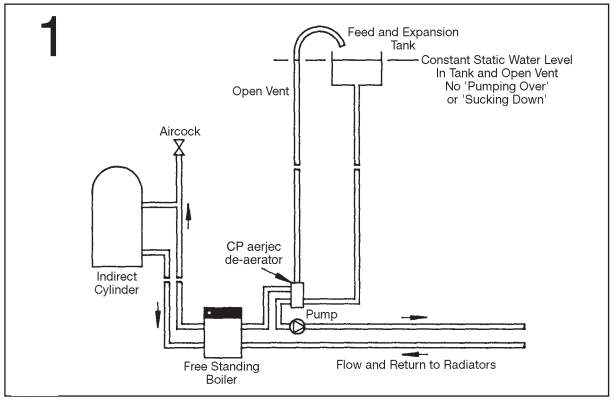
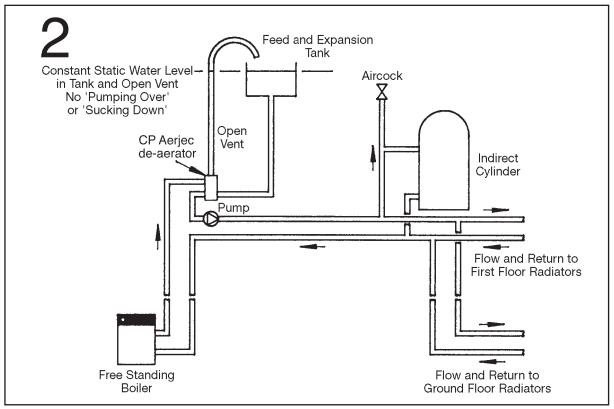
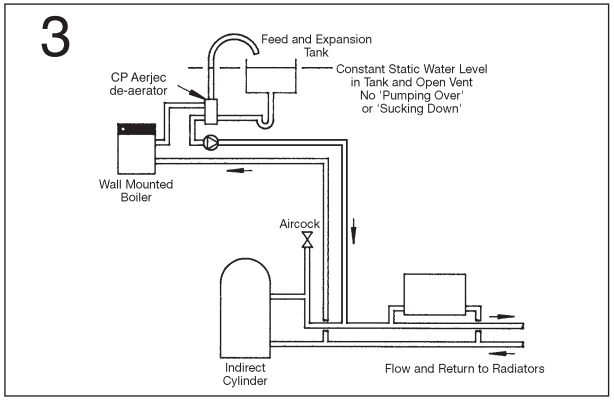


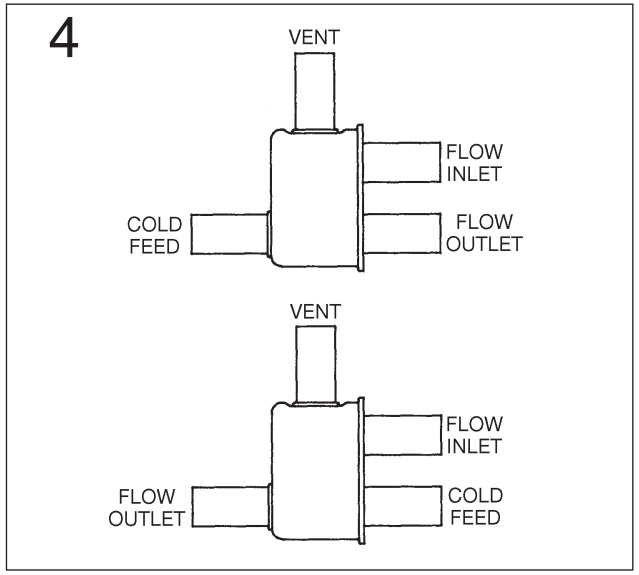
1. The Aerjec de-aerator in a system with a pumped heating circuit and primary gravity circulation to cylinder.



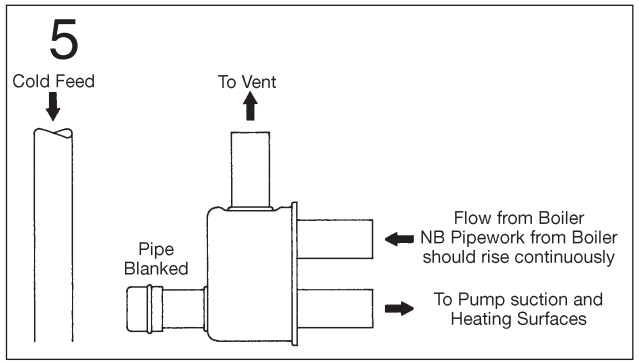
2. The Aerjec de-aerator in a fully pumped system.



3. The Aerjec de-aerator in a fully pumped system where headroom is restricted, such as in a bungalow or flat.



4. The Aerjec de-aerator mounting position.



5. The Aerjec de-aerator as a de-aerator alone.

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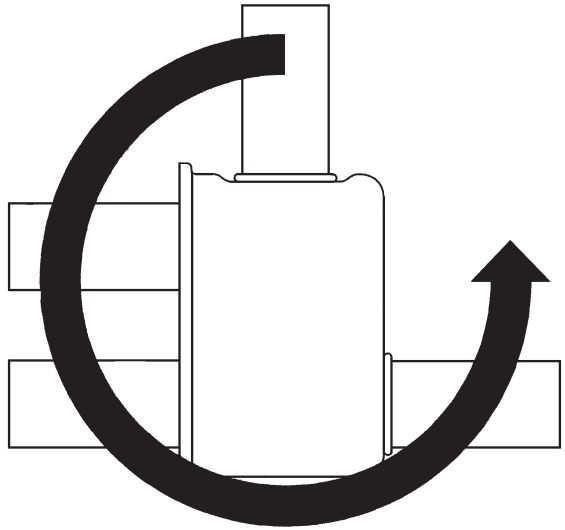

AERJEC

DOMESTIC HEATING SYSTEM DE-AERATOR

Installation Instructions

CE

Circulating Pumps Ltd, Oldmedow Road, Kings Lynn, England
Technical Helplines (01553) 764821

Safety Rules

These instructions are of fundamental importance for the installation, use and maintenance of this product and must therefore be read before commencing work and then carried out accurately by the installer and end user.

Installation and maintenance must be carried out by qualified personnel only. Failure to comply with these safety instructions will cause risk to people and equipment and may invalidate the guarantee.

Identified hazards are highlighted by the following symbols: -

Danger from general causes: ⚠

Instructions, which if ignored could cause damage or impair the function of the Aerjec are highlighted by the word:
ATTENTION

Field of Application

The Aerjec de-aerator combines efficient air removal with a safe common feed and vent. The Aerjec is designed for use in all domestic closed circuit central heating systems having an open vent, a feed and expansion tank, whether fully pumped or pumped heating and gravity primary. It is not suitable for sealed systems.

Installation of the Aerjec de-aerator

1) **ATTENTION** The Aerjec de-aerator should be fitted into the heating flow from the boiler to ensure all parts of the system are under positive pressure see fig. 1, 2 and 3.

2) **ATTENTION** Position the Aerjec with the vent connection pointing vertically upwards. It is important all other connections are made in accordance with fig. 4.
Do not use a combination of diagrams.

3) Pipe work to the Aerjec MUST RISE CONTINUOUSLY FROM THE BOILER PROVIDING A FEED AND VENT UNRESTRICTED BY CLOSING VALVES in accordance with standard practice. When motorised valves are used on both primary and heating circuits a permanently open bypass must be provided.

⚠ Failure to do this may result in an explosion and risk of injury and scalding.

4) To prevent air re-entering the system through the cold feed and expansion tank during normal heating and cooling cycles the cold feed pipe should contain a volume of water equal to at least 3% of the total system volume.

5) The Aerjec is designed for use with solder connections.

⚠ These connections must be correctly made and any pipework adequately supported. Failure to do this may result in a risk of scalding.

6) On commissioning run the system cold and adopt the normal procedures to achieve water circulation. Continue running pumps, ensuring all circuits are open, until air noise ceases.

⚠ In normal operation the Aerjec surface can be hot (up to boiler water temperature 100°C) creating a risk of burning.

The Aerjec as a de-aerator only

1) **ATTENTION** The Aerjec can alternatively be used as a de-aerator. A separate cold feed can be connected. However, care must be taken in positioning its connection point to the circuit to avoid pumping over or air being drawn into the system via the vent pipe or leaks in areas under negative pressure. Failure to do this could negate the advantages of using the Aerjec.

2) **ATTENTION** Position the Aerjec de-aerator with the vent connection pointing vertically upwards. It is important all other connections are made in accordance with fig. 5.

3) Pipe work to the Aerjec MUST RISE CONTINUOUSLY FROM THE BOILER PROVIDING A FEED AND VENT UNRESTRICTED BY CLOSING VALVES in accordance with standard practice. When motorised valves are used on both primary and heating circuits a permanently open bypass must be provided.

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These connections must be correctly made and any pipework adequately supported.

⚠ Failure to do this may result in a risk of scalding.

6) On commissioning run the system cold and adopt the normal procedures to achieve water circulation. Continue running pumps, ensuring all circuits are open, until air noise ceases.

⚠ In normal operation the Aerjec surface can be hot (up to boiler water temperature 100°C) creating a risk of burning.

7) The cold feed and vent should not be combined into one pipe before entering the Aerjec as this may slow or stop water entering the system during the initial fill or subsequent de-aeration.

⚠ Failure to do this may result in a boiler explosion and risk of injury and scalding.

Operating Conditions

Maximum Water Temperature	100°C
Pressure Tested	2 Bar

Troubleshooting

In the unlikely event you have problems with your Aerjec de-aerator here are some of the most likely causes and solutions.

Problem	Likely Cause	Solution
Air continues to re-enter system after initial system commissioning	Flow inlet directly in line with cold feed	Re-connect as fig 4
	Pump not positioned close to Aerjec flow outlet	Reposition pump
	Excess developed pumped head	Switch pump speed down
	Insufficient water in cold feed pipe	Increase cold feed pipe diameter and / or length so that its volume exceeds 3% of the total system volume
Excessive noise.	Excessive circulation.	Switch pump speed down.