



**HANDBOOK
AND SERVICE LOG**

HRM

WALLSTAR

12/15

15/20

20/25

Your Boiler Serial Number is:

to be found on the Burner Cover.



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

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CONTACTS

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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 Standard, ISO9000.

Each boiler is manufactured and tested with care by a member of our production team; you will find their name inside the boiler casing.

Your boiler will provide you with a long and trouble free service life provided that a few essential steps are addressed. Please take the 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.

Hedley Mickleburgh

Hedley Mickleburgh
Chief Executive



HOUSEHOLDER INFORMATION

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 "CO2" content.

Your installer will organise commissioning of your boiler. Should you experience any difficulty locating an engineer our service department may be able to provide you with the name 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. The details in 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 inside the rear cover** 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 copy to HRM in order to qualify for a **further 3 years warranty** of the heat exchanger - a **total of 5 years**.

Extended warranty conditions

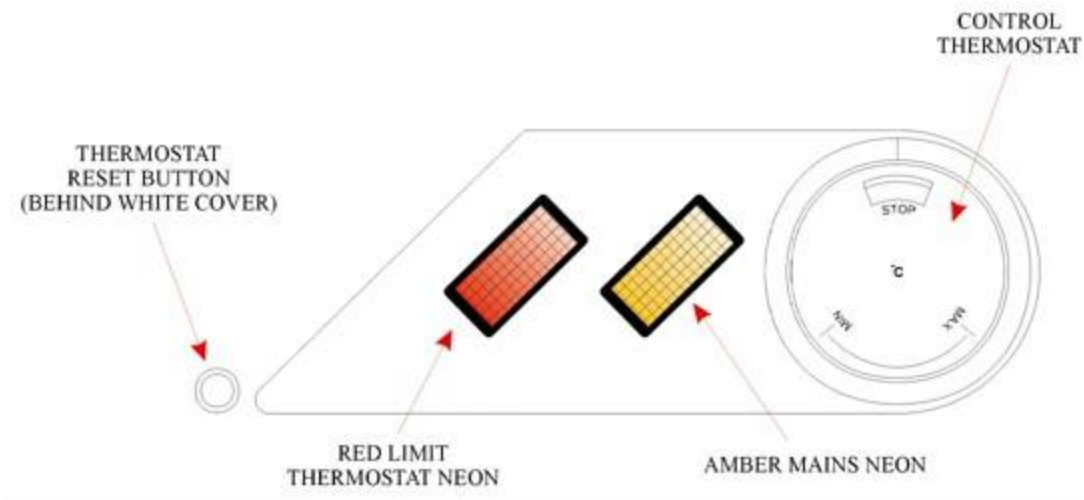
- The boiler must be serviced annually and maintained in accordance with the handbook. A "Benchmark" service log is located on the inside rear cover of this book.
- This warranty is in addition to your statutory and other legal rights.

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. If appropriate, your installer will contact us.
- Under no circumstances should "in warranty" work be undertaken without authorisation from our service department.
- If you are unable to contact your installer please contact our service department.

BOILER CONTROLS

Control panel



Temperature control thermostat

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

The recommended settings are "MAX." for heating and hot water and "MIN." for hot water only.

Do not operate the boiler below the minimum setting, this will induce corrosion and reduce the life of the boiler.

Boiler overheat (limit) thermostat

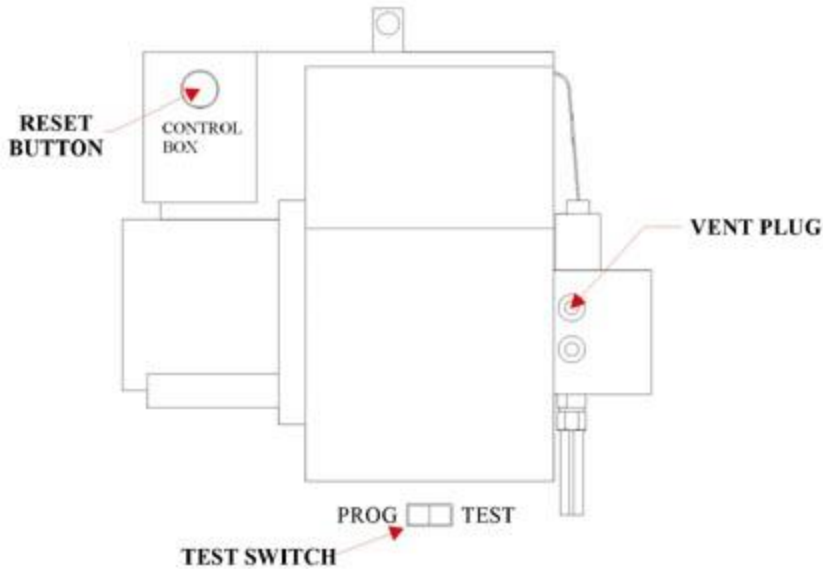
If the boiler overheats the reset button will trip and cut the power supply to the boiler. Allow the boiler to cool then press the reset button to reset the thermostat. To gain access to the reset button, switch off the power supply and remove the white casing.

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

Mains neon lamp

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

Burner lockout



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
- Turn off the oil at the tank

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 tank to settle.

Maintenance

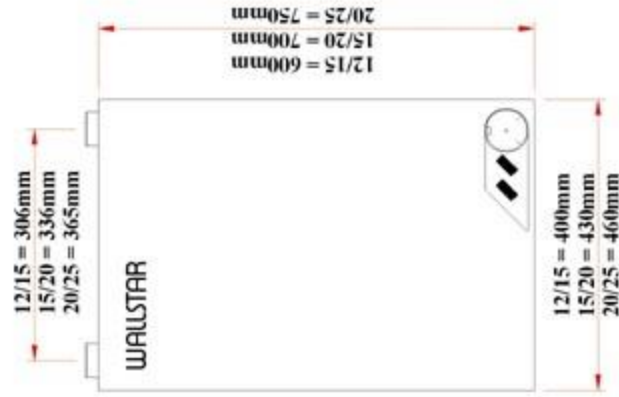
Your boiler should be serviced annually. Failure to have this done will invalidate your warranty and also lead to inconvenient breakdowns. A "Benchmark" service log is provided inside the rear cover of this handbook.

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.

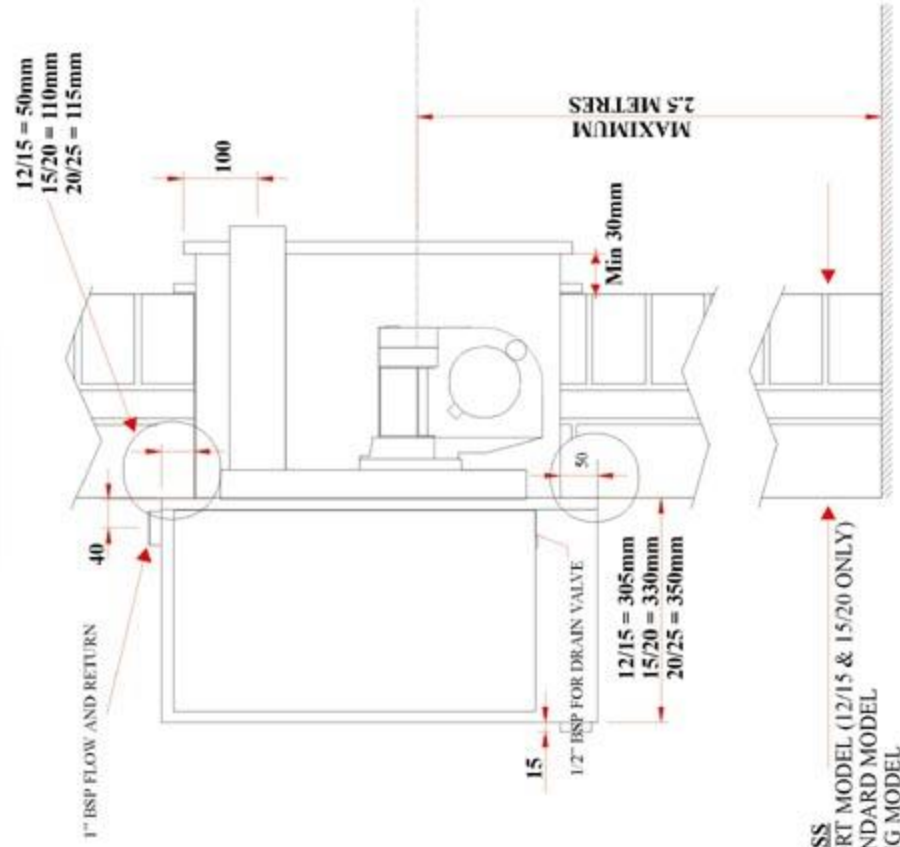
TECHNICAL SPECIFICATIONS

BOILER DIMENSIONS

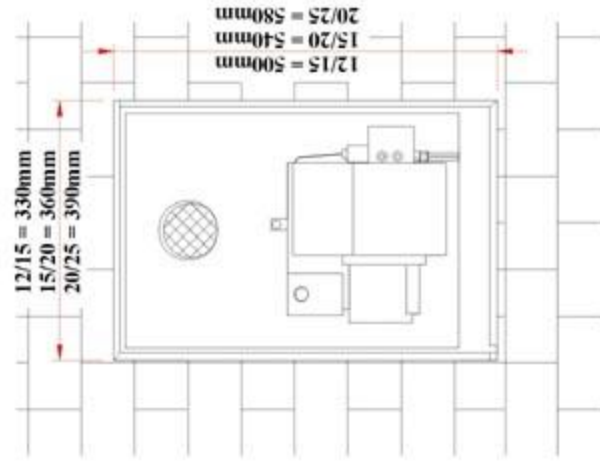
Internal View



Cross-sectional View



External View



WALL THICKNESS

- = 180-230mm SHORT MODEL (12/15 & 15/20 ONLY)
- = 260-310mm STANDARD MODEL
- = 410-485mm LONG MODEL

EXTENSION KIT PART NUMBERS

MODEL	50mm	100mm
12/15	12/15x50	12/15x100
15/20	15/20x50	15/20x100
20/25	20/25x50	20/25x100

NOTES

1. 12/15 MODEL, ALLOW 120mm CLEARANCE ABOVE CASING FOR REMOVAL OF THERMOSTAT PHIALS.
2. 15/20 & 20/25 MODELS, ALLOW 75mm CLEARANCE ABOVE CASING FOR ACCESS TO CASE RETAINING SCREWS.
3. FOR A WALL THICKNESS BELOW 180mm, EITHER CONSTRUCT STUDWORK ON THE INSIDE FACE OF THE WALL OR ALLOW THE BOILER TO PROTRUDE EXTERNALLY.
4. ALLOW 10mm CLEARANCE EITHER SIDE OF THE INTERNAL WHITE CASING.
5. THE WALL DUCT MUST PROTRUDE A MINIMUM OF 30mm FROM THE FACE OF THE WALL.

TECHNICAL SPECIFICATIONS

Heating system requirements:	Fully pumped, conventional open vented or sealed systems.
Maximum operating pressure:	3bar (43.5psi) static head 30.59 metres (100 feet)
Operating Temperature:	60°C to 80°C Maximum
Resistance to water flow:	@ 10°C temperature rise across the boiler Model 12/15 = 26mm, 15/20 = 35mm, 20/25 = 48mm W.G.
Thermostats:	Control thermostat range = 58-88°C Limit thermostat, manual reset, set point = 110-6°C
Electrical supply:	230V single phase 50Hz, fused 5 amp
Burner:	Sterling 40
Fuel:	Class C2 (28 second kerosene).
Oil supply connection:	¼" BSP
Weight empty:	12/15 = 80kg, 15/20 = 90kg, 20/25 = 110kg
Water capacity:	12/15 = 17.5 litres, 15/20 = 19.25 litres, 20/25 = 21 litres

BURNER SETTINGS

BOILER MODEL		12/15			15/20			20/25		
OUTPUT	Btu/h	44,400	47,800	51,200	54,600	61,400	68,200	71,700	78,500	85,300
	kW	13	14	15	16	18	20	21	23	25
NOZZLE	US/GPH Size & Type	Danfoss 0.40 x 80' EH	Danfoss 0.45 x 80' EH	Danfoss 0.45 x 80' EH	Danfoss 0.50 x 80' EH	Danfoss 0.55 x 80' EH	Danfoss 0.65 x 80' EH	Danfoss 0.65 x 80' EH	Danfoss 0.65 x 80' EH	Danfoss 0.75 x 80' EH
OIL PRESSURE	BAR	8	7.25	8.5	8	8.25	7.25	8	9.25	8.25
	PSI	115	105	125	115	120	105	115	135	120
FIRING RATE	Kg/hr	1.2	1.29	1.41	1.5	1.69	1.86	1.95	2.11	2.3
	Litres/hr	1.52	1.63	1.78	1.9	2.14	2.35	2.47	2.67	2.91
AIR SETTING	Scale	2	3	4	5.5	6.5	7.5	8.25	10	11.5
SMOKE NO	Bacharach Scale	0	0	0	0	0	0	0	0	0
CO	%	10.5	11	11	11	11.5	11.5	11.5	12	12
FLUE GAS TEMP.	Less Ambient °C	135	145	155	140	150	160	145	155	165
SEDBUK	Band	-	-	C	-	-	C	-	-	C
SEDBUK	Rating	-	-	85.2	-	-	85.7	-	-	85.7
EFFICIENCY NETT	B.E.D. Test	-	-	90.5	-	-	92.4	-	-	91.2

BOILER INSTALLATION

REGULATIONS

The installation of oil fired boilers must comply with the following Standards and Codes of Practice.

BS 5410 - Part 1	Oil installations up to 45kW
BS 5449	Forced circulation hot water central heating systems for domestic premises
BS 4543 - Part 1 & 3	Factory made insulated chimneys
BS 7593:1992	Treatment of water in hot water central heating systems
Building Regulations	Part L1 Part J 2002 England and Wales, Part F Scottish Regulations and Technical Booklet L Northern Ireland
BS7671: 1992	Electrical Regulations

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
- the design 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

WARNING! - 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 such as Fernox Superfloc to remove traces of flux residues, grease, metal swarf, solder pieces and oils used during component manufacture.

After flushing

Add a corrosion inhibitor such as Fernox MB-1. This will minimize the chemical action and chemical change that takes place in the system's primary water and system components.

Note.

The manufacturer's usage instructions for chemical cleaners and inhibitors should always be followed. Please refer to BS7593 1992 for a detailed explanation of cleansing procedures.

BOILER LOCATION

Noise levels - consideration should be given to the following:

- small rooms will accentuate noise levels
- 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.

Roof space, bathroom and bedroom installation should only be considered where there is no alternative.

WALL CONSTRUCTION

The boiler must be installed in a suitable load bearing external wall - a lintel is not required.

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 duct.

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

WALL THICKNESS

The standard Wallstar models are designed to fit through exterior walls 260-310mm thick but for walls of differing thickness it is still possible to install and benefit from a Wallstar boiler:

- The short flue version Wallstar (12/15 and 15/20 only) is suitable for 180-230mm thick walls. For a wall below 180mm, either construct stud work on the internal face of the wall or allow the boiler to protrude externally.
- For thicker walls between 410 and 485mm a long version is available in each model. Walls that fall outside this measurement range may require a 50mm or 100mm wall duct and flue extension kit meaning the Wallstar can be fitted through walls up to 585mm (23") thick.
- The 50mm and 100mm kits can be used on all boiler models in order to extend the length of the wall duct and flue - only 1 kit is permitted per boiler.

IMPORTANT - Be sure to measure your wall thickness before purchase!

WALL DUCT AND FLUE EXTENSION KITS

Only one extension kit per boiler is permitted (see part nos. below).

The extension kit is fitted at the wall plate / interior end of the supplied wall duct. It cannot be fitted at the access door / exterior end of the wall duct

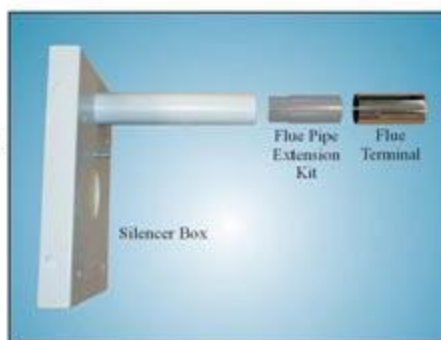
DESCRIPTION	SIZE	PART CODE
Wallstar 12/15 duct and flue extension	50mm (2")	12/15X50
Wallstar 12/15 duct and flue extension	100mm (4")	12/15X100
Wallstar 15/20 duct and flue extension	50mm (2")	15/20X50
Wallstar 15/20 duct and flue extension	100mm (4")	15/20X100
Wallstar 20/25 duct and flue extension	50mm (2")	20/25X50
Wallstar 20/25 duct and flue extension	100mm (4")	20/25X100

The wall duct should protrude from the outside wall by a minimum of 30mm to allow sufficient air to be drawn in by the burner.



Extending the Wall Duct

1. Remove the wall duct from the wall plate.
2. Fit the extension piece to the wall duct using the screws and nuts provided.
3. Refit the extended wall duct to the wall plate using the original screws and nuts.



Extending the Flue Pipe

1. Remove the screw holding the stainless steel flue terminal in place.
2. Pull the terminal off and replace with the flue pipe extension kit provided.
3. Refit the stainless steel terminal and secure using the original fixing method.

WALLSTAR ACCESSORIES



Terminal guards

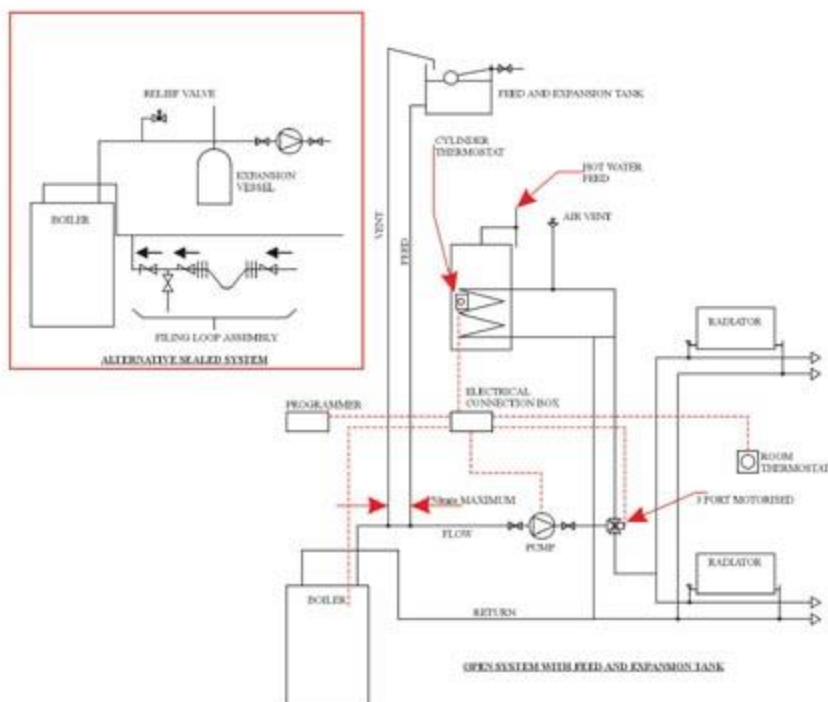
It is recommended that a terminal guard is fitted in situations where the flue height is less than 2 metres. HRM's custom-made stainless steel flue terminal guard comes in one size to fit all Wallstar models and is quickly and easily installed with no drilling or screwing required.



Oil filters

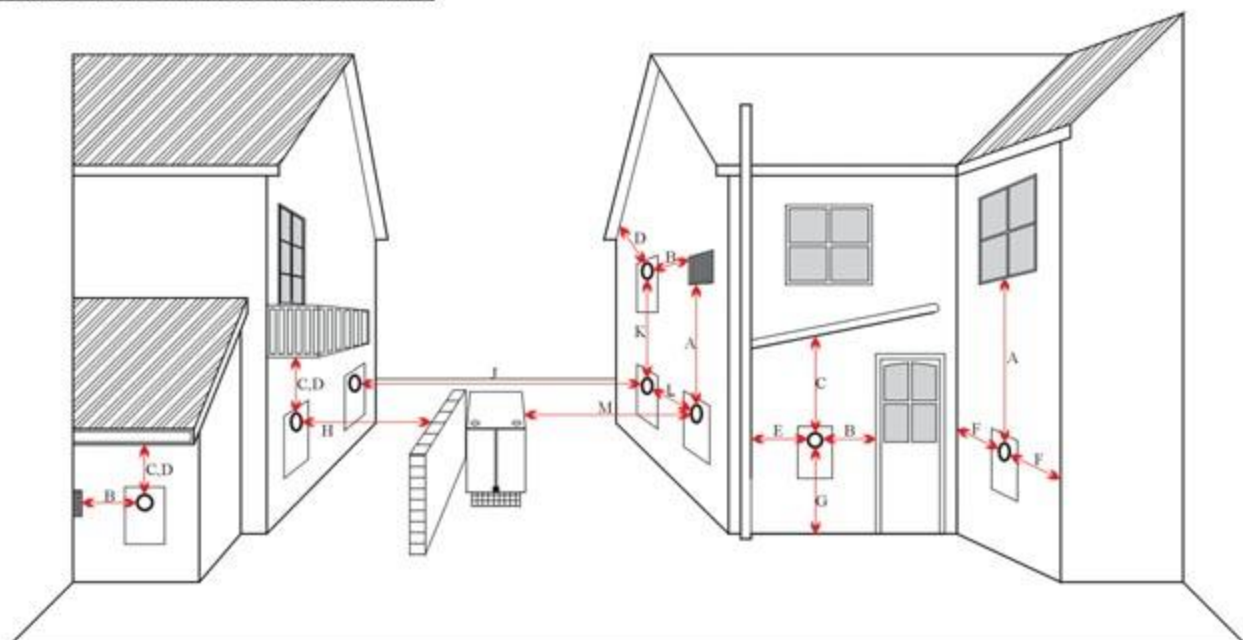
Oil filters are an essential part of your fuel supply system. They can increase the life of your burner by preventing debris contained in the fuel from reaching it. To ensure that your boiler's warranty remains valid, a paper element filter must be used. The HRM oil filter comes with all the required fittings.

FULLY PUMPED Y-PLAN HEATING SYSTEM



This diagram shows a general arrangement only; there are many alternative systems. Sealed system components are available in the form of a kit from your plumber's merchant.

FLUE TERMINATING POSITIONS



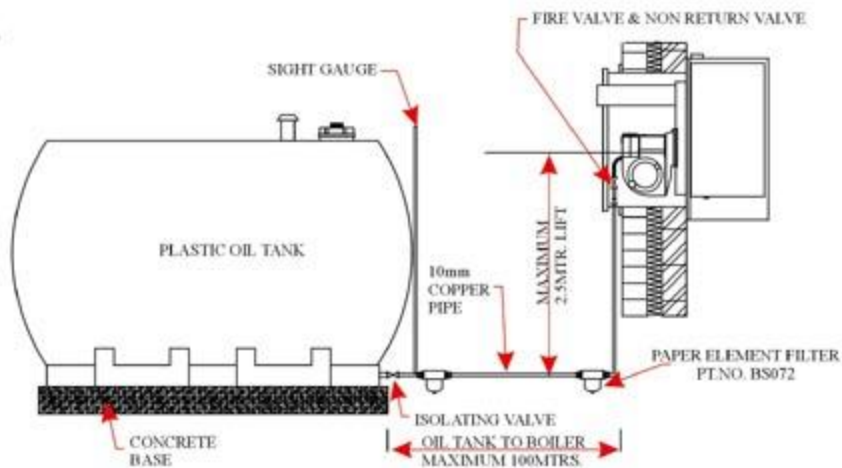
A	Directly below an opening. (air brick, window, etc.)	600mm
B	Horizontally to an opening. (air brick, window, door, etc.)	600mm
C	Below a gutter, eaves or balcony with protection (note 2)	75mm
D	Below a gutter, eaves or balcony with out protection	600mm
E	From vertical sanitary pipework	300mm
F	From an internal or external corner	300mm
G	Above ground or balcony level	300mm
H	From a surface or boundary facing the terminal	600mm
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 from BS5410: Part 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 boundary of an adjoining property, consideration should be given to possible noise disturbance as some people are sensitive to even low noise levels.

FUEL SUPPLY SYSTEM



Oil tank

We recommend the use of plastic oil tanks as 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. **Reference should be made to the: Control of Pollution (Oil Storage) Regulations 2001.**

A concrete base 100mm high is sufficient support for the tank. Alternatively use paving slabs of 42mm thickness. Ensure enough clearance is provided to allow removal of the oil filter bowl.

OIL SUPPLY

Fuel tank below the burner

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

Pipework

Soldered fittings should not be used, as the joints will fail in the event of fire. Flux deposits may damage the pump and fuel may deteriorate the solder within the joint. Galvanised pipe 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.

Jointing 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 fire

In accordance with Document J of the Building Regulations we provide "a means of automatic isolation of the fuel supply" in the form of a fusible hand wheel fire valve.

In the majority of installations fuel supply is under suction, i.e. the burner is above the oil level in the tank. For installations where the oil level is above the burner we recommend the installation of a remote acting fire valve in accordance with BS5410 Pt.1 1997.

Oil filtration

A paper element filter must be installed adjacent to the boiler (1/4" filter Pt No. BS072). Paper element filters have high filtration rates (12 microns). Gauze strainers which are commonly used, have a filtration rate of 100 microns, and do not provide the best protection for the highly tolerated components within the burner. They may also lead to the premature failure of burner components. Where a steel oil tank is installed we recommend a further paper element filter is also fitted adjacent to the oil tank.

INSTALLATION PROCEDURE

Unpack the boiler, remove the burner and silencer box from the heat exchanger.

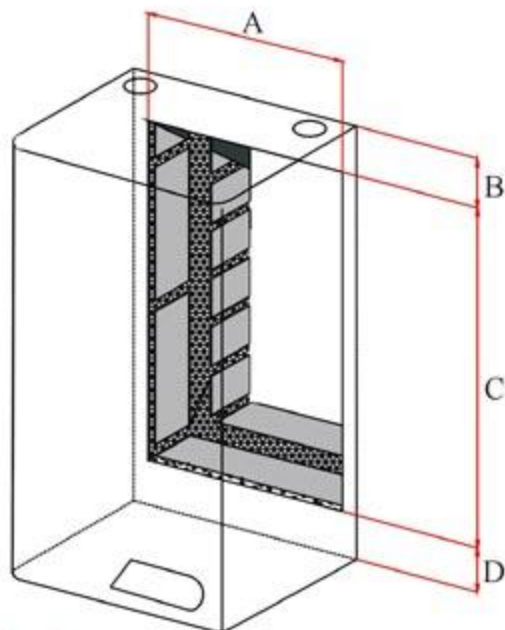


Fig. 1

1. CUT A HOLE IN THE WALL

Dimension	A	B	C	D
12/15	350	40	520	40
15/20	380	100	560	40
20/25	410	105	600	45

Hole sizes stated allow for a 10mm clearance around the wall duct.

Note.

For 12/15 models allow 120mm clearance above the casing for removal of the thermostat phials.

For 15/20 and 20/25 models, allow 75mm clearance above the casing, for access to the case retaining screws.

2. WALL PLATE AND DUCT ASSEMBLY

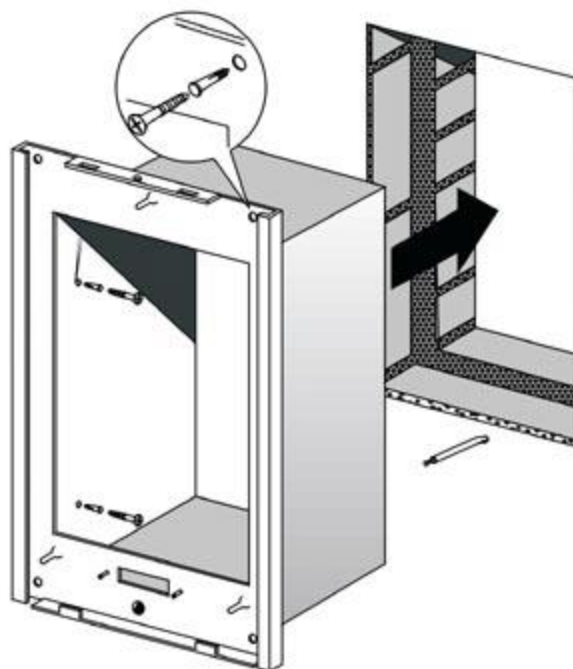
Drill through the holes in the wall plate and wall duct, and secure the assembly to the interior wall using the eight wall plugs and screws provided. (See Fig. 2 above and Fig. 8 at the back of this manual)

Note.

Hole positions vary according to model.

If the wall is uneven, avoid distortion of the wall plate. Place packing behind the wall plate, ensure the rubber foam on the rear of the wall plate forms an air tight seal against the wall. Use silicone sealant to fill any gaps if necessary.

Fig. 2



3. WALL DUCT TRIM

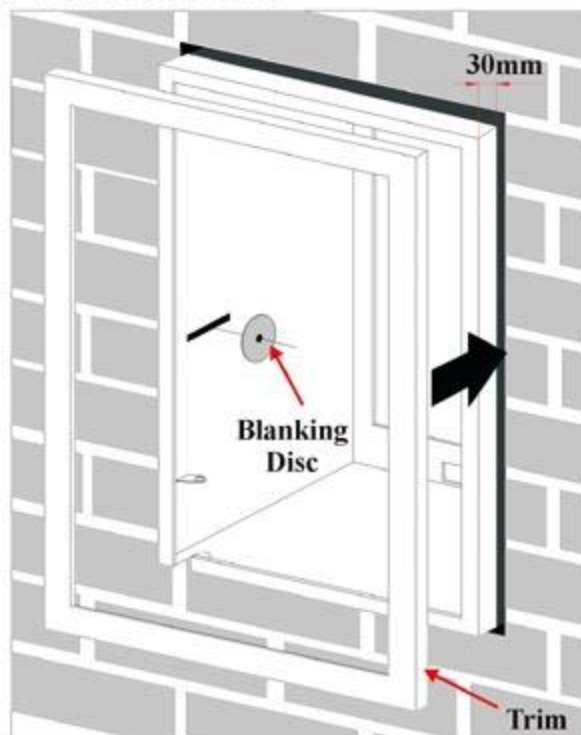


Fig. 3

Secure the trim with the blanking discs and screws provided. (See Fig. 8 at the back of this manual)

Do not recess the trim into the wall, as this will restrict combustion air supply.

Note. The wall duct must protrude a minimum of 30mm from the face of the wall. If it is less than this an extension kit should be fitted. (See Page 9)

4. HEAT EXCHANGER

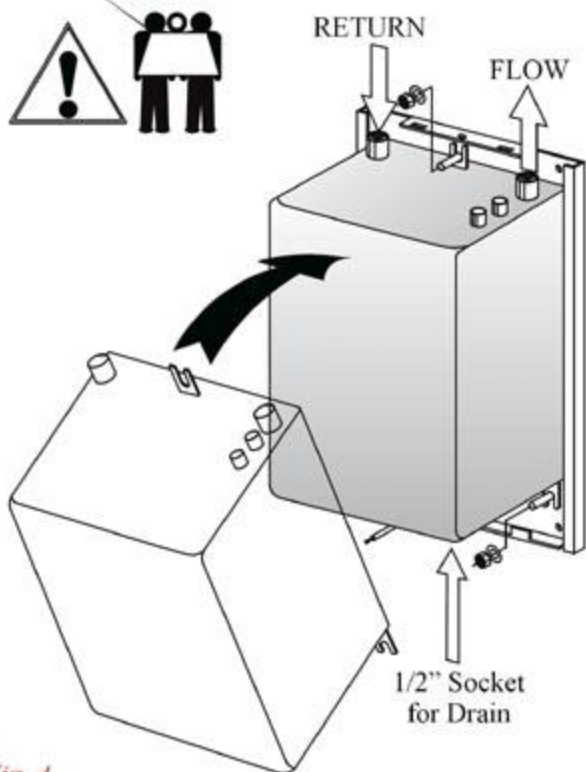


Fig. 4

Fit 1" BSP pipe fittings to the flow and return sockets and a drain cock to the 1/2" BSP socket.

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

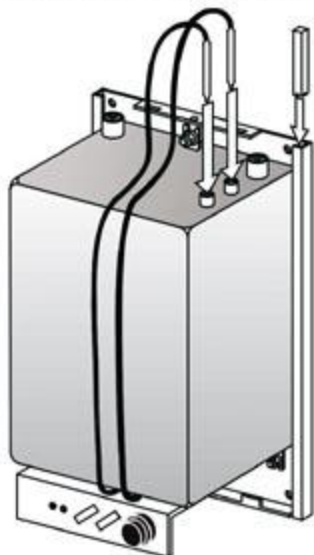
Safety: The heat exchanger is heavy, two people will be required to lift it into position.

5. CONTROL PANEL

Fit the control panel onto the wall plate and place the thermostat phials into their pockets. (Fig. 5)

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

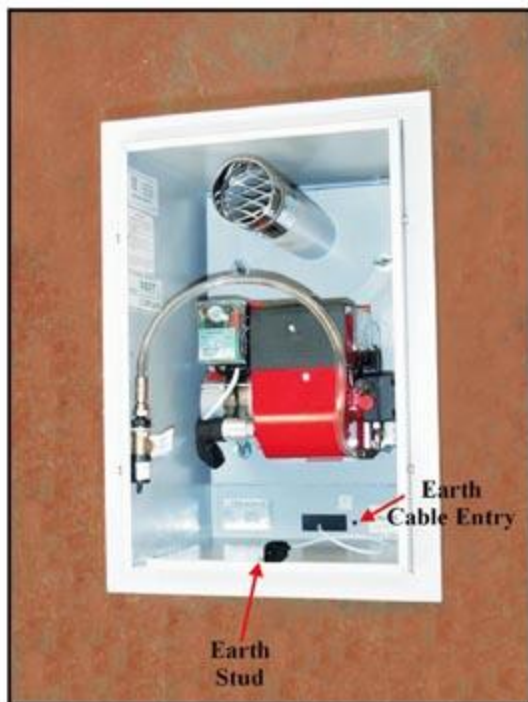
Fig. 5



6. ELECTRICAL CONNECTIONS

A 20mm hole is provided in the wall plate for concealed cable entry. Alternatively use plastic ducting to any corner of the wall plate

Fig. 6

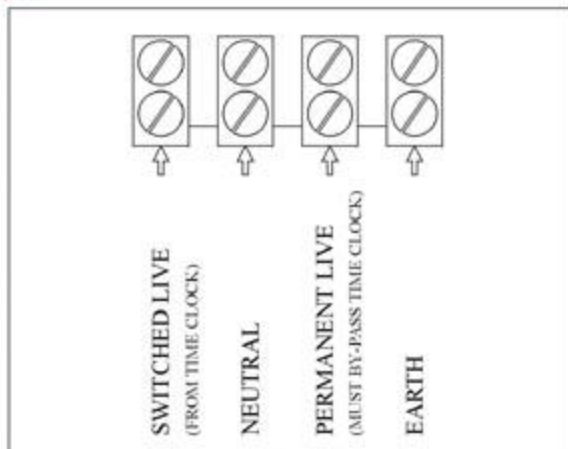


The earth bonding cable can be passed through an 8mm hole, adjacent to the test switch, and secured to the 6mm stud provided in the wall duct.

Note.

The power supply to the boiler should be fitted with a 5 amp fuse.

Fig. 7



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.

7. FIT THE WHITE CASING

Fig. 8



Lift the cover into position, ensure the tabs and slots are aligned, tighten the retaining screws.

8. SILENCER BOX AND BURNER

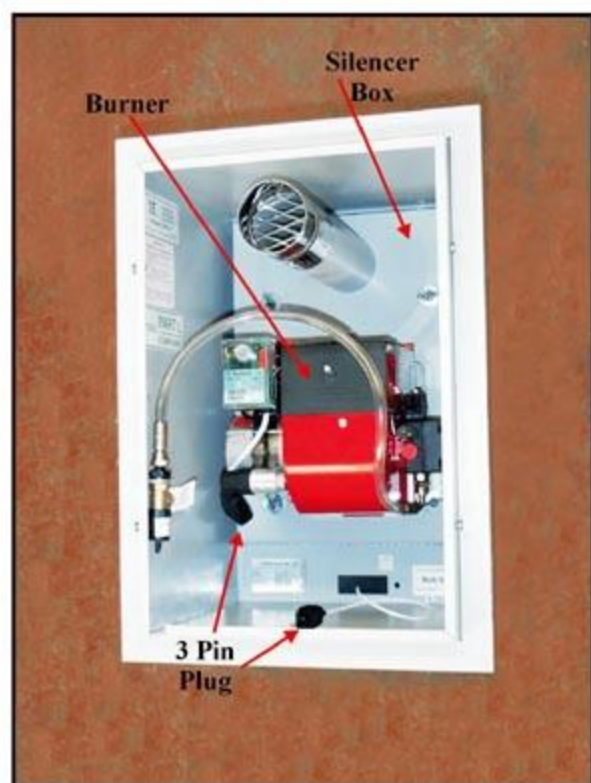


Fig. 9

Fit the silencer box and burner. Connect the 3-pin plug and socket.

9. CONNECT THE FUEL LINE



Fig. 10

Fit a paper element filter. Gauze strainers commonly used do not provide adequate protection. (1/4" filter Pt. No.BS072)

Do not use soldered or galvanised fittings.

Please refer to page 12 of this handbook for oil tank installation recommendations.

10. PRIMING THE BURNER

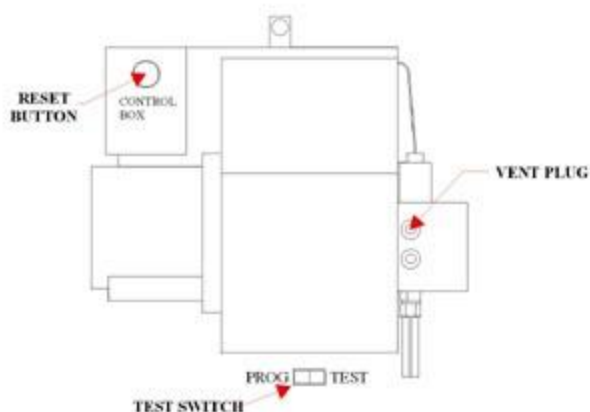


Fig. 11

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 period. If ignition

fails the burner will go to lockout. Wait 60 seconds and repeat the procedure.

11. 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.

12. COMMISSIONING THE BOILER

Installation is complete. The boiler must now be commissioned by a competent engineer. The "Benchmark" log book should be completed and warranty documentation returned to HRM Boilers Ltd..



Inside



Outside

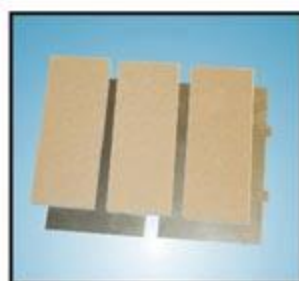
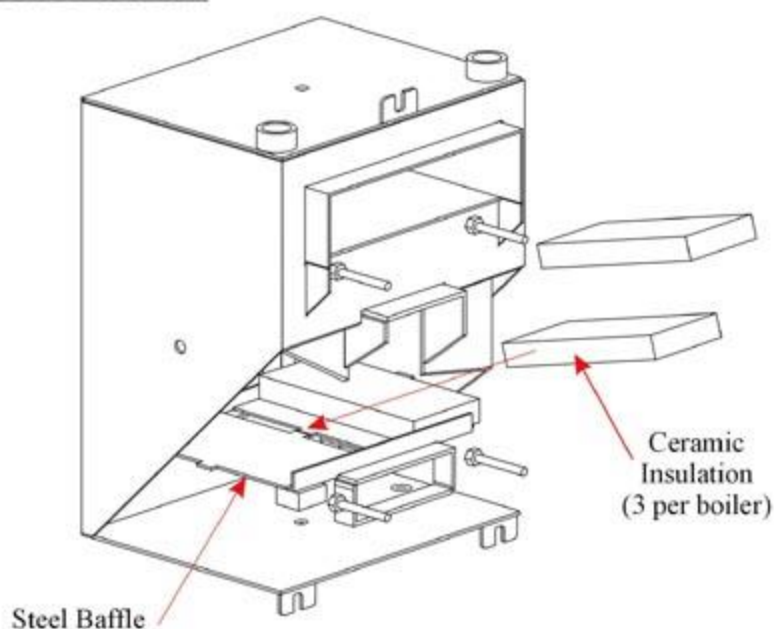
BOILER MAINTENANCE

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 name of an engineer in your area.

WARNING! ISOLATE THE POWER SUPPLY BEFORE SERVICING THE BOILER

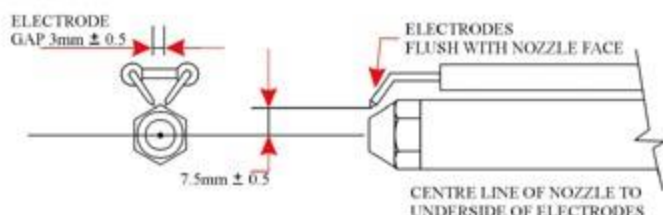
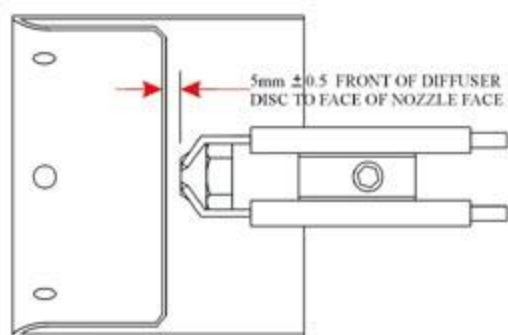
1. Remove the burner and combustion chamber baffles, clean the internal heat exchanger surfaces and components.
2. Check and replace seals and gaskets as appropriate.
3. Clean / replace filter elements and de-sludge the oil tank.
4. Dismantle the burner assembly and clean. Fit a new nozzle.
5. Check the oil pressure and flue gas analysis, adjust the burner settings as appropriate.

BAFFLE REMOVAL

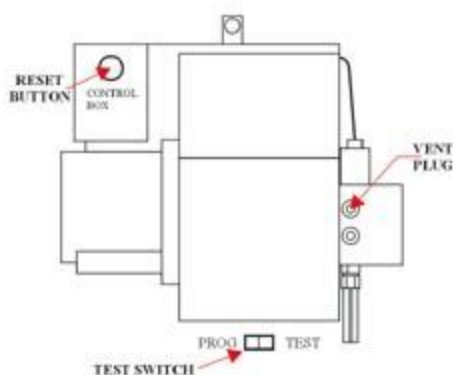


Baffles & Insulation

BURNER HEAD SETTINGS



PRIMING THE BURNER



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

FAULT DIAGNOSIS

Burner fails to start → mains lamp not illuminated

- blown fuse
- time clock/programmer not calling for heat
- room or hot water thermostats not calling for heat

Burner lock out lamp is illuminated

- lack of oil
 - faulty solenoid coil
 - blocked nozzle/jet
 - faulty fire valve
 - air in oil supply
 - empty oil tank
- flame extinguishes after a short period
 - photocell faulty
 - faulty control box
- no spark
 - faulty control box
 - faulty ignition transformer
 - incorrect electrode setting
 - faulty HT Leads

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

Smoky exhaust →

- blocked nozzle/jet
- incorrect burner settings

Burner starts violently → delayed ignition

- incorrect electrode adjustment
- electrode insulation damaged
- HT leads faulty
- air in oil supply
- incorrect air adjustment

Oil odours →

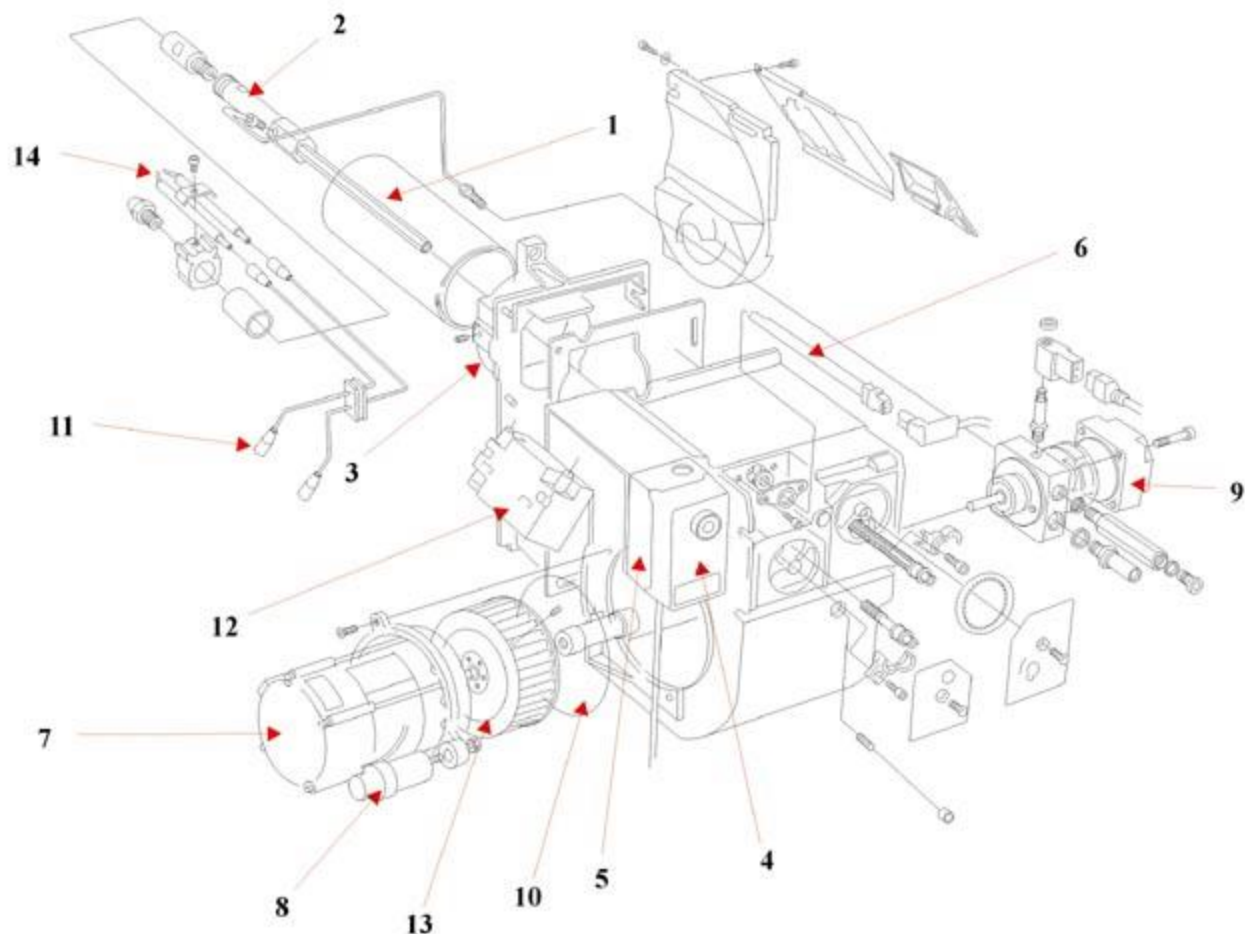
- incorrect combustion settings
- oil leak

Unstable flame →

- incorrect head settings
- low oil pressure
- excess air
- faulty nozzle

PARTS LIST/COMPONENT IDENTIFICATION

STERLING BURNER



ITEM	DESCRIPTION	EOGB Ref.	PART No.
1	Blast tube 12/15	B03-177-80109	BS013
1	Blast tube 15/20, 20/25	B03-960-DO212	BS045
2	Nozzle Assembly	118-538-01	BS046
3	Intermediate Gasket	04-390-120-27	BS047
4	Satronic Control Box	DK0970	BS041
5	Control Box Base	390-109-01	BS022
6	Photocell MZ770S	118-00301	BS065
7	Motor	118-483-02	BS050
8	Capacitor	118-95201	BS051
9	Danfoss Pump BFP11 L3	117-586-02	BS052
10	Pump Coupling	CO-1-00-115-94201	BS064
11	HT Lead	118-55901	BS054
12	Transformer EB1	115-977-01	Bs055
13	Fan 12/15, 15/20, 20/25	114-176-04	BS056
14	Ignition electrode (new style one piece)	113-867-01	BS067
15	Clear Flexible Oil Line (not shown)	N/A	BS012

BOILER COMPONENTS



Fig. 1 Silencer Box



Fig. 2 White Casing

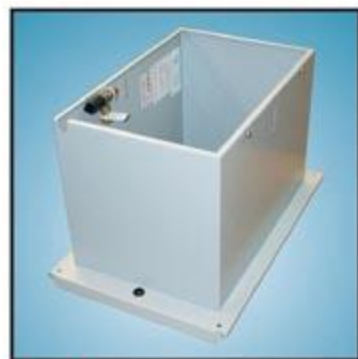


Fig. 3 Wall Duct & Trim



Fig. 4 Ceraboard
Insulation

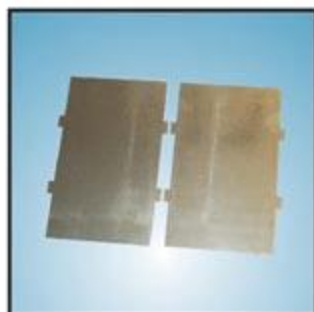


Fig. 5 Bottom Baffles



Fig. 6 Silencer
Insulation

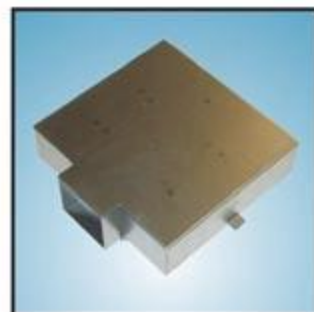


Fig. 7 Flue Baffles



Fig. 8 Fixing Kit Set



Fig. 9 Access Door (Outside)

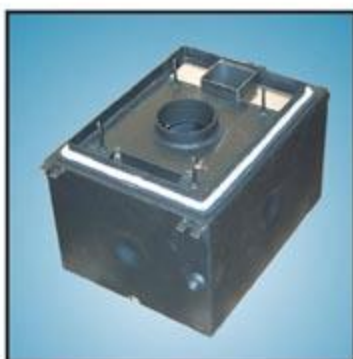
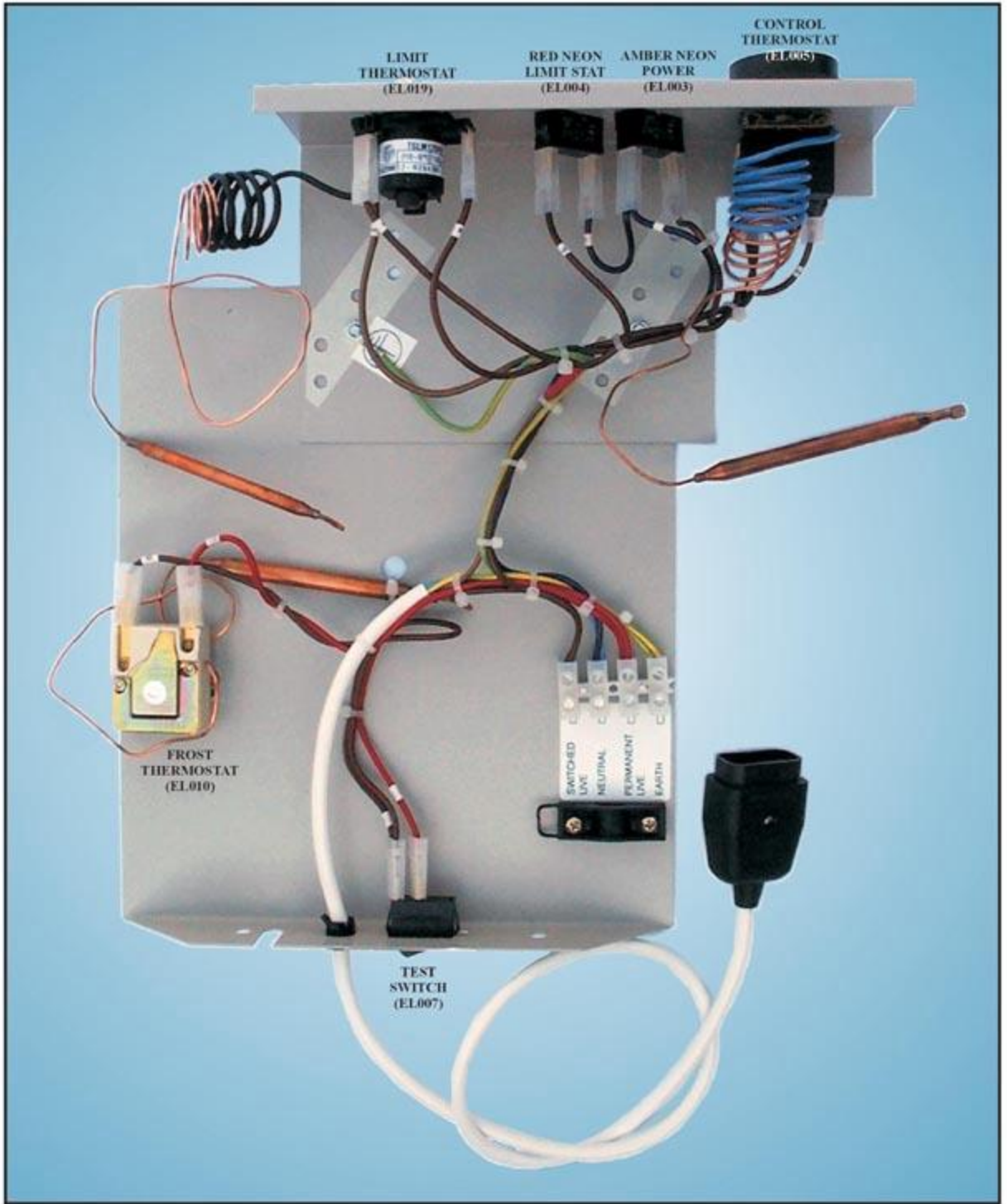


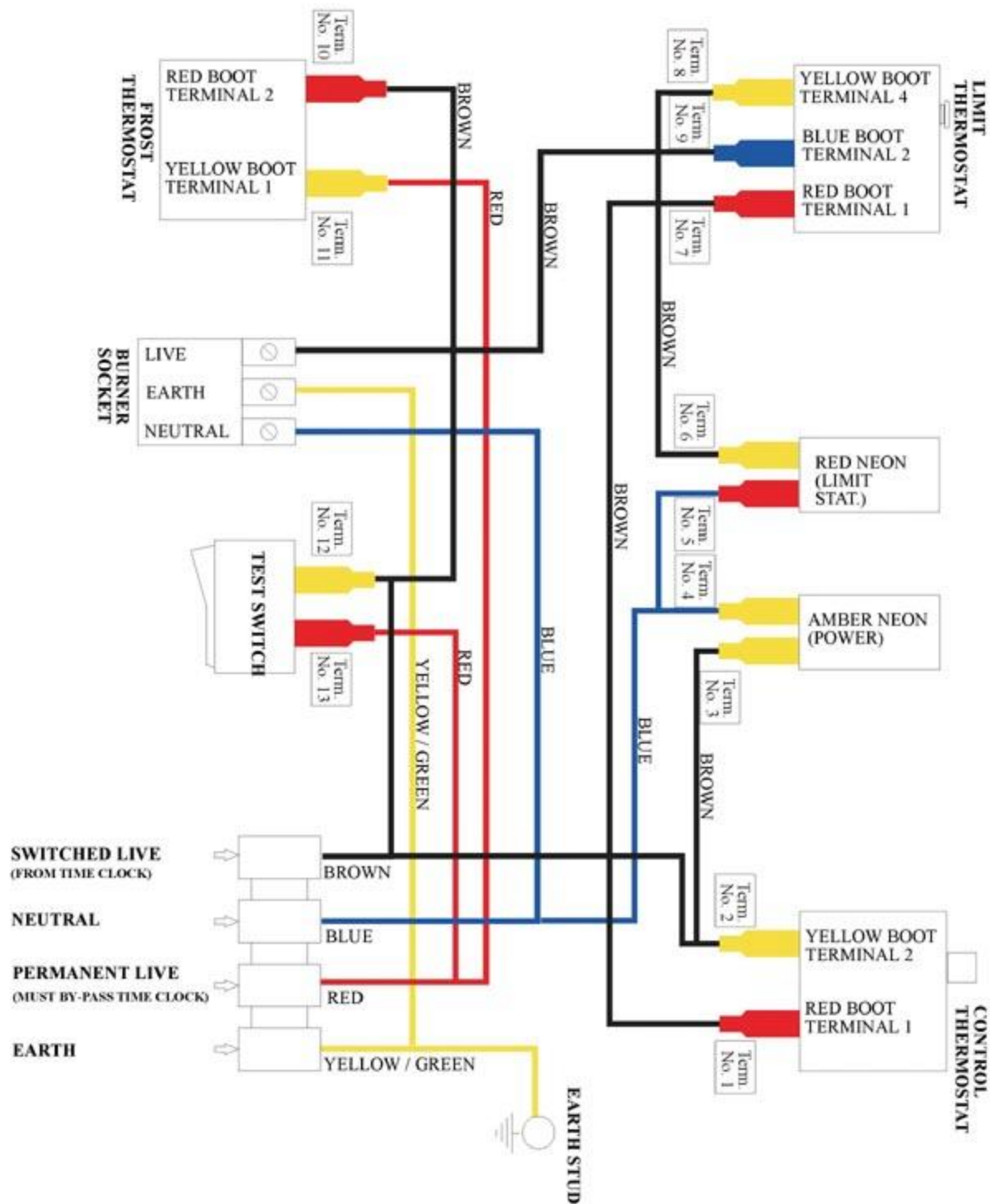
Fig. 10 Heat Exchanger



Fig. 11 Burner

CONTROL PANEL





WALLSTAR PARTS LIST

ITEM	DESCRIPTION	QTY.	12/15	15/20	20/25
1	White Casing	1	WA001	WA060	WA026
2	Blanking Disc	2	WA002	WA002	WA002
3	Access Door	1	WA080-40	WA090-40	WA100-40
4	Control Panel	1	WA004	WA004	WA004
5	Wall Plate	1	WA005	WA063	WA029
6	Baffle Insulation	1	WS080-16	WS090-16	WS100-16
7	Flue Way Baffle	1	WS080-22	WS090-22	WS100-22
8	Combustion Chamber Baffle	1	WS080-15	WS090-15	WS100-15
9	Wall Duct 410-485mm	1	WA007C	WA065C	WA033A
10	Wall Duct 260-310mm	1	WA007B	WA065B	WA031B
11	Wall Duct 180-230mm	1	WA007A	WA065A	N/A
12	Wall Duct Trim	1	WA008	WA066	WA032
13	Silencer Box 410-485mm	1	WA080-21	WA090-21	WA100-21
14	Silencer Box 260-310mm	1	WA080-20	WA090-20	WA100-20
15	Silencer Box 180-230mm	1	WA080-19	WA090-19	N/A
16	Flue Terminal	1	WS080-30	WA011	WA022
17	Heat Exchanger Assembly	1	WA080	WA090	WA100
18	Silencer Box Lining	1	WS080-17	WS090-17	WS100-17
19	Burner Flange Gasket	1	RP021	RP021	RP021
20	Control Thermostat	1	EL005	EL005	EL005
21	High Limit Thermostat	1	EL006	EL006	EL006
22	Frost Thermostat	1	EL010	EL010	EL010
23	Test Switch	1	EL007	EL007	EL007
24	Switch Gasket	1	WA014	WA014	WA014
25	Amber Neon	1	EL003	EL003	EL003
26	Red Neon	1	EL004	EL004	EL004
27	Burner Plug and Socket	1	EL002	EL002	EL002
28	Burner Assembly	1	WA12/15	WA15/20	WA20/25
29	Fire Valve Assembly	1	BSUFK-1	BSUFK-1	BSUFK-1
30	Access Door Screws	4	FSM612PHSS	FSM612PHSS	FSM612PHSS
31	Silencer Box Wing Nuts	4	FSM8WNZP	FSM8WNZP	FSM8WNZP
32	Clear Flexible Hose	1	BS012	BS012	BS012



INVESTOR IN PEOPLE