



## Information on understanding your Central Heating System

# Contents

Understanding your Central Heating System	2
• Combi System	
• Traditional System	
How your heating system works	3/4
• Programmer or Timer	
• Room Thermostat	
• Thermostatic Radiator Valves (TRV's)	
Troubleshooting guide for your heating system	5/6
• If you have no heating or hot water	
• If you have hot water but the radiators are not heating up to the temperature you want	
• If you have heating but the house doesn't seem to stay warm enough	
Energy Saving Tips	7/8
• Heating and Water Tips	
• Cooking Tips	
• Electrical Appliance Tips	
• Laundry Tips	

# Understanding your Central Heating System

## Combi System

A 'Combi' boiler is short for combination boiler. This type of appliance provides a highly efficient hot water supply on demand and central heating combined in a single unit. Water for the hot taps is provided on demand from within the boiler, unlike a traditional system which typically requires a tank or cylinder to store hot water.

The hot water temperature can normally be adjusted on the boiler or by adjusting the amount of flow through the taps. The central heating is normally controlled by means of a timer/programmer and room thermostat on the wall and/or thermostatic radiator valves.

## Traditional System

A traditional system typically contains a boiler that provides central heating in the same way as a 'combi' boiler. Hot water for the taps is heated by the boiler, then transferred and stored in a tank or cylinder which is normally fitted in an airing cupboard or possibly in the roof space.

The temperature of the hot water is controlled by the thermostat on the boiler and in most installations by a separate thermostat connected to the tank or cylinder.



# How your heating system works

## Programmer or Timer

Timers or programmers allow your home to be heated according to different lifestyles. Setting a programmer avoids the heating being left on all day when nobody is at home. Programmers can be set so that the system will come on before you wake up and before you get home in the evening, providing heating and hot water when it is needed. It is recommended to allow at least half an hour for the heating and hot water to be at the desired temperature. If you have a combination boiler, you will have hot water on demand so won't need to set a time for hot water.

There is also usually a 'boost', 'advance' or 'override' button which allows the pre-programmed settings to temporarily override the programme until the next set time.

## Room Thermostat

A room thermostat senses the air temperature and switches the heating system on and off based on the temperature setting that you need. For, if the thermostat is set to 21°C, when the air reaches the temperature the heating switches off. When the air temperature falls below 21°C the heating switches back on. Most households set the thermostat between 18 and 21°C. Once you have found a comfortable setting, you won't need to adjust the room thermostat again, unless the weather turns particularly cold.

Avoid turning the thermostat to maximum when the weather is very cold, as the boiler will stay on constantly in an attempt to get the house to an unnecessarily high temperature, which will waste energy and money.

Please note that the thermostat depends on the programmer, so the thermostat will only turn the heating on and off during the time that the heating is on or timed to come on.

## Thermostatic Radiator Valves (TRV's)

TRV's are numbered dials attached to each radiator that allow you to control the heat each radiator gives out. The TRV senses the air temperature around it and stops the flow of hot water to the radiator once the air temperature reaches the desired setting on the TRV.

TRV's are particularly useful if you want to have different temperatures in different rooms. You can set them at a level that gives you the room temperature you want and then leave them to do their job. For example, you might want a higher temperature in the living room and bathroom than in the bedrooms and hall. If you turn a TRV to a lower setting, the room will be controlled at a lower temperature which will save energy. TRV's need a free flow to air to sense the temperature, so you must avoid covering them with curtains or blocking them with furniture.



## Troubleshooting guide for your heating system

### If you have no heating or hot water

#### Check the programmer

- Are you in a programmed time for the heating or hot water to come on?
- Check that no one has pressed the 'advance' button and switched the heating system off until the next programmed time.

#### Check the thermostat

- Has the thermostat been turned down to a low setting or to the off position?
- Has there been a power cut or is the electricity supply to the heating system switched off?

#### Check the Boiler

- Has there been a drop in water pressure? Check the pressure gauge on the boiler. The pressure should normally be between 1 and 1.5 bar. If the pressure has dropped below 1 bar then you may need to contact Greenfields for an engineer to visit.

#### Check your gas meter

- If you have a pre-payment meter, check that your meter is topped up with credit.

### If you have hot water but the radiators are not heating up to the temperature you want

#### Have you set your programmer to the 'hot water only' setting?

- Switch the programmer to 'hot water and heating' and wait for the radiators to heat up.

#### Have you turned the thermostatic radiator valves down to a low or off position?

- Turn the TRV's up to the temperature you want and wait for the radiators to heat up.

## If you have heating but the house doesn't seem to stay warm enough

### Is your room thermostat set to a high enough temperature?

- Try turning the room thermostat up until the house is at a temperature you want. Most households set the thermostat to between 19 and 21°C.

If you have checked all of the above and the boiler is still not working, you may need an engineer to visit. **Please contact Greenfields**, who will be able to make the necessary arrangement.



## Energy Saving Tips

### Heating and Water Tips

- Only use central heating when you need it. If you can set your heating to come on 30 minutes before getting up or arriving home, and to go off 30 minutes before going to bed or going out, you will avoid heating an empty house which will just cost you money.
- If you can turn your heating down by 1°C, this can cut your energy usage by 10%. Also, if you have thermostatic radiator valves on your radiators you can turn radiators down or off in rooms that you are not using.
- Keep your radiators clear. For example, do not push large sofa in front of the radiator as it will absorb a lot of the heat.
- Consider putting radiator panels behind radiators fixed to outside walls to help reflect the heat back into the room.
- Use thermal curtains or heavy curtains during the winter and close them at dusk. This will help to stop heat escaping through the windows.
- Try to block all draughts around the house to help stop the heat escaping from warm rooms to cold ones. You can use letter-box covers and keyhole covers to help reduce draughts.
- Try to limit the time you spend in the shower or invest in a shower timer to keep an eye on how much hot water you're using.

### Cooking Tips

- You can save on gas by keeping gas flames turned down so they don't run up the sides of the pan.
- Only fill the kettle with as much water as you actually need.
- When boiling vegetables use just enough water to keep them covered.
- Always use the right size of pan for your cooking ring and put a lid on it. This will help save energy as food will cook quicker.
- Try to avoid putting hot food in a fridge or a freezer. Let it cool first.

## Electrical Appliance Tips

- Switch appliances off instead of leaving them on standby. Leaving TV's and other devices on standby wastes valuable energy. Using a standby saver socket strip means the power is turned off when the standby button is pressed on the remote control. Cutting out standby in your home can save you around £30 a year.
- Keep your fridge at a temperature of around 3°C to 5°C.
- Try to load and unload your fridge and freezer as quickly as possible and don't leave the door open for any longer than you need to.
- You will save electricity if you defrost your fridge or freezer when needed to prevent a build-up of ice around the door and seal.
- Position fridges and freezers away from cookers and direct sunlight.
- Where possible, try to use energy-saving light bulbs. They can last up to 10 times longer than ordinary bulbs and tend to use a fraction of the electricity when compared with traditional filament bulbs, and, of course, remember to turn off the lights when you don't need them.

## Laundry Tips

- Always use a full load in a washing machine. Two half loads use more energy than one full load.
- Use an economy programme on your washing machine whenever possible. Try washing clothes at cooler temperatures, like 30°C, if your machine has that option.
- If the weather is fine, dry your laundry outside instead of using the tumble dryer.
- As tempting as it is, don't dry clothes on the radiators. It makes your boiler work harder than it needs to. Hang clothes on drying racks instead.
- Keep the filters in your tumble dryer clean.
- If you're going to iron clothes after drying them, don't leave it until the clothes are bone dry. If the clothes are still slightly damp, they will iron more easily, saving you time and money.

## Important Phone Numbers

If you can smell gas then phone:  
**0800 111 999**