Gainsborough

Ambassador

Installation guide & user instructions

Please ensure that this document is handed to the user after installation is completed

Contents

Important information

Introduction

Gainsborough Ambassador systems are available in either exposed or built in valve variants, both complete with adjustable height shower head. The Gainsborough Ambassador thermostatic shower valves provide close temperature stability and fail safe protection on appropriate high and low pressure systems.

Gainsborough Ambassador thermostatic shower systems are supplied with a 3 year guarantee. If a defect that can be attributed to faulty design, materials or workmanship should arise with the product within the first year of purchase; the unit will be repaired or replaced at our discretion free of charge. Furthermore there is an additional 2 year guarantee, whereby any faulty parts will be replaced free of charge. This guarantee is subject to proper use and installation in accordance with the Installation and Operation Instructions detailed in this guide.
Please retain your proof of purchase for inspection in the event of a claim during the guarantee period. In the event of any product problems, please contact the customer helpline on 01959 560010 for assistance.

Safety information

This product must be installed by a competent person in accordance with all relevant current Water Supply (Water Fittings) Regulations 1999.

Gainsborough Ambassador shower valves deviate from EN1111 and EN1287 with respect to inlet connections. Both valves use push fit fittings and are therefore deemed to be a special case.

Gainsborough Ambassador shower systems are designed for domestic use only.

Product specification

The Ambassador thermostatic valve incorporates a thermostatic cartridge part number 022801, identified by a GREY ring on the cartridge face.

Gainsborough thermostatic valves are suitable for all approved UK systems including: gravity stored, gravity pumped, high pressure systems e.g. unvented storage etc. and combination boiler systems. Pressure range 0.1* – 10.0 bar max (static).

* If fitted to a combination boiler system, the appliance MUST have a minimum rating of 24kW (80,000 Btu) and be of the type fitted with a fully modulating gas valve.
If in any doubt regarding the suitability of any product for a given application, please contact the appliance manufacturer before installation commences.
Gainsborough Ambassador shower valves fitted to combination boiler systems must have the flow regulator supplied with the product fitted to the cold water inlet port of the shower valve body assembly.

Connections

The Gainsborough shower range incorporates 'push fit' type connections for use with 15mm British Standard copper and plastic tube. Tube should be cut with a rotary type cutter and lubricated using a silicone based lubricant or petroleum jelly (Vaseline or similar) prior to insertion into the fitting. If a hacksaw is used, the pipe ends must be thoroughly deburred and chamfered prior to insertion to the product. Supply lines must be flushed clear of any debris before installation of the unit. Any debris accumulation in the shower valve and head may result in damage and poor performance.

If plastic pipe is to be used, the tube inserts must not increase the tube diameter or extend the cut off length by more than 2mm.

THESE FITTINGS ARE NOT SUITABLE FOR STAINLESS STEEL TUBE.

Gainsborough Ambassador shower valves are designed for conventional supplies with HOT on the Left and COLD on the Right as viewed from the front. However, Ambassador valves may be adapted for use with reversed supplies. Please refer to the fitting instructions on page 16.

Flushing

Some modern fluxes can be extremely corrosive and, if left in contact, will attack the working parts of this unit. All soldering must be completed and the pipe work thoroughly flushed out in accordance with current Water Supply Regulations prior to connection of the product.

Filters

To ensure optimum ongoing performance, the 'CARTRIDGE' control mechanism is protected by a two part filter system in the internal waterways. Debris accumulation may result in progressively reduced flow through the showerhead and noisy operation.

As this condition is not covered by our standard warranty terms, it is suggested that the cartridge be removed and the filters checked by a competent person at least every 12 months. In the event of any difficulties please contact the customer helpline for assistance.

Isolation valves

Suitable isolation valves must be fitted to both supplies in accordance with current Water Supply Regulations and our terms of warranty. Due to their restrictive characteristics, stopcocks and ball type valves that reduce the pipe bore size must not be used on gravity or pumped installations.

Pressures

Gainsborough Ambassador shower valves are designed to control static pressure up to 10 bar. Where pressures are likely to exceed 10 bar, a pressure reducing valve (PRV) must be fitted into the incoming mains supply. A setting of 3 bar is recommended. It should be noted that daytime pressures approaching 8 bar can rise above the stated maximum overnight.

A suitable PRV is available by calling our customer helpline.

Gainsborough Ambassador valves are not suitable for mixed supply systems e.g. gravity hot and mains cold.

Gravity fed hot and cold supplies

Services must be installed according to good plumbing practice having regard to pipe sizing, long pipe runs and low-head situations.

The cold supply for the valve assembly must be taken directly from the cold storage system. The hot supply may be taken from the vent/draw off pipe of the hot water cylinder at a point below the cylinder connection or alternatively from the underside of the horizontal draw off.

Rising pipe work must not be connected into the horizontal draw-off from the cylinder or to any point in the vent/draw off pipe above the cylinder connection.

CYLINDER TEMPERATURE IN EXCESS OF 65°C MAY RESULT IN POOR SHOWER PERFORMANCE.

To minimise pressure loss we recommend that the hot and cold supplies are run in 22mm as close as reasonably possible to the mixing valve before reducing to 15mm.

Siting

For optimum performance, with gravity fed systems, the distance between the bottom of the storage cistern and the shower head should not be less than 1m (when using an adjustable height shower kit). Please refer to the system layouts on page 8.

Pump installation

UNDER NO CIRCUMSTANCES MUST A PUMP BE FITTED DIRECTLY TO THE WATER MAIN.

A pump must only be used to boost the pressure from tank-fed supplies. A typical layout is shown on page 8.

Stored water capacities

The minimum capacity of the cold storage cistern should not be less than 225 litres (50 gallons). The capacity of the hot cylinder must be capable of meeting the anticipated demand.

Balanced high-pressure system

The Gainsborough Ambassador thermostatic cartridges are suitable to operate with un-vented hot water storage systems up to a maximum pressure of 10 bar. A PRV must be used if either supply exceeds 10 bar. The cold water supply must be drawn from the same mains supply as that to the hot water system (down stream of the cylinder manufacturers pressure limiting valve, where supplied) and the hot supply from the nearest convenient draw off point. Account must be taken of pressure drops that may occur when other draw-off points are used while the shower is in use.

Pipe work can generally be run in 15mm.

A typical layout is shown on page 9.

Combination boiler system

The combination boiler MUST have a minimum rating of 24kW (80,000 Btu) and be of the type fitted with a fully modulating gas valve. This is sufficient to operate one outlet point at a time.

If in any doubt, please contact the appliance manufacturer before installation commences.

The thermostatic cartridge is designed to operate from the mains at a maximum of 10 bar. If the mains pressure exceeds 10 bar a 'drop tight' PRV must be fitted on the supply pipe after the main stopcock.

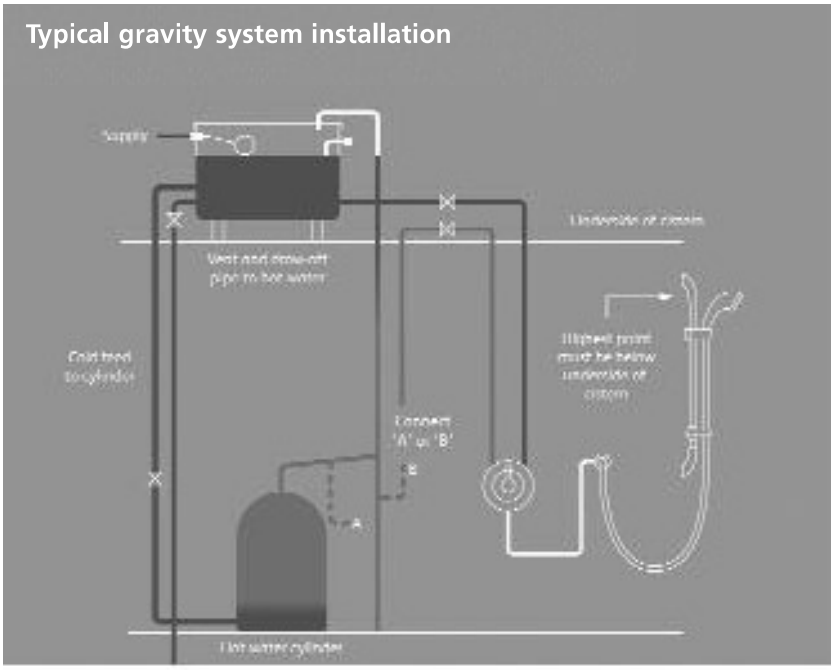
The cold supply can be taken from the nearest convenient mains supply and the hot supply can be taken from the nearest hot water draw-off point. Account must be taken of the pressure drops that will occur when other draw-off points are used while the shower is in use.

Pipe work can generally be run in 15mm.

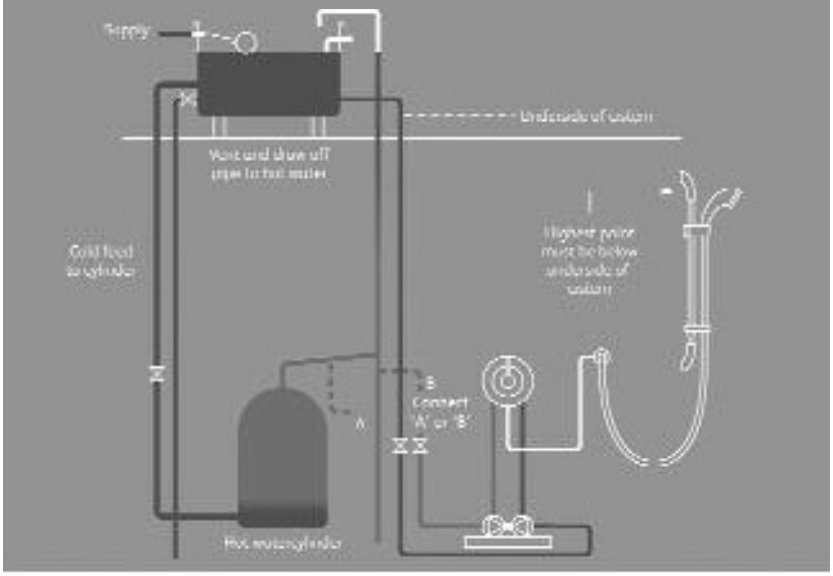
A typical layout is shown on page 9.

Typical system diagrams

Typical gravity system installation

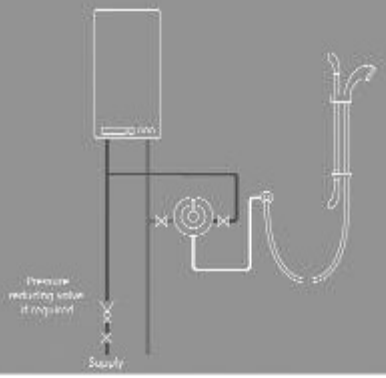


Typical pumped system installation

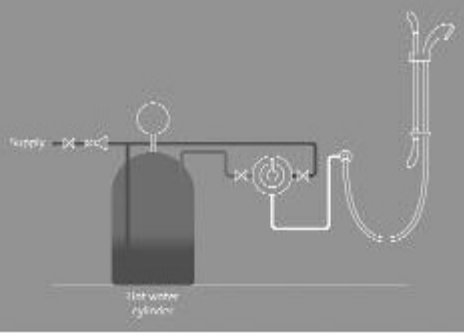


Typical system diagrams continued

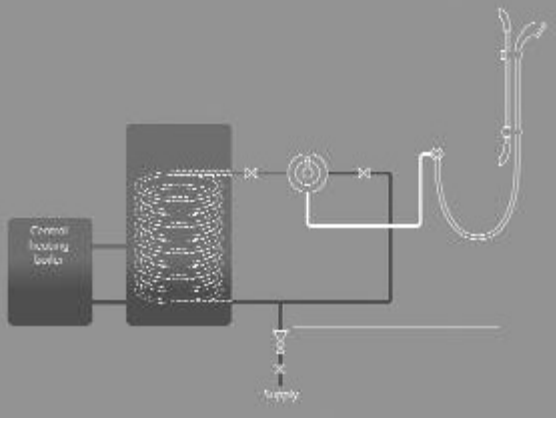
Typical combination boiler system installation



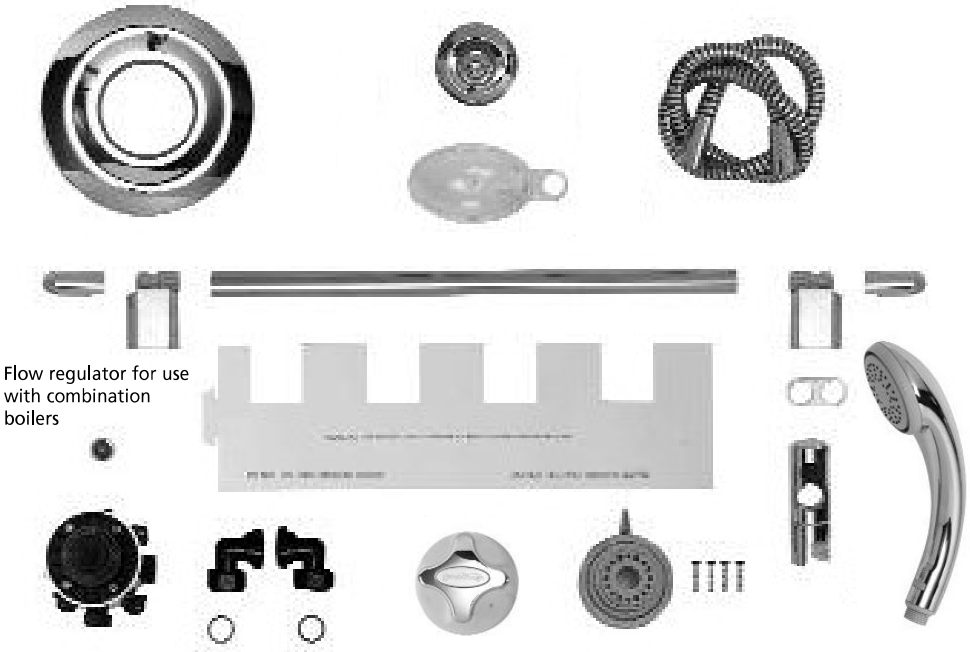
Typical UHW system installation



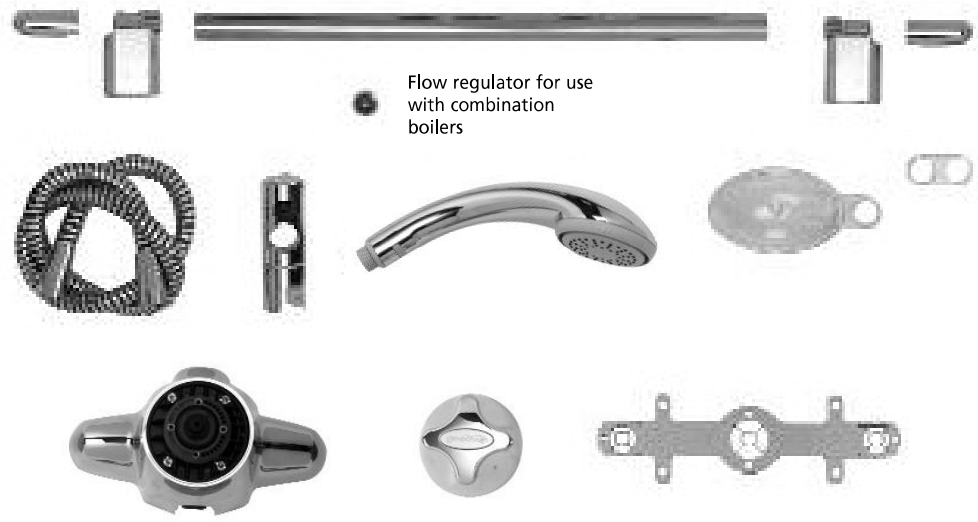
Typical thermal storage unit system installation



Components



Built in valve with adjustable head system



Exposed valve with adjustable head system

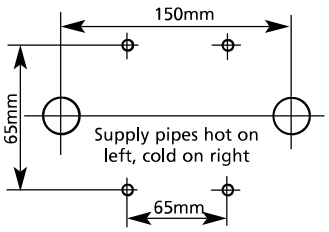
Product installation - Built in Ambassador shower valve

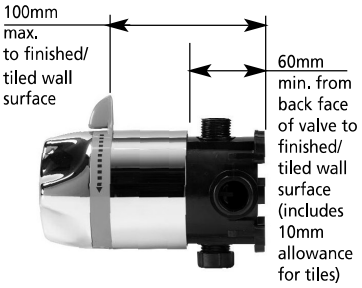
In addition to the guide below it is essential that the written instructions are read and understood and that you have all the necessary components (shown on page 10) before commencing installation. Failure to install the product in accordance with these instructions may adversely affect the warranty terms and conditions. Do not undertake any part of this installation unless you are competent to do so. Prior to starting, ensure that you are familiar with the necessary plumbing regulations required to install the product correctly and safely.

1 If installing the product built into a solid wall, chase out a suitable recess in the wall to receive the valve and pipe work. If installing the valve in a concealed panel mounted situation, in most cases we recommend first installing a suitable sound fixing in the cavity area before fixing the valve. A hole of Ø130mm is required to install the valve and gain access to inlet and outlet connectors.

The valve needs to be mounted to the depth shown at the following centres.

The inlet supply pipe centres are 150mm as shown.





2 Mark the position of the four fixing points through the valve base plate as outlined above.

3 Prepare four fixings suitable to the wall surface which should accept 4 No. 8 non-rusting screws (not provided).

4 Carefully remove the shroud from the valve assembly.

5 Fit the elbows to the valve body hand tight, ensuring that the rubber washers are correctly engaged (these are supplied in the screw pack).

6 If the valve is being installed for use with a combination boiler, the cold water flow regulator must be fitted at this stage by insertion into the cold water port with the central o'ring facing the incoming flow as shown (the flow regulator is supplied in its own pack).

7 The Ambassador built in valve is supplied with an outlet cap on the bottom of the valve allowing for a top outlet connection. The bottom outlet can be used by simply removing the cap and repositioning it on the top outlet. If the cap is removed please ensure that when replaced, the membrane in the cap is in place and that the cap is secured water tight.

8 Using a silicone based lubricant, lubricate the supply pipe ends and whilst supporting the elbows, push home the supply pipes ensuring the correct orientation for the inlet pipes (HOT left and COLD right as shown on the valve body). Push the valve fully home until a definite stop is reached.

9 Secure the valve assembly to the fixing surface using 4 No. 8 non-rusting screws of suitable length (not supplied).

10 Construct a suitable 1/2"BSP – 15mm 'union type' connector outlet assembly (not supplied). The Ambassador shower system will need a 15mm outlet supply to a suitable point for the wall outlet which should emerge from wall leaving a working end of approximately 50mm. The outlet pipe should be temporarily capped to prevent any dirt or debris ingress during the making good process. Please see the installation instructions from page 18 for full shower head fitting instructions.

11 Using a suitable tool tighten the elbow nuts until water tight.

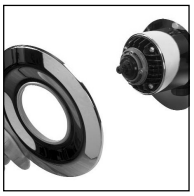
12 The installation may now be checked for leaks. Push the on/off knob onto the front of the valve fully home and turn the knob fully clockwise to ensure the valve is fully turned off.

13 Turn on the supplies and check for any leaks upstream of the valve. Slowly open the control and check for leaks downstream of the valve. If all is sound, turn off the on/off knob fully and turn off the supplies.

14 If the product is built in to a wall of solid construction, place the mortar guard around the valve and fill in the chase. Once the in-filling material has set, carefully remove the cardboard to expose the valve body.

! **THE MORTAR GUARD MUST BE USED.**

15 Using a silicone based lubricant or liquid soap, lubricate the wall plate seal. Apply a thin bead of silicone mastic into the groove on the rear of the wall plate and carefully push the wall plate into position flush with the finished wall surface.



16 With the cartridge set to mid blend and the control lever uppermost, secure the lever to the valve using the four M4 screws, hand tight only.

17 Ensuring the Gainsborough badge in the centre of the knob is horizontal when the valve is in the off position, push the on/off knob onto the valve fully home.

Product installation - Exposed shower valves

! **In addition to the guide below it is essential that the written instructions overleaf are read and understood and that you have all the necessary components (shown on page 10) before commencing installation. Failure to install the product in accordance with these instructions may adversely affect the warranty terms and conditions. Do not undertake any part of this installation unless you are competent to do so. Prior to starting, ensure that you are familiar with the necessary plumbing regulations required to install the product correctly and safely.**

1 In most cases for hollow wall fixing it will be necessary to first install a suitable sound fixing surface within the cavity area before fixing the valve. Mark out the position of the pipe work entry points using the template provided. The 15mm supplies must emerge from the wall at right angles at 150mm pipe centres leaving a working end of approximately 50mm.

The template may also be temporarily secured to the wall to ensure correct orientation of the pipe work during making good if required.

2 After making good, apply a thin bead of mastic to the rear or the gripper assembly and slide the assembly onto the projecting pipes flush to the finished wall surface.

3 Cut the supply pipes to their finished length (14mm – 23mm measured from the finished wall surface) using a rotary type cutter.

4 Remove the shroud assembly from the valve body and set aside.

5 Fit the elbows to the valve body hand tight, ensuring the rubber washers are correctly engaged (these are supplied in the screwpack).

6 If the valve is being installed for use with a gas fired instantaneous (multipoint) water heater or a combination boiler, the cold water flow regulator must be fitted at this stage by insertion into the cold water port with the central o'ring facing the incoming flow as shown (the flow regulator is supplied in its own pack).

7 Using a silicone based lubricant, lubricate the supply pipe ends and whilst supporting the elbows, push home the supply pipes ensuring the correct orientation for the inlet pipes (HOT left and COLD right as shown on the valve body). Push the valve fully home until a definite stop is reached. Mark the position of the 4 fixing points through the base plate and remove the valve assembly.

8 Drill and prepare suitable wall fixings to accept 4 No. 8 non rusting screws (not supplied).

9 Check the lubricated pipe ends are clean and free of dust prior to refitting the valve assembly. Secure to the wall using 4 No. 8 non rusting counter sunk head screws of suitable length.

10 Using a suitable tool tighten the elbow nuts until water tight.

11 Check that the outlet cap on the valve body is positioned at the top of the valve to allow for a hose connection to be made at the bottom of the valve. Remove and reposition if required ensuring the rubber membrane in the cap is in place.

12 The installation may now be checked for leaks. Push the on/off knob onto the front of the valve fully home and turn the knob fully clockwise to ensure the valve is fully turned off. Attach the shower hose to the ½" BSP outlet on the underside of the valve to allow the water to discharge safely to waste.

13 Turn on the supplies and check for any leaks upstream of the valve. Slowly open the control and check for leaks downstream of the valve. If all is sound, turn off the on/off knob fully, turn off the supplies and remove the on/off knob and shower hose.

14 Apply a thin bead of mastic to the rear of the shroud and reposition the shroud over the valve assembly. Push the shroud fully home flush with the finished wall surface.

15 With the cartridge set to mid blend and the control lever uppermost, secure the lever to the valve using the four M4 screws, hand tight only.

16 Ensuring the Gainsborough badge in the centre of the knob is horizontal when the valve is in the off position push the on/off knob onto the valve fully home.

Reversed supplies

Gainsborough Ambassador shower valves are designed for conventional supplies with HOT on the Left and COLD on the Right as viewed from the front. However, the Ambassador valves can be adapted for use with reversed supplies, by adopting the following procedure.

1 Ensure the temperature lever is set to the vertical position.

2 Remove the on/off knob (if fitted). Remove the four temperature control lever fixing screws and detach the lever.

3 Rotate the valve body through 180°. Remove and reposition the outlet cap as required. The valve will now be in the 'upside down' position.

4 Ensuring the temperature lever is in the vertical position, replace the lever and secure using the temperature screws hand tight only.

5 Ensuring the Gainsborough badge in the centre of the knob is horizontal when the valve is in the off position, push the on/off knob onto the valve fully home.

Built in and exposed Ambassador valve commissioning

For additional safety, the Gainsborough Ambassador shower valve incorporates a temperature limiting device enabling you to set minimum and maximum temperature adjustment if required.

We recommend the MAXIMUM outlet temperature is set to 46°C.

Temperature adjustment is limited by inserting the limiting pins provided into the small holes in the face of the cartridge.

The pins are fitted as follows:

1 Ensure the temperature lever is set to the vertical position.

2 If fitted, carefully pull the on/off knob clear.

3 Remove the four temperature control lever fixing screws and detach the lever.

4 Replace two of the screws in the top and bottom threaded holes of the temperature ring.

5 To set the MAXIMUM temperature, insert a limit pin into the mid-position hole in the upper set of holes as illustrated. Fig.1

6 Using the 2 screws in the cartridge face as a lever, turn the temperature control ring clockwise until a stop is reached.

7 Replace the on/off knob and turn the valve on to check the temperature is at the desired maximum temperature. **We recommend a MAXIMUM temperature of 46°C.** If the temperature is too hot, re-position the pin in a lower hole. If too cool, re-position in a higher hole. Turn the valve on to check the temperature is sufficient. Repeat the procedure as necessary.

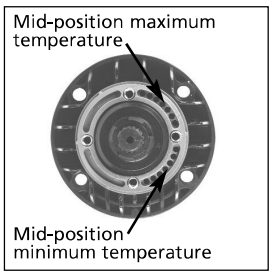


Fig.1

8 If a minimum temperature is required, use the lower set of holes in the cartridge face and repeat the above procedure. If no minimum temperature is required, do not position any pins in the lower set of holes.

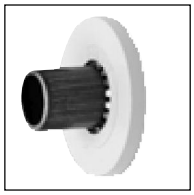
9 With the temperature limit pins in the desired positions, turn the temperature control ring to the vertical position and remove the two fixings screws. Replace the temperature control lever in its original position and fix with the screws hand-tight only.

10 Ensuring the Gainsborough badge in the centre of the knob is horizontal when the valve is in the off position, re-fit the on/off knob onto the valve and push fully home.

Shower head installation - Adjustable height head

A wall outlet assembly is supplied with built in Ambassador systems. However, if installing an exposed Ambassador system, please proceed to step 8.

1 Carefully slide the 15mm gripper ring down the projecting outlet pipe (as instructed in stage 10 of the built in valve installation instructions on page 13), flush to the finished wall surface.



2 Cut the outlet pipe to the finished length (15mm – 22mm measured from the finished wall surface) using a rotary type cutter.

3 Clean and lubricate the pipe using a suitable silicone based lubricant.

4 Carefully slide the wall outlet assembly onto the pipe and ensuring the outlet is in the correct position, mark the four fixing points. Remove the wall outlet assembly.

5 Prepare suitable wall fixings for the mounting surface to accept No. 8 non-rusting screws (not supplied).

6 Apply a thin bead of mastic to the rear of the wall outlet assembly and ensuring the pipe end is clean and free of dust, push onto the outlet pipe and secure to the wall using 4 No. 8 non rusting screws of suitable length.

7 Using a silicone based lubricant or liquid soap, lubricate the wall outlet cover plate seal and carefully push the wall plate into position flush with the finished wall surface.

8 Prepare two fixing points 470mm vertically apart using suitable fixings to accept No. 8 non-rusting screws (not supplied).

9 Ensuring the handset cradle is on the left side of the rail, pass the rail through the handset holder whilst keeping the slider button depressed. If the soapdish is required, slide onto the rail under the handset holder.

10 Current water supply regulations state the handset should not be allowed to pass a point 25mm above the spill over level of the bath or shower tray. If this cannot be achieved, the hose restraint must be fitted. This is fitted to the rail under the soapdish.

11 Fit the rail into the rail end bodies ensuring the indents in the rail are facing the finished wall surface.

12 Secure the rail assembly to the wall using No 8. non-rusting round head screws of suitable length ensuring the rail and rail end bodies remain firmly engaged.

13 Fit the rail end covers into position and push firmly into place.

14 Connect the hose to the wall outlet or valve outlet ensuring the hose washer is correctly fitted to allow the water to discharge safely to waste and run the shower for a few seconds to clear any debris in the outlet assembly.

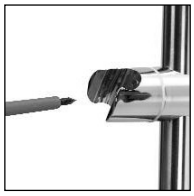
15 Turn off the shower and pass the hose through the hose restraint (if required).

16 Disengage the pivot clip and remove the pivot from the bottom of the handset.

17 Ensure the hose washer is in the correct position and screw the pivot into the hose, using a suitable 10mm hexagonal key to tighten, taking care not to over tighten.

18 Reinsert the pivot into the handset and engage the pivot clip prior to placing the handset into the handset holder.

! **The tension of the handset station of the handset holder is factory set. However, it may be necessary, especially for showers fitted to high pressure systems, to tighten the tension as required. Tighten the screw inside the handset station taking care not to over-tighten.**



User guide - Shower control

Your Gainsborough Ambassador shower system has been designed to provide many years of trouble-free use when installed and operated correctly.

Shower valve operation

1. Turn the front on/off knob FULLY anticlockwise into the open position to turn the shower on. Turn the on/off knob fully clockwise into the closed position after use.

! Please note the on/off control knob is not a flow control knob and should be turned fully on when the shower is in use.

2 When the temperature lever is vertical the valve is in the mid-blend position. The mid-blend temperature is dictated by the temperature of the incoming supplies. To select a comfortable showering temperature, slowly rotate the temperature control lever clockwise to increase the temperature and anti-clockwise to reduce the temperature, using the temperature markings as a guide.

The temperature control movement can be limited or prohibited if required by following the 'Temperature limit stops' procedure on page 17.

Shower valve cleaning and maintenance

Your Gainsborough Ambassador shower valve should be cleaned using only a soft cloth and washing up liquid.

! DO NOT USE ABRASIVE CLEANERS.

This shower valve requires minimum maintenance, even in hard water areas. In order to ensure the internal working parts are unaffected by any water borne deposits, the following procedure should be adopted regardless of whether or not the shower is in regular use.

Once a week with the shower fully running, rotate the temperature control lever from full hot through to full cold 5 or 6 times to activate the internal cleaning mechanisms.

User guide – Shower head

Adjustable head operation

! NEVER ATTEMPT TO MAKE ANY ADJUSTMENT TO THE SHOWER HEAD BY PULLING ON THE SHOWER HOSE.

1. To select the preferred height for the shower head, depress the handset holder button fully to enable the slider to be moved up or down the rail.

2. Angular adjustment is made by carefully but firmly pulling forwards or pushing back the shower head against the knuckle in the holder.

Cleaning

Your Gainsborough shower head system should be cleaned using only a soft cloth and washing up liquid.

! DO NOT USE ABRASIVE CLEANERS.

To reduce the requirement for chemical descaling in hard water areas, the shower heads incorporate rub clean teats. Any scale build up that may occur in any of the holes can be broken down by gently rubbing the flexible tips of the jets during use.

Should chemical descaling of the head become necessary, remove the shower head and fully immerse in a mild proprietary descalent.

IT IS IMPERATIVE THAT DESCALING IS CARRIED OUT STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. SUBSTANCES THAT ARE NOT SUITABLE FOR PLASTICS AND ELECTROPLATED SURFACES MUST NOT BE USED.

Trouble shooting guide

Symptom	Possible cause	Action
Water output is either all hot or all cold, or cold only	Reversed inlet supplies	Check that the supplies correspond with the inlet markings
Water output is not hot enough	The temperature of the hot water cylinder is too low	The cylinder temperature should be at least 15˚c hotter than the blend
	Water flow through the hot water appliance is too fast	Check the flow rate recommendations with the heater manufacturer
		Check product is compatible with water system
Flow rate is poor and water temperature is low	Airlock in the hot water supply	Check that the pipe work is laid out in accordance with correct practices, paying particular attention to potential air-traps
	Combi set up incorrectly	Set up the appliance in accordance with the manufacturers instructions
Water temperature swings regularly between hot and cold	Cold water pressure is too high	If the static water pressure exceeds 10 bar, install a pressure reducing valve (PRV) in accordance with the installation guide
	The flow regulator has not been fitted	Fit the flow regulator
Poor flow rate	Twisted hose	Check for debris and clear as necessary
	Debris in shower head	
	Debris in filters	
	Debris in cold inlet flow regulator	

Gainsborough

The Flyer's Way, Westerham, Kent TN16 1DE
Technical Helpline: 01959 560010 Fax: 01959 560030

Part No:235501/1/07

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