GENUS

benchmark™

The code of practice for the installation, commissioning & servicing of central heating systems

Users Manual

ARISTON

Dear Customer,

Thank you for choosing an ARISTON boiler.
We guarantee that your boiler is a reliable and technically sound product.
This User's Manual provides detailed instructions and recommendations for proper installation, use and maintenance.
Remember to keep this manual in a safe place for future reference i.e. by the gas meter.
Your local MTS Servicing Centre is at your complete disposal for all requirements.

MTS (GB) Limited

The guarantee on this appliance is valid for 12 months from the first day of installation.

Repairs to the electric, hydraulic or gas circuits may be carried out only by your local authorised MTS Servicing Centre.

Every attempt has been made to avoid errors of any kind in this User's Manual, the Management invites customers to inform of any inaccuracies which they may find.
This will help to improve our service

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IMPORTANT

Please read this manual carefully.

For additional information, please consult the "Installation and Servicing Instructions."

Please ensure manuals provided are kept with the appliance so that they can be used by the end-user, installer or our authorised engineer.

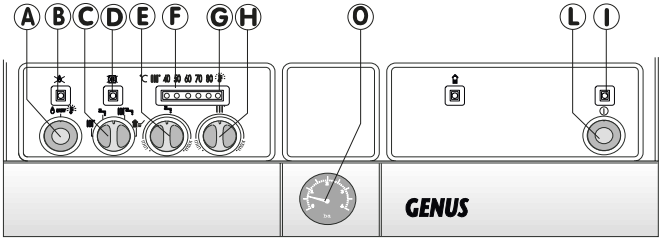
MTS (GB) Limited support the benchmark initiative. Your installer will give you, and show you how to use, a logbook which will give you important information about your boiler, and heating system. Please have this log-book to hand whenever you contact a service engineer or us.
All CORGI Registered Installers carry a CORGI ID card, and have a registration number. Both should be recorded in your boiler Logbook. You can check your installer is CORGI registered by calling CORGI direct on :- (01256) 372300.

TECHNICAL INFORMATION

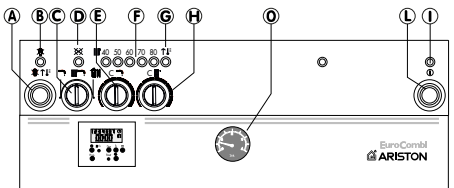
		Genus 27 RFFI System	Genus 30 MFFI
GENERAL DATA			
Heating input max	*kW(Btu/h)*	29.8 (101707)	33.0 (112629)
Heating input min	*kW(Btu/h)*	12.0 (40956)	12.0 (40956)
Heating output max	*kW(Btu/h)*	27.1 (92492)	30.3 (103414)
Heating output min	*kW(Btu/h)*	10.1 (34471)	10.2 (34813)
Efficiency at Maximum Thermal Capacity (see installation instructions)	*%*	91.6	92.0
Efficiency at Reduced Thermal Capacity (see installation instructions)	*%*	88.3	88.6
CENTRAL HEATING			
Operating Temperature max	*°C*	82	82
Operating Temperature min	*°C*	42	42
Maximum Heating Pressure	*bar*	3	3
Minimum Heating Pressure	*bar*	1	1
Built-in expansion vessel - Total capacity	*litres*	7	7
DOMESTIC HOT WATER*			
Maximum Temperature of Water for Domestic Use	*°C*	56	56
Minimum Temperature of Water for Domestic Use	*°C*	36	36
Working pressure max	*bar*	6	6
Working pressure min	*bar*	0.2	0.2
Flow rate ΔT 25°C	*l/min*	15.6	17.3
Flow rate ΔT 35°C	*l/min*	11.2	12.4
Minimum flow rate	*l/min*	2.6	2.6
ELECTRICAL DATA			
Electrical Supply/Frequency	*V/Hz*	230/50	230/50
Wattage Rating	*W*	150	150
Protection of Electrical System	*IP*	X 4 D	X 4 D
CATEGORY			
Nominal Pressure/Methane Gas (G20)	*mbar*	20	20
Nominal Pressure/Liquid Gas (G30-G31)	*mbar*	30-37	30-37

*** Combination versions only**

Genus 27 RFFI SYSTEM



Genus 30 MFFI



LEGEND

A) Ignition Lockout Reset Button/Safety (Overheat)Thermostat Reset
B) Ignition Lockout L.E.D.
C) Selector Knob for Summer/Winter/Flue Analysis Modes
D) Low System Water Level L.E.D.
E) Temperature Adjustment Knob for Domestic Hot Water
F) Heating System Thermometer
G) Safety (Overheat)Thermostat Intervention L.E.D.
H) Adjustment Knob for Heating Temperature
I) On/Off L.E.D.
L) On/Off Switch
O) Heating System Pressure Gauge

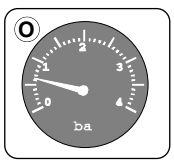
Installation, start-up, adjustments and maintenance must be performed by a competent person only in accordance with the Gas Safety (Installation & Use) Regulations (1984) and the instructions provided. Improper installation may cause damage or injury to individuals, animals and personal property, for which the manufacturer will not be held liable.

To ensure efficient and safe operation it is recommended that the boiler is serviced annually by a competent person.

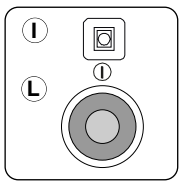
If it is known or suspected that a fault exits on the appliance, it must not be used until fault has been corrected by a competent person

HELPFUL SUGGESTIONS

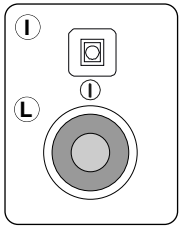
To get the most out of your boiler, we have provided you with some useful advice on the proper use and maintenance:



- Periodically check the system pressure using the pressure guage **"O",** make sure that the pressure is between 1.0 and 1.5 bar (the blue part on the gauge) when the system is off and cool. The warning L.E.D. **"D"** will indicate if the pressure is below the minimum recommended value. Consult your installer for checking and refilling the system.
- The outer panels of the unit's case must only be cleaned with a damp cloth. Do not use abrasive cleaners. The Control panel can be wiped with either a damp or dry cloth. Spray polishes must not be used on the control panel surface or knobs. Care must be taken in preventing any liquid entering the appliance.
- If the water is exceptionally hard, install a water softener so that the efficiency of the unit remains the same over time, as this will consume less gas.
- To improve comfort and take full advantage of the heat produced by the boiler, it is recommended that an external thermostat be installed.
- If the boiler is not going to be used for an extended period of time, turn off the supply of electricity to the unit by pressing the On/Off switch **"L"**.
  The green L.E.D. **"I"** will turn off. Then turn off the supply of gas to the unit itself.
- It is good practice to clean and service the appliance and central heating system every year.
  Call an Authorised Service Centre.



START-UP PROCEDURE LIGHTING



(FOR ALL MODELS)

Before starting the unit, check the following:

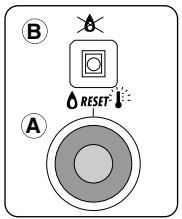
- The water pressure on the pressure gauge **"O"**;
- That the gas cock and the inlet for domestic water are open.

These models are equipped with electronic ignition which utilises contact ionisation.

To make the boiler operational, simply press the On/Off switch **"L"**.

The green L.E.D. **"I"** will then turn on.

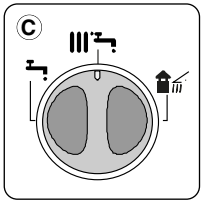
At this point the boiler is ready for use: a centralised electronic control unit will automatically light the main burner when needed. If the burner does not light within the pre-set safety time limit, the red **"B"** L.E.D. will light up. To reset the ignition system, the reset button **"A"** must be pressed. Should the system fail to light a second time, check to make sure that the gas cock is open. If the problem persists, contact one of our Authorised Service Centres for assistance.



WINTER AND SUMMER OPERATING MODES

(FOR ALL MODELS)

The boiler is fitted with a selector knob **"C"** which allows you to switch between winter < > and summer < > operating modes and vice versa. When the knob is set to < >, the boiler can serve the dual purpose of providing heat and/or hot water for domestic use.

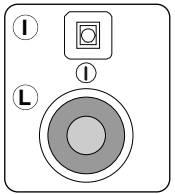


The supply of hot water for domestic use always takes precedence over heating. When the knob is set to < >, the boiler cuts out the heating system and only provides hot water for domestic use (when needed).

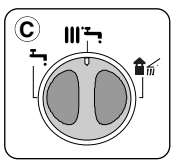
TURNING ON THE BOILER

Installation without a room thermostat :

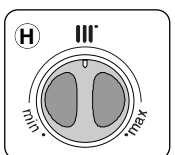
- Turn on the power supply to the boiler by pressing the On/Off switch **"L"**; the green L.E.D. **"I"** will then turn on;



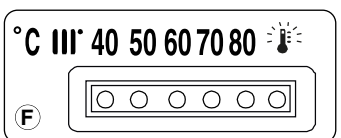
- Turn the **"C"** selector knob to < III˙ ⌐ >;



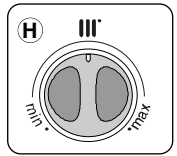
- Regulate the temperature of the water in the boiler by turning the **"H"** knob. The temperature can vary between 42°C and about 82°C;



- Check the boiler temperature on the thermometer with the yellow L.E.D.s **"F"**. With this type of installation, the ambient temperature does not influence the operation of the boiler and the circulation pump always remains in operation.



Installation with a room thermostat:

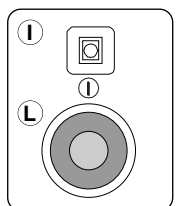


- Turn the **"C"** selector knob to < III˙ ⌐ >;
- Turn on the power supply to the boiler by pressing the On/Off switch **"L"**; the green L.E.D. will then turn on;
- Turn the thermostat knob **"H"** to the highest temperature setting.
- With this type of installation, the boiler is controlled by a room thermostat. Therefore, it runs until the ambient temperature has reached the temperature setting on the thermostat. At that point, the main burner will turn off and the circulation pump will stop.

TURNING OFF THE BOILER

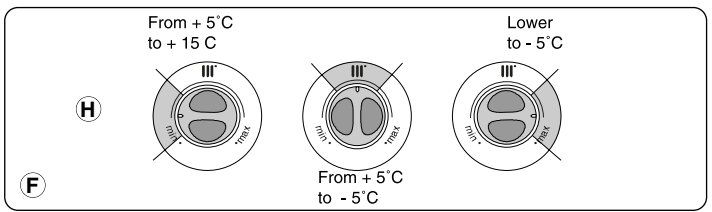
Installation without a room thermostat:

To turn off the heating, turn the **"C"** selector knob to < ⌐ >. The boiler will still provide hot water for domestic use.

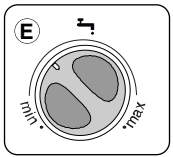


ADJUSTING THE HEATING TEMPERATURE

To economise on consumption while achieving the highest level of comfort, the temperature adjustment knob is designed with three different heating zones based on the temperature outside the home.
Rotate the knob **"H"** as shown below.

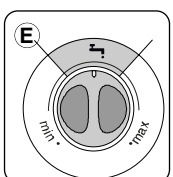


PRODUCTION OF HOT WATER FOR DOMESTIC USE



(FOR ALL MODELS)
- Turn on the power to the boiler by pressing the On/Off switch **"L"**;
- With these settings, the boiler is already ready for use, regardless of the position of the **"C"** selector knob.
- Turn the **"E"** knob to select the temperature for the hot water (between 36°C and about 56°C depending on the flow rate of the water).

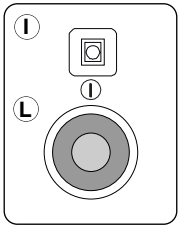
ADJUSTING THE TEMPERATURE OF WATER FOR DOMESTIC USE



(FOR ALL MODELS)
It is recommended that the temperature for the hot water should not be set to high temperatures and then mixed with cold water. Setting the thermostat to medium temperatures is preferable *(see figure)*.

SHUTDOWN PROCEDURE

(FOR ALL MODELS)
To turn off the main burner, simply press the On/Off switch **"L"**; the green L.E.D. **"I"** will also turn off.
As a precautionary measure, it is recommended that the gas cock located on the bottom of the boiler be turned off as well.



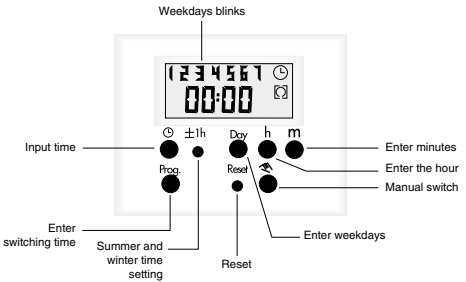
TIME CLOCK

The steps marked with the symbol ▶ are necessary to carry out a switching program.

▶ PREPARING FOR OPERATION

Activate the **"Reset"** switch to reset the time switch to it's default settings (activate using a pencil or similar pointed instrument). Do this:
- every time you wish to **"Reset"** the time switch;
- to erase all switching times and the current time of day

After approximately two seconds the following display appears:



▶ ENTER CURRENT TIME AND WEEKDAY

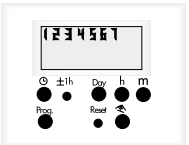
Keep the " " key pressed down. During the summer time period press the **+/-1h** key once.
Enter the hour using the **"h"** key.
Enter the minutes using the **"m"** key.
Enter the day using the **"Day"** key.
1 = Mon ..... 7 = Sun

Release the “ ” key.
The colon now blinks once a second.

AM/PM TIME DISPLAY

If you press the **“+/-h”** and **“h”** keys at the same time, the time display switches into the AM/PM mode.

Notes: If you keep the **“h”** and **“m”** keys pressed down for more than 2 seconds, the display will enter fast forward scroll mode.



▶ ENTERING THE SWITCHING TIMES

If your entry is incomplete, the segments not yet selected will blink in the display.

You have 20 memory locations available. Each switching time takes up one memory location.

Keep pressing the **“Prog”** key until a free memory location is shown in the display **“-- : --”**.

Program ON or OFF with the “ ” key:
“ ” = ON - “ ” = OFF.

Enter the hour using **“h”**; enter the minutes using **“m”**.

If a switching command is to be carried out every day (**1 2 3 4 5 6 7**) then store using the “ ” key, otherwise select the days it is to be carried out on by using the **“Day”** key.

When the day selection is left blank, the programmed switching instruction operates at the same time every day.

1 2 3 4 5 6 7	Monday ..... Sunday
1 2 3 4 5 6	Monday ..... Saturday
1 2 3 4 5	Monday ..... Friday
6 7	Saturday ..... Sunday
1	Monday
.....	(selection of single days)
7	Sunday

Store using the “ ” key or push **“Prog”** key if you are going to continue programming. The time switch enters the automatic operating mode and displays the current time of day. Begin any further entry of a switching time with the **“Prog”** switch.

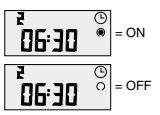
If necessary, once you have finished programming and have returned to the current time display, by pressing the “ ” button, the timer will not automatically switch to the current programmed status until the next timed setting. You can put the timer into the correct mode with the “ ” key.

ADDITIONAL FUNCTIONS

Switching from summer time to winter and vice versa.
Press the **"+/-1h"** key once.

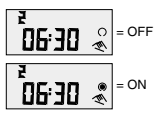
MANUAL OVERRIDE KEY
With the " ☜ " key you can change the current switching settings at any time. The switching program already entered is not altered.

Automatic Operation



The switching times correspond to the program entered.

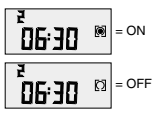
Manual Operation



If the current switching mode is changed manually, the next switching time will be carried out automatically again according to the entered switching program.

Continuous Operation

[ ]



You can only return to automatic mode from the continuously ON and continously OFF switching modes by pressing the " ☜ " key.

READING THE PROGRAMMED SWITCHING TIMES
Pressing the **"Prog"** key displays the programmed switching times until the first free memory location appears in the display **"-- : --"**.

If you now press the **"Prog"** key once again, the number of free memory locations will be displayed, e.g. **"Fr 20"**. If all memory locations are occupied, the display **"Fr 00"** appears.

CHANGING THE PROGRAMMED SWITCHING TIMES
Press the **"Prog"** key repeatedly until the switching time you want to change is displayed. You can now enter the new data. See "*Entering the switching times*".

Notes on storing switching times:
If you end your entry of the switching times by pressing the **"Prog"** key, the switching time you have entered will be stored and the next memory location displayed.
Entry of further switching times is also carried out as described in "*Entering the switching times*".

In addition, a complete switching command is stored automatically after around 90 seconds provided no other key is pressed.
The time switch then enters the automatic operating mode and displays the current time again.

DELETING INDIVIDUAL SWITCHING TIMES
Press the **"Prog"** key repeatedly until the switching time you wish to delete is shown in the display.
Then set to **"--"** using the **"h"** or **"m"** key and keep the " " key pressed down for around 3 seconds.
The switching time is now erased and the current time is displayed.

TECHNICAL DATA

Ambient temperature:	- 10°C to + 55°C
Running reserve:	5 h (not for 1,5 V DC)
Memory locations:	20
Shortest switching time:	1 minute
Programmable:	Every minute

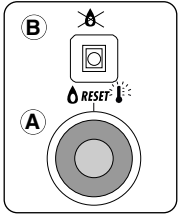
USEFUL INFORMATION AND TROUBLESHOOTING

BOILER SHUTDOWN

The boiler unit is equipped with safety devices which intervene in certain situations to shutdown the boiler.
Some of these situations are signalled by the unit and can be corrected by the user.

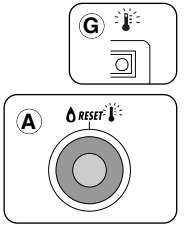
SHUTDOWN DUE TO THE FAILURE OF THE BURNER TO LIGHT AUTOMATICALLY

This anomaly is indicated by the red **"B"** L.E.D.
To reset the unit, press and then release the **"A"** button.
At this point, the electronic ignition system will attempt to light the burner again.
If lighting failure occurs repeatedly, it is recommended that you contact one of our Authorised Service Centres.



SHUTDOWN DUE TO OVERHEATING

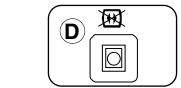
This anomaly is signalled by the red **"G"** L.E.D.
The boiler shuts off because the safety thermostat detected that the boiler temperature has reached the temperature limit.
To reset the unit, wait until the boiler has cooled and then press the **"A"** button.
If the safety thermostat shuts off the unit on a frequent basis, contact one of our Authorised Service Centres for assistance.

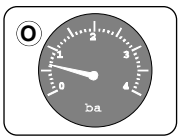


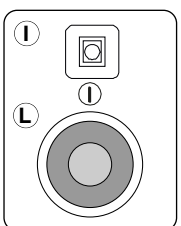
SHUTDOWN DUE TO INSUFFICIENT WATER CIRCULATION

This anomaly is indicated by the red **"D"** L.E.D.
One of the possible causes of this shutdown situation could be the lack of water in the boiler or water circulation failure in the primary heating circuit.
Check the system pressure on the pressure gauge **"O"** and, if it is less than 0.5 bar, consult your installer for checking and refilling the system.

Then reset the unit by turning the boiler off and then back on with the On/Off button **"L"**.
If this situation persists, contact one of our Authorised Service Centres.

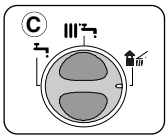






FLUE TEST FEATURE
(only for authorised personnel)

The **"C"** *Summer/Winter/Flue Test* selector knob can be set to < > to bypass temperature adjustment on the heating circuit for the purpose of analysing the fumes produced by combustion.



To access this mode, open a water tap or taps so that the flow rate is no less than 8 litres per minute.
Then press the **"C"** selector knob in and turn it from < > or < > to the < >.

WARNING!
The flue test feature eliminates the slow-light feature.
This mode must only be selected by a qualified service engineer.

MTS GROUP

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