

CONDENSING GAS WATER HEATER WHC56, LWHC56 (Internal)



Please read and understand these instructions before commencing installation and leave this manual with the customer for future reference.

Andrews. Built to perform.



Owner's Guide

Model WHC56, LWHC56

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Thank you for purchasing this ANDREWS WATER HEATERS Condensing Gas Water Heater. Before using, please: Read this manual completely for correct installation and operation instructions. Keep this manual where it can be found whenever necessary.

AGENT : ANDREWS WATER HEATERS

Innovation House 3 Oaklands Business Centre Oaklands Park Wokingham Berkshire RG41 2FD, UK

PRODUCT : NORITZ Corporation

5, Minamifutami, Futami-cho, Akashi, Hyogo, Japan

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Important Safety Information-1

To prevent damage to property and injury to the user, the icons shown below will be used to warn of varying levels of danger.

Every indication is critical to the safe operation of the water heater and must be understood and observed.

Potential dangers from accidents during installation and use are divided into the following four categories. Closely observe these warnings; they are critical to your safety.

■ Icons warning of risk level

	Danger	Denotes content that may result in instantaneous fire, serious injury and even death when ignored.
	Warning	Denotes content that may result in fire, serious injury and even death when ignored.
	Caution	Denotes content that may result in bodily injury and physical damage when ignored.
Remarks		The content following this icon is necessary to understand for safe and easy use of this water heater.

■ Other icons

 Electric Shock.	 High Temperature.	 Be sure to do.	 Earth	
 Prohibited	 No flame.	 Don't touch.	 Don't disassemble the equipment.	 Don't touch with a wet hand.

Danger

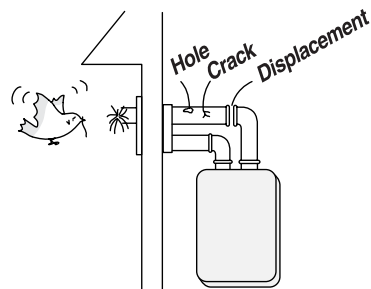


If you detect a gas leak:

1. Do not try to light any appliance
2. Do not touch any electrical switch; do not use any phone in your building.
3. Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
4. If you cannot reach your gas supplier, call the fire department.



Do not use the water heater if the intake/exhaust pipe is displaced, has holes, or is corroded.



Important Safety Information-2

Warning



If you detect abnormal combustion or abnormal odors, or during an earthquake, tornado or fire:

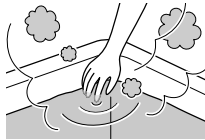
1. Turn off the hot water supply
2. Turn off the power to the water heater
3. Turn off gas and water at the main
4. Consult the nearest ANDREWS WATER HEATERS agent



Check the temperature of the running hot water before entering the shower.



Check the temperature before stepping into the bath tub.



Do not turn off the water heater or change the water temperature while someone is using.



Be sure the gas/power supplied matches the gas on the rating plate.



Do not place or use a spray can near the heater or the exhaust vent terminal.



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.



Children should be supervised to ensure that they do not play with the appliance.



Do not place outdoors

Rain may enter the unit or the burner fire may be blown by the wind, causing malfunction or fire as a result.



Outdoor



Consult the nearest ANDREWS WATER HEATERS if the water heater location needs to be changed.

For the safe usage.



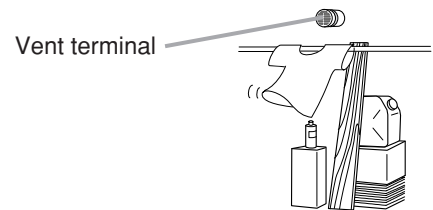
Contact a qualified service technician for any necessary repairs, service or maintenance.



Contact ANDREWS WATER HEATERS before using with a solar pre-heater.



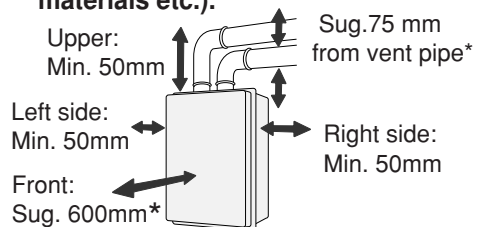
Do not place combustibles such as laundry, newspapers, oils etc. near the heater or the vent terminal.



Do not use combustible chemicals such as oil, gasoline, benzene etc. in the vicinity of the heater or the exhaust vent terminal.



Leave the proper clearance between the water heater and nearby objects (trees, timber, boxes with flammable materials etc.).



* Indicates suggested clearances for maintenance.

Caution



Be sure to electrically ground the unit.



Do not touch the power cord with wet hands.



Keep power cord free of dust.



Do not use a broken or modified power cord. Do not bind, bend or stretch power cords. Do not scratch, modify, or subject them to impact or force.



Do not use the water heater for other than hot water supply, shower and bath.



Do not use hair spray or spray detergent in the vicinity of the heater.



Do not touch the exhaust vent pipe during or immediately after operation of the water heater.



If this unit will be installed in a salon or other location where hair spray or aerosols will be used, locate the unit away from where these products are used.



Do not install in locations where excessive dust or debris will be in the air.



Do not use condensate, discharged from the drain pipe, for drinking or for consumption by animals.



To prevent burns or scalding, turn off the power on/off button and wait until the equipment cools before performing maintenance.

To prevent scalding.

The hot water in the equipment is a high temperature immediately after the use of the equipment.

Important Safety Information-3

Remark

Do not drink water that has been inside the unit for an extended period of time. Do not drink the first use of hot water from the unit in the morning.

Clean the filter on the water inlet as frequently as required by the quality of your local water.

Keep the area around the unit clean.

If boxes, weeds, cobwebs, cockroaches etc. are in the vicinity of the unit, damage or fire can result.

Do not install the equipment where the exhaust will blow on walls or windows.

Treat hard, acidic or otherwise impure supply water with approved methods to ensure full warranty coverage.

Problems resulting from scale formation are not covered by the warranty.

Check ignition during use and extinction after use.

Do not discharge cold water from the hot water tap when the power on/off button is off.

When discharging hot water, check to make sure the ON/OFF is on.

When discharging cold water from the hot water supply tap while the ON/OFF Button is off, condensation will occur within the heat exchanger causing poor combustion and damage to electrical components may occur as a result.

In the case of single-lever water tap, discharge cold water by completely turning the lever to the cold water side.

Do not use parts other than those specified for this equipment.

Do not disassemble the remote controller.

Do not use benzene, oil or fat detergents to clean the remote controller.

This may cause deformation.

Do not splash water on the remote controller. Do not expose the remote controller to steam.

Do not locate the remote controller near stoves or ovens, this may cause damage or failure.

If the mains electricity and gas are to be turned off for any long periods during severe weather, it is recommended that the whole system, including the boiler, should be drained to avoid the risk of freezing.

If it is snowing, check the exhaust gas vent and exhaust vent terminal for blockage.

Preventing damage from freezing (☞p.20 -22)

Damage can occur from frozen water within the device and pipes even in warm environments. Be sure to read below for appropriate measures. Repairs for damage caused by freezing are not covered by the warranty.

If you do not use the product for long time, contact your nearest agency of ANDREWS WATER HEATERS. (☞p.21)

In order to prevent the freeze and bare possibility of gas leakage.

Clean up the bathtub and the wash stand frequently.

If the boiling scale remains, slight copper ion contained in water reacts with fatty acid contained in soap etc. and it may get discolored to blue.

Do not use water from hot springs, wells and ground water.

A foreign object may attach to the piping in the equipment or the piping may become eroded and may cause water leakage depending on the water quality.

The repair in this case will be implemented with charge even within the guarantee period.

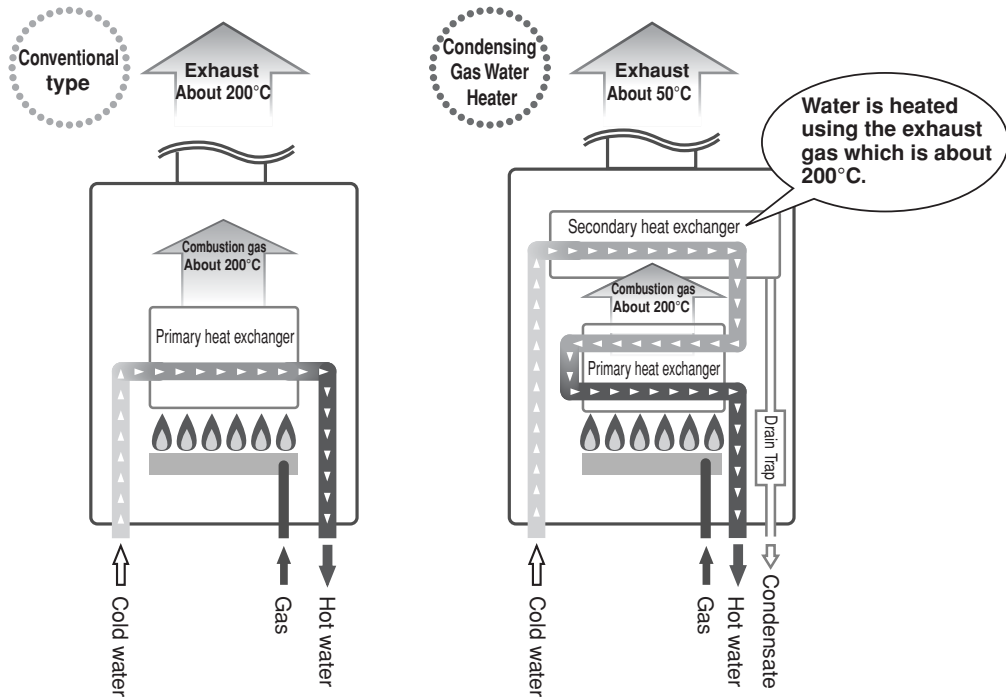
Condensate Drainage Blockage.

As safety feature, the water heater will stop working if the condensate drainage becomes blocked. During freezing conditions period this may be due to the forming of ice in the condensate drainage at the external part which locates out of the house.

Remove ice blockage by using of warm cloths around the pipe, and press the Power On/Off Button to turn off, then turn on again to reset. Then the water heater should resume operation. Contact ANDREWS WATER HEATERS, if the fault persists.

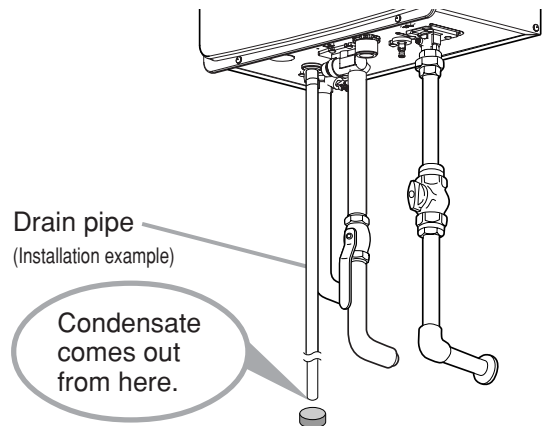
Overview of Condensing Gas Water Heater

This water heater is a high efficiency, fully condensing appliance. Unlike a traditional water heater, a condensing type captures heat from the exhaust gas and uses it to preheat the incoming cold water as it passes through the secondary heat exchanger as illustrated below.



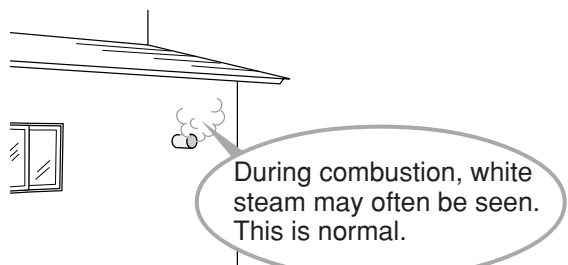
The condensing gas water heater discharges condensate.

When heat from the exhaust gas is collected within the secondary heat exchanger, condensation occurs from moisture in the exhaust gas and the resulting water is discharged from the drain pipe (approx. 100cc/min maximum). It is not a water leak. Do not plug or block the drain line as it must always be allowed to freely flow.



The condensing gas water heater tends to show white steam.

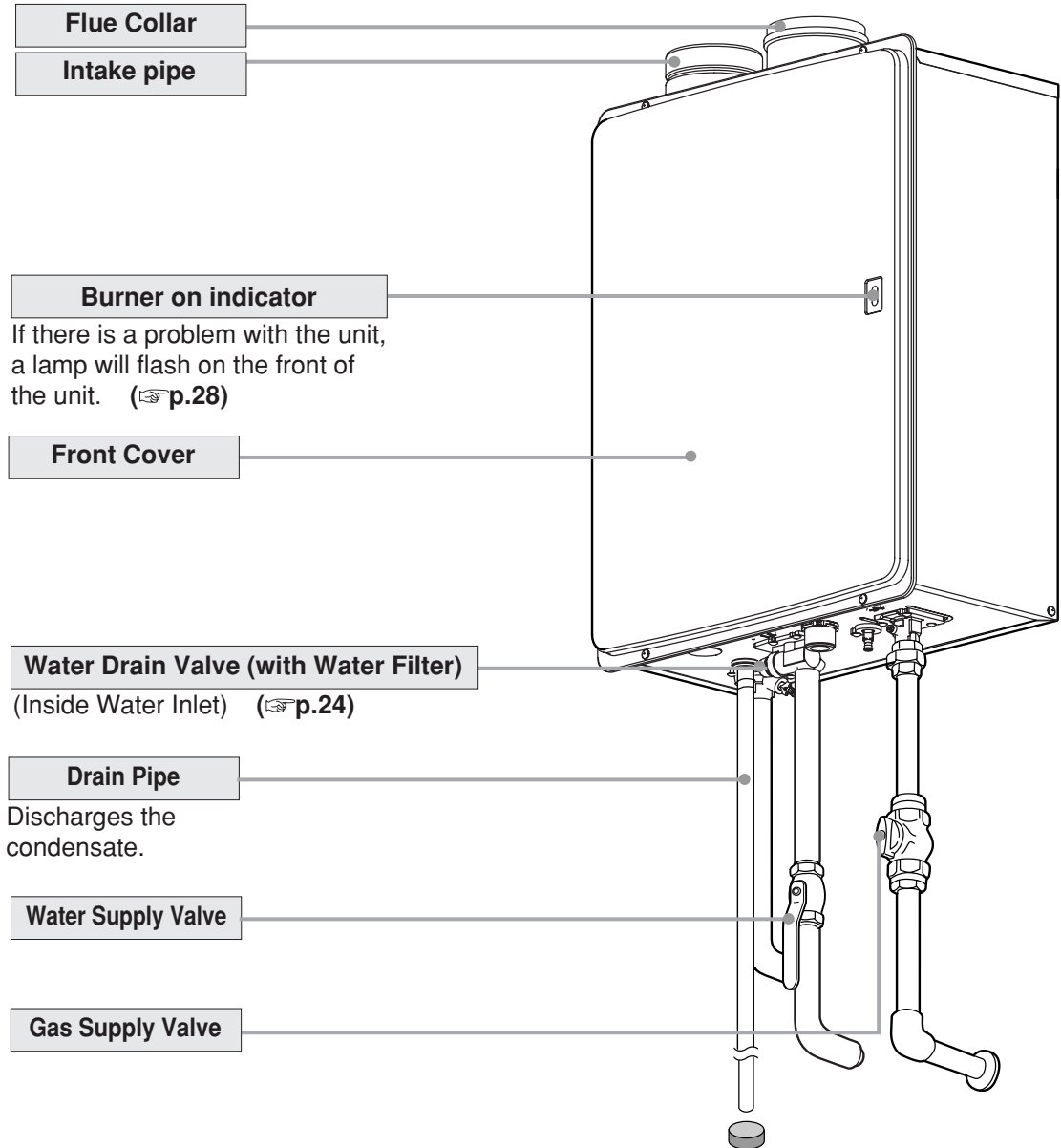
After the exhaust gas passes through the secondary heat exchanger, it becomes low in temperature and moisture rich which tends to produce steam at the vent discharge terminal. This is a normal occurrence.



General Parts

Main Unit

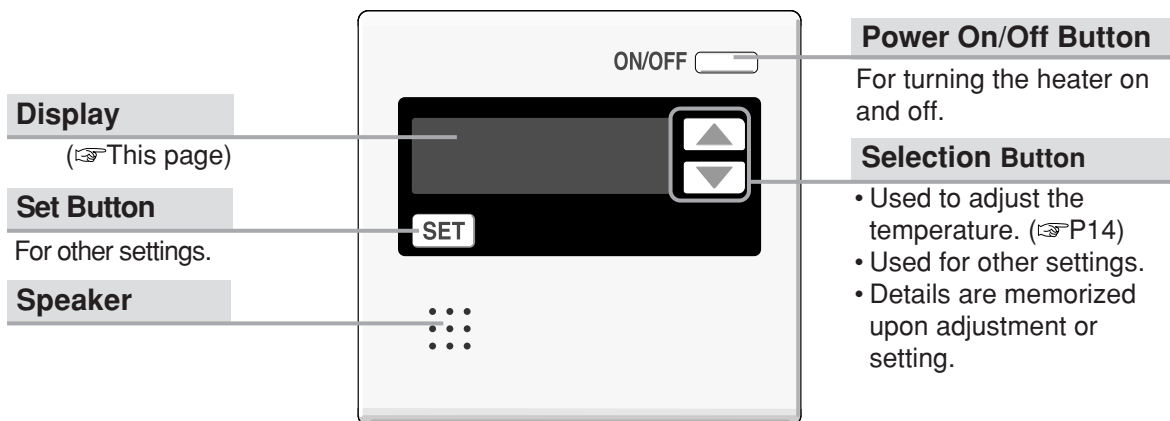
Internal Wall Mounted, Power Vent/Sealed Model



* The above illustration shows an example of installation.
The exact installation configuration may be slightly different.

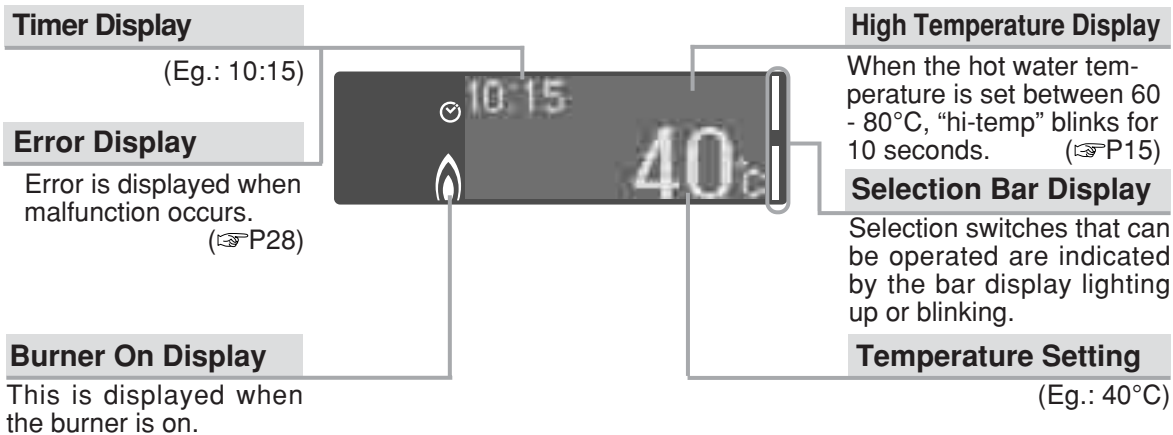
Names and Functions of Each Parts

Main Remote Controller (RC-7508M)



● Display ●

The illustration below shows the remote controller display. What is actually displayed depends on how the water heater is set.



● < Scroll display > to prevent the remote controller screen from burn-in ●

- * In order to prevent the screen burn-in, about 10 minutes after any remote control operation, the screen display begins to scroll sideways.
- * As soon as the remote controller is used again, the scrolling stops.

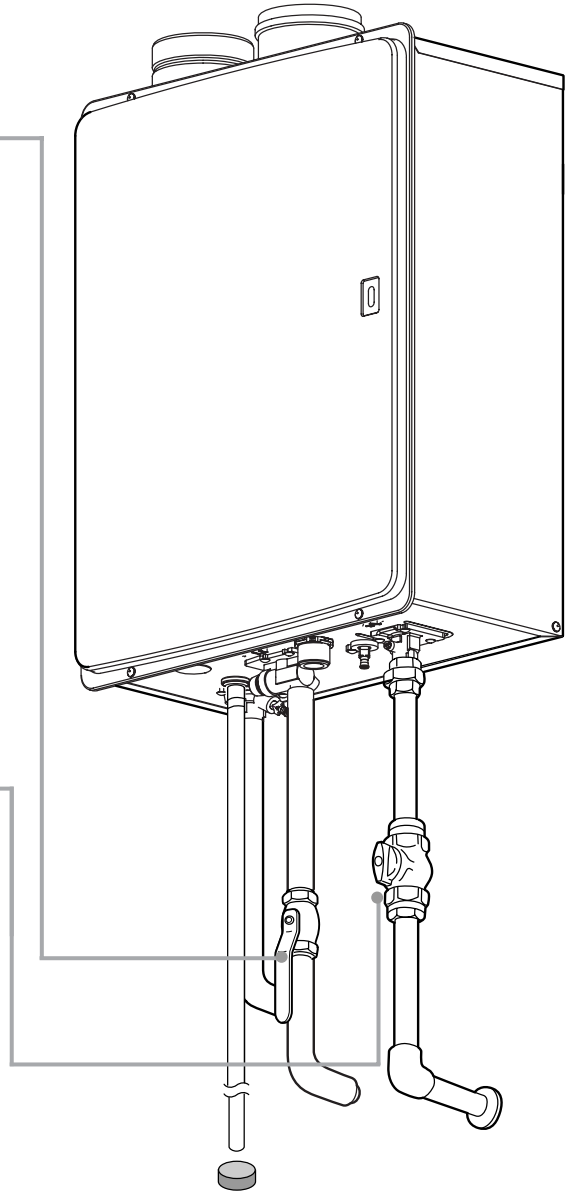
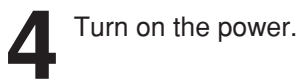
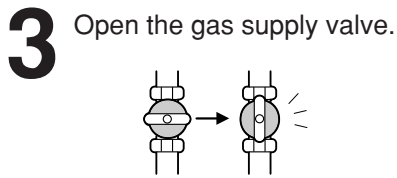
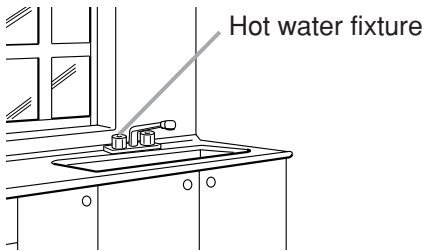
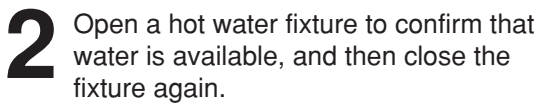
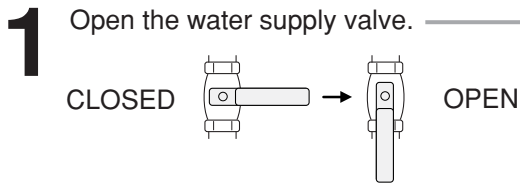


Current time (when the clock is set), the hot water temperature scrolls sideways.

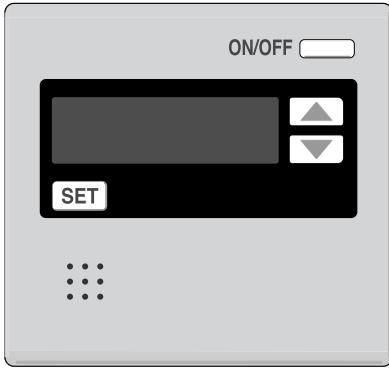
Initial Operation







Before the first use of your water heater, make the following preparations.

Follow steps **1 through 4.**



Clock Adjustment

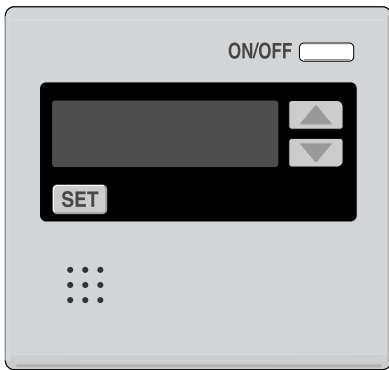






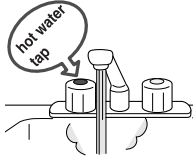

On this Display	Operation	Description
<p>1</p> 	<p>Press the ON/OFF <input type="checkbox"/> button to turn it “On”.</p>	<p>* The ON/OFF <input type="checkbox"/> is lit.</p>
<p>2</p>  <p>(Eg.: 40°C)</p>	<p>Press the <input type="button" value="SET"/> button to change the display until “time set” is shown.</p>	
<p>3</p> 	<p>Use the   buttons to adjust the clock.</p>	<p>* The time changes in 1-minute increments with each press on the button, and then in 10-minute increments if the button is kept pressed down.</p>
 <p>(Eg.: AM 10:15)</p>	<p>< Completion of setting ></p>	<p>* When the <input type="button" value="SET"/> button is pressed, or the console is left untouched for about 20 seconds, the settings screen ends.</p>



In the event of a power cut or after disconnecting the power supply, when the power is restored, the clock on the display screen shows “0:00”, so the clock needs to be re-set.

Running Hot Water



On this Display	Operation	Description
<p>1</p> 	<p>Press the ON/OFF  button to turn it "On".</p>	<p>* The ON/OFF  is lit.</p>
<p>2</p>  <p>Previous set temperature (Eg.: 40°C)</p>	<p>Turn on hot water.</p> 	<p>* This is lit during combustion.</p>  <p>(Display example)</p>



WARNING



Whenever using the hot water, such as when using the shower, check the temperature shown on the remote controller first, and then test the hot water temperature by hand.

Be especially careful if using hot water after previously using water at 60°C or above to prevent scalding.



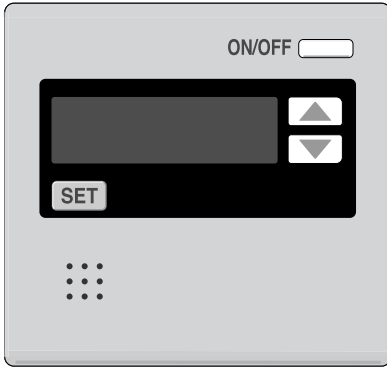
WARNING

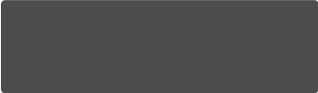







While the shower is being used, no one other than the user should change the temperature, the power switch must not be turned "off".

This is to prevent scalding if the temperature rises. Conversely, if the temperature drops or the power switch is turned "off", the user may be upset when the water suddenly becomes much colder.

Setting Hot Water Temperature



On this Display	Operation	Description
1 	Press the ON/OFF  button to turn it “On”.	* The ON/OFF  is lit.
2  (Eg.: 40°C)	Use the   buttons to adjust the temperature.	



WARNING



While the shower is being used, no one other than the user should change the temperature, the power switch must not be turned “off”.

This is to prevent scalding if the temperature rises. Conversely, if the temperature drops or the power switch is turned “off”, the user may be upset when the water suddenly becomes much colder.

● Approximate hot water conditions ●

														(°C)				
37	38	39	40	41	42	43	44	45	46	47	48	50	55	60	65	70	75	80
Washing dishes, etc.		Shower, hot water supply, etc.				Hot water supply, etc.						High temperature						

- Hot water temperatures are approximations, and may differ from actual temperatures depending on external factors, such as the season and length of piping involved.
- When low temperatures are set (for washing dishes, etc.), if the ambient water temperature is already quite high, it may be difficult to ensure the resultant water temperature is as per the setting.
- When the hot water temperature is adjusted using thermostat-controlled water mixing valves, set the temperature on the remote controller to about 10°C higher than that required to ensure the appropriate temperature.

● When setting high temperatures (60 - 80°C) ●

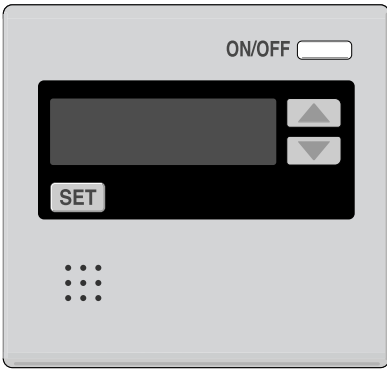
- When a high temperature is set, the readout on the right is shown.
- Please check the temperature displayed before using any hot water.
Be especially careful using any hot water after any previous setting of between 60 - 80°C.


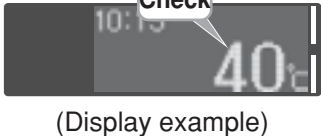
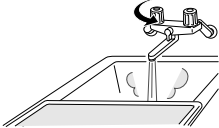

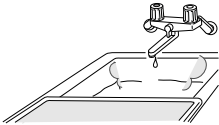




(Eg.: 60°C)

Temperature display flashes for about 10 seconds to indicate high temperature.

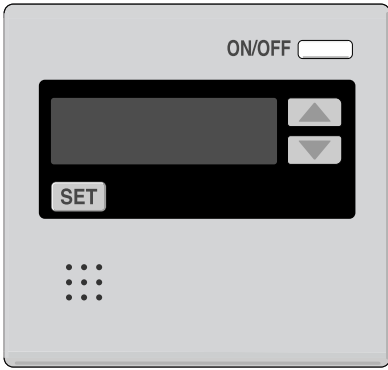
Filling Up the Bath



On this Display	Operation	Description
Preparation Insert the bathplug into the plughole.		
1 	Press the ON/OFF <input type="checkbox"/> button to turn it “On”.	* The ON/OFF <input type="checkbox"/> is lit.
2  (Display example)	Turn on hot water. 	* Please set to the highest temperature when using thermostat controlled water mixing valves. 
3 When the bath is full, turn off the taps.		

 WARNING		Check the bathwater temperature with your hand before getting into the bath.
To prevent scalding.		

Confirmation Beeper On/Off

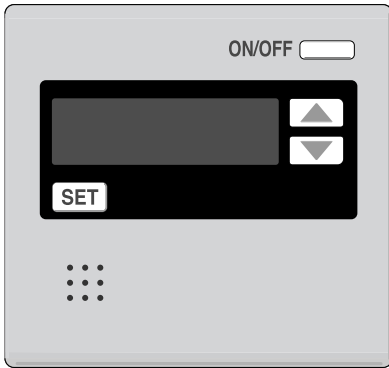


The remote controller will emit a sound when any button is pushed. This sound can be muted if it is desired.

* Initial factory setting is with sound.

Operation	Description
1 Press the ON/OFF <input type="checkbox"/> button for about five seconds. < Completion of setting >	* Setting is possible regardless of whether the power switch is ON/OFF.

Other Setting Options



Switching scroll display

Scroll display (P10) can be switched on = "yes" or off = "no".

Draining the unit

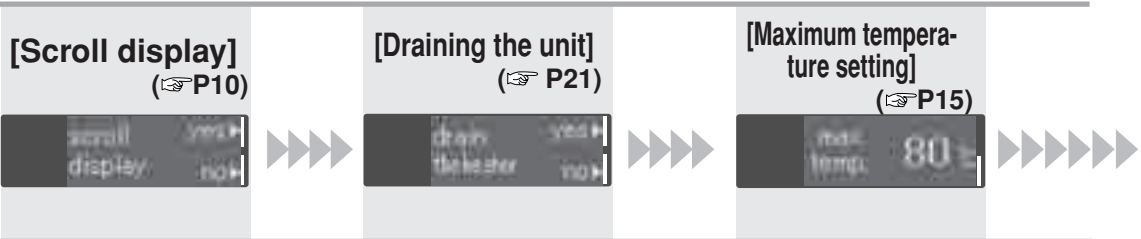
This is set to drain the unit.

On this Display

1



2



3

yes	yes	80°C
Scroll display is turned on.	Condition is suitable for draining the unit. (P21)	75°C ▪ (in 5°C increments)
no	no	50°C
Scroll display is turned off.	Stops draining the unit.	48°C ▪ (in 1°C increments)
		40°C

= Initial setting < factory setting >

Modification of the maximum temperature setting

The maximum temperature setting can be modified.

On this Display

Operation

- ① Press the ON/OFF button to "OFF".
- ② Press the button to show the settings screen.

* This may not be displayed depending on the installation conditions.

system diagnosis

Power is switched "Off" again.

Press the button to select the setting to be modified.
(Setting changes each time the button is pressed.)

* This is only used for installation and maintenance purposes, so please do not touch.

Use the buttons to modify the setting.

(Setting changes each time the button is pressed.)

< Completion of setting >

* When the button is pressed, or the console is left untouched for about 20 seconds, the settings screen ends.

* Repeat procedures 2 - 3 again to adjust other settings.

Preventing Damage from Freezing

The heater and piping can be damaged if cold temperatures cause water to freeze inside the unit. The damage can be prevented with the following method:

Normal cold [outside temperatures between 0°C - 10°C with no wind]

At these temperatures, the units have freeze prevention heaters that will prevent freezing.

- * **Do not disconnect the power. The freeze prevention heaters will not work if the power is disconnected.**
- * The freeze prevention will work regardless of whether the operation button on the remote controller has been turned on.

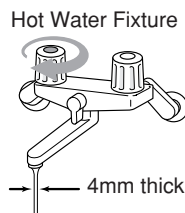
When the temperature drops, the **freeze-prevention heaters** are automatically activated to keep the unit warm and prevent it from freezing.

The freeze prevention heaters will not prevent the plumbing external to the unit from freezing. Protect this plumbing with insulation. If you are still worried that your heater will freeze, contact the nearest ANDREWS WATER HEATERS agent.

For severely cold temperatures [outside temperature including wind chill of less than -10°C]

Run water to prevent freezing.

1. Turn the unit on with the Power Button on the Remote Controller.
2. Close the gas supply valve.
3. Open a hot water fixture and let it run for approx. 2 minute, and then check that the number 11 or F11 is flashing on the remote controller display.
 - * If multiple units are being used, drain each unit for approx. 2 minute.
 - * It is possible that a different number may be displayed on the remote controller, but as long as it is flashing, you may continue.
4. Adjust a hot water fixture, and keep a small amount of hot water running. (0.4L/minute or about 4mm thick.)
 - * If there is a mixing valve, set it to the highest level.
 - * When linking multiple units, discharge water equivalent to 0.4L/minute per unit.
5. The flow may become unstable from time to time. Check the flow 30 minutes later.



- This method can be applied not only to the heater, but also to the water supply, water piping and mixing valve.
- Remember that if the mixing valve is set to the maximum level, there is a risk of scalding.
- If freezing still might occur, drain the water from the unit following the steps on P21.

If water will not flow because it is frozen

1. Close the gas and water valves.
2. Turn off the operation button.
3. Open the water supply valve from time to time to check whether water is running.
4. When the water is flowing again, check for water leaks from the equipment and piping, or follow steps 1 through 4 on P11 (“Initial Operation”).

- If the heater or the piping is frozen, do not use the heater, or it may become damaged.
- Repairs for damage caused by freezing, is not covered by the warranty.

When Unused for an Extended Period-1

If the water heater will not be used for a long period of time, drain the water.

CAUTION



If you do not use the product for long time, contact your nearest agency of ANDREWS WATER HEATERS.

Because the operation in equipment is necessary for complete drainage.

CAUTION



Whenever the unit is checked, maintained, or drained, the power switch must be turned "Off", and it must be allowed to cool down first.

To prevent scalding.

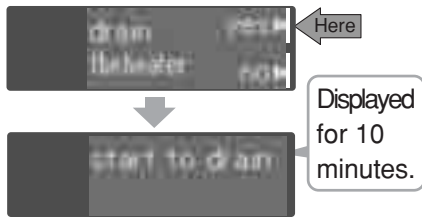
The water within the appliance is still very hot , for a short period after use.

Preparation

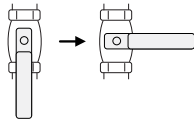
A bucket for draining water.

Drainage using the remote controller RC-7508M

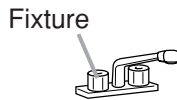
- 1 Follow the procedure on Pgs. 18 - 19, and set "Drain the heater" to "yes".



- 2 Close the water supply valve.



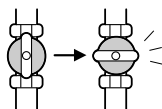
- 3 Fully open all hot water fixtures.



- 4 Open all cleanout plugs by turning them to the left.
(Position of the cleanout plugs → P22)
* Draining starts.

- 5 When the water is completely drained, replace all drain plugs and close the hot water fixtures.

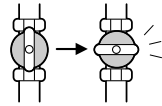
- 6 Close the gas valve and disconnect the electrical power supplied to the unit.



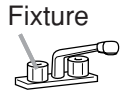
Do not touch with wet hand's.

Manual draining

- 1 Close the gas valve.

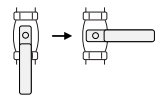


- 2
 1. Turn the power switch "On".
(If there is no remote controller, make sure that the power is plugged in.)
 2. Open the hot water tap fully, leave it in that position for at least 2 minutes, and then turn off the tap.



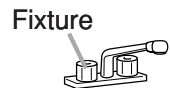
- * For conjunct setting: Allow at least 2 minutes per unit
- * Error display <11> may appear on the remote controller, but this is not an error. Do not turn the power switch "Off".

- 3 Close the water supply valve and disconnect the electrical power supplied to the unit.



Do not touch with wet hand's.

- 4 Fully open all hot water fixtures.



- 5 Open all cleanout plugs by turning them to the left.
(Position of the cleanout plugs → P22)
* Draining starts.

- 6 When the water is completely drained, replace all drain plugs and close the hot water fixtures.

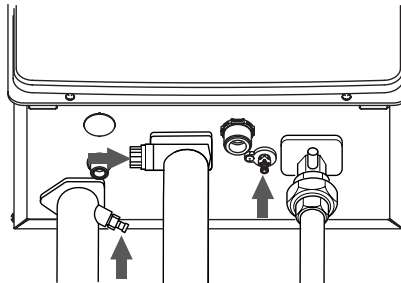
(Continued)

When Unused for an Extended Period-2

If the water heater will not be used for a long period of time, drain the water.

Position of the cleanout plugs

3 positions



- * The shapes of the cleanout plugs are as pictured on the right.
- * The cleanout plugs may not be clearly visible as they are partially hidden behind the pipe insulation.
- * Water may not drain out fully even though the cleanout plugs are loosened, depending on the pipe arrangement. In this case, fully remove the cleanout plugs. (Make sure not to mislay them.)



Turning the Unit Back On

1. Check that all drain plugs are inserted.
2. Check that all hot water fixtures are closed.
3. Follow the procedure on P11 "Initial operation", steps 1 through 4.
4. Make sure that the area around the appliance is well ventilated; open a window or a door if necessary. Then, operate the unit and verify that condensate is coming out of the drain pipe.
(During normal use of the water heater, condensate will begin to discharge from the drain pipe within 30 minutes of use. However, depending on the season and/or installation site conditions, it may take longer.)

* If water does not appear at the end of the drain line, a qualified service technician must clean the condensate line.

DANGER



Be sure to do.

After the water heater has been out of use for a long time or after replacing the drain trap with a new unit, make sure that you fill the drain trap unit with water. This is to prevent dangerous exhaust gases from entering the building. Failure to fill the drain trap unit could result in severe personal injury or death. (By performing step 4 as described above, the drain trap unit will automatically fill itself with water.)

Regular Maintenance-1

Inspection (Once a month)



Caution



High Temperature

To avoid burns, wait until the equipment cools down before draining the water. The appliance will remain hot after it is turned off.

Check For dust and soot in the exhaust vent or flue terminal.

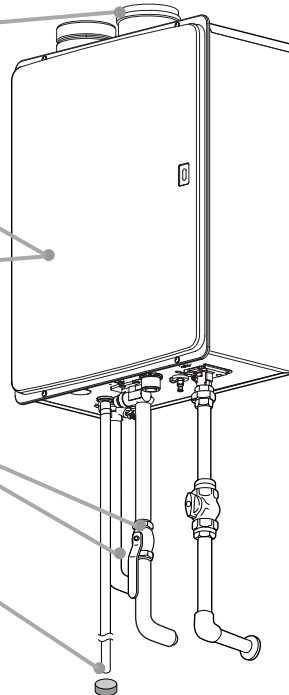
Check For abnormal sounds during operation.

Check For abnormalities in external appearance, discoloration or flaws.

Check For water leaks from the equipment and piping.

Check For blockage at the drain pipe discharge.

Check For laundry, newspaper, timber, oil, spray cans and other combustible materials. (P4)



Maintenance (Once a month)

Equipment

The boiler casing can be cleaned using a mild liquid detergent with a damp cloth, then a dry cloth to polish.

Do not use any form of abrasive or solvent cleaner as you may damage the paintwork.

Remote Controller

Wipe the surface with a wet cloth.

- Do not use petrol, oil or fatty detergents to clean the remote controller; deformation may occur.
- The remote controller is water resistant but not water proof. Keep it is dry as possible.

Regular Maintenance-2

Maintenance (Once a month)

Water Drain Valve (with Water Filter)

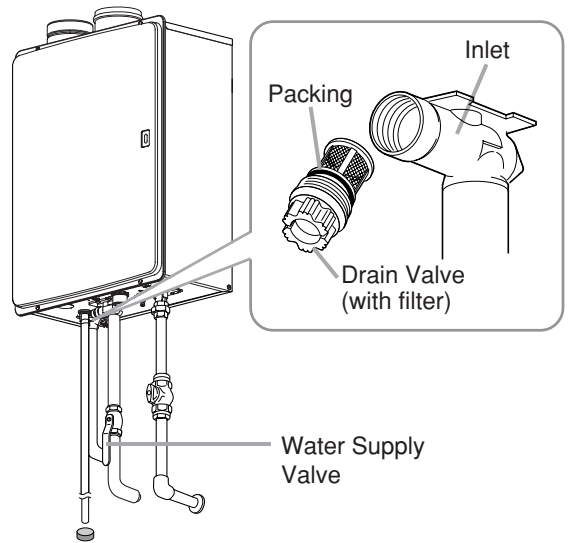
If the water drain valve (with water filter) is covered with debris, the hot water may not run smoothly, or the unit may produce cold water. Check and clean the filter as explained below.

* **To avoid burns, wait until the equipment cools down before draining the water.**

The appliance will remain hot after it is turned off.

* Water will be discharged from the trap plug. Place a container, etc. to receive the discharged water.

1. Close the water supply valve.
2. Open all hot water fixtures.
3. Remove the inlet and outlet drain plugs (about 2L will drain out)
4. Take the water drain valve (with water filter) out of the inlet. (See illustration to right).
5. Clean the water drain valve (with water filter) with a brush under running water.
6. Replace the water drain valve (with water filter). (Take care not to lose the packing.)
7. Close all hot water fixtures.
8. Open the water supply valve and check that water does not leak from the drain plugs or water drain valve (with water filter).



Troubleshooting-1

Initial Operation

Unit does not attempt to ignite when water is running.

- Check for reversed plumbing or crossed pipes.
- Check the water drain valve filter. (☞P24)

Unit attempts to ignite but fails

- Reset unit and try again. There may be air in the gas line.
- Have a professional check the gas supply pressure.

Temperature

Hot water is not available when a fixture is opened.

- Are the gas and water supply valves fully open?
- Is the water supply cut off?
- Is the hot water fixture sufficiently open?
- Is the gas being cut off by the gas meter?
(Can other gas devices such as stoves be used?)
- (For LP) Is there enough gas in the tank?
(Can other gas devices such as stoves be used?)
- Is the water drain valve filter clogged? (☞P24)
- Is the power button turned on?

No water is available when a fixture is opened.

- Is the water supply cut off?
- Is the heater frozen?

The hot water is not the correct temperature.

- Is the hot water fixture sufficiently open?

Water takes time to become hot when turning the hot water fixture.

- Have you allowed enough time for the cold water in the pipes to drain out?

The water is too hot.

- Are the gas and water supply valves fully open?
- Is the water temperature setting appropriate? (☞P14 - 15)
- If the water supply temperature is high, it is possible for the temperature to be higher than the temperature set on the remote controller.
- If only a small amount of hot water is demanded, it is possible for the temperature to be higher than the temperature set on the remote controller.

The water is not hot enough.

- Are the gas and water supply valves fully open?
- Is the water temperature setting appropriate? (☞P14 - 15)
- If the amount of hot water required is very high, it is possible for the temperature to be lower than the temperature set on the remote controller.
Decrease the amount of hot water passing through the unit and the temperature should stabilize.

(Continued)

Troubleshooting-2

(Continued)

The water is cold when only a single fixture is open.	<ul style="list-style-type: none">• The unit will not heat the water if the flow rate is less than 2.5 litre per minute. Open the fixture more or open other fixtures so that a greater flow passes through the unit, and the unit should begin heating again.
Setting temperature cannot rise.	<ul style="list-style-type: none">• Is the maximum temperature setting appropriate? (☞P18 - 19)
The temperature does not increase to set hot water temperature.	<ul style="list-style-type: none">• If the hot water (water) of previous day remains, the temperature goes down from set temperature by just that much.

Amount of Hot Water

The amount of hot water at a certain fixture is not constant.	<ul style="list-style-type: none">• When hot water is demanded at other fixtures, the amount available may be reduced. The maximum flow available from this unit is 32 litre per minute at a 25°C temperature rise.• Pressure fluctuations and other plumbing conditions can cause the temperature and pressure at a fixture to be unstable, but it should stabilize after a short time.• There are some types of hot water taps that discharges large volumes of hot water at first but stabilize after time.• To keep the temperature stable, the heater limits the amount of water that can flow through it to a small amount initially, but the amount increases over time.
Amount of hot water available has decreased over time.	<ul style="list-style-type: none">• Is the water filter clogged? (☞P24)• If the supply water is hard and has not been treated, scale can build-up in the water heater and decrease the maximum amount of hot water available. To prevent scale from forming in the water heater, a water softener or scale inhibitor is recommended.

Remote controller

The power lamp is not lit.	<ul style="list-style-type: none">• Has the power been cut?• Is the power connected properly?
Clock shows "0:00".	<ul style="list-style-type: none">• If the power is disconnected for any reason, when the power is reconnected, the clock on the display screen shows "0:00", indicating that it needs to be reset. (☞P12)
The display on the remote controller moves continuously.	<ul style="list-style-type: none">• In order to prevent the screen from burn-in, after the remote controller has not been used for about 10 minutes, the screen display changes, and continuously scrolls sideways. (☞P10,18-19)
Temperature setting cannot be increased.	<ul style="list-style-type: none">• Has the maximum temperature setting been changed? (☞P18-19)

Sounds

The fan can be heard after operation is stopped.
A motor can be heard when turning the unit ON or OFF, when opening or closing a fixture, or after the unit has been running for a while.

- These noises indicate the proper operation of devices which are designed to let the unit reignite more quickly, and ensure the water temperature is stable.

Other

The heater stops burning during operation.

- Are the gas and water supply valves fully open?
- Is the water supply cut off?
- Is the hot water fixture sufficiently open?
- Is the gas being cut off by the gas meter?
(Can other gas devices such as stoves be used?)
- (For LP) Is there enough gas in the tank?
(Can other gas devices such as stoves be used?)

White smoke comes out of the exhaust vent on a cold day.

- This is normal. The white smoke is actually steam.

The hot water is turbid.

- This is harmless. Small bubbles appear as the air in the water is heated and depressurized rapidly to atmospheric pressure.

The water appears blue
The bath tub/wash-basin has turned blue.

- Coloration to a blue color may be noticed from small traces of copper ion contained in the water and fat (furring). However, there are not problems concerning health. Coloration of the bath tub/wash-basin can be prevented by cleaning frequently.

Frequent water discharge from the drain pipe.

- Condensation forms inside the unit during operation and is discharged from the drain pipe.

Troubleshooting-3

Please check the failure display on the remote controller or the Burner on indicator on the main body.

In the event of a failure, the cause is notified by a blinking failure display. Please resolve the problem in accordance with the table below.





Failure display blinks

(This display is an example.)

Failure display	Details of Failure	Remedy
11 F11	Fault occurs with the ignition switch at the hot water supply side.	Turn the power "Off", make sure that the gas valve is open and that the gas meter has not shut off the gas, and if this is the problem, please rectify it. Then, turn the power "On", and when the hot water tap is turned on, it is back to normal if nothing is displayed.
29 F29	Clogging of water trap	Please contact the installer or ANDREWS WATER HEATERS.
90 F90	Abnormal combustion, low gas supply pressure	Have a professional check the gas supply pressure. Please contact ANDREWS WATER HEATERS.
99 F99	Fault occurs with combustion of the unit.	Please contact ANDREWS WATER HEATERS.

[Burner on indicator is lit. (P9)]

In the event of a failure, you are notified by the burner on indicator blinking at the front of the unit. Please resolve the problem in accordance with the table below.

Burner on indicator	Details of Failure	Remedy
Continuously blinking Lit  Unlit 	<ul style="list-style-type: none"> Fault occurs with the unit. 	Make sure that the gas valve is open. Close the hot water tap, then reopen it, and it is back to normal if the burner on indicator is no longer lit.

Contact our Technical Department if:

- Any other error code appears.
- An error code is indicated again after the above actions were followed.
- There are any other questions.

Follow-up Service

Requesting Service

First follow the instructions in the troubleshooting section (P25 to P28).
If the error is not corrected, contact ANDREWS WATER HEATERS.

We will need to know:

The Model (check the rating plate)

Date of purchase (see the warranty)

Details of problem ... (flashing error codes,
etc., in as much detail as possible)

Your name, address, and telephone number



* A request for service may be rejected if the water heater is installed in a location where working on the unit may be dangerous. Contact a plumber.

Warranty

Be sure that the warranty card is returned and includes, date of installation/commissioning, site address and other necessary items as shown.

Read the content carefully, and keep in a safe place.

For repairs after the warranty period, please contact your local Maintenance company.

Minimum period of time for stocking repair parts

ANDREWS WATER HEATERS will stock repair parts for this unit for a minimum of ten years after production has ceased.

These are the parts necessary to repair or maintain this unit.

Specifications

- Specifications may be changed without prior notice.
- The capacity may differ slightly, depending on the water pressure, water supply, piping conditions, and water temperature.

Specifications

Item		Specification	
Model Name		WHC56	LWHC56
Type	Installation	Internal, Wall Mounted	
	Air Supply/Exhaust	Power Vented	
Ignition		Direct Ignition	
Minimum Pressure for Maximum flow		2.0 bar	
Minimum Flow Rate		2.5 L/min.	
Dimensions		61.5 cm(Height) x 46.4 cm(Width) x 24 cm(Depth)	
Weight		33 kg	
Water Holding Capacity		1.9 Litre	
Connection Sizes	Water Inlet	R 3/4"	
	Hot Water Outlet	R 3/4"	
	Gas Inlet	R 3/4"	
	Condensate Drain	R 1/2"	
Power Supply	Supply	230V AC (50Hz)	
	Consumption	140W	140W
		Freeze Prevention 170W	
Materials	Casing	Zincified Steel Plate/Polyester Coating	
	Flue Collar	Stainless Steel	
	Primary Heat Exchanger	Copper Sheeting, Copper Tubing	
	Secondary Heat Exchanger	Stainless Steel Sheeting, Stainless Steel Tubing	
Safety Devices		Flame Rod, Thermal Fuse, Pressure Relief Valve, Lightning Protection Device (ZNR), Electric Leakage Prevention Device, Overheat Prevention Device, Freezing Prevention Device, Fan Rotation Detector	
Accessories		Anchoring Screws	

Performance

Item		Maximum Performance	Minimum Performance
Gas Consumption (NET)	I _{2H}	54.0 kW	3.2 kW
	I _{3P}	54.0 kW	3.2 kW
Hot Water Capacity	25°C Rise	32 L/min.	
	58°C Rise	13.8 L/min.	
Capacity Range		2.5 - 42 L/min.	
Temperature Settings		37 - 48, 50, 55, 60, 65, 70, 75, 80°C	

ErP-Information

Product Sheet

Product name		Fastflo WH42	Fastflo WH56	Fastflo LWH42	Fastflo LWH56	Fastflo WHC56	Fastflo LWHC56	Fastflo WHX56	Fastflo LWHX56
Declared load profile		XXL	XXL	XXL	XXL	XXL	XXL	XXL	XXL
Water heating energy efficiency class		B	B	B	B	A	A	B	B
Water heating energy efficiency	%	71	71	71	71	86	87	71	72
Annual energy consumption	kWh ⁽¹⁾	65	65	65	65	74	73	59	61
	GJ ⁽²⁾	27	27	27	27	22	22	27	26
Other load profiles for which the water heater is suitable to use and the corresponding water heating energy efficiency and annual electricity consumption ⁽³⁾		-	-	-	-	-	-	-	-
Thermostat temperature setting	°C	40	40	40	40	40	40	40	40
Sound power level L _{WA} indoors	dB	57	57	57	57	57	57	57	57
Ability to off-peak hours functioning ⁽³⁾		-	-	-	-	-	-	-	-
Enables smart control settings ⁽⁴⁾		-	-	-	-	-	-	-	-
<p>(1) Electricity (2) Fuel (3) If applicable. (4) If smart control settings value is "1", the water heating energy efficiency and annual electricity and fuel consumption only relate to enabled smart control settings.</p>									

Technical parameters

Product name			Fastflo WH42	Fastflo WH56	Fastflo LWH42	Fastflo LWH56	Fastflo WHC56	Fastflo LWHC56	Fastflo WHX56	Fastflo LWHX56
Daily electricity consumption	Q_{elec}	kWh	0.297	0.297	0.33	0.33	0.337	0.33	0.271	0.276
Declared load profile			XXL	XXL	XXL	XXL	XXL	XXL	XXL	XXL
Sound power level, indoors	L_{WA}	dB	57	57	57	57	57	57	57	57
Daily fuel consumption	Q_{fuel}	kWh	30.452	30.452	30.332	30.332	27.73	27.46	33.57	33.01
Emissions of nitrogen oxides	NO_x	mg/kWh	70	70	70	70	52	52	60	60
Weekly fuel consumption with smart controls	$Q_{fuel, week, sm}$	kWh	-	-	-	-	-	-	-	-
Weekly electricity consumption with smart controls	$Q_{elec, week, sm}$	kWh	-	-	-	-	-	-	-	-
Weekly fuel consumption without smart controls	$Q_{fuel, week}$	kWh	213	213	212	212	194	194	235	234
Weekly electricity consumption without smart controls	$Q_{elec, week}$	kWh	2	2	2	2	2	2	2	2



Register now to activate your warranty www.andrewswaterheaters.co.uk/register-a-warranty. Please make sure you attach proof of purchase for your warranty to be monitored.

All descriptions and illustrations provided in this document have been carefully prepared but we reserve the right to make changes and improvements in our products which may affect the accuracy of the information contained in this leaflet. All goods are sold subject to our standard Conditions of Sale which are available on request.

Aug 2016

Customer support
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8am - 5pm

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