

MAINSBOOST iBOOST +200

Installation, Operation & Maintenance Instructions

Please leave this instruction booklet with the home owner as it contains important warranty, maintenance and safety information



Read this manual carefully before commencing installation.

This manual covers the following products:

iBOOST +200

Pt. No. 46712

iBOOST +200 CAT 5

Pt. No. 46714

**Please note images are representative only and
may not portray your model**



PRODUCT DESCRIPTION

iBOOST +200

Additional water storage tank consisting of fill valve, 200 litre water storage and coupling for system integration to an iBoost 200. The design of the tank incorporates an AF air gap for fluid isolation (BS EN 1717).

iBOOST +200 CAT 5

Additional water storage tank consisting of fill valve, 200 litre water storage and coupling for system integration to an iBoost 200 CAT 5. The design of the tank incorporates an AB air gap for fluid isolation (BS EN 1717).

APPLICATION

The Mainsboost iBoost +200 is designed to meet the demand of pressurised systems in larger domestic applications where the existing mains water supply is insufficient.

Inlet pressures to the tank and ambient temperatures must not exceed the values given in the technical specifications.

STORAGE

If this product is not to be installed immediately on receipt, ensure that it is stored in a dry, frost and vibration free location in its original packaging.

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WARNINGS:



- **This pump set must not be used for any other application without the written consent of Stuart Turner Limited.**
- **This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.**
- **Children shall not play with the appliance.**
- **This product should not be used for the supply of water to more than one dwelling (house, apartment, flat).**
- **Cleaning and user maintenance shall not be made by children without supervision.**
- **In order to avoid toppling over the appliance must be placed on a smooth, level surface and the retaining strap must be fitted.**

Please read installation details carefully as they are intended to ensure this product provides long, trouble free service. Failure to install the unit in accordance with the installation instructions will lead to invalidation of the warranty.

CHECKLIST

IMPORTANT: With the appliance removed from its packaging check for any damage prior to installation. If any damage is found contact Stuart Turner Ltd within 24 hours of receipt.

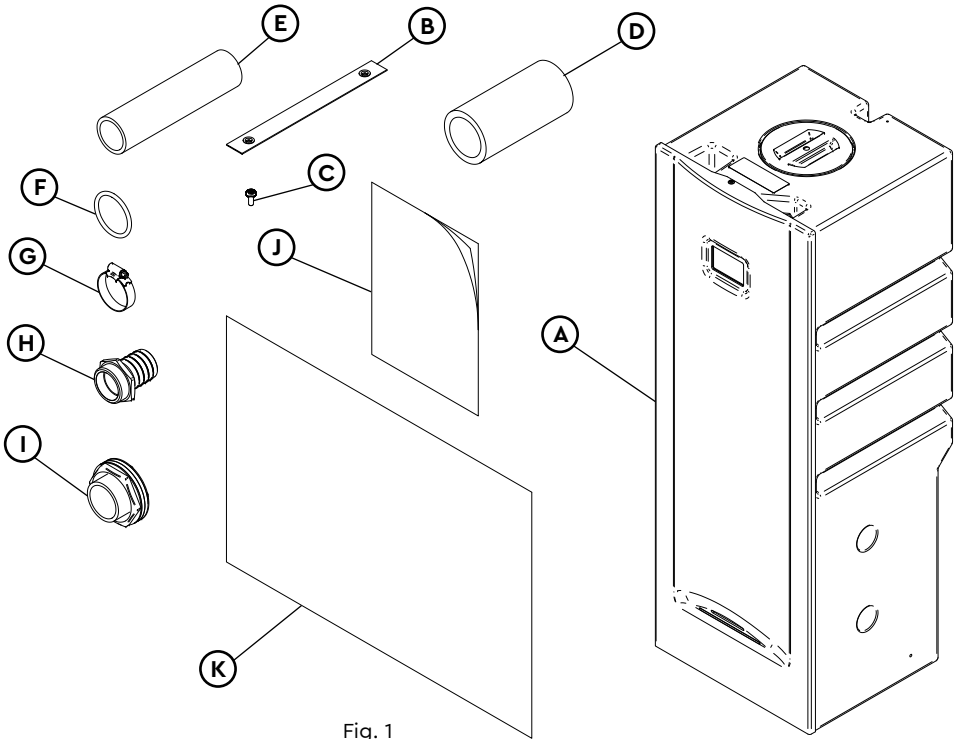


Fig. 1

Item	Description	Qty	Item	Description	Qty
(A)	iBoost +200	1	(G)	Jubilee clip	2
(B)	Retaining strap	1	(H)	Hose connector	2
(C)	M6 screw	1	(I)	Tank connector	2
(D)	Hose cover	1	(J)	Instruction book	1
(E)	Hose	1	(K)	Template	1
(F)	'O'-ring (52 mm ID)	2			

Note: Item B supplied loose – this will require fitting to the pump outlet. Tighten to torque 4/5 Nm.

Your product may vary slightly from the picture above.

1 IMPORTANT FACTS: READ BEFORE COMMENCING INSTALLATION

A Water storage capacity.

- 1.11 The iBoost +200 has a usable water volume of approximately 200 litres; the length of time the iBoost delivers water will be dependent on the usage and refill rates.

B Water temperature

This unit is designed to offer extended water storage and not exceed the following values:

- 1.12 The maximum allowable water temperature is 23 °C (see Section 7.13).
1.13 The minimum allowable water temperature is 4 °C.

C Pipework – General

- 1.14 **Secure pipework:** Ensure pipework to and from pump is independently supported & clipped to prevent forces being transferred to inlet and outlet branches of pump. **Do not** secure pipework to the iBoost, this will cause damage and possible leakage.
- 1.15 **Flux:** Solder joints must be completed and flux residues removed prior to iBoost installation (**flux damage will void any warranty**).
- 1.16 **Pipework design:** Care should be taken in the design of pipework runs to minimize the risk of air locks e.g. use drawn bends rather than 90° bends.



- 1.17 **DO NOT** introduce solder flux to flexible hose, tank, pump or any parts manufactured from plastic.

- 1.18 **DO NOT** allow contact with oil or cellulose based paints, paint thinners or strippers, acid based descalents or aggressive cleaning agents.



- 1.19 **DO NOT** bend the flexible hose beyond 30°. It must be installed as straight as possible.

D Plumbing Installation Regulations

- 1.20 The plumbing installation must comply with the current water and building regulations.
- 1.21 The plumbing installation must be installed by a qualified person.

2 LOCATION – GENERAL



- 2.11 **Access:** The iBoost +200 must be easily accessible.
- 2.12 **Protection:** The iBoost must be located in a dry, frost free area. The iBoost must not be installed in a loft space.
- 2.13 **Water retention:** Site the iBoost in a location where in the unlikely event of a water leak, any spillage is contained or routed to avoid electrics or areas sensitive to water damage.
- 2.14 **Supply inlet pressure:** The water supply inlet pressure must be lower than 7 bar; lower supply inlet pressures will reduce the tank fill rate.
- 2.15 **Ambient temperature:** The iBoost must be sited in a location where the ambient temperature does not exceed 30 °C (see Section 7.11 – Water Quality).
- 2.16 **Preferred iBoost location:** The iBoost +200 **must be** located immediately adjacent to the iBoost unit on a smooth level floor of sufficient strength to support the combined filled weight.



Only one iBoost +200 supplementary tank can be connected to an iBoost 200 master unit.

Ensure there is sufficient room above the iBoost to allow the removal and servicing of the internal float valve if needed, typically 350 mm.

3 KEY FEATURES iBoost +200

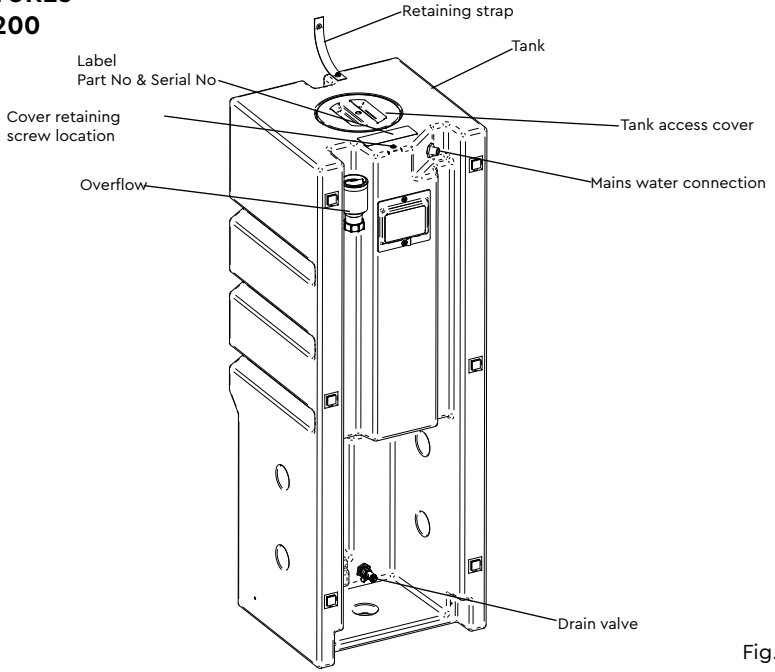


Fig. 2

iBoost +200 CAT 5

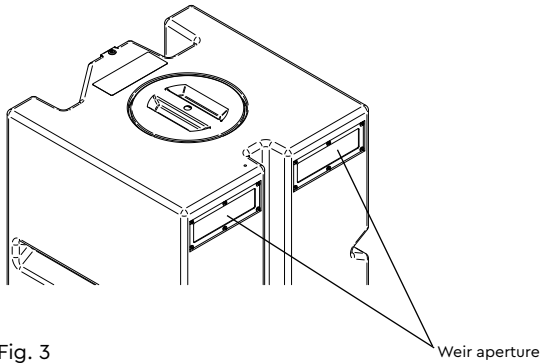


Fig. 3

4 INSTALLATION

- 4.11 **Mains water connection to iBoost:** The iBoost +200 is to be permanently connected to the mains water supply using rigid pipe or suitably sized and rated flexible hose to comply with current building and plumbing regulations.



Note: Mains supply connections should only be made to the iBoost +200 tank to ensure water flow through both it and the master iBoost pump tank. If the iBoost +200 tank is being added to a previously installed iBoost pump tank the mains connection to this unit should be re-routed to supply the iBoost +200 tank only.

The water tank fill valve has a G ½ male threaded fitting; a suitable 90° elbow type fitting must be used. When tightening ensure the fill valve within the tank is not rotated. If the valve is rotated it may not function correctly with the risk of flooding.

Ensure there is a demountable joint in the pipe to allow the removal of the iBoost if needed (see Fig. 15).

- 4.12 **Water outlet pipework:**

The iBoost +200 is supplied with a kit for connecting it to an iBoost 200 unit, side to side.

If a greater distance between the units is required then a longer hose will need to be sourced.

- 4.13 **Connection to overflow/warning pipe:** The overflow fitting is designed to use G 1 ¼ (35 mm OD) (+200), G ¾ (21.5 mm OD) (+200 CAT 5) plastic waste pipe. Ensure there is a demountable joint in the pipe to allow the removal of the iBoost if needed (see Fig. 15). The overflow must be free to vent to atmosphere either via a tundish or a dedicated external pipe.

The overflow for the +200 unit is to be kept separate from the existing iBoost 200 unit's overflow.

- 4.14 The iBoost is intended to be installed as a freestanding unit with its back to a wall.

All the services are connected to the iBoost via a plumbing access window at the back of the unit, the installation is conducted in 3 simple steps.

Prior to installation remove the screw on the top of the unit and pull the corner of the front cover to remove it and retain them in a safe place.

Step 1 Preparation:

- a) If connecting to an already installed iBoost 200 unit, then drain the water out of the tank. It needs to be empty in order to connect the +200 unit to it.

- b) The kit provided is for side connection only, back connection is possible with additional fittings and longer hose (not supplied). The supplied hose provides a maximum gap between the units of approximately 262 mm (from tank to tank). Measure the gap and check there is enough space to fit the secondary unit in place.

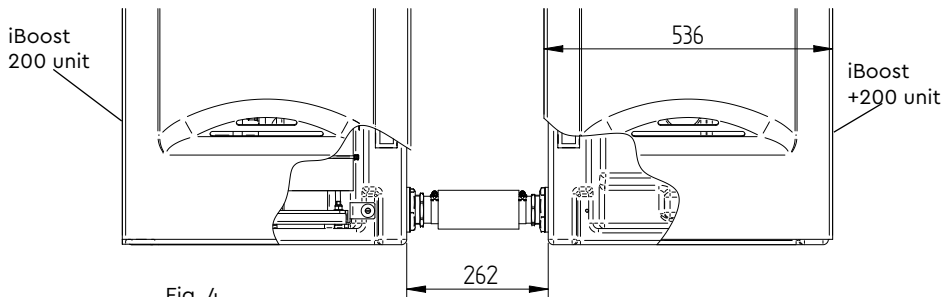


Fig. 4

- c) First step is to decide where your preferred connection should be, either the side or the rear of the tanks then mark the centre point location on both units (iBoost +200 and iBoost 200).
 Note: Later models will have pre-marked centres on the tank.

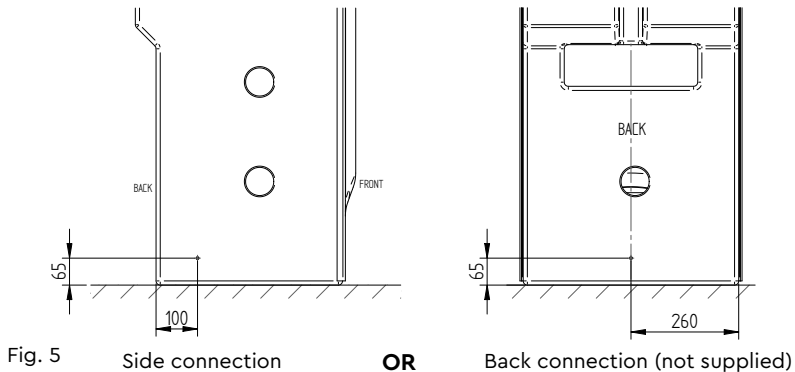


Fig. 5

Step 2 Fitting of the tank connector:

- a) Mark 2 circles approximately on both tanks using the previous location as their centres. One for the hole at 65 mm diameter and the other to add fitting at 89 mm diameter.

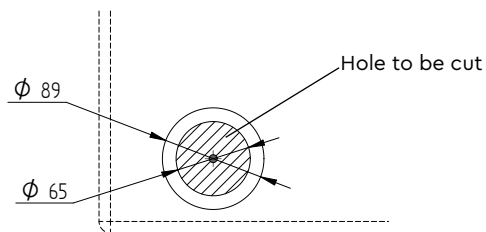


Fig. 6

- b) Cut a hole in both tanks using a 65 mm diameter hole cutter using the centre points marked previously. Take care not to allow debris to fall into the tank and keep cut edge free from burrs and hole as near to size as possible.
- c) Straighten the wire holder and pass through body as shown. Then, whilst holding the wire in one hand, manipulate the flanged end of the body into the hole. This is easily done if one lug is inserted at a time, turning the body from left to right.

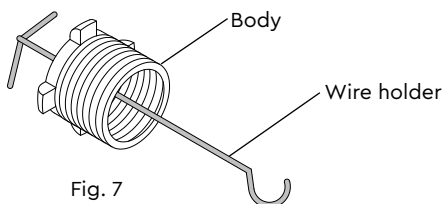


Fig. 7

- d) Whilst taking care not to drop/lose the wire holder inside the tank, thread the split washer onto the wire holder and then with the aid of the split, insert the washer into the hole in a spiral manner. Place washer into the body and against the flange.

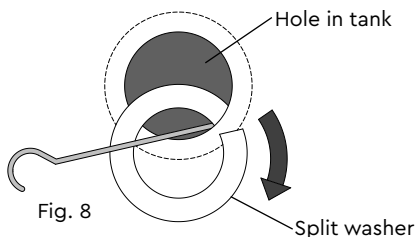


Fig. 8

- e) Thread the rubber washer followed by the 'O'-ring onto the wire holder and push them through the hole and onto the body until they are against the copper washer.

Note: The 'O'-ring is to help position the flange in the hole due to material thickness in order to aid sealing.

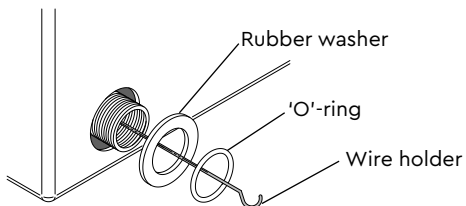


Fig. 9

- f) The whole assembly can now be pulled into position by pulling gently on the wire holder.

Note: Take care to see that the body is in the centre of the hole, using the outer marked circle as a guide.

- g) Holding the fitting firmly in position, add the second rubber washer and brass washer. Screw the nut onto the end of the thread. Apply jointing compound (not supplied) to thread before screwing up.

Note: Before tightening the joint make sure the connection is within the outer guide circle previously marked and then make the joint as tight as possible.

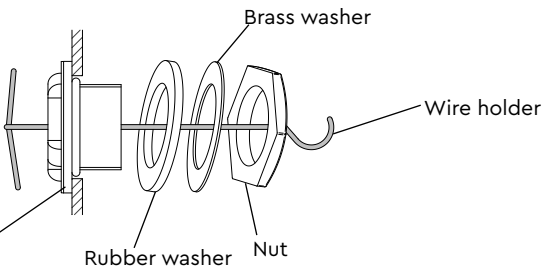


Fig. 10

- h) Remove the wire holder from the tank by pulling it through. **DO NOT** allow for it to fall inside. Repeat steps C - H to fit the second flange in the other tank.

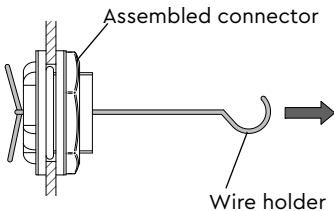


Fig. 11

Step 3 Connecting the tanks:

- a) Apply appropriate sealer such as threadlock or PTFE tape to each hose connector and screw one into each tank connector.

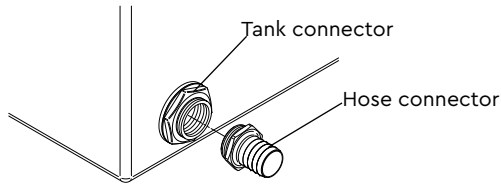


Fig. 12

- b) Position the paper installation template on the wall alongside the existing unit where the iBoost +200 is to be installed, approximately 262 mm away from existing tank. Ensure the 'floor level' of the template is level and resting on the surface the iBoost is to be mounted on (Fig. 13).

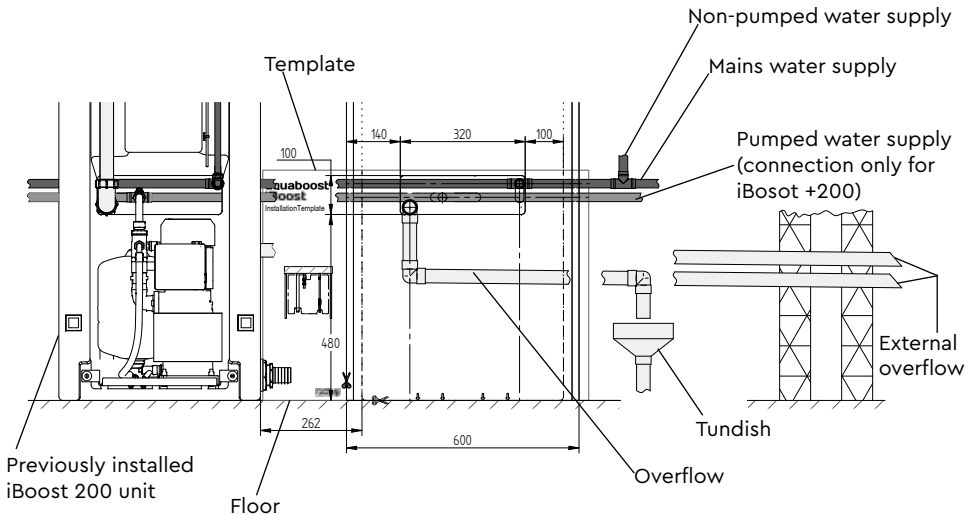
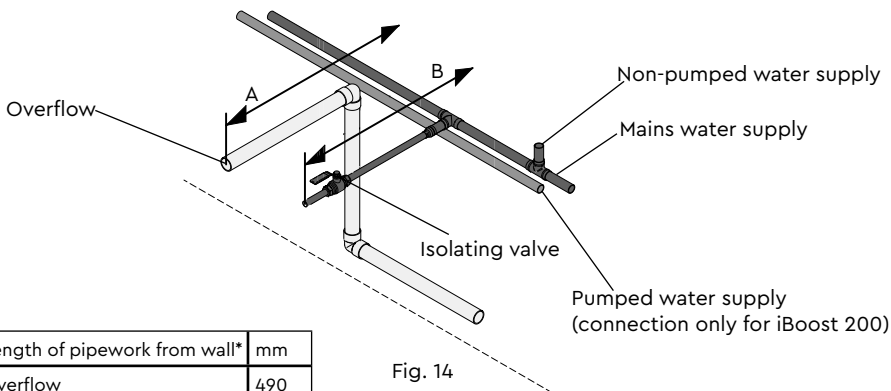


Fig. 13

All dimensions in mm

c) Run the mains water and overflow to the template positions and make the pipe length as detailed in Fig. 14).



	Length of pipework from wall* mm	mm
A	Overflow	490
B	Mains water supply	500

Fig. 14

*Lengths are dependent on fittings used

d) Slide the iBoost +200 in front of the services leaving approximately 20 mm gap between the iBoost and the wall behind. Connect the services using isolation valves and demountable fittings (push-fit or compression) were shown in Fig. 15. The positioning of these fittings allow the iBoost to be removed without cutting pipes or draining the system.

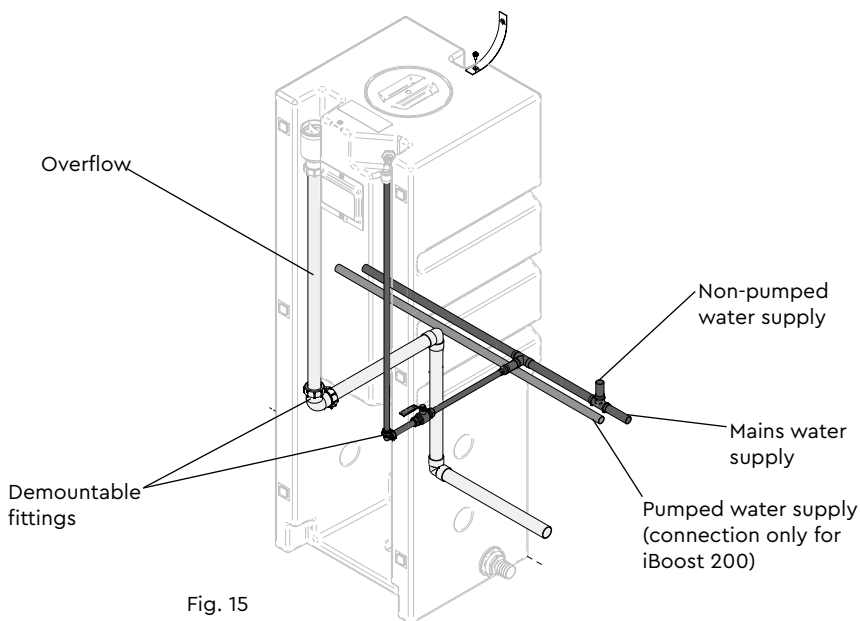
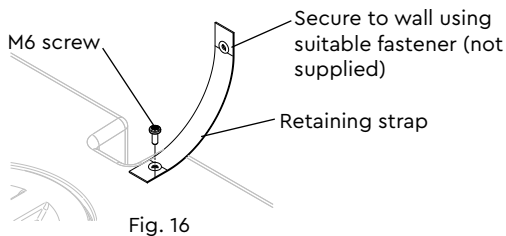
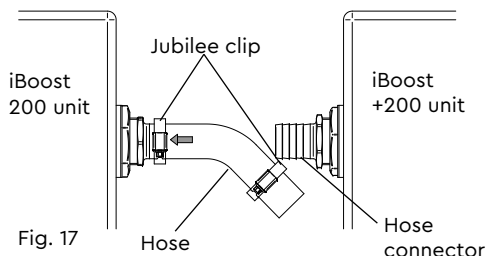


Fig. 15

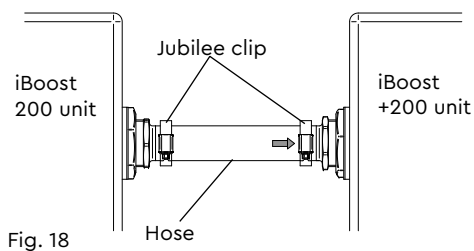
- e) Fix the retaining strap to the top of the iBoost +200 using the M6 screw provided. The free end of the strap must be secured to suitable wall using suitable fastening system.



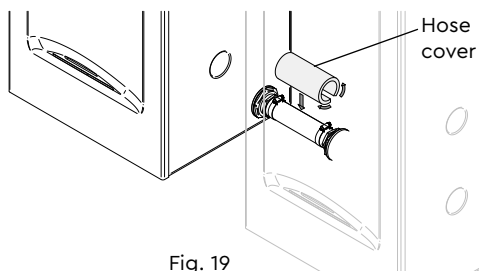
- f) Push one end of the hose onto one of the hose connectors and fix into position using the jubilee clip.



- g) Feed the other jubilee clip onto the hose and manipulate the hose onto the other hose connector. With the jubilee clip into position, tighten to secure hose.



- h) Split the hose cover apart at the join and push over the hose.



4.15 It is recommended that at least one drinking water tap is connected into the un-pumped mains water supply (typically a kitchen sink), so the water supply is maintained in the event of a failure of the pumped supply.

5 COMMISSIONING / STARTING



5.11 **System Flushing**

The pipework system should be flushed out prior to the iBoost being connected to ensure any contaminants/chemical residues and foreign bodies are removed from elsewhere in the system. Fill the system and check for leaks, refer back to the iBoost 200 manual for priming and starting of the pump.

5.12 **Water Supply:** Always ensure that water supply is adequate to meet the demand.

5.13 **For Further Technical Support:** Phone the Stuart Turner TechAssist team on +44 (0) 800 31 969 80. Our staff are trained to help and advise you over the phone.

6 MAINTENANCE

- 6.11 **Water quality:** The iBoost has been manufactured to the highest standard from WRAS approved materials. As with any stored volume of water; in order to ensure that the water remains fit for use the water temperature needs to remain below 20 °C. The quality of stored water will deteriorate with time and temperature. Bacterial growth is dependent on the water temperature, growth rates will be higher when the conditions are warm. If the water remains unused for long periods of time, the tank should be drained and flushed through. The tank should be cleaned on an annual basis to protect against bacterial growth. If the iBoost is installed in a rental property, it must be maintained in line with current Health & Safety regulations.
- 6.12 The tank can be drained by isolating the mains water supply to the fill valve and using the pump to pump the water out of the tank.

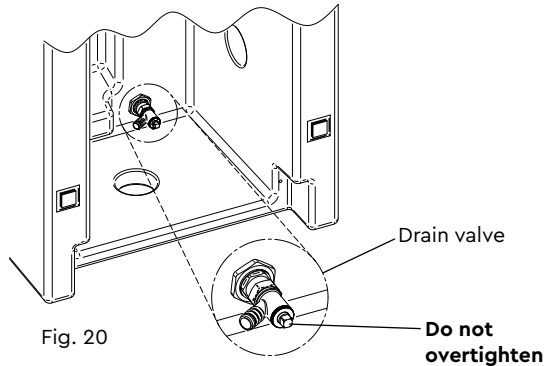


Fig. 20

- 6.13 **Front cover cleaning:** The front cover is made from acrylic capped ABS, it must only be cleaned with warm soapy water or mild detergent. **Do not** use abrasive cleaners. The front cover is supplied with clear protective film in place, this can be removed by lifting at the edge.
- 6.14 **Float fill valve:** The float level is factory set but if in time the water level in the tank is found to be too high, the level can be adjusted by carefully bending the arm of the fill valve down slightly (see Fig. 19). Access the float fill valve by removing the lid of the tank (see Section 3 – Key Features).

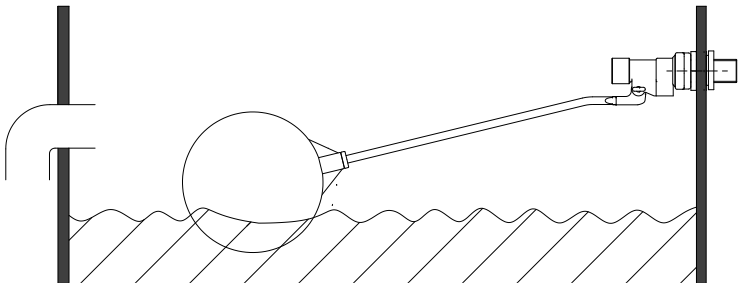


Fig. 21

7 TECHNICAL SPECIFICATION

Pump Model		iBoost +200 46712	iBoost +200 CAT 5 46714
General	Warranty	3 years	
	Approval certification	Kiwa Reg 4 WRAS Approved Product	
Features	Fluid risk compatibility	CAT 3 / CAT 4	CAT 5
	Water tank air gap	Type AF	Type AB
Performance	Maximum inlet pressure -static	7 bar (700 kPa)	
	Maximum outlet pressure - static	15 metres	
	Ambient air temperature	Min 4 °C – Max 30 °C	
Water tank	Nominal water tank size	220 litres	
	Usable water capacity	200 litres	
	Water tank fill rate	20 l/min*	
Connections	Inlet connection	G ½ M	
	Overflow	G 1 ¼ (35 mm OD) compression	G ¾ (21.5 mm OD) compression
Materials	Water tank	Polyethylene	
	Front panel	Acrylic capped ABS	
Physical	Width	536 mm	
	Depth	529 mm	
	Height	1504 mm	
	Weight - including fittings	35 Kg	
	Weight - filled	235 Kg	

Stuart Turner reserve the right to amend the specification without notice.

8 TROUBLE SHOOTING GUIDE

8.11 **Environment Protection:** Your appliance contains valuable materials which can be recovered or recycled.

At the end of the products' useful life, please leave it at an appropriate local civic waste collection point.

PRODUCT WARRANTY TERMS & CONDITIONS

Congratulations on purchasing a Stuart Turner product

We are confident this product will provide many years of trouble free service as all our products are manufactured to the very highest standard.

All **Mainsboost iBoost products** are warranted to be free from defects in materials or workmanship for **up to 3 years*** from the date of purchase.

Within the warranty period we will repair, free of charge, any defects in the product resulting from faults in material or workmanship, repairing or exchanging the whole unit as we may reasonably decide.

* Important Note

This extended promotional warranty is only granted under the following conditions:

5. That the product is registered on the Stuart Turner web site within 12 months of the purchase date.
6. That a valid receipt or other acceptable form of 'proof of purchase' such as a copy of the installers invoice/receipt is also uploaded during this registration process.

Product registration to obtain the warranty extension is not a requirement in the Republic of Ireland.

Please register your product here:

<https://www.stuart-turner.co.uk/warranty>

Failure to register the product within this period, or failure to upload a valid form of proof of purchase will invalidate the promotional extended warranty and the default product warranty of 1 year will be applicable.

Warranty Exclusions

Not covered by this warranty: Damage arising from incorrect installation, improper use, unauthorised repair, normal wear and tear and defects which have a negligible effect on the value or operation of the pump.

This warranty is in addition to your statutory rights as a consumer. If you are in any doubt as to these rights, please contact your local Trading Standards Department.

Warranty Claim Procedure

In the event of a claim please telephone 'TechAssist' on **+44 (0) 800 31 969 80**

or email us at techassist@stuart-turner.co.uk

In the event of a claim within the terms of this warranty policy, your receipt or 'proof of purchase' provided during registration will be reviewed.

You should obtain appropriate insurance cover for any loss or damage which is not covered by Stuart Turner Ltd in this provision.

Please make a note for your own reference:

PRODUCT MODEL	SERIAL NO.	DATE PURCHASED



UK DECLARATION OF CONFORMITY
MAINSBOOST IBOOST RANGE

Supply of Machinery Regulation - 2008

EN ISO 12100:2010, EN 809:1998+A1:2009/ AC:2010

Electrical Equipment Regulation - 2006

EN 60335-1: 2012 +A11: 2014 +A13: 2017 + A1: 2019 +

A14: 2019 +A2: 2019 + A15: 2021

EN 60335-2-41: 2021 + A11: 2021

RoHS Regulation - 2012

RoHS in EEE Regulation 2012

RoHS in EEE Regulation (Amendment) 2021

WEEE Directive-2013

EMC Regulation - 2016

EN IEC 55014-1: 2021

EN IEC 55014-2: 2021

EN IEC 61000-3-2: 2019/A1:2021

EN 61000-3-3: 2013/A2:2021

EMF Regulations - 2012

EN 62233: 2008 + AC: 2008

IT IS HEREBY CERTIFIED THAT THE STUART TURNER PUMPS: **46712, 46714** COMPLIES WITH THE ESSENTIAL REQUIREMENTS OF THE ABOVE STATUTORY REGULATION AND EU DIRECTIVES

STUART TURNER LTD

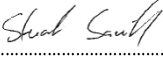
HENLEY-ON-THAMES, OXFORDSHIRE,

RG9 2AD, ENGLAND

WEBSITE: www.stuart-turner.co.uk

RESPONSIBLE PERSON AND MANUFACTURER

SIGNED:


.....

Stuart Savill, Head of Engineering
Stuart Turner Ltd

Stuart Turner is an approved company to BS EN 9001:2015



EU DECLARATION OF CONFORMITY
MAINSBOOST IBOOST RANGE

Machinery Directive - 2006/42/EC

EN ISO 12100:2010, EN 809:1998+a1:2009/AC:2010

Low Voltage Directive - 2014/35/EC

EN 60335-1: 2012 +A11: 2014 +A13: 2017 + A1: 2019 +

A14: 2019 +A2: 2019 + A15: 2021

EN 60335-2-41: 2021 + A11: 2021

RoHS Directive - 2011

RoHS Directive 2011/65/EU

And Amendment 2015/863

WEEE Directive-2012/19/EU

EMC Directive - 2014/30/EU

EN IEC 55014-1: 2021

EN IEC 55014-2: 2021

EN IEC 61000-3-2: 2019/A1:2021

EN 61000-3-3: 2013/A2:2021

EMF Directive - 1999/519/EC

EN 62233: 2008 + AC: 2008

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STUART TURNER LTD

HENLEY-ON-THAMES, OXFORDSHIRE,

RG9 2AD, ENGLAND

WEBSITE: www.stuart-turner.co.uk

RESPONSIBLE PERSON AND MANUFACTURER

EU AUTHORISED REPRESENTATIVE


ARC (AUTHORISED REP COMPLIANCE)

GROUND FLOOR, 71 LOWER BAGGOT STREET

DUBLIN DO2 P593, IRELAND

www.authorisedrepcompliance.co.uk

SIGNED:


.....

Stuart Savill, Head of Engineering
Stuart Turner Ltd

Stuart Turner is an approved company to BS EN 9001:2015



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