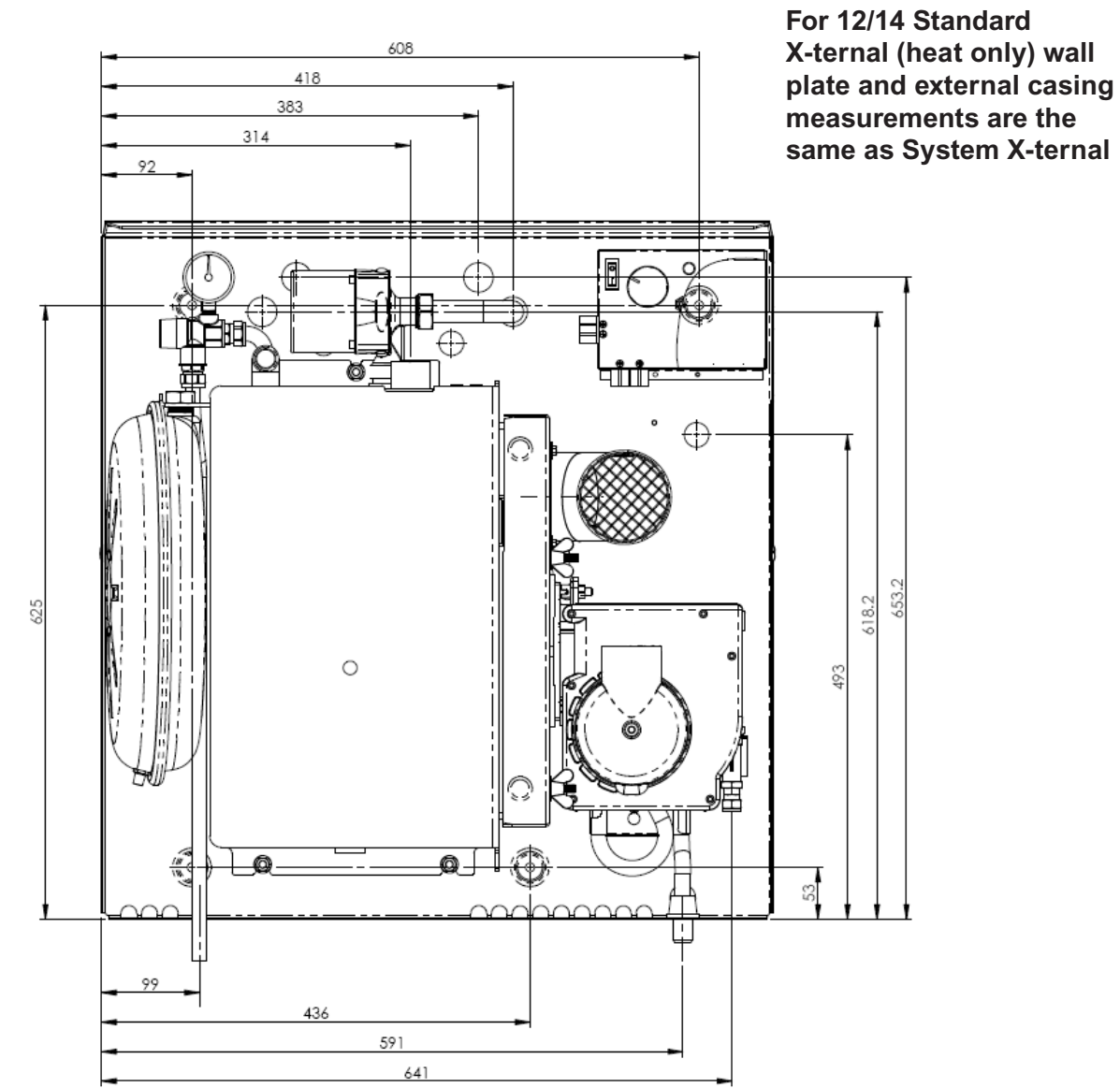
Frontal View



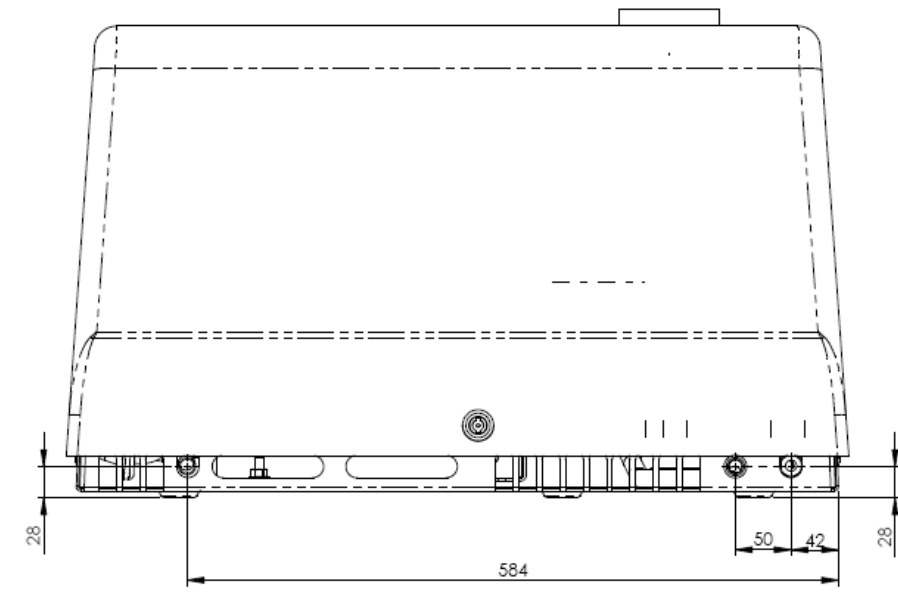
Underside View



Frontal View



Underside View



Technical Specifications

Standard X-ternal

Electrical Supply	230V Single Phase, Fused 5amp
Max Power Consumption	110W
Fuel	Class C2 (28 Sec Kerosene)
Oil Supply Connection	10mm Compression, Single Pipe
Heating Systems Requirements	Fully Pumped, Conventional Open Vented, or Sealed System
Max Operating Pressure	3 Bar (43.5psi) Static Head 30.59 Meters (100ft)
Operating Temperature Range	60 to 80 Degree's Centigrade
Resistance To Water Flow Between Return and Flow Connections (10 Deg Temp Rise)	15/19 - 35mm 12/14 - 26mm
Cut Out Temperature	100 Degree's Centigrade
Weight Empty	15/19 - 93kg 12/14 - 84kg
Water Capacity	15/19 - 19.25 Litres 12/14 - 17.5 Litres
SEDBUK Rating	A

System X-ternal

Electrical Supply	230V Single Phase, Fused 5amp
Max Power Consumption	110W
Fuel	Class C2 (28 Sec Kerosene)
Oil Supply Connection	10mm Compression, Single Pipe
Heating Systems Requirements	Sealed Systems Only
Max Operating Pressure	3 Bar (43.5psi) Static Head 30.59 Meters (100ft)
Operating Temperature Range	60 to 80 Degree's Centigrade
Resistance To Water Flow Between Return and Flow Connections (10 Deg Temp Rise)	12/14 – 26mm
Cut Out Temperature	100 Degree's Centigrade
Weight Empty	12/14 - 84kg
Water Capacity	12/14 - 17.5 Litres
SEDBUK Rating	A

Technical Specifications – Burner Settings

Boiler Model		12/14 Condensing	15/19 Condensing
Output	btu/h	47,800	64,850
	Kw	14	19
Nozzle	US/GPH Size & Type	0.50 80° EH	0.55 80° EH
Oil Pressure	BAR	6.9	8.6
	PSI	100	125
Firing Rate	Kg/hr	1.34	1.63
	Litres/hr	1.7	2.05
Smoke No.	Bacharach Scale	0	0
CO ₂	%	11.5	12
Flue Gas Temp	Less ambient °C	85	85
SEDBUK	Band	A	A

Burner Fault Diagnosis

Burner fails to start -	<u>Mains lamp not illuminated</u> Blown fuse Time clock/programmer not calling for heat Room or hot water thermostats not calling for heat
Burner lockout lamp is illuminated -	<u>Lack of oil</u> Faulty solenoid coil Blocked nozzle Faulty fire valve Air in oil supply Empty oil tank Blocked Oil Filter <u>Flame extinguishes after a short period</u> Photocell faulty Faulty control box <u>No spark</u> Faulty control box Faulty ignition transformer Incorrect electrode setting
Motor does not run -	Seized oil pump Motor faulty Control box faulty Capacitor faulty
Radio/T.V interference -	Incorrect electrode setting Poor earth bonding Faulty ignition transformer
Smokey exhaust -	Blocked nozzle Incorrect burner settings
Burner starts violently -	<u>Delayed Ignition</u> Incorrect electrode adjustment Electrode insulation damaged HT leads faulty Air in oil supply Incorrect air adjustment
Oil odours -	Incorrect combustion settings Oil leak
Unstable flame -	Incorrect head settings Low oil pressure Excess air Faulty nozzle

Regulations

The Installation of oil fired boilers must comply with the following Standards and Codes of Practice:

BS 5410-1:1997	Oil installations up to 45kW
BS 5449	Forced circulation hot water central heating systems for domestic premises
BS 7593:2006	Treatment of water in hot water central heating systems
Building Regulations	Part L1 Part J 2006 England and Wales, Part F Scottish Regulations and Technical Booklet L Northern Ireland
BS 7671:2001	Electrical Regulations
BS 7074	Code of practice for sealed systems

Boiler Sizing

It is important to establish the correct size of boiler required. Boiler output will depend on a number of factors, including:

- The preferred room temperatures
- Location winter temperature
- Structural and ventilation heat losses
- Domestic hot water requirements

This is a complicated calculation, we recommend you employ the services of a heating engineer, who will determine the correct size of boiler required for your property.

Refurbishing an Old System



IMPORTANT – Before installing a new boiler:

The system should be chemically cleaned to remove debris, in the form of black magnetite sludge and lime scale that accumulates in radiators and pipe work. Failure to do this will result in debris adhering to the clean surfaces of a new boiler, causing kettling or knocking noises. It also prohibits efficient heat transfer. A cleanser such as Fernox Superfloc should be added to the system 48 hours prior to changing the boiler

System Protection

After Installation

Flush the system with a cleanser to remove traces of flux residues, grease, metal swarf, solder pieces and oils used during component manufacture.

After Flushing

Add a corrosion inhibitor. This will minimise the chemical action and chemical change that takes place in a systems primary water and system components.

Note: The manufacturer's usage instructions for chemical cleaners and inhibitors should always be followed. Please refer to BS 7593:2006 for a detailed explanation of cleansing procedures.

Boiler Location

Noise levels – consideration should be given to the following:

- Where a flue terminates near the boundary of an adjoining property, consideration should be given to possible noise disturbance as some people are sensitive to even low noise levels.

Wall Construction

The boiler must be installed on a suitable load bearing external wall.

For walls constructed of timber, stramit or similar material, the structural material must support the weight of the boiler when filled with water. A stud work frame should be constructed when appropriate.

It is not necessary to construct a heat barrier around the wall plate.

Where the external cladding is of weatherboard or similar, construct a "picture frame" for the wall plate to seat against.

1. Mark & Drill Holes

Place the flue guard onto the front of the casing, mark out and drill the four 5mm holes.

Note: Drill smaller pilot holes first to reduce the risk of the fibreglass case cracking.



2. Bolts & Washers

Pass a stainless steel bolt with a washer through the front of the guard bracket. Place another washer on the back so it sits between the guard and the casing.



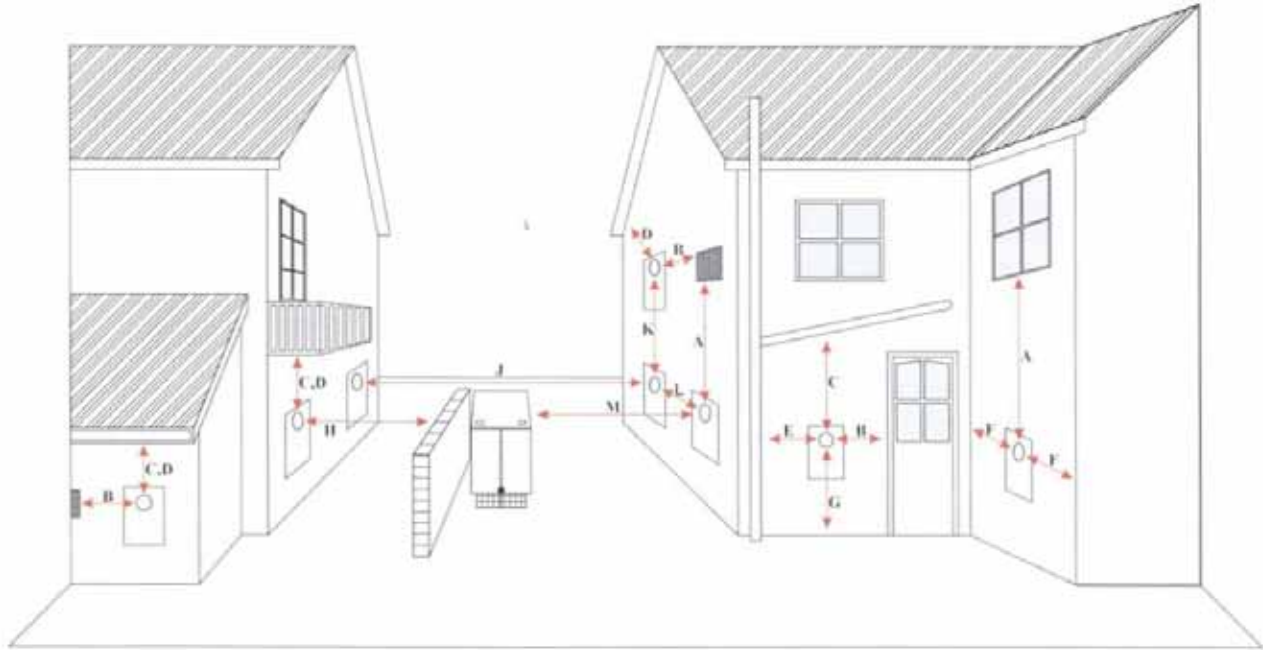
3. Securing Guard

Secure the guard onto the case using a further washer and nut on the inside.



4. Installation Complete

The installation of the X-ternal flue terminal guard is now complete.

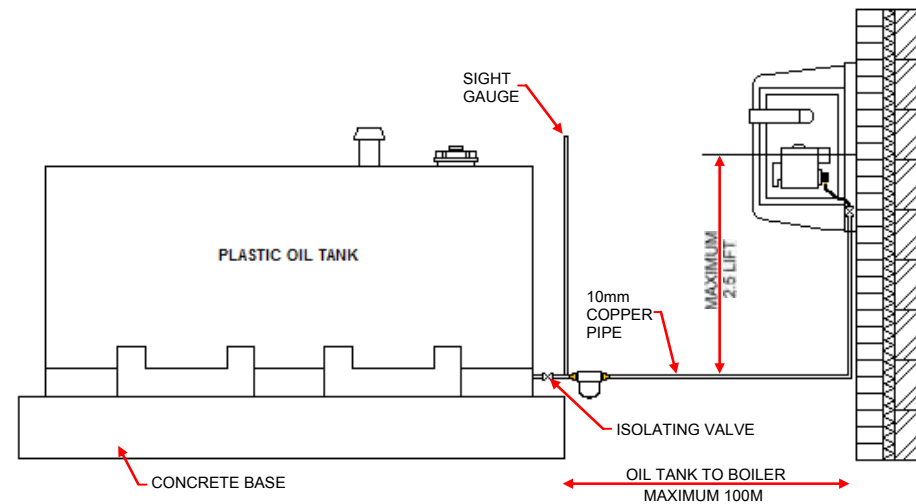


Position	Description	Dimension
A	Directly Below An Opening (Air Brick, Window, etc)	600mm
B	Horizontally To An Opening	600mm
C	Below a Gutter, Eaves or Balcony With Protection (Note 2)	75mm
D	Below a Gutter, Eaves or Balcony Without Protection	600mm
E	From Vertical Sanitary Pipework	300mm
F	From An Internal or External Corner	300mm
G	Above Ground or Balcony Level	300mm
H	From Surface or Boundry Facing The Terminal	2500mm
J	From a Terminal Facing a Terminal	1200mm
K	Vertical From a Terminal On The Same Wall	1500mm
L	Horizontally From A Terminal On The Same Wall	750mm
M	From An Oil Tank	1800mm

Information taken from BS 5410-1:1997

Notes:

- 1 - Terminals should be positioned so as to avoid products of combustion accumulating in stagnant pockets around the building or entering into buildings.
- 2 - Where a flue is terminated less than 600mm away from a projection above it and the projection consists of plastics or has a combustible or painted surface, then a shield of at least 750mm should be fitted to protect these surfaces.
- 3 - If the lowest part of the terminal is less than 2m above the ground, balcony, flat roof or other place to which any person has access, the terminal should be protected by a guard.
- 4 - Where a flue terminates near the boundry of an adjoining property, consideration should be given to possible noise disturbance as some people are sensitive to even low noise levels.
- 5 - Boilers can produce sulphur deposits, occasionally these deposits are discharged out of the flue, this should be taken into consideration when planning to site flue's over patios etc.



Oil Tank

We recommend the use of plastic oil tanks, they require less maintenance than steel tanks and are longer lasting.

A bunded oil tank may be required on any environmentally sensitive site where spillage of oil could pollute rivers, ponds, or any other water courses. Please refer to the appropriate requirements when locating oil tanks: "Control of Pollution Regulations", "Building Regulations" and OFTEC Technical Paper T19.

Oil Supply

Fuel Tank Below the Burner

The fuel pump can lift fuel to a height of 2.5m. A two pipe system or deaerator (Tiger Loop, 3K or similar) is not required. For heights above 2.5m, please consult our service department.

Pipework

Soldered fittings should not be used, as the joints will fail in the event of a fire. Flux deposits may damage the pump and fuel may deteriorate the solder within the joint. Galvanised pipes and fittings must not be used. The aggressive action of the fuel will erode the zinc and damage the fuel pump.

Keep the number of pipe joints to a minimum, form bends rather than using compression fittings.

Joining Compounds

Jointing compounds should be used with care. Excessive amounts can cause blockages, and fragments may cause failure of the fuel pump or the non-return valve. We recommend the use of a non-setting liquid pipe sealant.

Automatic Isolation of the Fuel Supply in the Event of a Fire

In accordance with Document J of the Building Regulations "a means of automatic isolation of the fuel supply" should be used. A remote acting fire valve being the most common in accordance with BS 5410-1:1997

Oil Filtration

The paper element filter supplied must be installed adjacent to the boiler. Where a steel oil tank is installed we recommend a further paper element filter is also fitted adjacent to the oil tank, replacement elements are available (Pt. No. BS076)

1. Unpack The Boiler

Remove the fibre glass cover, burner assembly, silencer box assembly, heat exchanger, top baffle and control panel.

Note: Keys for the fibre glass cover are secured to the burner.



2. Attach Wall Plate To Wall

4 Rawl bolts are supplied to secure the wall plate to the wall. The drill size for the Rawl bolts is 14mm.

Secure the wall plate to the wall and ensure that it is level



3. Drill Holes For Pipe Work / Power Supply

Once the wall plate is secure, drill holes for the pipe work and power supply connections with a suitably sized drill bit.



4. Heat Exchanger

The boiler is supplied with 22mm copper end feed bends for the flow and return connections, and a drain cock.

Lift the heat exchanger into position, secure with nuts and washers provided.

! IMPORTANT: The heat exchanger is heavy, two people will be required to lift it into position.



5. Top Baffle

Place the top baffle into the heat exchanger as shown.



6. Control Panel

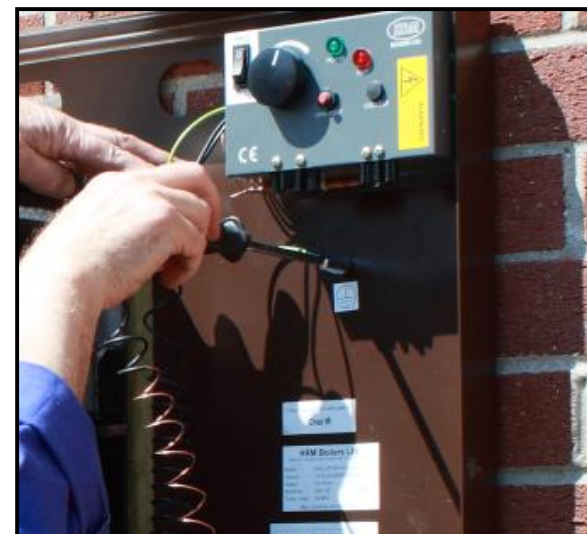
Fit the control panel onto the wall plate with and secure screw provided.



7. Thermostats

Place the thermostat phials into their pockets located at the top of the heat exchanger.

! IMPORTANT: Ensure the thermostat capillary tubes are kept clear of any possible electrical contact on the control panel



8. Electrical Connections

A 20mm hole is provided in the wall plate for concealed cable entry. Use round cable ducting to pass wires through the wall cavity.

The earth bonding cable can be secured to the 5mm stud provided on the wall plate, as shown.

Note: The power supply to the boiler should be fitted with a 5 amp fuse. The electrical supply to the boiler should be made via a switched and fused spur located near the boiler, fitted with a 5 amp fuse.

A frost thermostat is fitted as standard to protect the boiler. Where appropriate, an additional frost thermostat may be required to protect the rest of the heating system.

9. Silencer Box

Slide the silencer box over the 4 mounting pins located on the heat exchanger. Secure the silencer box to heat exchanger by tightening the 4 supplied wing nuts and penny washers down onto the mounting pins.



10. Burner

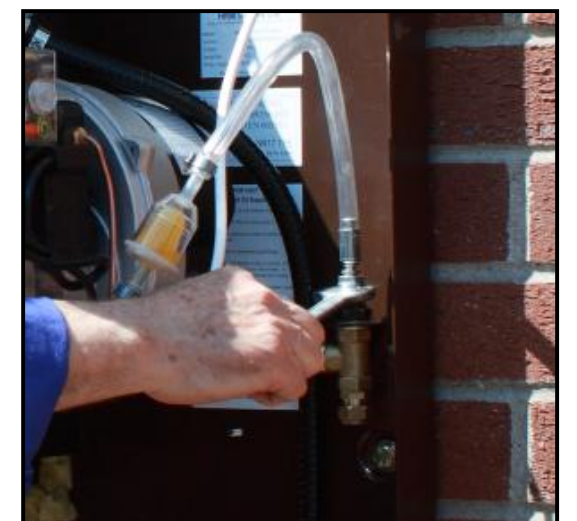
Fit the burner to the mounting flange on the silencer box. As you can see in this picture the flue has been rotated around into its operational position.

11. Connect The Fuel Line

Connect the fuel line from the burner, to the oil supply.

! IMPORTANT: The X-ternal comes with a built in non-return valve. No additional non return valve must be used. Should the boiler be used in conjunction with a purpose designed underground tank, the foot valve found inside such tanks must be removed or at least rendered ineffective. A replaceable element fuel filter must be fitted near the tank. The adjacent images show a clear fuel line with built in filter which are no longer supplied as standard, they are available separately (Part Number: BS099A)

Please refer to page 15 of this manual for oil tank installation recommendations





12. Burner Lead

Connect the 3 pin plug and socket.

13. Condensate Drain

In order to drain away condensate produced in operation there is a stainless steel tube connection on the underside of the flue, which comes pre-connected to a flexible hose. The flexible hose supplied forms the condensate trap and is terminated with a rubber fitting which will seal inside 22mm plastic waste pipe that must be connected into a soak-away, the household drains or a vertical stack.

14. Priming The Burner

Ensure both power and fuel supplies to the boiler are switched on. Press the reset button, the burner will start it's firing sequence. To release air from the oil line, slacken the vent plug during this sequence. If ignition fails the burner will go to lock out, wait 60 seconds and repeat the procedure.

15. Test The Fuel Supply

With the burner running, check the fuel supply for air leaks. It is normal for a static air bubble to remain at the highest point of the oil line, but a continuous stream of bubbles through the oil line indicates that air is being drawn in. This must be cured before proceeding.



16. Casing

Lift the case into position, secure it to the wall plate using the lock located on the underside.

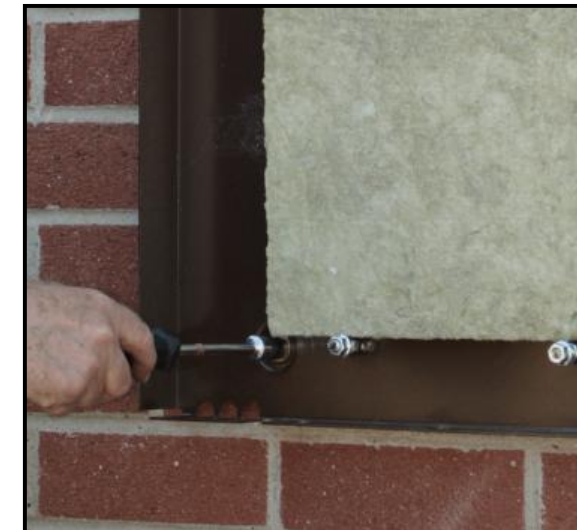
17. Commissioning the Boiler

Installation is complete. The boiler must now be commissioned by a competent engineer. The "Benchmark" log found at the back of this manual should be completed, and the warranty documentation returned to HRM Boilers Ltd.

1. Unpack The Boiler

Remove the fibre glass cover, burner assembly, silencer box assembly, heat exchanger, expansion vessel, pump, pressure relief valve and control panel.

Note: Keys for the fibre glass cover are secured to the burner.



2. Attach Wall Plate To Wall

4 Rawl bolts are supplied to secure the wall plate to the wall. The drill size for the Rawl bolts is 14mm.

Secure the wall plate to the wall and ensure that it is level



3. Drill Holes For Pipe Work / Power Supply

Once the wall plate is secure, drill holes for the pipe work and power supply connections with a suitably sized drill bit.



4. Heat Exchanger

The boiler is supplied with 22mm copper end feed bends for the flow and return connections, and a drain cock.

Lift the heat exchanger into position, secure with nuts and washers provided.

! IMPORTANT: The heat exchanger is heavy, two people will be required to lift it into position.



5. Top Baffle

Place the top baffle into the heat exchanger as shown.



6. Control Panel

Fit the control panel onto the wall plate with and secure screw provided.



7. Thermostats

Place the thermostat phials into their pockets located at the top of the heat exchanger.

! IMPORTANT: Ensure the thermostat capillary tubes are kept clear of any possible electrical contact on the control panel

8. Electrical Connections

A 20mm hole is provided in the wall plate for concealed cable entry. Use round cable ducting to pass wires through the wall cavity.

The earth bonding cable can be secured to the 5mm stud provided on the wall plate, as shown.

Note: The power supply to the boiler should be fitted with a 5 amp fuse. The electrical supply to the boiler should be made via a switched and fused spur located near the boiler, fitted with a 5 amp fuse.

A frost thermostat is fitted as standard to protect the boiler. Where appropriate, an additional frost thermostat may be required to protect the rest of the heating system.

9. Silencer Box

Slide the silencer box over the 4 mounting pins located on the heat exchanger. Secure the silencer box to heat exchanger by tightening the 4 supplied wing nuts and penny washers down onto the mounting pins.



10. Attach Pump

Attach the pump to the heat exchanger, ensuring that the supplied washer is used between the connection.

11. Attach Pump (Cont.)

Connect the 3 pin plug from the pump to the control panel.





12. Pressure Relief Valve

Attach the pressure relief valve to the half inch socket located at the back left of the heat exchanger in the orientation shown.



13. Pressure Relief Valve (Cont.)

The flow from the pressure relief valve should be plumbed away through the bottom of the wall plate using the supplied 15mm copper pipe.



14. Expansion Vessel

Hook the expansion vessel nut over the bracket located at the back of the heat exchanger, as shown.



15. Expansion Vessel (Cont.)

Connect the other end of the expansion vessel hose to the nipple on the heat exchanger.

16. Filling The System

25mm diameter holes are provided in the wall plate allowing a connection to a cold feed. Connect the filling loop to the heat exchanger on the 1/2" elbow. Open the filling loop valve and pressurise the system until 1 bar is showing on the pressure gauge. It may be necessary, after venting air from the heating system, to repeat this operation in order to fill the system correctly.



17. Burner

Fit the burner to the mounting flange on the silencer box.



18. Connect The Fuel Line

Connect the fuel line from the burner, to the oil supply.

! IMPORTANT: The X-ternal comes with a built in non-return valve. No additional non return valve must be used. Should the boiler be used in conjunction with a purpose designed underground tank, the foot valve found inside such tanks must be removed or at least rendered ineffective. A replaceable element fuel filter must be fitted near the tank.

Note: Please refer to page 15 of this manual for oil tank installation recommendations.



19. Burner Lead

Connect the 5 pin plug and socket.

20. Condensate Drain

In order to drain away condensate produced in operation there is a stainless steel tube connection on the underside of the flue, which comes pre-connected to a flexible hose. The flexible hose supplied forms the condensate trap and is terminated with a rubber fitting which will seal inside 22mm plastic waste pipe that must be connected into a soak-away, the household drains or a vertical stack.

21. Priming The Burner

Ensure both power and fuel supplies to the boiler are switched on. Press the reset button, the burner will start it's firing sequence. To release air from the oil line, slacken the vent plug during this sequence. If ignition fails the burner will go to lock out, wait 60 seconds and repeat the procedure.

22. Test The Fuel Supply

With the burner running, check the fuel supply for air leaks. It is normal for a static air bubble to remain at the highest point of the oil line, but a continuous stream of bubbles through the oil line indicates that air is being drawn in. This must be cured before proceeding.



23. Casing

Lift the case into position, secure it to the wall plate using the lock located on the underside.

24. Commissioning The Boiler

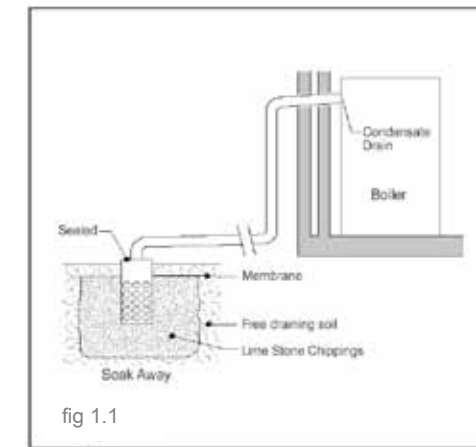
Installation is complete. The boiler must now be commissioned by a competent engineer. The "Benchmark" log found at the back of this manual should be completed, and the warranty documentation returned to HRM Boilers Ltd.

The Condensate Drain

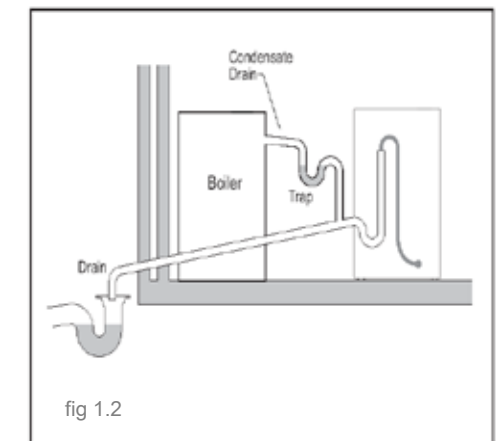
Condensate Drain Installation

The X-ternal condensing range of boilers use a single unit heat exchanger similar to those in the condensing Wallstar. However, in order to drain away condensate produced in operation, there is a stainless steel tube connection on the underside of the flue, which comes pre-connected to a flexible hose. The flexible hose supplied forms the condensate trap and is terminated with a rubber fitting which will seal inside 22mm plastic waste pipe, it must be connected into a soak-away (fig 1.1), the household drains (fig 1.2), or a vertical stack (fig 1.3).

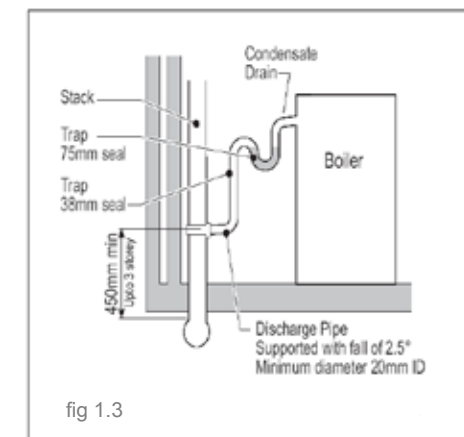
Soak Away



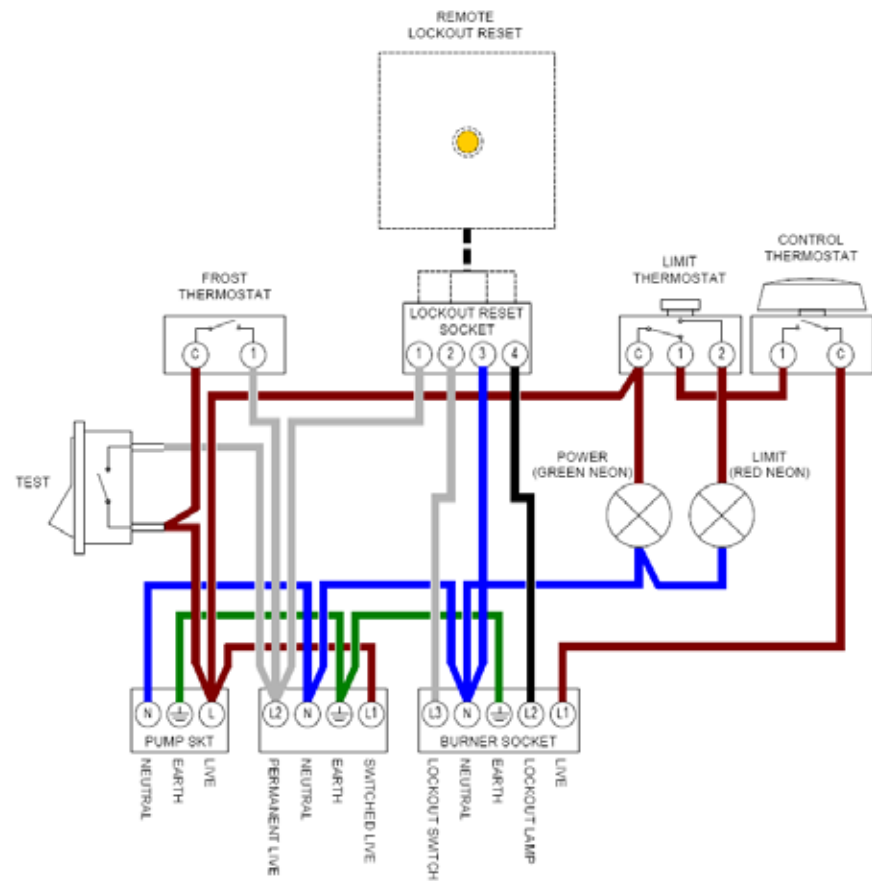
Household Drains



Vertical Stack



Standard X-ternal and X-ternal System



Note: The electrical supply to the boiler should be made via a switched and fused spur located near the boiler, fitted with a 5 amp fuse.

The Pump socket is only utilised on the X-ternal System, it is redundant on the Standard X-ternal.

A frost thermostat is fitted as standard to protect the X-ternal and X-ternal System boilers. Where appropriate an additional frost thermostat may be required to protect the rest of the heating system.

Boiler Maintenance

Servicing

The boiler should be serviced annually. Should you experience any difficulty in locating an engineer, our service department may be able to provide you with the contact details of an engineer in your area.

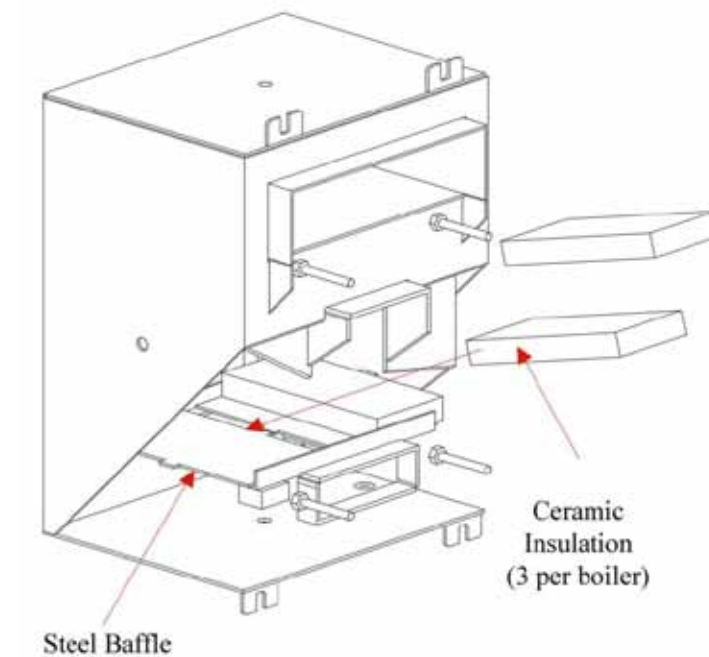
! IMPORTANT: Isolate the power supply before servicing the boiler.

Servicing Steps

1. Remove the burner and combustion chamber baffles/insulation, clean the internal heat exchanger surfaces and components. Replace the combustion chamber baffles and insulation with new items.
2. Check and replace seals, gaskets and flexible oil lines as appropriate.
3. Clean or replace filter elements and de-sludge the oil tank.
4. Dismantle the burner assembly and clean, fit a new nozzle. For instructions on how to carry this out please read the separate burner instructions supplied with your boiler.
5. Check the oil pressure and flue gas analysis, adjust the burner settings as appropriate.

! IMPORTANT: Do not use a wire brush to clean flue ways.

Baffle Replacement



Priming the Burner

Ensure both power and fuel supplies to the boiler are switched on. Press the reset button, the burner will start its firing sequence. To release air from the oil line, slacken the vent plug during this sequence. If ignition fails the burner will go to lock out, wait 60 seconds and repeat the procedure.



The code of practice for the installation, commissioning & servicing of oil central heating.

Installation, Commissioning and Service Record Log Book

IMPORTANT

1. Please keep the Log Book in a safe place for future reference.
2. This Log Book is to be completed in full by the competent person(s) who commissioned the boiler and associated equipment and then handed to the customer. When this is done, the Log Book is a commissioning certificate that can be accepted as evidence of compliance with the appropriate Building Regulations.
3. Failure to install and commission this appliance to the manufacturer's instructions may invalidate the warranty.

The above does not affect your statutory rights.

The content of this Log Book has been
produced in consultation with



APPLIANCE INSTALLATION AND CONTROL DETAILS

INSTALLER DETAILS

COMPANY NAME:

INSTALLATION DATE:

ADDRESS:

TEL. NO.

OFTEC REG NO. (if applicable)

COMMISSIONING DETAILS

COMPANY NAME:

COMMISSIONING DATE:

ADDRESS:

TEL. NO.

OFTEC REG NO. (if applicable)

APPLIANCE DETAILS

MODEL:

WALLSTAR

(Please enter model number)

X-TERNAL

SERIAL NUMBER:

FLUE TYPE (Weybourne Only)

LOW LEVEL

HIGH LEVEL

VERTICAL

CONVENTIONAL

CONVENTIONAL FLUE INSTALLATION (Weybourne Only)

IS THE FLUE INSULATED?

YES

IS ADEQUATE COMBUSTION/VENTILATION AIR SUPPLY PROVIDED?

YES

FLUE TERMINATING POSITION

DOES THE FLUE TERMINATE IN ACCORDANCE WITH THE INSTALLATION MANUAL?

YES

OIL SYSTEM

TANK CAPACITY:

litres.

BUNDED

YES

NO

FIRE VALVE TYPE: FUSEABLE HANDWHEEL, (Supplied Wallstar Only)

YES

NO

REMOTE SENSING (Weybourne or Wallstar on Gravity Oil Supply)

YES

NO

IS THE TANK SUPPORTED ON A SUITABLE BASE?

YES

NO

IS A PAPER ELEMENT OIL FILTER FITTED?

YES

NO

CONTROLS

To comply with the Building Regulations, each section must have a tick in one or other of the boxes.

REQUIREMENTS		MEASURES PROVIDED			
1.	TIME AND TEMPERATURE CONTROL TO HEATING	ROOM STAT AND PROGRAMMER/TIMER	☐	PROGRAMMABLE ROOMSTAT	☐
2.	TIME AND TEMPERATURE CONTROL TO HOT WATER	CYLINDER STAT AND PROGRAMMER/TIMER	☐	COMBI BOILER	☐
3.	HEATING ZONE VALVES	FITTED	☐	NOT REQUIRED	☐
4.	THERMOSTATIC RADIATOR VALVES	FITTED	☐		
5.	AUTOMATIC BYPASS TO SYSTEM	FITTED	☐	NOT REQUIRED	☐

APPLIANCE INSTALLATION AND CONTROL DETAILS

CIRCULATION

HAS THE SYSTEM BEEN FLUSHED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS?

YES

☐

HAS AN INHIBITOR BEEN ADDED:

YES

☐

(For the central heating mode, measure and record)

CENTRAL HEATING FLOW TEMPERATURE

°C

CENTRAL HEATING RETURN TEMPERATURE

°C

BURNER SETTINGS

SMOKE NO

CO²

%

NETT FLUE GAS TEMPERATURE

°C

NOZZLE SIZE

OIL PRESSURE

COMBINATION BOILERS ONLY

HAS A WATER SCALE REDUCER BEEN FITTED?

YES

☐

NO

☐

TYPE FITTED?

(For the domestic hot water mode, measure and record):

MAXIMUM OPERATING WATER PRESSURE

bar

COLD WATER INLET TEMPERATURE

°C

HOT WATER OUTLET TEMPERATURE

°C

WATER FLOW RATE AT MAXIMUM SETTING

litres/min

IS THE SYSTEM PRESSURE CORRECT

YES

CONDENSING BOILERS ONLY

HAS THE CONDENSATE DRAIN BEEN INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS?

YES

☐

NO

☐

FOR ALL INSTALLATIONS

DOES THE HEATING AND HOT WATER SYSTEM COMPLY WITH THE APPROPRIATE BUILDING REGULATIONS?

YES

☐

HAS THE BOILER AND ASSOCIATED EQUIPMENT BEEN INSTALLED AND COMMISSIONED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS?

YES

☐

HAVE YOU DEMONSTRATED THE OPERATION OF THE BOILER AND SYSTEM CONTROLS TO THE CUSTOMER?

YES

☐

HAVE YOU LEFT ALL MANUFACTURER'S LITERATURE WITH THE CUSTOMER?

YES

☐

HAS WARRANTY DOCUMENTATION BEEN COMPLETED AND RETURNED?

YES

☐

COMPETENT PERSON'S

CUSTOMER'S

SIGNATURE:

SIGNATURE:

(To confirm demonstrations of equipment, and receipt of appliance instructions)

SERVICE LOG

Service engineer's name: Telephone No:

Date	Parts Replaced	Comments/Parts to be replaced Next Service



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THE HOME OF THE WALLSTAR

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