How to install your Airgon yourself.

If you are not particularly comfortable with DIY there are a few things you need to do to make sure you complete the installation without struggling.

Firstly, read through the instructions a couple of times and watch the videos. If you're still not sure about DIY - ask a capable family member or friend that you know to give you a hand, that usually means they do it for you ⁽²⁾

Alternatively, if you get cold sweats and panic attacks at the thought of PLUMBING then click on our **find a Plumber** link. Remember to tell the plumber that the job is to install an Airgon into your heating system and describe the type of heating system you have.

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There are three main types of boiler: combi, heat only and system. Heat only boilers (aka conventional or regular) work with a cylinder in the airing cupboard. System boilers are often found in modern homes with an 'unvented' hot water cylinder (but they can work with a vented cylinder also), Combi-boiler, Condensing

So assuming that you're ready to go here's what you do.

Locate the ON/Off power switch and turn off the boiler

Isolate the boiler by turning the isolator valves anti-clockwise, then allow to cool before draining down the boiler, remember to isolate the first in line radiator this will stop the system from draining down. Watch Video You Tube

It is not necessary to drain down the heating system to install Airgon, but if your system water is highly contaminated (black of brown with sediment) it is recommended that you at least drain all the dirty system water out and refill it with clean water, before installation.

► If you have multiple radiators that do not heat up, then you should *consider a flush to remove all the sediment that has formed in the radiators.

AIRGON will still improve the performance of your heating system without flushing but it won't remove the long term magnetite build up.

* Use the <u>Contact a Plumber</u> link and get advice and a quotation.

For general information check out Videos You Tube



Before you start the installation - Check what's in the box.

Prepare the Airgon for installation.



Take the components out of the packaging and check that you have;

- ✓ 1 x Airgon A22.
- 2 x White 22mm Connectors
- 1 x automatic Air vent

Carefully, wrap the 3/8inch male thread of the Air vent in PTFE tape twice and pull to rip it, then smooth it into the thread or you can use a

liquid PTFE, we like Flowmasta but there are others.

► Now introduce the Air vent into the female thread of the Non-Return Valve (NRV)

Carefully turn the Air vent clockwise until it is firmly attached and hand tighten - take Care not to overtighten and use a spanner or grips to hold the NRV whilst rotating the Air vent.



▶ Push each connector on to the spigot until it stops and then twist to lock onto the spigot of the Airgon.

You can install the Airvent now or wait until the Airgon is installed into the pipework, the latter makes it lighter and a little easier to handle.

What equipment do I need?

Ensure that you have the plumbing parts and equipment to complete the installation.

The equipment includes;

- Pipe cutting tool these are specifically for plastic pipe and available online
- Fine Sandpaper/Wire wool used to remove the burr left by cutting pipe
- PTFE tape or liquid PTFE available online for around 20p or £5 for liquid.
- Absorbent Paper cloth, kitchen roll
- Bucket or Tray
- Old Towel

► Decide where the Airgon is going to be located in the pipework, it is beneficial to fit Airgon as close to the boiler as is reasonable but is not imperative.

The diagram above shows the AIRGON fitted in an Airing cupboard that houses the boiler.

You can use the empty Airgon box as a guide to the space required for the installation.

Alternatively draw a diagram of where it is to be fitted and measure how much pipe and what connectors you need. You can order these online or purchase them from any plumbing/building merchants or DIY store. Some are cheaper than others so shop around.



► Remember to check that your pipe size from the boiler is the same as the 22mm fitting that comes with AIRGON. If yours are smaller (15mm) you need to step down using a <u>22mm to 15mm reducer</u>

Airgon can be fitted into the flow (or) the return of the heating pipework.

The flow means from the boiler, the hot water that is going to the radiators (not the taps). The return is coming back to the boiler from the radiators to be reheated.

If you have an airing cupboard this is usually a good location for fitting Airgon as it offers an environment with more space and therefore more fitting options. If it is upstairs even better as Air rises in the pipework.

Ensure that AIRGON goes on the radiator pipework not the Immersion heater.



If your pipework isn't insulated, we recommend buying some 22mm pipe insulation and cover all exposed pipes, this stops unnecessary heat loss, which ultimately you are paying for.

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Polyethylene Foam pipe insulation is the most economic insulation for effective energy saving. It is the ideal solution for the insulation and protection of pipes (heating system pipes, domestic hot and cold water pipes) and other parts of heating and plumbing installations.

Step Before you cut into Pipework

² Put your old towel down under the pipework where you are working and place the bucket /tray on it to catch any water left in the pipes. If you drain down the boiler this could be around 18 litres of water, the average bucket is10 litres!

► Isolate the flow and return to the boiler and remember close off the first radiator in the system or all the radiators will drain down.

► Drain down the boiler **or** if this cannot be achieved then you can **freeze the pipes to be cut using a freezing kit.** Please seek advice from a Plumbers merchant as to which kit to use. Watch Video. You Tube

▶ Ensure you close the feed from the first radiator or the entire system will drain down.

Make your first cut across the pipe. Keep it as straight as possible. A good tip is to place some tape around where you intend to cut and use the tape as a guide whilst cutting which can then be removed.

► Cut the Primary Flow Pipe at the appropriate point for the installation. Use a bucket or container to catch the water drained from the boiler, have more than one container available as some boilers can carry up to 18-20 litres of water.

de-burr the ends of the cut pipe and if is joining to copper, clean the cut pipework with wire wool/sandpaper to ensure all the rough edges (burs) are removed and the ends are clean. Drain any water left in the pipes or boiler into a bucket.

Complete all the cuts and then assemble the pipework to make sure everything fits. A tip is to locate the first piece of new pipe into the connector and draw a line on the pipe, so that you know how much goes into the connector.

Position the Airgon and connectors into the pipes for the inlet and outlet spigots point A and B on the Instruction diagram using the JG Speed fit connectors making sure the connectors are OPEN before firmly pushing them onto the Airgon spigots and pipework to the boiler until they are fully located then CLOSE the connectors by twisting them clockwise shut. Watch Video. You Tube

Check each connector is located properly and closed and located - the Airgon is now secure.



When the installation is complete, check your work and wipe down clean up the surrounding work area.

▶ Open the isolation valves by turning then clockwise and allow the system to refill.

Allow the boiler to fully refill/recharge before turning the power to the boiler back on.

► If you have a pressurised system you will have to refill to a pressure of 1 Bar using the filling loop, then remove the filling loop. See YouTube video YouTube

▶ Now bleed the radiators and check the pressure is at 1 Bar or recharge it again.

► Loosen the threaded top valve on the Air vent to allow it to continuously vent, listen out for the air leaving the Vent to ensure it's working.

As the system water flows through the Airgon you will hear Air being removed from the system water via the Air vent, it sounds like hissing in short bursts.

► Check that the boiler is heating up and reaches its operating temperature, check that the radiators are heating up, you can use a thermostat or gauge it with your hand.

Step 6 Airgon starts to work straight away and after around 48 hours or sooner you will see improvement in heating and a reduction in the amount noise from pipes.

► Check temperature of the boiler and rads as you may need to turn down the thermostat as removing air means more heat is released into the space to be heated.

► As the Air is removed from the system water there may be a drop in pressure. This is easily resolved by topping up the system water. See the video in Step 5 or this one. You Tube

► Check the air vent once a week in the first month in case it gets blocked with debris from the system water.

If brown liquid and sediment is showing, then remove it and clean it by unscrewing it and washing it through in warm soapy water then rinse, dry and reinstate on the Airgon. The Airgon is located into a Non-return valve for this reason.

Once your Airgon is installed and operational **REMEMBER to register it on our website using the 8-digit serial number on the device.** This registers your product for the benefit of a Lifetime product guarantee and 25 years' warranty.

If you want to calculate how much you are saving every month go to the link on our website. Measuring Savings.

^{*} PTFE tape polytetrafluoroethylene film made into tape. It makes an excellent lubricant and can be used to tighten the seal of a pipe on metal to metal or plastic screw thread joints. Available from plumbers/Building merchants and DIT stores.