



# CONDENSATE PUMP KIT

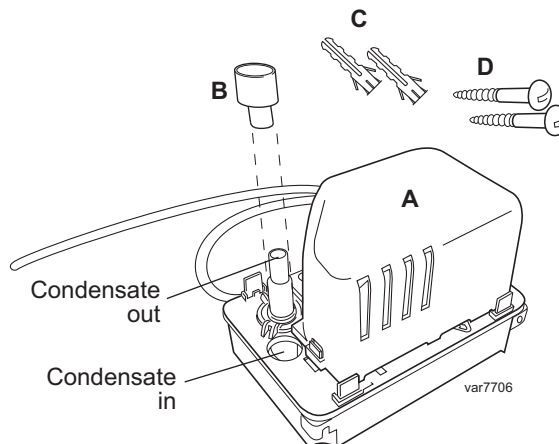
When replacing any part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Ideal Boilers.

**For the very latest copy of literature for specification and maintenance practices visit our website [www.idealboilers.com](http://www.idealboilers.com) where you can download the relevant information in PDF format.**

This Condensate Pump is suitable for installation on all domestic condensing boilers

## 1 PACK CONTENTS

- A Condensate Pump - 1 off
- B Pipe Adaptor - 1 off
- C Wall Plugs - 2 off
- D Wood Screws - 2 off



## TECHNICAL INFORMATION

Maximum flow rate .....	440 litres/hour
Electrical supply .....	230V AC / 50-60 Hz 0.8amps
Alarm contact .....	NC 4 amps resistive
Overheat protection .....	130°C
Tank Capacity .....	0.5 Litres
Length .....	195mm
Width .....	130mm
Height .....	122mm
Maximum vertical head -	4.5m
Maximum horizontal length -	30m

## INTRODUCTION

The condensate pump is designed to collect and remove condensate and can be used with domestic condensing boilers.

The condensate drain pipe from the boiler is connected into the pump using 21.5mm overflow pipe and collected in the sump. Once the sump capacity of 0.5 litres is achieved the pump operates to discharge the condensate via the outlet pipework to the discharge point.

The pump is fitted with 2 float switches which operate on the depth of condensate within the sump i.e. on reaching a depth of 24mm the first float switch operates to energise the pump to discharge the condensate and the pump shuts down when the level drops to 13mm.

Should a fault occur within the condensate outlet pipe, e.g. a blockage, the pump will shut off the boiler when the condensate level reaches 30mm in the sump, via the second float switch (provided the alarm wiring has been connected to the boiler terminal strip - see wiring information).

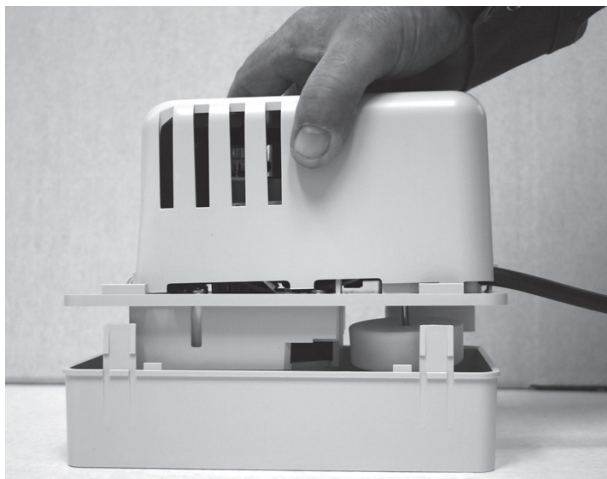
**NOTE TO THE INSTALLER: LEAVE THESE INSTRUCTIONS ADJACENT TO THE GAS METER**

## 2 INSTALLING THE PUMP

*For mexico HE range refer to the boiler installation instructions.*

To ease installation, the tank on the pump is reversible i.e. this can be fitted to accept the condensate drain pipework from the boiler to either the left or right hand side.

### Condensate Inlet on left

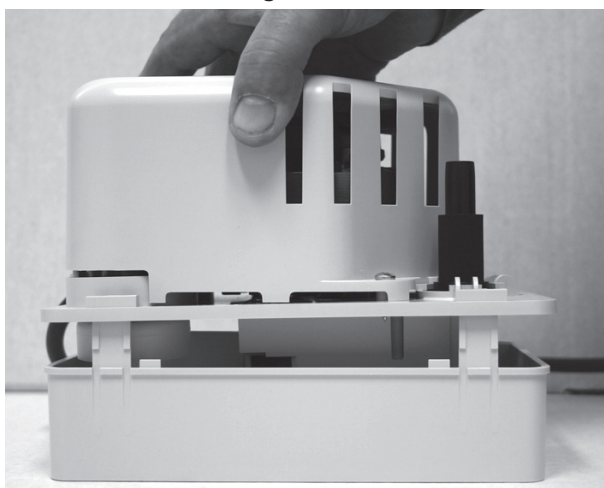


1. Consideration should also be taken of the siting of the pump to prevent noise emissions and vibrations.
2. To ensure sufficient ventilation to the motor the area around the pump should be left unobstructed.
3. The pump should not be installed where ambient temperatures may fall below freezing or in areas of a very high humidity. The pump must be fitted in a dry area and away from where it could be splashed with water. (The IP rating of the pump is **IP20**).
4. The pump must be installed horizontally where the condensate drain pipe from the boiler can enter into the 'condensate in' collection point on the pump, using 21.5mm plastic overflow pipe.

As the condensate from the boiler is gravity fed into the condensate pump kit it is essential the pump is sited lower than the boiler.

5. If required, the pump kit can be wall mounted as follows:

### Condensate Inlet on right



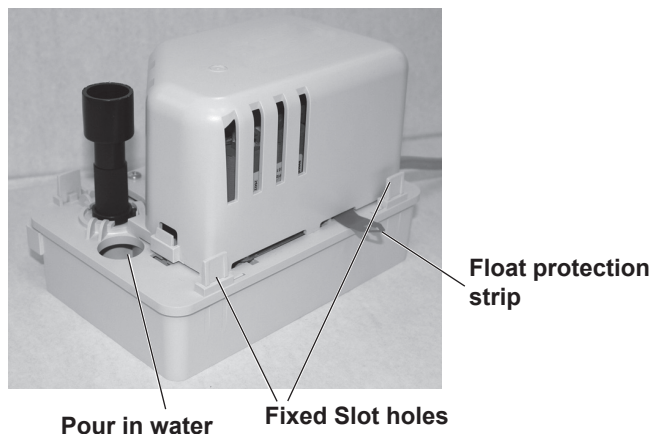
- a. Mark two holes to suit wall plugs provided 176.5mm horizontally apart to coincide with location mounting lugs provided on side of condensate pump unit. Ensure adequate clearance for pump body and connecting pipework around mounting location chosen before drilling holes. Drill holes accordingly.
  - b. Insert wall plugs and screws, leaving 3mm protruding on the screws.
  - c. Mount pump onto screws using the fixed slot holes on the casing. See Frame 3.
6. The pump discharge connection should be made using the pipe adaptor supplied in the kit, which is a push-fit on to the check valve, and allows standard 21.5mm plastic overflow pipe to be used up to the final discharge point. (See *condensate pipe termination configurations*)
  7. Wiring of the pump should be made following the relevant wiring diagram see Frame 7.

## 3 OPERATING THE PUMP

Before operating the pump, the float protection strip should be pulled out to free off the float switch.

To check operation pour water into the sump until the pump operates (first float switch makes contacts) and then stops once the level of the water falls.

It is possible to check the alarm contacts by continuing to pour water into the sump, until the second float switch lifts and breaks the contacts to the alarm wiring thus switching off the power supply to the boiler. Check switch operation with a suitable electrical test meter.

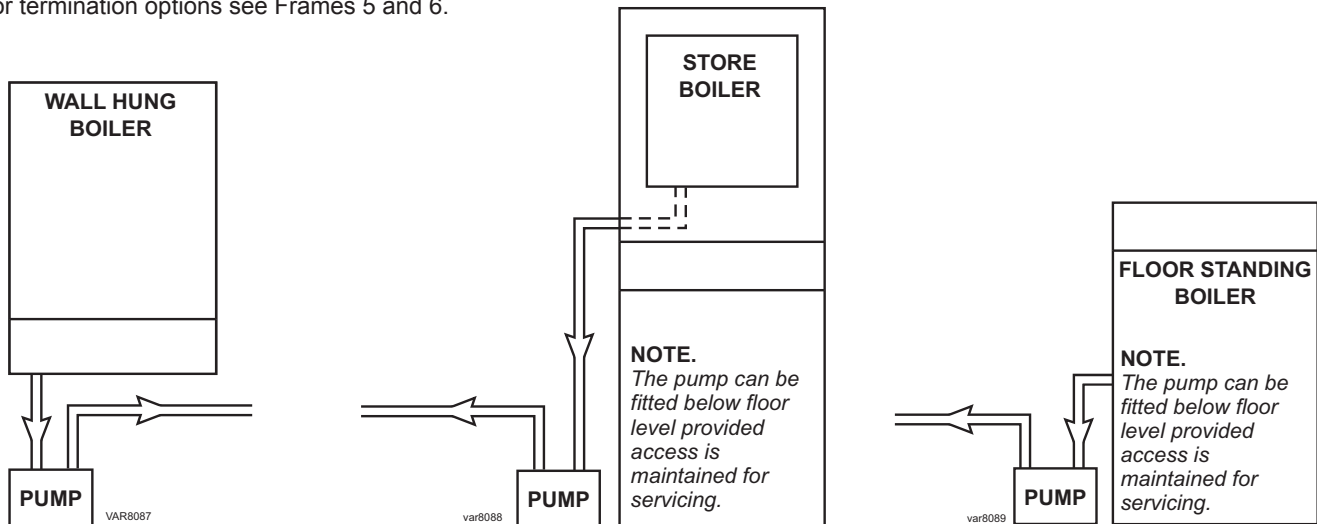


## 4 CONDENSATE RUNS

### NOTE.

As the condensate from the boiler is gravity fed into the condensate pump it is essential that the pump is sited lower than the boiler.

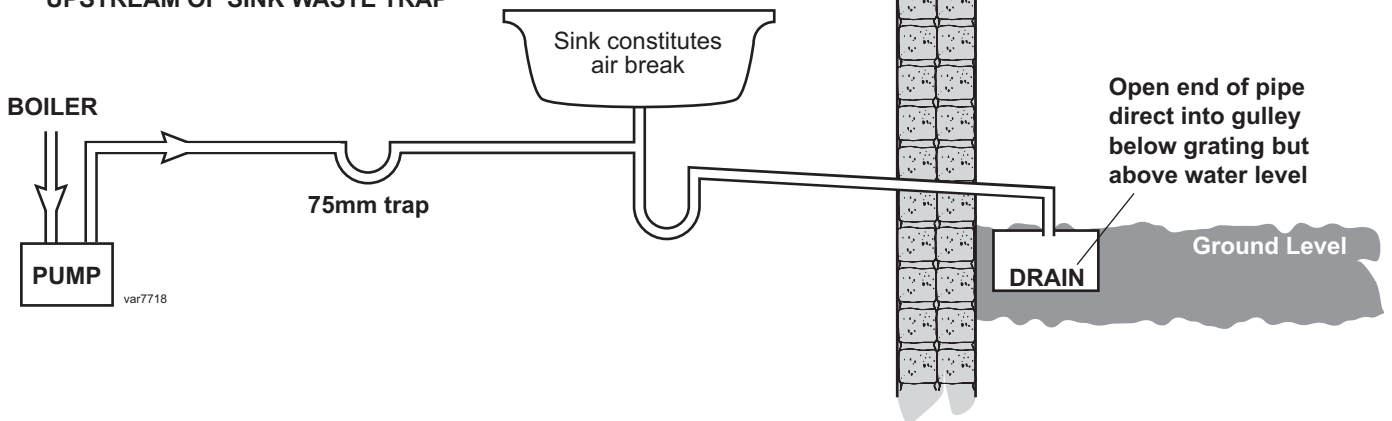
For termination options see Frames 5 and 6.



## 5 CONDENSATE PIPE TERMINATION CONFIGURATIONS

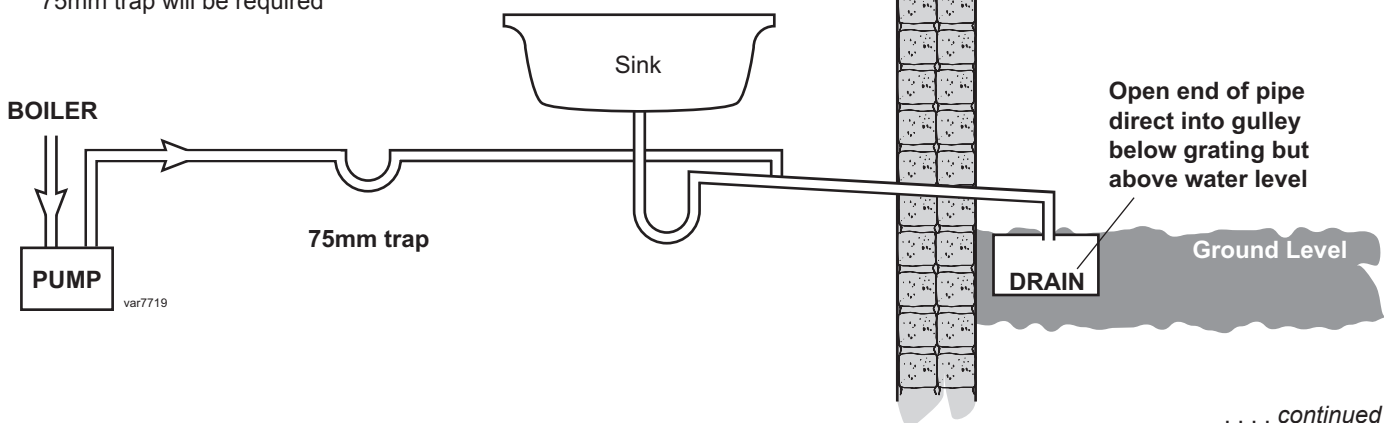
Note. ALL EXTERNAL PIPE RUNS MUST BE INSULATED

### 1. INTERNAL TO SINK WASTE UPSTREAM OF SINK WASTE TRAP



### 2. INTERNAL TO SINK WASTE DOWNSTREAM OF SINK WASTE TRAP (PREFERRED METHOD)

\* If drain termination is to soil stack, a 75mm trap will be required



... continued

## 6 CONDENSATE PIPE TERMINATION CONFIGURATIONS . . . *continued*

### 3. INTERNAL CONNECTION TO SOIL AND VENT STACK

\* Make connection to soil and vent pipe using a solvent welded saddle

BOILER

PUMP

var7720

### 4. TERMINATION INTO FALL PIPE HOPPER

\* Condensate pipe must terminate in the hopper - IT MUST NOT be connected into the fall pipe

BOILER

PUMP

Fall Pipe Hopper

var7721

### 5. TERMINATION TO SOAK AWAY

BOILER

PUMP

var7722

Termination to Soak away

Ground Level

minimum 500mm

External wall

BOILER

PUMP

var7723

Open end of pipe direct into gulley below grating but above water level

Ground Level

DRAIN

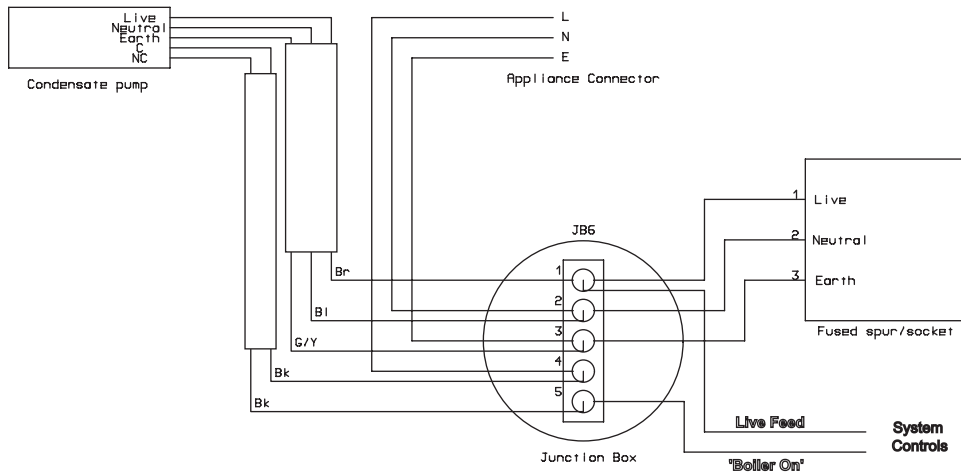
### 6. TERMINATION TO DRAIN / GULLEY

## 7 WIRING

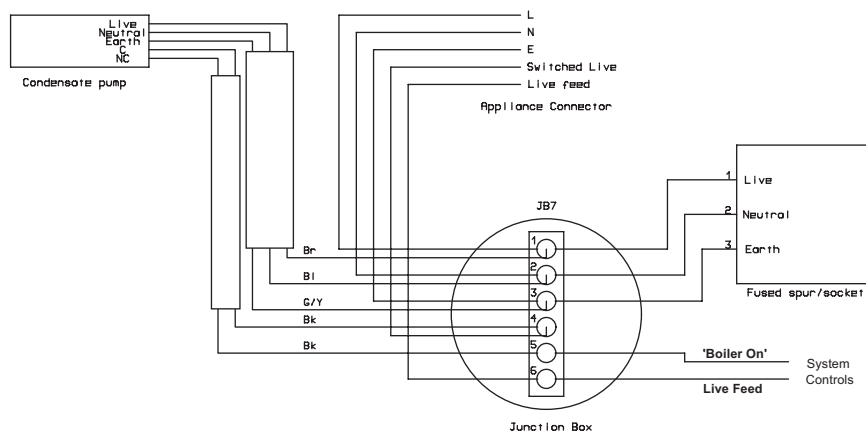
### Note.

1. The wiring for the alarm contacts **MUST** be used.
2. Choose the wiring diagram from those below (A-C) which matches that of the appliance. If in doubt contact the appliance manufacturer.
3. **For mexico HE range refer to boiler installation instructions.**
4. Wiring diagrams provided depict the additional wiring needed for the inclusion of the condensate pump. This scheme may be incorporated into the existing wiring centre junction box, fused spur etc. incorporated in the heating system as appropriate.

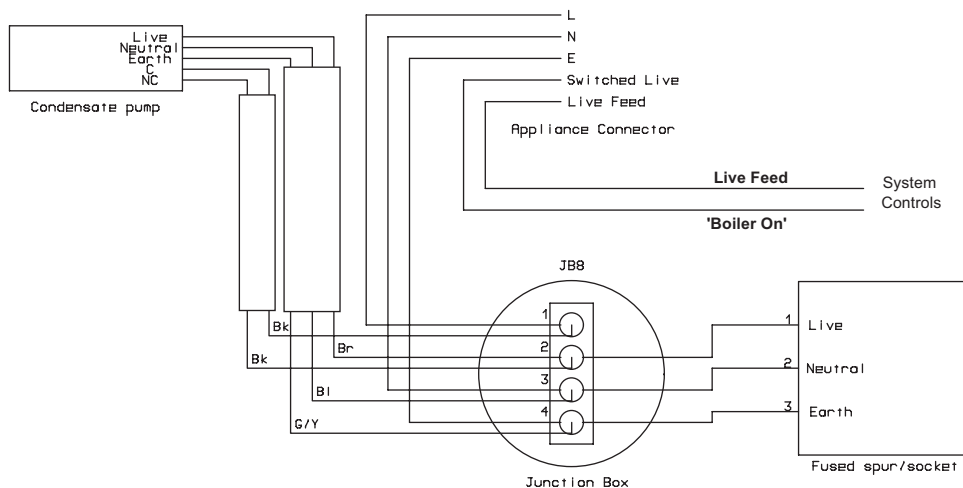
#### A - Heating Only - No Permanent Live



#### B - Heating Only - With Permanent Live



#### C - Combi Appliance

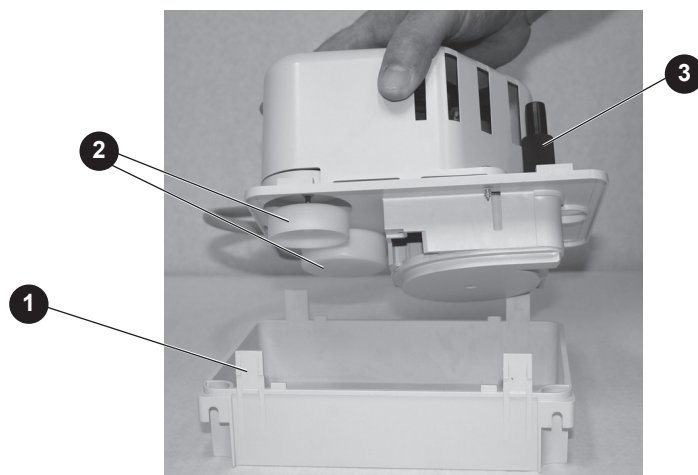


## 8 MAINTENANCE AND SERVICING

The inside of the pump kit should be cleaned regularly at every annual service of the appliance.

**Note.** Before any maintenance the pump must be isolated from the power supply. When disconnecting the inlet and outlet pipe work from the pump make provision to capture any condensate which may be still contained within the pipe work

1. Remove the reservoir by disengaging the four plastic retaining pegs and lift the pump off. Clean the reservoir as necessary.
2. Ensure the floats remain clean and free to move.
3. Turn the check valve anti-clockwise to unlock then remove and clean.
4. Re-assemble in reverse order.
5. Re-establish power supply and carry out checks, see Frame 2.





### **Technical Training**

The Ideal Technical Training Centre offers a series of first class training courses for domestic, commercial and industrial heating installers, engineers and system specifiers.

For details of courses please ring:..... 01482 498432

Ideal Boilers Ltd. pursues a policy of continuing improvement in the design and performance of its products.

The right is therefore reserved to vary specification without notice.

Ideal Boilers Ltd., PO Box 103, National Avenue, Kingston Upon Hull, HU5 4JN

Tel 01482 492251 Fax 01482 448858

Registration No. London 322 137

Ideal Technical Helpline: 01482 498663  
[www.idealboilers.com](http://www.idealboilers.com)