

HEATING AND COOKING

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Heating and Cooking

BEFORE USING APPLIANCES PLEASE READ THE USER INSTRUCTIONS SUPPLIED.

NOTE: In the interest of safety, replacement parts for an appliance must conform to the appliance manufacturer's specifications and should be fitted only by them or their authorised agent.

CENTRAL HEATING AND HOT WATER SYSTEM

PLEASE READ THE USER INSTRUCTIONS.

CAUTION: - The boiler can produce water at over 80°C when in central heating mode. If you run a hot tap when the boiler has been heating the radiators, the initial flow through the hot tap could be very hot. DO NOT PLACE YOUR HANDS under the tap or use the shower until the initial flow has passed.

The thermal grade of your holiday home is Grade 2 with Central Heating & Grade 1 Without Central Heating:-

The definition of a Grade 2: A caravan holiday home, including windows, doors and

roof lights in which the average thermal transmittance (U) of the elements shall not exceed 1,7 W/(m2.K).

An average temperature difference of at least 20 K between inside and outside temperatures shall be achieved in lounge, dining room and kitchen, when the outside temperature is 0°C

The definition of a Grade 1: A caravan holiday home, including windows, doors and roof lights in which the average thermal transmittance (U) of the elements shall not exceed 1,7 W/(m2.K).

There is no grade for this heating

Radiator valves

The TRV features a discreet locking and limiting facility allowing users to set and lock in place to a pre-determined temperature, or temperature range.

TRVs control room temperature from 0°C to 28°C and incorporate a positive shut off

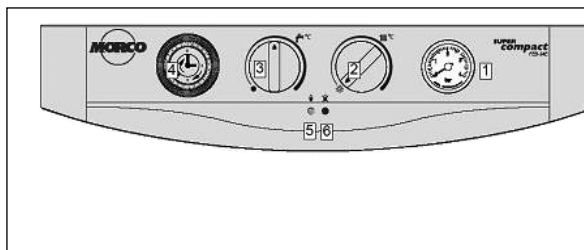
OPERATION

Limiting the maximum setting

A feature of the TRV is the ability to limit the maximum setting. To achieve this, attach the thermostatic head and set the temperature to the maximum desired position. Remove the black retention pin, found underneath the setting arrow, and re-insert into the slot directly underneath position IIIII. The temperature adjustment has been limited to the set point.

Locking a predetermined setting

To lock a predetermined setting carry out the limiting maximum setting procedure as detailed above. Then remove the retention pin positioned under setting IIIII, and replace it two slots to the left. The desired set temperature is now locked.



1. Pressure gauge
2. Heating service and heating temperature selector
3. Main control, reset and D.H.W temperature selector
4. Clock
5. Green light power on and flashing burner on
6. Red light - lock out

Heating and Cooking

The fire can be operated using the remote control hand set (see operating instructions).

WARNING: Before undertaking any maintenance or cleaning, disconnect from the power supply. Only competent persons should service/repair appliances.

NOTE:- To prevent scratching of the front screen, this appliance should be cleaned with soapy water and a damp cloth only. Due to the nature of stainless steel it picks up finger marks easily, the trim should always be cleaned with a cleaner that is suitable for stainless steel.

FOR USER INSTRUCTIONS, LAMP REPLACEMENT AND FAULT FINDING PLEASE CONSULT THE USER INSTRUCTIONS.

GAS FIRE (IF FITTED)

Before igniting your fire read the user instructions.

DISHWASHER (IF FITTED)

Please read user instructions before using the dishwasher.

MORCO MODELS D-61B

BEFORE USING THIS APPLIANCE PLEASE READ THE FULL INSTRUCTIONS SUPPLIED THOROUGHLY, ALWAYS RETAIN THE INSTRUCTIONS FOR FUTURE USE.

INSTRUCTIONS FOR USERS

WARNING: No attempt must be made to adjust this appliance for use with other gases.

LIGHTING THE PILOT



Fully depress the control knob and turn it to the left from the • position to the ★ position (pilot setting).

The pilot should light during this operation due to the action of the piezoelectric spark igniter or electronic ignition.

Hold this knob in this position for about 10 seconds after the pilot has lit.

If the pilot fails to light after having activated the piezoelectric spark igniter mechanism or electronic ignition, this means that there is air in the gas pipes. In this case, allow plenty of time for the pipes to be cleared of air, with the gas control knob at the pilot setting. * Where there are long gas pipe runs, it may take up to 3 minutes.

PREPARING THE HEATER FOR USE


Once the pipes are free of air and the pilot is alight, wait about 10 seconds for the safety valve mechanism to be activated, the appliance is ready for use. Turn the control knob anti – clockwise to one of the main burner settings.



GAS CONSUMPTION SELECTION

You can choose between two different types of operation, depending on the hot water outlet temperature required.

Economy Setting

Turn the control knob to the  position.

Use this setting only when the ambient cold water supply to the heater temperature is high (Normally summer continental use)

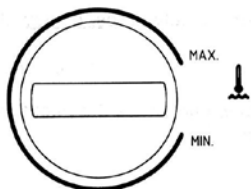
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Full power setting (for normal use)



Use this setting when the ambient cold water supply to the heater is low (Normally UK or cold climate countries)

WATER TEMPERATURE SELECTION



To adjust the hot water temperature, turn the selector control to the right for hotter water and to the left for cooler water.

- Whatever the water temperature selected, it remains constant even if there are fluctuations in the mains water pressure, (within the minimum and maximum range), due to the action of the automatic water flow regulator.
- Never reduce the flow of hot water by using the appliance's water inlet stopcock. This stopcock should always be fully open.

TURNING OFF THE WATER HEATER

From whichever position the gas control knob is in, turn it to the right to the • position. This will cut off the supply of gas to the pilot and the burner.

PRECAUTIONS TO BE TAKEN AGAINST FROST AND FREEZING CONDITIONS

If the appliance is installed in caravan holiday home, leaving the appliance un-drained during freezing conditions, will result in the appliance being frost damaged. It must be drained down in one of the following ways:

Instructions for F11-E and D61-B appliances

- Turn off the gas and electrical supply.
- Turn off the mains water inlet stopcock.
- Turn temperature control knob fully anticlockwise to minimum setting.
- Turn on all hot and cold water taps.
- Open all hot and cold drain cocks on the installation. Please refer to your caravan owners handbook for the location of all drain cocks.
- Leave all taps and plugs open until the boiler is next needed for service. This will allow any residual water to continue to drain.
- Disconnect the mains water inlet

stopcock from the caravan pipework, this will stop water refilling the pipework, if the stopcock fails due to frost damage.

- Protect drain cocks and any open ended pipe from insects or debris.

To turn the water on again, close all drain cocks, reconnect and open the mains water inlet stopcock and turn off each hot and cold water taps as the water runs clear.

Instructions for FEB-24D appliance

Providing the boiler power supply and gas supply is connected the boiler will automatically fire on minimum when near freezing conditions are detected. When the temperature in the system reaches 20°C it will switch off.

NOTE: It is still necessary to drain the domestic hot and cold water system.

If the holiday home is to be un-occupied during cold periods, and whenever there is a threat of freezing, the domestic hot and cold water circuit must be drained as follows:

- Turn off the cold water supply.
- Turn on all hot and cold water taps.
- Open all drain plugs in the hot and cold water system (Do not drain the central heating circuit which should have been filled with antifreeze) Please refer to your

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caravan owners handbook for the location of all drain cocks.

Note: There are no drain plugs fitted to the actual boiler.

- Leave all taps and plugs open until the boiler is next needed for service. This will allow any residual water to continue to drain.
- Disconnect the mains water inlet stopcock from the caravan pipework, this will stop water refilling the pipework, if the stopcock fails due to frost damage.
- Protect drain cocks and any open ended pipe from insects or debris.

NOTE: The boiler inbuilt frost protection feature is designed primarily to prevent damage to the heating circuit and radiators. It will not protect the hot and cold water pipes from freezing under the holiday home and will provide only a limited protection to the boiler pipework and hot and cold pipework inside the holiday home.

The heating circuit and radiators should contain the correct level of antifreeze to prevent damage during freezing conditions and should not be drained down.

For the frost feature to work, the gas supply must be left on and the electrical power supply (wall socket), must be connected and switched on, the central heating control knob on the boiler must be in the off position.

Do not rely on the boiler frost protection to prevent freezing of the hot and cold water pipes, including those inside the boiler during severe frost conditions, it will not.

We strongly recommend a qualified & competent service engineer is employed to do the drain down service.

MAINTENANCE RECOMMENDATIONS

The appliance must be checked for safe operation annually, regardless of frequency of use. This refers principally to the correct combustion of the main burner and pilot. Maintenance should only be carried out by a qualified and competent service engineer. Please refer to section 2.3 of this manual.

CHECKING FOR SAFE OPERATION

In addition to any annual service by a competent person, the user should carry out the following checks periodically and especially after any period of disuse.

PILOT BURNER

Look through the pilot window and check the pilot flame is blue. There should be no yellow colour or laziness.

MAIN BURNER

Look through the pilot window when the hot tap is open and the boiler is running. The

burner flames should be all blue with no yellow/white colour or laziness.

If you see any yellowness or laziness in the flames do not use the appliance and call a service engineer. The burners will almost certainly be blocked by dust/fluff or insect matter and any further use will cause sooting up leading to a dangerous situation and expensive repair.

OTHER INDICATIONS

- Never tamper or adjust with any pre-sealed unit.
- There is a danger of burning yourself if you touch the area in or around the pilot window. We recommend that you avoid touching this area.
- Do not cover or use the heater for drying purposes or use the heater compartment for storage of any goods especially flammable liquids.
- The appliance has a device to detect that combustion gases are removed correctly via the flue. If there are any problems detected in the removal of these gases (spillage), the device cuts off the supply of gas to the burner

N.B. Adverse weather conditions may cause this device to activate please

See section A.2.2 COMBUSTION GAS REMOVAL

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To restart the appliance you must wait at least 10 minutes before lighting the pilot light, as described earlier.

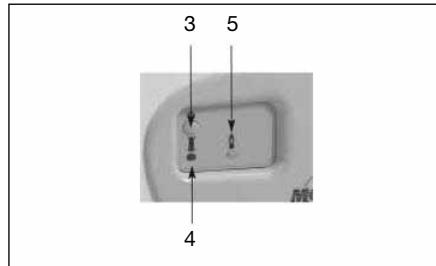
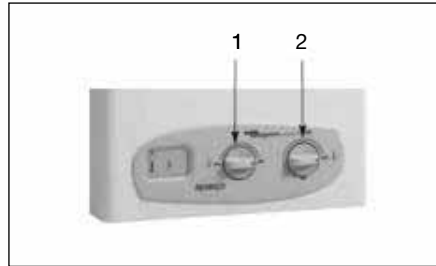
If these interruptions occur repeatedly have the heater inspected by a competent registered gas engineer.

NEVER BLOCK ANY VENTILATION THAT HAS BEEN PURPOSELY PROVIDED FOR THE CORRECT AND SAFE OPERATION OF THE APPLIANCE.

MINIMUM ANNUAL MAINTENANCE

Gas water heaters are rugged pieces of equipment which are designed to work for a long time with minimum maintenance requirements. The only regular maintenance required is the (annual) cleaning of the heating body and the burner. **It is essential this is done at the beginning of each season.**

ROOM SEALED WATER HEATER (if fitted)



- 1 - Variable power selector
- 2 - Water temperature selector
- 3 - ON-OFF button
- 4 - Red 'LOCKOUT' indicator LED
- 5 - Orange burner ON indicator LED

Operation

Obtaining hot water

To start up the heater depress the ON-OFF button (3). The heater will then be ready to function automatically when any of the hot water taps are turned on. The orange LED (5) will come on while the heater is working.



Selecting the required power

Turn the power selector (1) to obtain the desired power. MAX position indicates 100% power. MIN position indicates 50% power.



Selecting the hot water temperature

Turn the water temperature dial (2) to obtain the desired temperature. MAX position indicates the maximum temperature (min flow). MIN position indicates the minimum temperature (maximum flow).

IMPORTANT: This heater is not thermostatic.

Note: It is advisable to adjust both the power and the water temperature to minimum value necessary to cover your requirements. This will save energy and prolong the life of the appliance, reducing scale deposits on the heat exchanger.

Switching off the water heater

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When the hot water tap is turned off, the heater will stop automatically. To switch off the heater completely, press the ON-OFF button (3).

IMPORTANT: When the heater is switched on for the first time, or if it has not been used for a certain time, or when a new gas bottle is installed, the appliance may fail to ignite due to the presence of air in the gas pipes. If this happens, the heater will 'LOCK OUT' and the red LED (4) will be displayed.

- Occasionally, the heater may fail to ignite due to excessively windy conditions or other adverse atmospheric conditions, causing 'LOCKOUT'.
- Insufficient gas pressure (faulty regulator) or fluctuations in voltage may also cause 'LOCKOUT'.
- To RESET the heater press the ON-OFF button to switch off then depress the ON-OFF button to restart. The red LED should now be off and the heater should ignite when the hot tap is opened.
- If the heater locks out persistently, call your installer or the MORCO on 01482 325456 for details of your nearest service agent.
- ALWAYS REFER TO THE MORCO USER MANUAL

SETTING TEMPERATURE LIMITS

Withdrawing the retention pin

The black retention pin for limiting or locking desired temperatures can be found underneath the setting arrow.



Retention pin installed

The retention pin is shown as it would look after installation, in the slot under setting IIIII limiting the temperature to position II.



Frost protection setting

Provided the central heating boiler and pump remain operative, the frost protection setting allows heat to circulate within the system e.g. where properties are vacant over the winter months, to prevent freezing and consequent damage to the system.



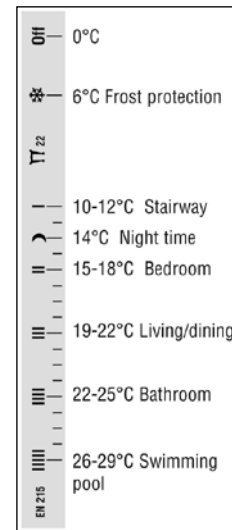
Working pressures and temperatures

The following maximum temperatures and pressures must not be exceeded.

Size	Maximum temperature	Maximum pressure	Maximum differential pressure
8 - 15mm	120°C	10 bar	1 bar

Mistral TRV temperature settings

This diagram shows the relationship between the settings on the valve head and the approximate room temperature achieved.



Appliances

GAS OVEN AND GRILL

Please read the user instructions provided before using the oven and grill.

GAS HOB

Please read the user instructions provided before using the hob.

COOKER HOOD

Please read the user instructions provided before operating or changing the filter.

FRIDGE/FREEZER

Please read the user instructions provided before using the fridge/freezer.

MICROWAVE OVEN (IF FITTED)

Please read the user instructions provided before using the microwave.

ELECTRICAL LOUNGE FIRE/HEATER (IF FITTED) PLEASE READ USER INSTRUCTIONS PROVIDED

The fire can be operated using the remote control hand set (see operating instructions).

WARNING: Before undertaking any maintenance or cleaning, disconnect from the power supply. Only competent persons should service/repair appliances.

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